



# 14th EAOHP CONFERENCE | 2020

Promoting healthy and sustainable work

BOOK OF PROCEEDINGS

**Edited by**

**Kevin Teoh, Luis Torres, Aditya Jain**



**Cyprus 2020**

**2-4 September 2020, Nicosia, Cyprus**  
14th CONFERENCE OF THE EUROPEAN ACADEMY  
OF OCCUPATIONAL HEALTH PSYCHOLOGY

# BOOK OF PROCEEDINGS

14<sup>th</sup> Conference of the European Academy of Occupational Health Psychology

*'Promoting healthy and sustainable work'*

**Edited by:**

**Kevin Teoh  
Luis Torres  
Aditya Jain**



**European Academy of Occupational Health Psychology**

European Academy of Occupational Health Psychology  
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NOTTINGHAM

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## PREFACE

The European Academy of Occupational Health Psychology in collaboration with the European University Cyprus welcomes you to its 14<sup>th</sup> scientific conference. This is the first time that our conference is taking place online due to the Covid-19 pandemic that resulted in the cancellation of our originally planned conference in Nicosia, Cyprus.

Covid-19 has so far resulted in about 850,000 deaths around the world. People have now started to return to their workplaces physically while others continue to work remotely online. EAOHP has a moral and scientific duty to support the working population through its research, knowledge dissemination and practice. We have therefore decided to bring the OHP community together online on 2-4 September 2020 and hopefully physically at a follow on EAOHP Symposium on 17-18 June 2021 in Rome, with a focus on 'Mental health and well-being at work in times of crisis'. In doing so, we also recognise that the value of our conference lies not only in the generation of new scientific knowledge but also in engaging in the same collaborative, supportive and friendly way we have been since the EAOHP was established.

The Academy's first conference took place in 1999 to provide a new platform to promote the development of research, education and practice in the then emerging field of occupational health psychology. That inaugural event was held in Lund, Sweden. In the intervening years, conferences have been held successfully in Nottingham, UK (2000), Barcelona, Spain (2001), Vienna, Austria (2002), Berlin, Germany (2003), Porto, Portugal (2004), Dublin, Ireland (2006), Valencia, Spain (2008), Rome, Italy (2010), Zürich, Switzerland (2012), London, UK (2014), Athens, Greece (2016) and Lisbon, Portugal (2018).

The theme for this year's conference is 'Promoting healthy and sustainable work'. This is more important now than ever as new pressures, health, financial and social, have been generated globally because of the pandemic. In the six months since we found ourselves in lockdown or physically and social distancing, we have witnessed a big impact on the population's mental health. There are many ways in which the OHP community can help. The conference will address what occupational health researchers and practitioners can do to prevent psychosocial risks but also build sustainable work environments in which people can not only survive but flourish despite adversity.

At each conference, the Academy awards a lifetime fellowship to individuals, who in the opinion of the Executive Committee, have made an exceptional contribution to the discipline of occupational health psychology. This year we are proud to welcome Prof. Paula Brough (Griffith University, Australia) and Prof. Ståle Einarsen (University of Bergen, Norway) into our College of Fellows.

On behalf of the Organising Committee, we would like to thank you for your commitment to the Academy despite current adversities and your contribution to this conference. We hope it will meet your expectations and will stoke up your enthusiasm. We continue in our commitment to build a members' Academy and will always welcome those who wish to be actively involved going forward. Finally, we would like to thank all of those who have given so generously of their time in helping to make this event a reality. Thank you and we hope to also see you next year in person in Rome!



**George Boustras**  
Conference Chair



**Sergio Iavicoli**  
President, EAOHP



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**Taru Feldt**, University of Jyväskylä, Finland  
**Timo Sinervo**, National Institute for Health and Welfare, Finland

## SPONSORS & SUPPORTING INSTITUTIONS

The following have  
generously supported the 14<sup>th</sup> conference of the  
European Academy of Occupational Health Psychology



# SPRINGER NATURE



# DELEGATE INFORMATION

## Venue

The EAOHP 2020 Conference was originally going to take place at the European University Cyprus in Nicosia, the capital city of Cyprus. However, due to the impact of the Covid-19 pandemic, the 14<sup>th</sup> EAOHP conference was postponed to 2-4 September, and will now take place for the first time as an online conference. In keeping with the original venue, the programme is based on Cyprus local time (GMT+3). The Conference will be held on BigMarker, a browser based online platform (which does not require any software downloads and runs on all devices) for learning and sharing through web conferences and webinars.

## Address:

Registration page: [https://www.bigmarker.com/series/series123/series\\_summit](https://www.bigmarker.com/series/series123/series_summit)

Conference homepage: [https://www.bigmarker.com/communities/eaohp\\_conference/conferences](https://www.bigmarker.com/communities/eaohp_conference/conferences)

## Getting online

**System considerations – IMPORTANT:** Please use the latest version of Chrome or Firefox

**Final Conference Programme** available at: <http://www.eaohp.org/programme.html>

## Information for EVERYONE

- Register as an attendee.
  - Registration page: [https://www.bigmarker.com/series/series123/series\\_summit](https://www.bigmarker.com/series/series123/series_summit)
  - Click on “Register for the conference” and use your delegate email address (this is the address where you have received this message).
  - Include your first and last name and the password sent to you by email.
  - You will be redirected to the conference channel where all the sessions will be displayed in your local time zone and in Cyprus local time. In the conference channel you will be able to see all the sessions of the conference sorted by day.
  - You will receive an email confirming your registration, you can access the conference sessions anytime by clicking on this link. If you lose this email, you can re-register using the same email and password.
- Please note that only session presenters and chairs have access to the camera and microphone. As an attendee your camera and microphone will be disabled by default, you will be able to enter the waiting room for any session from 15 minutes before the webinar starts. To ask presenters any questions during the session, please use the public chat function.

## Presentations (Author Guidelines)

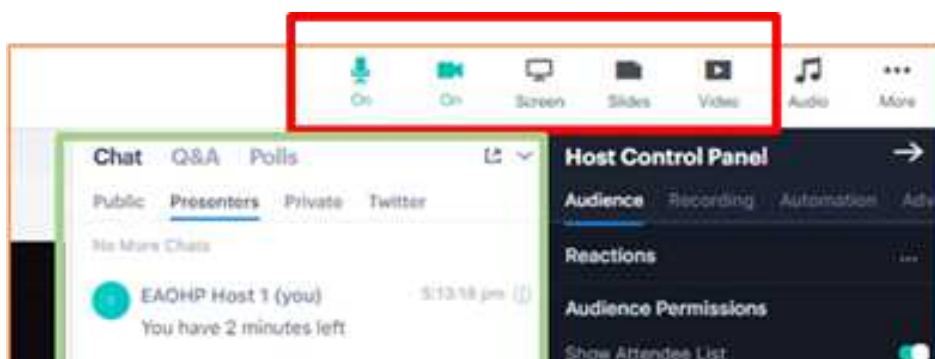
### Before the Session

- Click on the link in the email from BigMarker inviting you to “Get Ready to Present” (you will receive a link for each session in which you are presenting). Please click on the link provided to set up your profile. Here, you can check whether your system and internet is compatible for the session as well as download the “Presenter Guide”. Please avoid using Microsoft Edge or Internet Explorer. Instead please use the latest version of Chrome or Firefox as these browsers work best with Bigmarker.
- The link in the email will allow you to access the session on the day. You can also access the session through the landing page of the Conference on BigMarker ([https://www.bigmarker.com/communities/eaohp\\_conference/conferences](https://www.bigmarker.com/communities/eaohp_conference/conferences)), and then clicking on the session in which you are presenting.

- Presentations uploaded onto BigMarker are automatically converted to PDF format. Sometimes special effects, animation or fonts may lose their formatting during the conversion process. BigMarker suggests saving PowerPoints as PDFs before uploading your presentation. PowerPoints and presentation file size limit is 100MB. Anything larger may take longer to upload or not upload at all.

### Immediately Prior to the Session

- The Session will open to Chairs and Presenters three hours before the session starts. You can use this time, to familiarise yourself with the platform, meet other speakers and to upload presentations. We ask all presenters to have uploaded their presentations at least 30 minutes before the session, and to be in the session platform 15 minutes before the session starts.
- Please check your presentation to see that it has uploaded fully, and the formatting is correct.
- On the top righthand side of the screen there is the option to turn on microphones and cameras, and to upload slides and video (see red box in image below).



- The green box contains the chat functions. “Presenters” is for all presenters in the session including the Chair. “Public” is for everyone in the session and will be primary medium of communication in the session. This means that questions to presenters should be received through this Public chat function.
- A volunteer from the EAOHP Team will also be present, to provide any assistance 30 minutes prior to the session, and will remain available throughout the session. They will be able to support you with any questions or issues with the platform. They will introduce themselves to you.
- If you have any problem with the platform, let the Volunteer in your session know.
- We would like to record as many sessions as possible. If you and your fellow presenters’ consent, then the Volunteer will record the session. Recordings will remain on BigMarker for other participants at the Conference to watch over during the conference week. They will not be made publicly available.

## During the Session

- Please keep in mind that each oral and symposium presentation is maximum 15 minutes long (10' presentation, 5' Q&A). You are kindly requested to keep to time.
- Please switch off your microphone and camera when you are not presenting.
- Questions are taken via the public chat function, and presenters respond verbally.
- Invite participants to ask questions via the public chat function. The default position would be for microphones and cameras to be disabled for attendees during the session.
- The Chair and the EAOHP Volunteer will be at hand to help with any issues during the session

## Poster presentations

- Poster presenters have the possibility of choosing any of the following options:
  - Record a 3-minute video presentation
  - Display your poster with a short presentation explaining it.
  - You can use one Power Point slide or any other means you find useful to do this
- You will be able to upload your video directly to BigMarker three hours before the session starts. If you encounter any difficulties with this, you can send us the video at [conference@eaohp.org](mailto:conference@eaohp.org)
- After your presentation ends, you will have 2 minutes to answer any questions from attendees.

## Further assistance

Should you require any assistance during the conference, please don't hesitate to contact a member of the conference organizing committee at message board on conference home page on bigmaker. You can also contact us via email at [conference@eaohp.org](mailto:conference@eaohp.org) or on Twitter [https://twitter.com/ea\\_ohp](https://twitter.com/ea_ohp)

## Additional resources

- Presenter Guide - <https://tinyurl.com/y4jaj8rp>
- Video on sharing content (e.g. slides) - <https://tinyurl.com/yyt34ayw>



**PROGRAMME  
AT A  
GLANCE**

**Wednesday, 2/09/2020 – All Times are in local Cyprus time**

10:00 – 10:40 **Opening Session**

10:45 – 11:30 **Keynote Address:** The Enigmatic Concept of Work-Life Balance: Ensuring Meaningful Progress – Paula Brough

11:45 – 13:30 Symposium: Return to work for parents: Maintaining work-family well-being

Symposium: How to improve psychosocial risk management: New strategies and examples of good practice

Oral session: Workplace Violence, Bullying and Harassment

Oral session: Antecedents of stress and well-being 1

14:00 – 15:00 Poster session: Focus on occupational groups 1

Poster session: Workers' Health and Functioning

Meet the editors

Business Meeting

15:05 – 16:05 Symposium: Safety training of migrant workers in construction

Symposium: Overview of the Healthy Work Design and Well-Being program and illustrative case studies

Symposium: "HealthyHealthcare": Staff wellbeing Interventions in the healthcare sector

16.15 – 17.45 Symposium: The importance of sleep and recovery for work-related well-being and performance

Early Career Researcher Showcase 1

Oral session: Job satisfaction and Wellbeing

Oral session: Workplace health promotion 1

18:00 – 19:00 Symposium: Drivers of change in organisations – and the importance of context

Symposium: Work Flexibility in the US and Europe

Oral session: Antecedents of stress and well-being 2

Oral session: Employee Motivation and Performance 1

**Thursday, 3/09/2020 – All Times are in local Cyprus time**

- 10:00 – 11:30 Symposium: Still encountering a glass ceiling?  
Developments for women and work  
  
Symposium: Evaluating reflective practice groups for nursing staff in an acute care hospital setting  
  
Oral session: Leadership and management  
  
Oral session: Mental Health and the Workplace 1
- 11:45 – 13:15 DOP Invited Symposium: Addressing occupational health psychology issues in the 21st century: Are we there yet?  
  
Oral session: Policy, Practice and Consulting  
  
Oral session: Psychosocial factors at work 1  
  
Oral session: Workplace Health Promotion 2
- 13:45 – 14:45 Symposium: The future of the office: Multiple perspectives on the impact of innovative workplaces  
  
Oral session: Measurement, Assessment and Modelling  
  
Practice Forum: Are standards the panacea in mental health: An international practitioner perspective
- 15:00 – 16:30 Oral session: Burnout  
  
Oral session: Organisational Development and Change  
  
Oral session: Organisational interventions and outcomes
- 16:45 – 17:45 Poster session: Workplace health promotion  
  
Poster session: Psychosocial factors  
  
Education Forum: The connected curriculum - Occupational Health Psychology education valuable for a range of professions  
  
ICG-OHP Meeting (by invitation only)
- 18:00 – 18:45 **Keynote Address:** Well-being and Work – Paul Schulte

**Friday, 4/09/2020 – All Times are in local Cyprus time**

- 10:00 – 11:15 Symposium: The show must go on. Precarious work in the performing arts  
Symposium: The Life Course: Exploring work-relevant changes over time and generations  
Symposium: Psychosocial Safety Climate: New evidence  
Oral session: Job Insecurity, Retention and Wellbeing
- 11:30 – 12:30 Symposium: Assessing and discussing occupational health in academia  
Oral session: Employee Motivation and Performance 2  
Oral session: Ageing and the workplace
- 12:45 – 13:30 **Keynote Address:** Preventing and managing workplace bullying: The need for a well-functioning ethical infrastructure - Ståle Einarsen
- 14:00 – 15:00 Poster session: Focus on occupational groups 2  
Poster session: Antecedents of stress and well-being  
Research Forum
- 15:05 – 16:35 Symposium: Effects of working time on employees' work-life balance, recovery and health  
Symposium: Craft and recover: Creating well-being in a changing working life  
Oral session: Mental Health and the Workplace 2  
Oral session: Psychosocial factors and interventions
- 16:45 – 18:00 Oral session: Focus on occupational groups  
Oral session: Gender, health and the workplace  
Oral session: Psychosocial factors at work 2
- 18:10 – 18:30 **Closing Session**



**DETAILED  
CONFERENCE  
PROGRAMME**



**Wednesday, 2 September 2020**

## Opening Session

10:00 - 10:40

### Keynote Address: The enigmatic concept of work-life balance: Ensuring meaningful progress

10:45 – 11:30

- K1 The Enigmatic Concept of Work-Life Balance: Ensuring Meaningful Progress  
Paula Brough  
Griffith University, Brisbane, Australia

### Symposium: Return to work for parents: Maintaining work-family well-being

11:45 – 13:30 Chair: Inés Martínez-Corts, Maria Karanika-Murray

- S1 Going beyond policies to ease parents back into work and rebalance roles: The importance of individualized-deals  
Inés Martínez-Corts, Juan Pable Moreno-Beltrán  
University of Seville, Seville, Spain
- S2 Building new parents' support network at work and outside  
Helen Pluut<sup>1</sup>, Sara De Hauw<sup>2</sup>  
<sup>1</sup>Leiden University, Leiden, Netherlands. <sup>2</sup>Ghent University, Ghent, Belgium
- S3 Navigating parents' return-to-work: Lessons for maintaining work-family well-being  
Maria Karanika-Murray<sup>1</sup>, Cary Cooper<sup>2</sup>  
<sup>1</sup>Nottingham Trent University, Nottingham, United Kingdom. <sup>2</sup>Alliance Manchester Business School, Manchester, United Kingdom
- S4 Training and development for employees returning to work after parental leave  
Jo Yarker<sup>1,2</sup>, Hans-Joachim Wolfram<sup>3</sup>, Nina Junker<sup>4</sup>, Almuth McDowall<sup>1</sup>  
<sup>1</sup>Birkbeck, University of London, London, United Kingdom. <sup>2</sup>Affinity Health at Work, London, United Kingdom. <sup>3</sup>Kingston University, London, United Kingdom. <sup>4</sup>Goethe University, Frankfurt, Germany
- S5 I am a mother, I am a leader, I can do this! The moderated mediation of Psychological Capital, work-family conflict and having children on wellbeing of women leaders.  
Laritz Machin, Cifre Eva, M. Pilar Dominguez-Castillo  
Universitat Jaume I, Castellón de la Plana, Spain

## Symposium: How to improve psychosocial risk management: New strategies & examples of good practice

11:45 – 13:30 Chair: Noortje Wiezer, Irene Houtman

- S6 The role of political, social, and economic factors in promoting a positive psychosocial work environment in the UK  
Aditya Jain<sup>1</sup>, Peter Kelly<sup>2</sup>, Luis Torres<sup>1</sup>  
<sup>1</sup>Nottingham University Business School, Nottingham, United Kingdom. <sup>2</sup>HSE, London, United Kingdom.
- S7 Integrated management of psychosocial risks: Moving from the assessment to the implementation of actions.  
Cristina Di Tecco  
Inail, Rome, Italy
- S8 Benchmarking Psychosocial Safety Climate as a stimulus for improving work design and work conditions.  
Maureen Dollard, Tessa Bailey  
University of South Australia, Adelaide, Australia
- S9 Decreasing employees' work stress by a participatory, organizational level intervention in primary education: A multiple-case study  
Maartje Bakhuys Roozeboom, Roos Schelvis, Noortje Wiezer  
TNO, Leiden, Netherlands
- S10 Skills for Work Program as an example of life-course -focused intervention.  
Salla Toppinen-Tanner, Mervi Ruokolainen  
Finnish Institute of Occupational Health, Helsinki, Finland

## Antecedents of stress and well-being 1

11:45 – 13:30 Chair: Cleo Varianou-Mikellidou

- O1 What is wrong with not being restricted to a single work location? A further validation to the E-Work Life (EWL) scale  
Maria Charalampous, Christine Grant, Carlo Tramontano  
Coventry University, Coventry, United Kingdom
- O2 The appraisal of resources: A valid extension for current demand and resources theories?  
Thomas Rigotti<sup>1</sup>, Miriam Arnold<sup>2</sup>  
<sup>1</sup>Johannes Gutenberg Universität Mainz, Mainz, Germany. <sup>2</sup>German Resilience Center, Mainz, Germany
- O3 Individual characteristics, work demands and work environment affecting the performance of the worker  
Cleo Varianou-Mikellidou, Olga Nicolaidou, George Boustras  
European University Cyprus - Cerides, Nicosia, Cyprus
- O4 Longitudinal changes in employees' appraisal of their job demands: A latent transition analysis  
Peikai Li, Toon Taris, Maria C. W. Peeters  
Utrecht University, Utrecht, Netherlands

- O5 Compulsive internet use and romantic partner conflict in long-hour workers: impact of two brief interventions on participants symptoms and partners' perceived relationship improvement  
*Cristina Quinones*  
*Open University, Milton Keynes, United Kingdom*
- O6 Why would board of directors' care about occupational health and safety? An interview study of boards' motives to engage in occupational health and safety  
*Ulrica von Thiele Schwarz<sup>1,2</sup>, Terese Stenfors<sup>2</sup>, Henna Hasson<sup>2</sup>, Mandus Frykman<sup>2</sup>, Carl Johan Sundberg<sup>2</sup>, Caroline Lornudd<sup>2</sup>*  
*<sup>1</sup>Mälardalen university, Västerås, Sweden. <sup>2</sup>Karolinska Institutet, Stockholm, Sweden*

## Workplace Violence, Bullying and Harassment

11:45 – 13:30 Chair: Norbert Semmer

- O7 High-performance work practices and employee well-being: Effects on engagement and workplace bullying  
*Denise Salin, Stefan Santokhie, Sofia John*  
*Hanken School of Economics, Helsinki, Finland*
- O8 Relationship between bullying, resilience and job satisfaction among Pakistani university employees  
*Ivan Suneel, Sara Issra*  
*Forman Christian College (A Chartered University), Lahore, Pakistan*
- O9 Explaining situational triggers of incivility in tightly cooperating teams: Towards a theory of micro-coordination conflict  
*Norbert Semmer<sup>1</sup>, Sandra Keller<sup>2</sup>, Tschan Franziska<sup>3</sup>*  
*<sup>1</sup>University of Bern, Bern, Switzerland. <sup>2</sup>Bern University Hospital, Bern, Switzerland. <sup>3</sup>University of Neuchâtel, Neuchâtel, Switzerland*
- O10 Onset of workplace bullying, violence and changes in health-related behaviors: A multi-cohort study  
*Tianwei Xu<sup>1,2,3</sup>, Morten B Nielsen<sup>4,5</sup>, Alice J Clark<sup>1</sup>, Jaana Pentti<sup>6,7</sup>, Jussi Vahtera<sup>7</sup>, Sari Stenholm<sup>7</sup>, Reiner Rugulies<sup>3,1</sup>, Jeppe K Sørensen<sup>3</sup>, Mads Nordentoft<sup>3</sup>, Hugo Westerlund<sup>2</sup>, Linda Magnusson Hanson<sup>2</sup>, Åse M Hansen<sup>1,3</sup>, Tuula Oksanen<sup>8</sup>, Mika Kivimäki<sup>6,9</sup>, Naja H Rod<sup>1,2</sup>*  
*<sup>1</sup>University of Copenhagen, Copenhagen, Denmark. <sup>2</sup>Stockholm University, Stockholm, Sweden. <sup>3</sup>National Research Center for the Working Environment, Copenhagen, Denmark. <sup>4</sup>University of Bergen, Bergen, Norway. <sup>5</sup>National Institute of Occupational Health, Oslo, Norway. <sup>6</sup>University of Helsinki, Helsinki, Finland. <sup>7</sup>University of Turku and Turku University Hospital, Turku, Finland. <sup>8</sup>Finnish Institute of Occupational Health, Helsinki and Turku, Finland. <sup>9</sup>University College London, London, United Kingdom*
- O11 'That's not my job': Measuring behaviours around communal kitchens as markers of positive workplaces  
*Joshua Hemmings, Prudence Milliar*  
*University of the Sunshine Coast, Maroochydore, Australia*

## Poster Session: Focus on occupational groups 1

14:00 – 15:00 Chair: EAOHP Organising Committee

- P1 Investigation of anxiety level, depressive symptomatology and how they affect the quality of life and satisfaction of Greek Police Officers  
Maria Malliarou<sup>1</sup>, Anastasia Michou<sup>2</sup>, Pavlos Safaris<sup>3</sup>  
<sup>1</sup>University of Thessaly, Larisa, Greece. <sup>2</sup>Hellenic Open University, Patra, Greece. <sup>3</sup>Cyprus University of Technology, Limassol, Cyprus
- P2 Influence of shift work on job satisfaction and the emergence of burnout syndrome in nursing staff in Ferrol  
Adela Reig Botella, Gloria Andrea Salazar Reina  
University A Coruña, A Coruña, Spain
- P3 The role of exposure to violence, burnout and self-efficacy on the life satisfaction of clinical staff working in a secure mental health hospital  
Ella Hatton<sup>1,2,3</sup>, Mei-I Cheng<sup>3</sup>  
<sup>1</sup>Coventry University, Coventry, United Kingdom. <sup>2</sup>St Andrew's Healthcare, Northampton, United Kingdom. <sup>3</sup>De Montfort University, Leicester, United Kingdom
- P4 "Polish" occupational burnout - determinants of the phenomenon and its dynamics based on selected professional sectors and preventive actions from the perspective of HR consultant.  
Magdalena Ślęzyk-Sobol  
University of Wrocław, Wrocław, Poland

## Poster Session: Workers' Health and Functioning

14:00 – 15:00 Chair: EAOHP Organising Committee

- P5 Developing a scale for measuring social well-being in non-territorial offices  
Susanne Colenberg  
Delft University of Technology, Delft, Netherlands
- P6 The Job-demands resources model: A validation with employees working in Luxembourg  
Martha Fernandez de Henestrosa, Philipp Sischka, Georges Steffgen  
University of Luxembourg, Esch sur Alzette, Luxembourg
- P7 The development and validation of the Work-Related Maladaptive Thinking Patterns Questionnaire  
Nejc Ploh<sup>1</sup>, Andrea Noja<sup>2</sup>, Bettina Kubicek<sup>2</sup>, Sara Tement<sup>1</sup>  
<sup>1</sup>University of Maribor, Maribor, Slovenia. <sup>2</sup>University of Graz, Graz, Austria
- P8 Job demands, exhaustion, and sleep quality: A daily diary study  
Marina Horvat, Sara Tement  
University of Maribor, Maribor, Slovenia

## Meet the Editors

**14:00 – 15:00 Chair: Karina Nielsen, Sandra Ohly**

F1 In this session, editors from the major journals in OHP will be represented.

- Professor George Boustras, editor of *Safety Science*
- Professor Sharon Clarke, incoming editor of *Journal of Occupational Health Psychology*
- Professor Karina Nielsen, associate editor of *Work & Stress*
- Professor Sandra Ohly, editor of *European Journal of Work & Organizational Psychology*

## Business Meeting

**14:00 – 15:00** EAOHP General Assembly – open to all members

## Symposium: Safety training of migrant workers in construction

**15:05 – 16:05 Chair: Karina Nielsen**

- S11 What is known on safety training of construction migrant workers and the main challenges for future research  
José M. Peiró<sup>1,2</sup>, Karina Nielsen<sup>3</sup>, Rose Shepherd<sup>3</sup>, Michela Vignoli<sup>4</sup>, Felisa Latorre<sup>5</sup>  
<sup>1</sup>University of Valencia, Valencia, Spain. <sup>2</sup>IVIE, Valencia, Spain. <sup>3</sup>University of Sheffield, Sheffield, United Kingdom. <sup>4</sup>University of Trento, Trento, Italy. <sup>5</sup>Universidad Juan Carlos I, Madrid, Spain
- S12 The challenges of training migrant workers in the construction industry: A qualitative study  
Rose Shepherd<sup>1</sup>, Laura Lorente<sup>2</sup>, Michela Vignoli<sup>3</sup>, José M. Peiró<sup>2</sup>  
<sup>1</sup>University of Sheffield, Sheffield, United Kingdom. <sup>2</sup>University of Valencia, Valencia, Spain. <sup>3</sup>University of Trento, Trento, Italy
- S13 A theory-based model for evaluating safety training of migrant workers in construction  
Karina Nielsen<sup>1</sup>, Rose Shepherd<sup>1</sup>, Michela Vignoli<sup>2</sup>  
<sup>1</sup>University of Sheffield, Sheffield, United Kingdom. <sup>2</sup>University of Trento, Italy

## Symposium: Overview of the Healthy Work Design and Well-Being program and illustrative case studies

**15:05 – 16:05 Chair: Regina Pana-Cryan, Tapas Ray**

- S14 Work organization variables associated with stress in U.S. teachers  
Naomi Swanson  
NIOSH, Cincinnati, OH, USA
- S15 Examining support for workers to reduce consequence of work-family conflict  
Jeannie Nigam, Naomi Swanson  
NIOSH, Cincinnati, OH, USA

- S16 Prevalence, trends, and effects of non-standard work arrangement dimensions: Focus on work schedules  
Regina Pana-Cryan<sup>1</sup>, Abay Asfaw<sup>1</sup>, Tim Bushnell<sup>2</sup>  
<sup>1</sup>NIOSH, Washington, DC, USA. <sup>2</sup>NIOSH, Cincinnati, OH, USA

## Symposium: “HealthyHealthcare”: Staff wellbeing Interventions in the healthcare sector

15:05 – 16:05 Chair: **Annet de Lange, Kevin Teoh**

- S17 Successful aging and job crafting to sustain at work: Examining relations between job crafting and work ability of healthcare workers  
Annet de Lange<sup>1,2,3,4</sup>, Karen van Dam<sup>1</sup>, Karen Pak<sup>2,5</sup>, Marit Christensen<sup>4</sup>, Lise Lovseth<sup>4</sup>, Eghe Osagie<sup>2</sup>, Tjerry Verhoeven<sup>6</sup>  
<sup>1</sup>Open University, Heerlen, Netherlands. <sup>2</sup>HAN University, Nijmegen, Netherlands. <sup>3</sup>University of Stavanger, Stavanger, Norway. <sup>4</sup>NTNU, Trondheim, Norway. <sup>5</sup>University of Tilburg, Tilburg, Netherlands. <sup>6</sup>VNO-NCW midden, Arnhem, Netherlands
- S18 Intervention for doctors reducing stigma around mental distress: Randomised controlled trial  
Asta Medisauskaite<sup>1</sup>, Caroline Kamau<sup>2</sup>  
<sup>1</sup>UCL Medical School, London, United Kingdom. <sup>2</sup>Birkbeck, London, United Kingdom
- S19 Reflections of an organisational-level wellbeing intervention: What worked and what did not  
Kevin Teoh  
Birkbeck, University of London, London, United Kingdom

## Symposium: The importance of sleep and recovery for work-related well-being and performance

16:15 – 17:45 Chair: **Jana Kühnel**

- S20 Do vacations affect creativity? A longitudinal study  
Christine Syrek<sup>1</sup>, Jessica de Bloom<sup>2,3</sup>, Dirk Lehr<sup>4</sup>  
<sup>1</sup>University of Applied Sciences Bonn-Rhein-Sieg, Rheinbach, Germany. <sup>2</sup>University of Groningen, Groningen, Netherlands. <sup>3</sup>University of Tampere, Tampere, Finland. <sup>4</sup>Leuphana Universität, Lüneburg, Germany
- S21 The flow of energy from daily sleep to work engagement: The role of positive affect, basic needs satisfaction and trait self-control  
Wladislaw Rivkin<sup>1</sup>, Stefan Diestel<sup>2</sup>  
<sup>1</sup>Aston Business School, Birmingham, United Kingdom. <sup>2</sup>University of Wuppertal, Wuppertal, Germany
- S22 Work- and non-work-related social media use during work breaks: Effects on daily employee well-being and recovery  
Despoina Xanthopoulou<sup>1</sup>, Konstantina Foti<sup>2</sup>, Savvas Papagiannidis<sup>2</sup>  
<sup>1</sup>Aristotle University of Thessaloniki, Thessaloniki, Greece. <sup>2</sup>Newcastle University Business School, Newcastle, United Kingdom

- S23 How does daily sleep quality shape vitality and creativity throughout the working day? The mediating role of flow-experience and the moderating role of mindfulness  
*Stefan Diestel, Elvira Radaca*  
*Bergische University of Wuppertal, Wuppertal, Germany*
- S24 Does the shift to daylight saving time impair employees' sleep and their work engagement?  
*Jana Kühnel<sup>1</sup>, Jette Völker<sup>2,3</sup>, Franziska Feinäugle<sup>2</sup>*  
*<sup>1</sup>University of Vienna, Vienna, Austria. <sup>2</sup>Ulm University, Ulm, Germany. <sup>3</sup>University of Mannheim, Mannheim, Germany*
- S25 The role of surface acting and detachment for changes in judges' employability  
*Angela Kuonath<sup>1</sup>, Irmgard Mausz<sup>1</sup>, Alexandra Hauser<sup>2</sup>, Dieter Frey<sup>1</sup>*  
*<sup>1</sup>LMU Munich, Munich, Germany. <sup>2</sup>TU Munich, Munich, Germany*

## Early Career Researcher Showcase

16:15 – 17:45 Chair: Birgit Greiner

- EC1 Designing inclusive work in a health-promoting way - Analysis of job demands and resources of employees in social firms  
*Ann-Christin Kordsmeyer, Volker Harth, Stefanie Mache*  
*University Medical Centre Hamburg-Eppendorf, Hamburg, Germany*
- EC2 In need of leisure: Investigating the relationship between off-job crafting, satisfaction of psychological needs and subjective well-being  
*Miika Kujanpää*  
*Tampere University, Tampere, Finland*
- EC3 Cognitive load in health professionals: Reducing information overload through adapted presentation of health data  
*Cordula Kupfer*  
*University of Graz, Graz, Austria*
- EC4 Teachers' recovery processes: Investigating the roles of different breaks from work for well-being and health among ageing teachers  
*Anniina Virtanen<sup>1</sup>, Ulla Kinnunen<sup>1</sup>, Jessica de Bloom<sup>1,2</sup>*  
*<sup>1</sup>Tampere University, Tampere, Finland. <sup>2</sup>University of Groningen, Groningen, Netherlands*
- EC5 Supporting dyslexic adults in the workplace  
*Anna Niemczewska*  
*Birkbeck, University of London, London, United Kingdom*
- EC6 Organizational capability driven change in Swedish health care: The use of focus team to develop change capabilities in health care staff  
*Johanna Widh*  
*Gothenburg University, Gothenburg, Sweden*
- EC7 Step Out – Exploring work forms and norms in the urban outdoors  
*Charlotte Petersson*  
*Malmö University, Malmö, Sweden*

## Oral Session: Job Satisfaction and Wellbeing

16:15 – 17:45 Chair: Janet Boekhorst

- O12 The importance of friends while having fun at work: A serial mediation model of workplace fun on employee wellbeing  
Janet A. Boekhorst<sup>1</sup>, Jessica Good<sup>2</sup>, Michael Halinski<sup>3</sup>  
<sup>1</sup>University of Waterloo, Waterloo, Canada. <sup>2</sup>York University, Toronto, Canada. <sup>3</sup>Ryerson University, Toronto, Canada
- O13 Brave new world? New forms of work and psychological well-being  
Amanda Sophie Voss<sup>1</sup>, Roman Soucek<sup>2</sup>, Hans Drexler<sup>1</sup>, Klaus Moser<sup>2</sup>  
<sup>1</sup>Friedrich-Alexander-University of Erlangen-Nuremberg, Erlangen, Germany.  
<sup>2</sup>Friedrich-Alexander-University of Erlangen-Nuremberg, Nuremberg, Germany
- O14 The role of job crafting in coping with work intensified demands and enhancing well-being in the workplace.  
Georgia Thrasyvoulou  
Cyprus Institute of Marketing, Nicosia, Cyprus
- O15 From flailing to gaining platform workers: Shedding light on the job demands and resources in platform work and how platform workers can rebalance them via job crafting  
Lorenz Verelst<sup>1</sup>, Lan Lemmens<sup>1</sup>, Rein De Cooman<sup>1</sup>, Marijke Verbruggen<sup>2</sup>  
<sup>1</sup>KU Leuven, Antwerp, Belgium. <sup>2</sup>KU Leuven, Leuven, Belgium
- O16 Technology use at work and the impact on staff wellbeing: It makes things easier... or does it?  
Tina Kowalski, Jane Suter  
University of York Management School, York, United Kingdom
- O17 The impact of organisational culture and business strategy incongruence on employee wellbeing: Competing values & psychological contract violations  
Zara Whysall  
Nottingham Trent University, Nottingham, United Kingdom

## Oral Session: Workplace Health Promotion 1

16:15 – 17:45 Chair: Miguel Muñoz

- O18 The influence of enterprise social media on employees' wellbeing: A research agenda  
Kathrin Kirchner<sup>1</sup>, Rikke Seim<sup>2</sup>, Christine Ipsen<sup>1</sup>  
<sup>1</sup>Technical University of Denmark, Kongens Lyngby, Denmark. <sup>2</sup>Arbejdsmiljø København, Copenhagen, Denmark
- O19 Defining and measuring dignity at work  
Tabatha Thibault, Kevin Kelloway  
Saint Mary's University, Halifax, Canada
- O20 Design, implementation, and evaluation of a psychosocial risk intervention program in an emergency unit of a Chilean public hospital  
Miguel Muñoz<sup>1,2</sup>, Viviana Rodríguez<sup>2</sup>  
<sup>1</sup>Instituto de Seguridad del Trabajo, Viña del Mar, Chile. <sup>2</sup>Universidad de Valparaíso, Valparaíso, Chile



- O21 Mental Health of Brazilian army military personnel deployed in Federal Intervention operations in Rio de Janeiro  
*Michela Cotian, Filipe Tolentino, Carolina Rodrigues-Silveira*  
*Applied Psychology Center of the Brazilian Army, Rio de Janeiro, Brazil*
- O22 The psychological and behavioural resources model of team flow (PBrTF) in project teams.  
*Weiwei Wang, Angeli Santos*  
*University of Nottingham, Nottingham, United Kingdom*

## Symposium: Drivers of change in organisations – and the importance of context

**18:00 – 19:00 Chair: Karina Nielsen**

- S26 Does seeing eye to eye on pre-training context influence followers' perceptions of leadership training outcomes?  
*Susanne Tafvelin<sup>1</sup>, Karina Nielsen<sup>2</sup>, Robert Lundmark<sup>1</sup>, Ulrica von Thiele Schwarz<sup>3</sup>, Johan Simonsen Abildgaard<sup>4</sup>, Henna Hasson<sup>5</sup>*  
*<sup>1</sup>Umeå University, Umeå, Sweden. <sup>2</sup>University of Sheffield, Sheffield, United Kingdom. <sup>3</sup>Mälardalen University, Västerås, Sweden. <sup>4</sup>National Research Centre for the Working Environment, Copenhagen, Denmark. <sup>5</sup>Karolinska institutet, Stockholm, Sweden*
- S27 The role of safety representatives' sensemaking in implementing organizational interventions  
*Eyvind Helland<sup>1</sup>, Marit Christensen<sup>1</sup>, Siw Tone Innstrand<sup>1</sup>, Anne Iversen<sup>1</sup>, Karina Nielsen<sup>2</sup>*  
*<sup>1</sup>Norwegian University of Science and Technology, Trondheim, Norway. <sup>2</sup>University of Sheffield, Sheffield, United Kingdom*
- S28 What about me? The impact of organizational changes on organizational change agents  
*Karina Nielsen<sup>1</sup>, Jeremy Dawson<sup>1</sup>, Ulrica von Thiele Schwarz<sup>2</sup>, Henna Hasson<sup>1</sup>*  
*<sup>1</sup>University of Sheffield, Sheffield, United Kingdom. <sup>2</sup>Mälardalen University, Mälardalen, Sweden. <sup>3</sup>Karolinska Institute, Stockholm, Sweden*
- S29 Congruence rules! Increased self-efficacy after an occupational health intervention - but only if leaders/teams agree about participative safety climate  
*Ulrica von Thiele Schwarz<sup>1,2</sup>, Carina Loeb<sup>1</sup>, Henna Hasson<sup>2,3</sup>, Susanne Tafvelin<sup>1</sup>*  
*<sup>1</sup>Mälardalen University, Västerås, Sweden. <sup>2</sup>Karolinska Institutet, Stockholm, Sweden. <sup>3</sup>Stockholm County Council, Stockholm, Sweden. <sup>4</sup>Umeå University, Umeå, Sweden*

## Symposium: Work Flexibility in the US and Europe

**18:00 – 19:00 Chair: Tapas Ray, Naomi Swanson**

- S30 Work flexibility trends in the United States and the potential effects of work flexibility on the future of work  
*Regina Pana-Cryan*  
*National Institute for Occupational Safety and Health, Washington, DC, USA*
- S31 Work flexibility and work-related well-being  
*Tapas Ray*  
*National Institute for Occupational Safety and Health (NIOSH), Cincinnati, USA*

- S32 Flexible work practices and its consequences in European economies  
Aditya Jain  
Nottingham University Business School, Nottingham, United Kingdom
- S33 Moving to activity based flexible office: Effects on work-related outcomes in a longitudinal study  
Bettina Kubicek<sup>1</sup>, Sabina Hodzic<sup>1</sup>, Christian Korunka<sup>2</sup>  
<sup>1</sup>University of Graz, Graz, Austria. <sup>2</sup>University of Vienna, Vienna, Austria

## Oral Session: Antecedents of stress and well-being 2

18:00 – 19:00 Chair: Ruth Noppeneay

- O23 Chronic stressors, strain, and coping resources in Dutch police officers  
Liselotte Eikenhout<sup>1</sup>, Karen van Dam<sup>1</sup>, Roos Delahaij<sup>2</sup>, Wim Kamphuis<sup>2</sup>, Joris van Ruysseveldt<sup>1</sup>  
<sup>1</sup>Open Universiteit, Heerlen, Netherlands. <sup>2</sup>TNO, Soesterberg, Netherlands
- O24 Just striving, or thriving? Underlying mechanisms for the link between challenge and hindrance stressors with employee resilience  
Arian Kunzelmann<sup>1</sup>, Thomas Rigotti<sup>1,2</sup>  
<sup>1</sup>Johannes-Gutenberg-University, Mainz, Germany. <sup>2</sup>German Resilience Center, Mainz, Germany
- O25 The dynamics of affect regulation: how demands and resources shape reactivity and inertia  
George Michaelides  
University of East Anglia, Norwich, United Kingdom
- O26 Does commuting strain affect the relationship between work stress and detachment? A diary study  
Ruth Noppeneay, Bettina S. Wiese  
RWTH Aachen University, Aachen, Germany

## Oral Session: Employee Motivation and Performance 1

18:00 – 19:00 Chair: Hanne Berthelsen

- O27 What makes for a good active lunch break? A diary study on lunch break workouts in relation to creativity at work.  
Juriena de Vries, Paraskevas Petrou, Arnold Bakker  
Erasmus University, Rotterdam, Netherlands
- O28 Is there a potential in integrating staff-assessed care quality in workplace surveys? A prospective study  
Hanne Berthelsen<sup>1</sup>, Katharina Wretling<sup>2</sup>, Hugo Westerlund<sup>3</sup>  
<sup>1</sup>Malmö University, Malmö, Sweden. <sup>2</sup>Västra Götaland Region, Gothenburg, Sweden. <sup>3</sup>Stockholm University, Stockholm, Sweden
- O29 Self- and Other-oriented strengths use at work: Daily relations to in- and extra-role performance  
Hannah Moore<sup>1</sup>, Marianne van Woerkom<sup>1,2</sup>, Arnold Bakker<sup>1</sup>, Heleen van Mierlo<sup>1</sup>  
<sup>1</sup>Erasmus University, Rotterdam, Netherlands. <sup>2</sup>Tilburg University, Tilburg, Netherlands

**Symposium: Still encountering a glass ceiling? Developments for women and work**

**10:00 – 11:30 Chair: Paula Brough**

- S34 Different experiences of job characteristics for female and male leaders.  
*Paula Brough*  
*Griffith University, Brisbane, Australia*
- S35 Crossover research: Past, present and future.  
*Mina Westman*  
*Tel Aviv University, Tel Aviv, Israel*
- S36 The song remains the same: The precarious journey to the top.  
*Almuth McDowall, Mark Stringer*  
*Birkbeck, University of London, London, United Kingdom*
- S37 Menopause and the workplace – What do menopausal employees want and what can we do? Insights from the United Kingdom  
*Claire Hardy*  
*Lancaster University, Lancaster, United Kingdom*

**Symposium: Evaluating reflective practice groups for nursing staff in an acute care hospital setting**

**10:00 – 11:30 Chair: Prudence Millear**

- S38 Reflective practice groups and professional quality of life: A predictive model accounting for the effects of person and job factors  
*Benjamin Davey<sup>1</sup>, Prudence Millear<sup>1</sup>, Christopher Dawber<sup>2</sup>, Gino Medoro<sup>2</sup>*  
*<sup>1</sup>University of the Sunshine Coast, Sippy Downs, Australia. <sup>2</sup>Sunshine Coast Hospital and Health Service, Birtinya, Australia*
- S39 RPGs for nurses – Comparing between wards and on levels of personal attendance  
*Samuel Byrne<sup>1</sup>, Prudence Millear<sup>1</sup>, Christopher Dawber<sup>2</sup>, Gino Medoro<sup>2</sup>*  
*<sup>1</sup>University of the Sunshine Coast, Sippy Downs, Australia. <sup>2</sup>Sunshine Coast Hospital and Health Service, Birtinya, Australia*
- S40 Exploring how quality of RPGs build resources and improve professional quality of life for nurses  
*Madison Sundgren<sup>1</sup>, Prudence Millear<sup>1</sup>, Christopher Dawber<sup>2</sup>, Gino Medoro<sup>2</sup>*  
*<sup>1</sup>University of the Sunshine Coast, Sippy Downs, Australia. <sup>2</sup>Sunshine Coast Hospital and Health Service, Birtinya, Australia*
- S41 Group cohesion in nurse group clinical supervision  
*Debbie Reschke<sup>1</sup>, Prudence Millear<sup>1</sup>, Christopher Dawber<sup>2</sup>, Gino Medoro<sup>2</sup>*  
*<sup>1</sup>University of the Sunshine Coast, Sippy Downs, Australia. <sup>2</sup>Sunshine Coast Hospital and Health Service, Birtinya, Australia*

- S42 Exploring the influences on attendance and effectiveness of Reflective Practice Groups: The role of facilitators, preferences, and perceived benefits & barriers  
*Phoebe Rattray<sup>1</sup>, Prudence Milliar<sup>1</sup>, Christopher Dawber<sup>2</sup>, Gino Medoro<sup>2</sup>*  
<sup>1</sup>University of the Sunshine Coast, Sippy Downs, Australia. <sup>2</sup>Sunshine Coast Hospital and Health Service, Birtinya, Australia

## Oral Session: Leadership and Management

10:00 – 11:30 Chair: Kristoffer Holm

- O30 My leader just cares for me – Do leaders profit from health-oriented leadership?  
*Miriam Arnold<sup>1</sup>, Thomas Rigotti<sup>2,1</sup>*  
<sup>1</sup>German Resilience Center, Mainz, Germany. <sup>2</sup>Johannes Gutenberg-Universität, Mainz, Germany
- O31 “It’s not what you do, it’s you that makes the difference!” Interpersonal emotional regulation and employee well-being: The moderating role of managerial trustworthiness.  
*Bernadette Naughton<sup>1</sup>, Deirdre O’Shea<sup>2</sup>, Lisa van der Werff<sup>3</sup>*  
<sup>1</sup>Athlone Institute of Technology, Athlone, Ireland. <sup>2</sup>University of Limerick, Limerick, Ireland. <sup>3</sup>Dublin City University, Dublin, Ireland
- O32 Need-supportive leadership behaviors, need satisfaction, and sickness absenteeism: Direct and indirect associations  
*Andreas Stenling, Susanne Tafvelin*  
 Umeå University, Umeå, Sweden
- O33 Does leadership training affect subordinates’ intended and actual turnover? Evidence from a field experiment  
*Anne Bøllingtoft<sup>1</sup>, Tine Mundbjerg Eriksen<sup>2</sup>, Ann-Louise Holten<sup>3,4</sup>, Jacob Ladenburg<sup>5</sup>, Niels Westergaard-Nielsen<sup>4</sup>*  
<sup>1</sup>University of Aarhus, Aarhus, Denmark. <sup>2</sup>The Danish Center for Social Science Research, Aarhus, Denmark. <sup>3</sup>University of Copenhagen, Copenhagen, Denmark. <sup>4</sup>Copenhagen Business School, Copenhagen, Denmark. <sup>5</sup>The Rockwool Foundation, Copenhagen, Denmark
- O34 Longitudinal associations between witnessed and instigated workplace incivility, well-being and psychosocial work factors  
*Kristoffer Holm, Eva Torkelson, Martin Bäckström*  
 Lund University, Lund, Sweden

## Oral Session: Mental Health and the Workplace 1

10:00 – 11:30 Chair: Weiwei Wang

- O35 IGLOO resources enabling sustainable return to work following mental ill-health  
*Jo Yarker<sup>1,2</sup>, Karina Nielsen<sup>3</sup>*  
<sup>1</sup>Birkbeck, University of London, London, United Kingdom. <sup>2</sup>Affinity Health at Work, London, United Kingdom. <sup>3</sup>University of Sheffield, United Kingdom
- O36 Workplace bullying: A predecessor for mental health problems  
*Maria P. Michailidis<sup>1,2</sup>, Paris Vogazianos<sup>3</sup>, Maria Fotiou<sup>2</sup>*  
<sup>1</sup>University of Nicosia, Nicosia, Cyprus. <sup>2</sup>Mediterranean Institute of Management, Nicosia, Cyprus. <sup>3</sup>European University, Nicosia, Cyprus

- O37 Work-related well-being in the legal profession: An integrative literature review  
Lucinda Soon, Almuth McDowall, Kevin Teoh  
*Birkbeck, University of London, London, United Kingdom*
- O38 Staff-rated quality of work is related to perceived stress  
Hugo Westerlund<sup>1</sup>, Hanne Berthelsen<sup>2</sup>  
<sup>1</sup>*Stockholm University, Stockholm, Sweden.* <sup>2</sup>*Malmö University, Malmö, Sweden*
- O39 Burnout and exhaustion in Malaysian academia: implications for the growing landscape of South East Asian higher education  
Victor Goh<sup>1,2</sup>, Hazel Ramos<sup>2</sup>  
<sup>1</sup>*UCSI, Kuala Lumpur, Malaysia.* <sup>2</sup>*University of Nottingham Malaysia, Kuala Lumpur, Malaysia*

## **DOP Invited Symposium: Addressing occupational health psychology issues in the 21st century: Are we there yet?**

**11:45 – 13:15 Chair: Gail Kinman, Roxane Gervais**

- S43 Is online workplace advice for ADHD paying attention to the research? Is online workplace advice for ADHD paying attention to the research?  
Kirsty Lauder, Almuth McDowall  
*Birkbeck, University of London, London, United Kingdom*
- S44 Digital nomads – the implications for wellbeing and work-life balance  
Gail Kinman  
*University of Bedfordshire, Bedfordshire, United Kingdom*
- S45 The psychology of cycle-commuting: Encouraging healthy and sustainable behaviours for wellbeing at work  
Alan Redman  
*Criterion, Brighton, United Kingdom*
- S46 Positive Thinking in organisations: To fake or not to fake? An interview study  
Shafaq Garayeva, Almuth McDowall  
*Birkbeck, University of London, London, United Kingdom*
- S47 Sleep and its links with work relevant mental health  
Roxane Gervais  
*Independent, Goole, United Kingdom*

## **Oral Session: Policy, Practice and Consulting**

**11:45 – 13:15 Chair: Ian Hesketh**

- O40 A six-year effect evaluation of an occupational health intervention – Contextual challenges made a positive effect vanish  
Per Øystein Saksvik<sup>1</sup>, Helene Alnes Vedlog<sup>1</sup>, Silje Fossum<sup>1</sup>, Øystein Indergaard<sup>1</sup>, Marit Christensen<sup>1</sup>, Maria Karanika-Murray<sup>2</sup>  
<sup>1</sup>*Norwegian University of Science and Technology, Trondheim, Norway.* <sup>2</sup>*Nottingham Trent University, Nottingham, United Kingdom*

- O41 Developing and delivering trauma response in the British Police Service  
*Ian Hesketh<sup>1</sup>, Noreen Tehran<sup>2</sup>*  
*<sup>1</sup>College of Policing, London, United Kingdom. <sup>2</sup>NTA, Twickenham, United Kingdom*
- O42 Competence profile for the occupational clinician  
*Céline Leclercq<sup>1</sup>, Eric Philippe<sup>2</sup>, Julie Laurent<sup>1</sup>, Stéphanie Peters<sup>1</sup>, Anne Burlet<sup>2</sup>, Pierre Firket<sup>2</sup>, Isabelle Hansez<sup>1</sup>*  
*<sup>1</sup>University of Liège, Liège, Belgium. <sup>2</sup>La Licorne-ISoSL, Liège, Belgium*
- O43 Evaluation of a participatory intervention: Interprofessional working in healthcare settings  
*Maria Karanika-Murray<sup>1</sup>, Patricia Gillen<sup>2</sup>, Thomas Baguley<sup>1</sup>, Jenni Beckett<sup>2</sup>, Per Øystein Saksvik<sup>3</sup>*  
*<sup>1</sup>Nottingham Trent University, Nottingham, United Kingdom. <sup>2</sup>Southern Health and Social Care Trust, Newry, United Kingdom. <sup>3</sup>Norwegian University of Science and Technology, Trondheim, Norway*
- O44 Sustainable livelihoods: Experiences of Female Informal Traders (FIT) during the 2017 – 2018 cholera outbreak in Lusaka  
*Chao Nkhungulu Mulenga*  
*University of Cape Town, Cape Town, South Africa*
- O45 The 'Balance in Educational Tasks App': An intervention facilitating work stress management and professionalization  
*Irene Houtman<sup>1</sup>, Jos Sanders<sup>1,2</sup>, Joep van den Eerenbeemt<sup>1,3</sup>, Jenny Huijs<sup>1,4</sup>*  
*<sup>1</sup>TNO, Leiden, Netherlands. <sup>2</sup>HAN University of Applied Sciences, Arnhem, Netherlands. <sup>3</sup>Leiden University, Leiden, Netherlands. <sup>4</sup>Utrecht University, Utrecht, Netherlands*

## Oral Session: Psychosocial factors at work 1

11:45 – 13:15 Chair: Silke Op de Beeck

- O46 Well-being as a mediator of the relationship between human resource practices and employee performance – the case of a multinational corporation in Finland.  
*Stefan Santokhie, Maria Törnroos, Mats Ehnrooth*  
*Hanken School of Economics, Helsinki, Finland*
- O47 Home-to-career interference within dual-earner families  
*Silke Op de Beeck, Marijke Verbruggen, Elisabeth Abraham*  
*KU Leuven, Leuven, Belgium*
- O48 Challenges in managing psychosocial risks in EU countries: A qualitative case study  
*Michael Ertef*  
*Federal Institute for Occupational Safety and Health (BAuA), Berlin, Germany*
- O49 Employment relationship and precariousness of work: The effect on the quality of working life of Portuguese veterinarians  
*Fátima Lobo<sup>1</sup>, Sílvia Lopes<sup>2</sup>*  
*<sup>1</sup>Universidade Católica Portuguesa, Braga, Portugal. <sup>2</sup>Universidade Europeia, Lisbon, Portugal*

- O50 A multi-method approach to investigating psychological resilience in a conscripted basic military training environment  
Jeremiah Koh<sup>1,2</sup>, Almuth McDowall<sup>1</sup>  
<sup>1</sup>*Birkbeck, University of London, London, United Kingdom.* <sup>2</sup>*Singapore Armed Forces, Singapore, Singapore*

## Oral Session: Workplace Health Promotion 2

11:45 – 13:15 Chair: **Sascha Abdel Hadi**

- O51 Prevention program in connection with vocational rehabilitation in Iceland  
Ingibjorg Loftsdottir  
*VIRK Voational Rehabilitation Fund, Reykjavik, Iceland*
- O52 Relationships between work and physical activity during vacation  
Sascha Abdel Hadi<sup>1</sup>, Sabine Sonnentag<sup>2</sup>, Stacey Parker<sup>3</sup>, Jan Alexander Häusser<sup>1</sup>  
<sup>1</sup>*Justus-Liebig-University, Gießen, Germany.* <sup>2</sup>*University of Mannheim, Mannheim, Germany.* <sup>3</sup>*University of Queensland, St Lucia, Australia*
- O53 Into the wild! Greening and pleasure as predictors of psychological well-being after a recreational walk  
Micha Hilbert, Carmen Binnewies  
*Westfälische Wilhelms-Universität, Münster, Germany*
- O54 The impact of migraine on work-role functioning of employees: preliminary findings of a diary study  
Margot van der Doef, Sophie van den Berg, Karin van der Hiele  
*Leiden University, Leiden, Netherlands*

## Symposium: The future of the office: Multiple perspectives on the impact of innovative workplaces

13:45 – 14:45 Chair: **Rein De Cooman, Anja Van den Broeck**

- S48 Telework and its associations with employee well-being and performance: Employees' self-identity as a key individual difference?  
Maria Gaudiino<sup>1</sup>, Anja Vanden Broeck<sup>1</sup>, Rein DeCooman<sup>2</sup>, Marijke Verbruggen<sup>3</sup>  
<sup>1</sup>*KU Leuven, Brussels, Belgium.* <sup>2</sup>*KU Leuven, Antwerpen, Belgium.* <sup>3</sup>*KU Leuven, Leuven, Belgium*
- S49 Place and time independent working: Meant to benefit employee and organization, but what about the customer?  
Rein De Cooman<sup>1</sup>, Jonas De Kerf<sup>1</sup>, Lynn Germeys<sup>2</sup>, Sara De Gieter<sup>3</sup>  
<sup>1</sup>*KU Leuven, Antwerp, Belgium.* <sup>2</sup>*KU Leuven, Leuven, Belgium.* <sup>3</sup>*Vrije Universiteit Brussel, Brussels, Belgium*

## Oral Session: Measurement, Assessment and Modelling

13:45 – 14:45 Chair: **Silvia Lopes**

- O55 What does a single-item measure of job stressfulness assess?  
Jonathan Houdmont<sup>1</sup>, Liza Jachens<sup>2</sup>, Raymond Randall<sup>3</sup>, Sadie Hopson<sup>1</sup>, Sean Nuttall<sup>1</sup>, Stamatia Pamia<sup>1</sup>  
<sup>1</sup>*University of Nottingham, Nottingham, United Kingdom.* <sup>2</sup>*Webster University, Geneva, Switzerland.* <sup>3</sup>*University of Sheffield, Sheffield, United Kingdom*

- O56 Work-related stress in the healthcare sector: A tailored psychosocial risk assessment approach  
Ivan Marzocchi<sup>1,2</sup>, Cristina Di Tecco<sup>2</sup>, Monica Ghelli<sup>2</sup>, Matteo Ronchetti<sup>2</sup>, Claudio Barbaranelli<sup>1</sup>, Valerio Ghezzi<sup>1</sup>, Valeria Ciampa<sup>1</sup>, Benedetta Persechino<sup>2</sup>, Sergio Iavicoli<sup>2</sup>  
<sup>1</sup>Sapienza University of Rome, Rome, Italy. <sup>2</sup>The Italian Workers' Compensation Authority (INAIL), Rome, Italy
- O57 Proactive personality and job satisfaction: The mediating role of psychological capital and work engagement  
Konstantinos Chiotis  
 Naval Hospital of Crete, Chania, Greece. Hellenic Open University, Patras, Greece

## Practice Forum: Are standards the panacea in mental health: An international practitioner perspective

13:45 – 14:45 Chair: Peter Kelly

- F2 Developing frameworks for managing workplace mental health in Australia: Opportunities and challenges.  
Angela Martin  
 University of Tasmania, Tasmania, Australia
- F3 ISO45003: Development the first international standard on psychological health and safety in the workplace  
Stavroula Leka  
 Cork University Business School, University College, Cork, Ireland
- F4 A national approach to mental health and work-related stress: UK experience of a decade of interventions  
Peter Kelly  
 Health and Safety Executive, Liverpool, United Kingdom

## Oral Session: Burnout

15:00 – 16:30 Chair: Francisco Bretones

- O58 Reducing in-service teachers' burnout through social and emotional learning interventions: A meta-analysis  
Sofia Oliveira, Magda Sofia Roberto, Ana Margarida Veiga Simão, Alexandra Marques-Pinto  
 Universidade de Lisboa, Lisbon, Portugal
- O59 Killing two birds with one stone: Coaching helps to prevent and cure burnout among physicians - a controlled coaching intervention to reduce burnout and foster personal resources  
Lara Solms<sup>1,2</sup>, Annelies E.M. van Vianen<sup>1</sup>, Jessie Koen<sup>1</sup>, Tim Theeboom<sup>3</sup>, Anne P.J. de Pagter<sup>2</sup>, Matthijs de Hoog<sup>2</sup>  
<sup>1</sup>University of Amsterdam, Amsterdam, Netherlands. <sup>2</sup>Erasmus Medical Center, Rotterdam, Netherlands. <sup>3</sup>Vrije Universiteit Amsterdam, Amsterdam, Netherlands



- O60 The mediating effect of embitterment on psychological contract breach and burnout.  
Evie Michailidis<sup>1</sup>, Mia Delfin<sup>2</sup>  
<sup>1</sup>University of Cyprus, Nicosia, Cyprus. <sup>2</sup>Cyprus Institute of Management, Nicosia, Cyprus
- O61 Team-level PsyCap and its interaction with perceived visionary leader behavior in the context of burnout  
Sonja Kugler, Angela Kuonath, Dieter Frey  
LMU Munich, Munich, Germany
- O62 Mediating variables between pace of work and burnout in high-skilled migrant workers  
David Ortega Jiménez<sup>1</sup>, Karina Ocampo Vásquez<sup>1</sup>, Marina Rocío Ramírez<sup>1</sup>, Francisco D. Bretones<sup>2</sup>  
<sup>1</sup>Universidad Técnica Particular de Loja, Loja, Ecuador. <sup>2</sup>Universidad de Granada, Granada, Spain
- O63 Longitudinal effects of workaholism on burnout: Mediating role of mental health  
Anna Nastasi  
IMPAQ International, Columbia, USA. University of Baltimore, Baltimore, USA

## Oral Session: Organisational Development and Change

15:00 – 16:30 Chair: James Grosch

- O64 "It was such a good idea" – A case of implementing a participatory innovation framework in health care  
Christine Ipsen, Kasper Edwards  
Technical University of Denmark, Kgs. Lyngby, Denmark
- O65 Intra-individual dynamics of leaders during change – A weekly diary study to better understand how leaders react and act during times of transition  
Charlotte Blum, Thomas Rigotti  
Johannes Gutenberg-Universität Mainz, Mainz, Germany
- O66 An organizational design perspective on implementing organizational level intervention research in practice  
Christine Ipsen<sup>1</sup>, Signe Bergmann<sup>2</sup>  
<sup>1</sup>Technical University of Denmark, Kgs. Lyngby, Denmark. <sup>2</sup>Danish Association of Managers and Executives, Copenhagen, Denmark
- O67 Outdoor office work– benefits and challenges of integrating urban outdoor spaces into everyday working life  
Charlotte Petersson  
Malmö University, Malmö, Sweden
- O68 Technology use in the workplace: Data from the U.S. on trends and associations with physical health and well-being  
James Grosch  
National Institute for Occupational Safety and Health, Cincinnati, OH, USA
- O69 How are we doing? Attachment styles, leadership training, and wellbeing  
Arla Day, Emily MacQuarrie, Samantha Penney  
Saint Mary's University, Halifax, Canada

## Oral Session: Organisational interventions and outcomes

15:00 – 16:30 Chair: Hélène Sultan-Taïeb

- O70 Work-stress treatment and a return to work programme in Chile. Experiences and preliminary results.  
Pablo Garrido  
*OH&S Salud Ocupacional, Santiago, Chile. Universidad de Valparaíso, Valparaíso, Chile*
- O71 Psychosocial Safety Climate and its role in an intervention project to reduce psychosocial risk factors in emergency departments  
Anne Nathal de Wijn, Margot van der Doef  
*Leiden University, Leiden, Netherlands*
- O72 Predictors of treatment outcome in a multidisciplinary day clinic for police officers with PTSD  
Saara Martinmäki<sup>1</sup>, Niels van der Aa<sup>2</sup>, Mirjam Nijdam<sup>2,3</sup>, Jackie June ter Heide<sup>2</sup>  
*<sup>1</sup>ARQ Centre of Excellence Impact, Diemen, Netherlands. <sup>2</sup>ARQ Centrum'45, Diemen, Netherlands. <sup>3</sup>Amsterdam University Medical Centres, Amsterdam, Netherlands*
- O73 The costs imputable to work stress in European countries: How much does it cost from a societal perspective? A study protocol  
Hélène Sultan-Taïeb<sup>1</sup>, Jean-François Chastang<sup>2</sup>, Isabelle Niedhammer<sup>2</sup>  
*<sup>1</sup>Université du Québec à Montréal, Montréal, Canada. <sup>2</sup>INSERM, University of Angers, Angers, France*
- O74 The Opioid Crisis in the U.S.: The NIOSH Total Worker Health® Approach  
Paula Grubb, L. Casey Chosewood  
*National Institute for Occupational Safety and Health, Cincinnati, OH, USA*
- O75 From risk factors to risk constellations: adopting a person centered approach to psychosocial risk analysis.  
Guy Notelaers  
*University of Bergen, Bergen, Norway. Monitoring Statistical Research and Consulting, Galmaarden, Belgium*

## Poster Session: Psychosocial factors

16:45 – 17:45 Chair: EAOHP Organising Committee

- P9 The moderating effect of attitudes toward overqualification  
Stacy Stoffregen, Frank Giordano, Jin Lee  
*Kansas State University, Manhattan, USA*
- P10 Social-cognitive variables and health services consumption  
Adela Reig Botella<sup>1</sup>, Sarah Detaille<sup>2</sup>, Annet de Lange<sup>2,3</sup>, Miguel Clemente<sup>1</sup>, Manuel Gandoy-Crego<sup>4</sup>, Antonio Taboada-Vazquez<sup>1</sup>  
*<sup>1</sup>Universidad A Coruna, A Coruna, Spain. <sup>2</sup>HAN University of Applied Sciences, Nijmegen, Netherlands. <sup>3</sup>Open University, Heerlen, Netherlands. <sup>4</sup>Universidad de Santiago de Compostela, Santiago de Compostela, Spain*

- P11 The limitations of manager's caring behaviors on presenteeism: An investigation of the unexpected effects of an employee's felt obligation  
Janet A. Boekhorst<sup>1</sup>, Jessica Good<sup>2</sup>, Michael Halinski<sup>3</sup>  
<sup>1</sup>University of Waterloo, Waterloo, Canada. <sup>2</sup>York University, Toronto, Canada. <sup>3</sup>Ryerson University, Toronto, Canada
- P12 Vicarious customer aggression and anger  
Tabatha Thibault, Camilla Holmwall, Ramesh Venkat  
Saint Mary's University, Halifax, Canada
- P13 Stress coping strategies: Implications for employee PsyCap  
Kelsey Couture  
Kansas State University, Manhattan, Kansas, USA
- P14 Basic psychological needs satisfaction and intrinsic motivation as mediators between job resources and work engagement amongst outbound call centre operators in Peru  
Sandra Corso de Zúñiga, Sandra Alarcón Vilchez, Christian Alarcón Gonzales  
Universidad del Pacífico, Lima, Peru
- P15 Mitigating the effects of work-related stress and work/family life imbalance of female lawyers by coaching  
Ioannis Anyfantis<sup>1</sup>, Eleni Matrak<sup>2</sup>  
<sup>1</sup>European University Cyprus - CERIDES, Nicosia, Cyprus. <sup>2</sup>Institute of Prevention and Development - IPD, Larissa, Greece

## Poster Session: Workplace Health Promotion

16:45 – 17:45 Chair: EAOHP Organising Committee

- P16 Fueling work engagement: The role of sleep, health, and workload  
Ricarda Schleupner<sup>1</sup>, Jana Kühnel<sup>1,2</sup>  
<sup>1</sup>Ulm University, Ulm, Germany. <sup>2</sup>University of Vienna, Vienna, Austria
- P17 New work on old chairs? Analysis of ergonomics and implications for health-oriented design of coworking spaces  
Swantje Robelski<sup>1</sup>, Helena Keller<sup>2</sup>, Joshua de Jong<sup>3</sup>, Ann-Christin Kordsmeyer<sup>1</sup>, Volker Harth<sup>1</sup>, Stefanie Mache<sup>1</sup>  
<sup>1</sup>University Medical Centre Hamburg-Eppendorf, Hamburg, Germany. <sup>2</sup>City of Kiel, Kiel, Germany. <sup>3</sup>Helmut-Schmidt-Universität, Hamburg, Germany
- P18 How do corporate committees work with conflict prevention in the workplace?  
Liv Starheim, Rikke Seim  
Arbejdsmiljø København, Copenhagen, Denmark
- P19 The more, the better? Work engagement on the edge to a darker side  
Luzian Ganz<sup>1</sup>, Carmen Binnewies<sup>1</sup>, Despoina Xanthopoulou<sup>2</sup>  
<sup>1</sup>Westfälische Wilhelms-Universität, Münster, Germany. <sup>2</sup>Aristotle University of Thessaloniki, Thessaloniki, Greece
- P20 Electronically assisted employee psychosocial support model  
Alexandru Manescu  
Corporate Counselling Services, Luxembourg, Luxembourg

## Education Forum: The connected curriculum - Occupational Health Psychology education valuable for a range of professions

16:45 – 17:45 Chair: Birgit Greiner

F5 The connected curriculum - Occupational Health Psychology education valuable for a range of professions

## ICG-OHP Meeting (by invitation)

16:45 – 17:45

## Keynote Address: Well-being and Work

18:00 – 18:45

K2 Well-being and Work  
*Paul Schulte*  
*National Institute for Occupational Safety and Health, Cincinnati, USA*

## Friday, 4 September 2020

## Symposium: The show must go on. Precarious work in the performing arts

10:00 – 11:15 Chair: Almuth McDowall

S50 Precarious work in the performing arts and implications for wellbeing  
*Kevin Teoh*  
*Birkbeck, University of London, London, United Kingdom*

S51 Career penalties and well being. Do women become invisible as mothers?  
*Almuth McDowall*  
*Birkbeck, University of London, London, United Kingdom*

S52 "Why do we not value creative people and their input to society?" Sources of strain in the performing arts.  
*David Gamblin, Almuth McDowall, Kevin Teoh*  
*Birkbeck, University of London, London, United Kingdom*

S53 What are the performing arts doing about worklife balance and well being for carers?  
*Cassie Raine<sup>1</sup>, Almuth McDowall<sup>2</sup>*  
*<sup>1</sup>Parents in Performing Arts, London, United Kingdom. <sup>2</sup>Birkbeck University of London, London, United Kingdom*

## Symposium: The Life Course: Exploring work-relevant changes over time and generations

10:00 – 11:15 Chair: Roxane Gervais

- S54 Assessing long work hours and organisational outcomes across the generations  
Roxane Gervais<sup>1</sup>, Prudence Millear<sup>2</sup>  
*<sup>1</sup>Independent Practitioner, Goole, United Kingdom. <sup>2</sup>University of the Sunshine Coast, Sippy Downs, Australia*
- S55 Job and life satisfaction over the life course: Do life choices matter?  
Roxane Gervais<sup>1</sup>, Prudence Millear<sup>2</sup>  
*<sup>1</sup>Independent Practitioner, Goole, United Kingdom. <sup>2</sup>University of the Sunshine Coast, Sippy Downs, Australia*
- S56 Preferences for work and family roles: Exploring work patterns, choices and perceptions across the life course  
Prudence Millear<sup>1</sup>, Roxane Gervais<sup>2</sup>  
*<sup>1</sup>University of the Sunshine Coast, Sippy Downs, Australia. <sup>2</sup>Independent Researcher, Goole, United Kingdom*
- S57 Exposure to trauma as part of your job: Exploring effects on generations and presence of illegitimate tasks  
Prudence Millear, Tyne Smith  
*University of the Sunshine Coast, Sippy Downs, Australia*
- S58 Exploring demands and resources in the workplace and the impact of generations and job positions  
Prudence Millear, Clare Farley  
*University of the Sunshine Coast, Sippy Downs, Australia*

## Symposium: Psychosocial Safety Climate: New evidence

10:00 – 11:15 Chair: Amy Zadow, Maureen Dollard

- S59 Psychosocial safety climate, creativity, innovation and performance: A multilevel longitudinal study in a dynamic technological work environment  
Amy Zadow, Bella Yantcheva, Maureen Dollard  
*University of South Australia, Adelaide, Australia*
- S60 Validating the PSC tool in Germany by applying mixed methods - Results of an ongoing study  
Michael Ertel, Maren Formazin  
*Federal Institute for Occupational Safety and Health, Berlin, Germany*
- S61 Caught in a loss cycle: Breaking the reciprocal relationship between burnout and poor social support using Psychosocial Safety Climate.  
Sarven McLinton, Stephanie Jamieson, Mikaela Owen, Maureen Dollard  
*University of South Australia, Adelaide, Australia*
- S62 The beneficial effects of PSC Ideal as a clear and strong PSC message  
Ali Afsharian<sup>1</sup>, Maureen Dollard<sup>1</sup>, Tahereh Ziaian<sup>1</sup>, Christian Dormann<sup>2</sup>  
*<sup>1</sup>UniSA, Adelaide, Australia. <sup>2</sup>Johannes Gutenberg-University, Mainz, Germany*

## Oral session: Job Insecurity, Retention and Wellbeing

10:00 – 11:15 Chair: Silvia Lopes

- O76 Job demands and resources: Experiences of precariously employed casual academics at an Australian regional university  
Susan Blackmore, Prudence Millear, Mary Katsikitis  
*University of the Sunshine Coast, Sippy Downs, Australia*
- O77 The settlement and insecurity of Spanish workers in the United Kingdom in the face of Brexit  
Rebeca R. Aragón, Francisco D. Bretones  
*University of Granada, Granada, Spain*
- O78 Return to work after acquired brain injury: What can be done at the workplace to improve work retention? A systematic review of work-, and workplace factors  
Daniele Evelin Alves<sup>1</sup>, Wendy Nilsen<sup>1</sup>, Silje Christine Reistad Fure<sup>2,3</sup>, Heidi Enehaug<sup>1</sup>, Emilie Isager Howe<sup>2,3</sup>, Marianne Løvstad<sup>3,4</sup>, Louisa-Marie Fink<sup>5</sup>, Nada Andelic<sup>2,3</sup>, Øystein Spjelkavik<sup>1</sup>  
<sup>1</sup>Oslo Metropolitan University, Oslo, Norway. <sup>2</sup>Oslo University Hospital, Oslo, Norway. <sup>3</sup>University of Oslo, Oslo, Norway. <sup>4</sup>Sunnaas Rehabilitation Hospital, Nesoddtangen, Norway. <sup>5</sup>Goethe University, Frankfurt, Germany

## Symposium: Assessing and discussing occupational health in academia

11:30 – 12:30 Chair: Ellen Peeters

- S63 Assessing quality of working life in academia  
Margherita Brondino<sup>1</sup>, Marco Depolo<sup>2</sup>, Emanuela Inguscì<sup>3</sup>, Barbara Loera<sup>4</sup>, Francesco Pace<sup>5</sup>, Margherita Pasini<sup>1</sup>, Paola Spagnoli<sup>6</sup>  
<sup>1</sup>University of Verona, Verona, Italy. <sup>2</sup>University of Bologna, Bologna, Italy. <sup>3</sup>University of Salento, Lecce, Italy. <sup>4</sup>University of Torino, Torino, Italy. <sup>5</sup>University of Palermo, Palermo, Italy. <sup>6</sup>University of Campania, Caserta, Italy
- S64 Translating code of conduct, deontology and integrity into common practice in academia  
Ellen Peeters  
*Open Universiteit, Heerlen, Netherlands*
- S65 Consequences and implications of common practice in academia  
Thomas Rigotti  
*Johannes Gutenberg Universität Mainz, Mainz, Germany*
- S66 Consequences and implications of a code of conduct in academia  
Rein De Cooman  
*KU Leuven, Leuven, Belgium*

## Oral session: Employee Motivation and Performance 2

11:30 – 12:30 Chair: Beata Basinska

- O79 Work motivation under pressure on scientific productivity: a case form Polish technical university.  
*Magdalena Szufflita-Żurawska, Beata Basińska*  
*Gdańsk University of Technology, Gdańsk, Poland*
- O80 Eudaimonic and Hedonic motives and the Future Time Perspective: explaining employees' task perceptions, autonomous motivation, and persistence in their daily actions  
*Aly Kelleher<sup>1</sup>, George Michaelides<sup>2</sup>*  
*<sup>1</sup>Birkbeck, University of London, London, United Kingdom. <sup>2</sup>University of East Anglia, Norwich, United Kingdom*
- O81 Enhancing communication between leaders and teachers in secondary schools to reduce perceived workplace stress and improve job satisfaction  
*Katrina Thomas*  
*Bath Spa University, Bath, UK. British Psychological Society, London, UK*
- O82 Motivation profiles and well-being among academic researchers: A latent profile analysis  
*Beata Basinska*  
*Gdansk University of Technology, Gdansk, Poland*

## Oral session: Ageing and the workplace

11:30 – 12:30 Chair: Sheena Johnson

- O83 Protecting the health and wellbeing of older employees  
*Sheena Johnson<sup>1</sup>, Lynn Holdsworth<sup>1</sup>, Helen Beers<sup>2</sup>*  
*<sup>1</sup>University of Manchester, Manchester, United Kingdom. <sup>2</sup>Health and Safety Executive, Buxton, United Kingdom*
- O84 Development and validation of the Later Life Work Index for successful management of an aging workforce  
*Anne Wöhrmann<sup>1</sup>, Max Wilckens<sup>2</sup>, Julia Finseß, Jürgen Deller<sup>2</sup>, Mo Wang<sup>3</sup>*  
*<sup>1</sup>Federal Institute for Occupational Safety and Health (BauA), Dortmund, Germany. <sup>2</sup>Leuphana University of Lüneburg, Lüneburg, Germany. <sup>3</sup>University of Florida - Warrington College of Business, Gainesville, USA*
- O85 Successful aging at work: A psychometric analysis of a new scale  
*Annet de Lange<sup>1,2,3,4</sup>, Guy Notelaers<sup>5</sup>, Karen van Dam<sup>1</sup>*  
*<sup>1</sup>Open University Heerlen, Heerlen, Netherlands. <sup>2</sup>HAN University, Nijmegen, Netherlands. <sup>3</sup>University of Stavanger, Stavanger, Norway. <sup>4</sup>NTNU, Trondheim, Norway. <sup>5</sup>Bergen University, Bergen, Norway*
- O86 How does job performance vary with age? Evidence of curvilinear relationships with different types of performance and job complexity  
*Maria Karanika-Murray<sup>1</sup>, Dimitra Gkiontsi<sup>1</sup>, Marc van Veldhoven<sup>2</sup>, Thomas Baguley<sup>1</sup>, George Michaelides<sup>3</sup>*  
*<sup>1</sup>Nottingham Trent University, Nottingham, United Kingdom. <sup>2</sup>Tilburg University, Tilburg, Netherlands. <sup>3</sup>University of East Anglia, Norwich, United Kingdom*

## Keynote Address: Preventing and managing workplace bullying: The need for a well-functioning ethical infrastructure

12:45 – 13:30

- K3 Preventing and managing workplace bullying: The need for a well-functioning ethical infrastructure  
Ståle Einarsen  
*University of Bergen, Bergen, Norway*

## Poster Session: Focus on occupational groups 2

14:00 – 15:00 Chair: EAOHP Organising Committee

- P21 Working conditions and strains of social workers in the refugee and homelessness sector: A qualitative study  
Tanja Wirth<sup>1</sup>, Janika Mette<sup>1</sup>, Albert Nienhaus<sup>1,2</sup>, Zita Schillmöller<sup>3</sup>, Volker Harth<sup>1</sup>, Stefanie Mache<sup>4</sup>  
<sup>1</sup>University Medical Centre Hamburg-Eppendorf, Hamburg, Germany. <sup>2</sup>Institution for Statutory Accident Insurance and Prevention in the Health and Welfare Services (BGW), Hamburg, Germany. <sup>3</sup>Hamburg University of Applied Sciences, Hamburg, Germany. <sup>4</sup>Institute for Occupational and Maritime Medicine, University Medical Centre Hamburg-Eppendorf, Hamburg, Germany
- P22 “I need to take care of myself” – qualitative study on coping strategies, support and health promotion for social workers serving refugees and homeless individuals  
Julia Lengen<sup>1</sup>, Janika Mette<sup>2</sup>, Tanja Wirth<sup>2</sup>, Volker Harth<sup>2</sup>, Albert Nienhaus<sup>2,3</sup>, Stefanie Mache<sup>2</sup>  
<sup>1</sup>University Medical Centre Hamburg-Eppendorf (UKE), Hamburg, Germany. <sup>2</sup>University Medical Centre Hamburg-Eppendorf, Hamburg, Germany. <sup>3</sup>Institution for Statutory Accident Insurance and Prevention in the Health and Welfare Services (BGW), Hamburg, Germany
- P23 Analysis of mental health, working conditions, coping strategies and health promotion interventions in social firms – A scoping review  
Ann-Christin Kordsmeyer, Niklas Kiepe, Janika Mette, Swantje Robelski, Volker Harth, Stefanie Mache  
*University Medical Centre Hamburg-Eppendorf, Hamburg, Germany*
- P24 Living and working in health and safety: preliminary results from a survey on migrant workers in agro-zootechnical sector in Italy  
Benedetta Persechino<sup>1</sup>, Giovanna Gianturco<sup>2</sup>, Patrizia Laurano<sup>2</sup>, Bruna Maria Rondinone<sup>1</sup>, Antonio Valenti<sup>1</sup>, Francesco di Noia<sup>3</sup>, Donato Marino<sup>3</sup>, Mauro D’Anna<sup>4</sup>, Grazia Fortuna<sup>1</sup>, Sergio Iavicoli<sup>1</sup>  
<sup>1</sup>Italian Workers’ Compensation Authority (INAIL), Rome, Italy. <sup>2</sup>Sapienza University of Rome, Rome, Italy. <sup>3</sup>University of Foggia, Foggia, Italy. <sup>4</sup>Local Health and Social Unit of Cremona (ASST), Cremona, Italy



- P25 Evaluation of psychosocial risks in a call centre in Galicia  
*Adela Reig Botella, Julliana Andrade-Gonzales*  
*University A Coruña, A Coruña, Spain*
- P26 The relationships of the big-five personality traits, sleeping qualities, and ages:  
An exploration study on civil pilots in Taiwan  
*Chian-Fang G. Cherng<sup>1</sup>, Jenn-Sing Sher<sup>2</sup>, Hsin Chu<sup>3</sup>*  
*<sup>1</sup>National Yang-Ming University, Taipei, Taiwan. <sup>2</sup>Civil Aeronautics Administration., Taipei, Taiwan. <sup>3</sup>Civil Aeronautics Administration, Taipei, Taiwan*

## Poster Session: Antecedents of stress and well-being

14:00 – 15:00 Chair: EAOHP Organising Committee

- P27 Comparison of worklife areas and stress severity assessment in four occupation groups: Auditors, policemen, helping professionals and knowledge workers  
*Agata Chudzicka-Czupala<sup>1</sup>, Damian Grabowski<sup>1</sup>, Marta Stasiła-Sieradzka<sup>2</sup>, Żaneta Rachwaniec-Szczecińska<sup>3</sup>*  
*<sup>1</sup>SWPS University of Social Sciences and Humanities, Katowice, Poland. <sup>2</sup>University of Silesia, Katowice, Poland. <sup>3</sup>Medical University of Silesia, Katowice, Poland*
- P28 Prevalence of destructive leadership behaviors at work in Sweden  
*Robert Lundmark<sup>1</sup>, Andreas Stenling<sup>1</sup>, Ulrica von Thiele Schwarz<sup>2</sup>, Susanne Tafvelin<sup>1</sup>*  
*<sup>1</sup>Umeå University, Umeå, Sweden. <sup>2</sup>Mälardalen University, Västerås, Sweden*
- P29 Age differences in off-job crafting motives, behaviors and effects on employees' well-being and job performance  
*Merly Kosenkranius<sup>1</sup>, Jessica de Bloom<sup>1,2</sup>, Floor Rink<sup>1</sup>*  
*<sup>1</sup>University of Groningen, Groningen, Netherlands. <sup>2</sup>Tampere University, Tampere, Finland*
- P30 Qualitative and quantitative job insecurity. Job insecurity profiles in relation to wellbeing at work  
*Margherita Pasini<sup>1</sup>, Margherita Brondino<sup>1</sup>, Andrea Bazzoli<sup>2</sup>, Hans De Witte<sup>3</sup>*  
*<sup>1</sup>University of Verona, Verona, Italy. <sup>2</sup>Washington State University, Vancouver, USA. <sup>3</sup>KU Leuven, Leuven, Belgium*
- P31 Building a coaching culture in a multicultural organization in supporting its employees to grow  
*Alia AlSerka<sup>1</sup>*  
*Emirates Integrated Telecommunication Company, Dubai, UAE*

## Research Forum

14:00 – 15:00 Chair: Karina Nielsen

F6 Research Forum – open to all delegates

## Symposium: Effects of working time on employees' work-life balance, recovery and health

15.05 – 16.35 Chair: Anne Wöhrmann, Sandrine Schoenenberger

- S67 From 8-h shifts to 12h-shifts: What advantages for work life balance and rest? A longitudinal study in an intensive care unit.  
Sandrine Schoenenberger<sup>1,2</sup>, Damien Ramez<sup>3</sup>  
<sup>1</sup>FLSH, Université Catholique Lille, Lille, France. <sup>2</sup>PERSEUS, Université de Lorraine, Metz, France. <sup>3</sup>Institut Catholique de Lille, lille, France
- S68 Work-life balance of shift workers transitioning from 12-hour shifts to 8-hour shift  
Roland Strauß, Frank Brenscheidt, Anita Tisch  
Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany
- S69 The effects of working time ergonomics intervention on ageing employees' well-being  
Kati Karhula<sup>1</sup>, Tarja Hakola<sup>1</sup>, Aki Koskinen<sup>1</sup>, Tea Lallukka<sup>1,2</sup>, Sampsa Puttonen<sup>1</sup>, Tuula Oksanen<sup>1</sup>, Ossi Rahkonen<sup>2</sup>, Annina Ropponen<sup>1</sup>, Mikko Härmä<sup>1</sup>  
<sup>1</sup>Finnish Institute of Occupational Health, Helsinki, Finland. <sup>2</sup>University of Helsinki, Helsinki, Finland
- S70 Working time and health care sector employees' well-being  
Anne Wöhrmann<sup>1</sup>, Kati Karhula<sup>2</sup>  
<sup>1</sup>Federal Institute for Occupational Safety and Health Germany (BAuA), Dortmund, Germany. <sup>2</sup>Finnish Institute of Occupational Health, Helsinki, Finland
- S71 Shortened rest periods and well-being of full-time employees in Germany: Evidence from the BAuA Working Time Survey 2017  
Nils Backhaus<sup>1</sup>, Corinna Brauner<sup>2</sup>, Anita Tisch<sup>2</sup>  
<sup>1</sup>Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany. <sup>2</sup>Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany
- S72 Temporal boundarylessness of work and recovery state: The role of recovery experiences  
Laura Vieten, Anne Wöhrmann, Alexandra Michel  
Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany

## Symposium: Craft and recover: Creating well-being in a changing working life

15.05 – 16.35 Chair: Miika Kujanpää

- S73 Need satisfaction and optimal functioning at leisure and work: A longitudinal validation study of the DRAMMA model  
Miika Kujanpää<sup>1</sup>, Christine Syrek<sup>2</sup>, Dirk Lehr<sup>3</sup>, Ulla Kinnunen<sup>1</sup>, Jo Annika Reins<sup>3</sup>, Jessica de Bloom<sup>1,4</sup>  
<sup>1</sup>Tampere University, Tampere, Finland. <sup>2</sup>University of Applied Sciences Bonn-Rhein-Sieg, Rheinbach, Germany. <sup>3</sup>Leuphana University of Lueneburg, Lueneburg, Germany. <sup>4</sup>University of Groningen, Groningen, Netherlands
- S74 Do break recovery experiences mediate the relationship between daily emotional job demands and affect in the afternoon and in the evening?  
Anniina Virtanen<sup>1</sup>, Michelle van Laethem<sup>2</sup>, Jessica de Bloom<sup>1,3</sup>, Ulla Kinnunen<sup>1</sup>  
<sup>1</sup>Tampere University, Tampere, Finland. <sup>2</sup>University of Amsterdam, Amsterdam, Netherlands. <sup>3</sup>University of Groningen, Groningen, Netherlands
- S75 Recovery activities across different temporal settings  
Marjaana Sianoja<sup>1</sup>, Jessica de Bloom<sup>1,2</sup>, Ulla Kinnunen<sup>1</sup>  
<sup>1</sup>Tampere University, Tampere, Finland. <sup>2</sup>University of Groningen, Groningen, Netherlands
- S76 Working flexible, staying healthy – Development of a resource-oriented web-based training  
Sarah E. Althammer, Anne Wöhrmann, Alexandra Michel  
Federal Institute for Occupational Safety and Health (BAuA), Dortmund, Germany
- S77 Improving employees' psychological well-being and job performance with the help of a hybrid off-job crafting intervention  
Merly Kosenkranius<sup>1</sup>, Jessica de Bloom<sup>1,2</sup>, Floor Rink<sup>1</sup>  
<sup>1</sup>University of Groningen, Groningen, Netherlands. <sup>2</sup>Tampere University, Tampere, Finland

## Oral session: Mental Health and the Workplace 2

15.05 – 16.35 Chair: Liv Starheim

- O87 Being 'good enough': Perfectionism and wellbeing in social workers  
Gail Kinman, Louise Grant  
University of Bedfordshire, Bedfordshire, United Kingdom
- O88 Drawing the line between work and private life: development and validation of the work-home integration questionnaire  
Andrea Noja<sup>1</sup>, Sara Temen<sup>2</sup>, Nejc Ploh<sup>2</sup>, Bettina Kubicek<sup>1</sup>  
<sup>1</sup>University of Graz, Graz, Austria. <sup>2</sup>University of Maribor, Maribor, Slovenia

- O89 The reciprocal associations between workplace incivility and healthcare professionals' burnout, psychological well-being, and job satisfaction: A longitudinal study  
Paolo Yaranon<sup>1</sup>, Valentina Sommovigo<sup>2</sup>, Deirdre O'Shea<sup>1</sup>, Ilaria Sett<sup>2</sup>, Janine Bosak<sup>3</sup>  
<sup>1</sup>University of Limerick, Limerick, Ireland. <sup>2</sup>University of Pavia, Pavia, Italy. <sup>3</sup>Dublin City University, Dublin, Ireland
- O90 Forgiveness in the workplace: When and why forgiveness is associated with work outcomes  
Wenrui Cao, Reine van der Wal, Toon Taris  
Utrecht University, Utrecht, Netherlands
- O91 Dancing to two rhythms at the same time in a university setting  
Liv Starheim<sup>1</sup>, Martin Mølholm<sup>2</sup>  
<sup>1</sup>Arbejdsmiljø København, Copenhagen, Denmark. <sup>2</sup>University of Aalborg, Aalborg, Denmark
- O92 Emotional labour, emotional regulation, and secondary traumatic stress among allied mental health professionals in the UK: A pilot study  
Jasmeet Singh, Juliet Hassard  
University of Nottingham, Nottingham, United Kingdom

## Oral Session: Psychosocial factors and interventions

15.05 – 16.35 Chair: **Guy Notelaers**

- O93 Identification and analyses of psychosocial risks in the Belgian legal framework: the Short Inventory to Monitor Psychosocial Hazards (5A).  
Guy Notelaers<sup>1</sup>, Katrien Van Nieuwenhove<sup>2</sup>  
<sup>1</sup>University of Bergen, Bergen, Norway. <sup>2</sup>Monitoring Statistical Research and Consulting, Galmaarden, Belgium
- O94 Why management does (not) strive for a psychosocial safety climate? Developing an integrative model.  
Elfi Baillien<sup>1,2</sup>, Chahida Azzarouali<sup>1</sup>, Whitney Van den Brande<sup>3,1</sup>  
<sup>1</sup>KU Leuven, Brussels, Belgium. <sup>2</sup>University Bergen, Bergen, Norway. <sup>3</sup>IDEWE, Leuven, Belgium
- O95 Mapping of employees' of workspace preferences in activity based flex-office Setting (AFO)  
Christina Bodin Danielsson  
KTH (Royal institute of Technology), Stockholm, Sweden
- O96 Accounting for effect modifiers and confounders in intervention research  
Kasper Edwards  
Technical University of Denmark, Lyngby, Denmark

## Oral session: Focus on occupational groups

16:45 – 18:00 Chair: Ave Kutman

- O97 Psychosocial factors and emotional well-being of kindergarten teachers  
Ave Kutman, Eliis Pääsik  
*Tartu Health Care College, Tartu, Estonia*
- O98 Challenge, hindrance, and control: An analysis of primary and secondary appraisals' role in the job insecurity-outcomes relationships  
Andrea Bazzoli<sup>1</sup>, Margherita Brondino<sup>2</sup>, Hans De Witte<sup>3,4</sup>, Margherita Pasin<sup>2</sup>, Tahira Probst<sup>1</sup>  
<sup>1</sup>*Washington State University, Vancouver, WA, USA.* <sup>2</sup>*University of Verona, Verona, Italy.* <sup>3</sup>*KU Leuven, Leuven, Belgium.* <sup>4</sup>*Optentia NWU, Vanderbijlpark, South Africa*
- O99 Carrying on regardless: Sickness presenteeism in academic employees  
Gail Kinman<sup>1</sup>, Siobhan Wray<sup>2</sup>  
<sup>1</sup>*University of Bedfordshire, Bedfordshire, United Kingdom.* <sup>2</sup>*University of Lincoln, Lincoln, United Kingdom*
- O100 The effects of stress on teamwork in the NASA FOCUS lab for aerospace students  
Andrea Georgiou  
<sup>1</sup>*Middle Tennessee State University, Murfreesboro, USA*
- O101 Influence of Leadership Behaviour on Employee Well-Being: A case of Higher Education Institutions in Pakistan  
Wajiha Kazim<sup>1,2</sup>, Aditya Jain<sup>1</sup>, Ziming Cai<sup>1</sup>  
<sup>1</sup>*Nottingham University Business School, Nottingham, United Kingdom.* <sup>2</sup>*University of the Punjab, Lahore, Pakistan*

## Oral session: Gender, health and the workplace

16:45 – 18:00 Chair: Evie Michailidis

- O102 Organisational justice, work-family conflict and mental health in Chilean workers: Are there any gender-related differences?  
Viviana Rodríguez<sup>1</sup>, Luis Torres<sup>2</sup>, Karla Carvajal<sup>1</sup>  
<sup>1</sup>*University of Valparaíso, Valparaíso, Chile.* <sup>2</sup>*Nottingham University Business School, Nottingham, United Kingdom.*
- O103 Men who prioritize productivity over safety: How leadership can reduce the gender-safety priority relationship  
Maryam A. Kazmi, Xueqi Wen, Charissa Samaniego, Allison Tsao, Peggy Lindner, Christiane Spitzmueller  
*University of Houston, Houston, USA*
- O104 Perceived discrimination at work and its impact on the well-being of Canadian workers  
Maude Boulet  
*École nationale d'administration publique, Québec, Canada*

- O105 Is it OK to be connected outside the office? The impact on well-being at work and the mediated role of the work and family relationship  
*Vânia Sofia Carvalho<sup>1</sup>, Maria José Chambel<sup>1</sup>, Inês Correia<sup>1</sup>, Sílvia Lopes<sup>2</sup>*  
*<sup>1</sup>Universidade de Lisboa, Portugal. <sup>2</sup>Universidade Europeia, Lisbon, Portugal*
- O106 The knowledge loss: How overqualification relates to employees psychological needs satisfaction and work well-being  
*Sílvia Lopes<sup>1</sup>, Ana Sabino<sup>1</sup>, Francisco Cesário<sup>1</sup>, Maria José Chambel<sup>2</sup>, Carolina Rodrigues-Silveira<sup>2</sup>, Elizabete Basílio<sup>1</sup>*  
*<sup>1</sup>Universidade Europeia, Lisbon, Portugal. <sup>2</sup>Universidade de Lisboa, Portugal*

## Oral Session: Psychosocial factors at work 2

16:45 – 18:00 Chair: Janet Boekhorst

- O107 Job Insecurity Integrated Model: A longitudinal moderated mediation model test  
*Sonia Nawrocka<sup>1,2</sup>, Hans De Witte<sup>1</sup>, Sofie Kuppens<sup>1</sup>*  
*<sup>1</sup>KU Leuven, Leuven, Belgium. <sup>2</sup>Verona University, Verona, Italy*
- O108 Please respond ASAP: The stress related to ICT use and e-mail management among managers in the Quebec healthcare sector  
*Julie Dextras-Gauthier<sup>1</sup>, Maude Boulet<sup>2</sup>, Marie-Hélène Gilbert<sup>1</sup>, Justine Dima<sup>1</sup>*  
*<sup>1</sup>Université Laval, Québec, Canada. <sup>2</sup>École Nationale d'Administration Publique, Québec, Canada*
- O109 Psychiatry trainees' intentions to leave their training: Exploration of environmental factors and individual level well-being  
*Asta Medisauskaite, Antonia Rich, Kirsty Alexander*  
*UCL, London, United Kingdom*
- O110 Psychosocial factors at work and their associations with safety outcomes in the context of high-risk industries: A systematic review  
*Lukasz Derdowski<sup>1</sup>, Gro Ellen Mathisen<sup>1</sup>, Linn Iren Vestly Bergh<sup>2</sup>*  
*<sup>1</sup>University of Stavanger, Stavanger, Norway. <sup>2</sup>Petroleum Safety Authority Norway, Stavanger, Norway*
- O111 The double-edged sword of manager support for wellbeing: An investigation of the intended and unintended outcomes  
*Janet A. Boekhorst<sup>1</sup>, Rebecca Hewett<sup>2</sup>, Amanda Shantz<sup>3</sup>, Jessica Good<sup>4</sup>*  
*<sup>1</sup>University of Waterloo, Waterloo, Canada. <sup>2</sup>Erasmus University, Rotterdam, Netherlands. <sup>3</sup>Trinity College Dublin, Ireland. <sup>4</sup>York University, Toronto, Canada*
- O112 Identifying the link between psychosocial factors and their impact on employee wellbeing and organizational performance in the hospitality sector  
*Saurabh K. Jain<sup>1</sup>, Angeli Santos<sup>1</sup>*  
*<sup>1</sup>University of Nottingham, Nottingham, United Kingdom.*

## Closing Session

18:10 – 18:30



**KEYNOTE  
PRESENTATIONS**

## **K1 Keynote Address: The enigmatic concept of work-life balance: Ensuring meaningful progress**

Paula Brough

*Griffith University, Brisbane, Australia*



Paula Brough is a Professor of Organisational Psychology in the School of Applied Psychology at Griffith University in Brisbane, Australia, and Leader of the Occupational Health Psychology Research Lab. Paula's primary research and teaching areas are occupational stress and coping, employee mental health and wellbeing, work engagement, work-life balance, workplace conflict (bullying, harassment, toxic leadership), and the psychosocial work environment. Paula assesses how work environments can be improved via job redesign, supportive leadership practices, and enhanced equity to improve employee health, work commitment, and productivity. Paula works with a variety of organisations to reduce their employee's experiences of stress and burnout, and to improve employee's wellbeing, mental health and work-life balance. Paula has authored over 60 industry reports, over 100 journal articles and book chapters, and has produced 9 scholarly books based on her research. Paula is an Associate Editor of *Work & Stress*, and is Board member of *Journal Of Organizational Behaviour*, *International Journal of Stress Management*, and the *BPS Work-Life Balance Bulletin*.

### **Abstract:**

Like many psychological concepts, 'work-life balance' means different things to different people. After 50 years of research we have reached (approximate) agreements on the definition, measurement, and theoretical explanations of work-life balance. We have worked to include work-life balance in organisational policies and have demonstrated their benefits for employees dealing with a variety of non-work demands. We have (largely) overcome the scoffing dismissals to ensure work-life balance is considered as an appropriate strategy for the effective management of workers. Why then does work-life balance remain such an enigmatic concept, and is even considered to be non-existent by so many workers? This discussion considers the 'problem' of the reality of work-life balance, what has and has not been achieved, and the key emerging considerations to ensure some form of meaningful progress is achieved.

## **K2 Keynote Address: Well-being and Work**

Paul Schulte

*National Institute for Occupational Safety and Health, Cincinnati, USA*

Paul A. Schulte, Ph.D., is the Director of the Division of Science Integration, and Co-Manager of the Nanotechnology Research Center, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention. Dr. Schulte has 40 years experience in conducting research and developing guidance on occupational cancer, nanomaterials, risk communication, workplace well-being, and genetics. He also has examined the convergence of occupational safety and health and green chemistry and sustainability. He is the co-editor of the textbook entitled, "Molecular Epidemiology: Principles and Practices." He has served as guest editor of the *Journal of Occupational Medicine* and the *American Journal of Industrial Medicine* and was on the initial editorial board of *Cancer Epidemiology, Biomarkers and Prevention*. He currently is on the International Advisory Board of the *Annals of Occupational Hygiene*.





Dr. Schulte has developed various frameworks for addressing the aging workforce, burden of occupational disease and injury, well-being of the workforce, and translation research and synthetic biology and occupational risk.

**Abstract:**

The workforce throughout the world is aging, workers are changing jobs voluntarily and involuntarily, and the nature of work is evolving at a rapid pace. Work is being impacted by technology, globalization, urbanization and climate. These changes are interrelated and need to be considered from a comprehensive perspective. The concept of well-being of workers may provide an overarching view of changes in the nature of work, the workforce, and the workplace. My colleagues and I have pursued a multifaceted approach to consider well-being as a concept that could be useful in occupational safety and health (OSH). For the seminal conference “Towards health work and well being” held in Finland in 2010, we framed five critical questions (i) is there a robust and usable definition of workplace well-being? (ii) have the variables that influence well-being been aptly described and can they be measured and used in risk assessments? (iii) what is the nature of the evidence that well-being is linked to productivity? (iv) what is the state of knowledge on the effectiveness of interventions to promote workplace well-being? and (v) should interventions aimed at improving well-being at work focus on more than work-related factors?

In 2015 we conducted a survey of the literature on well-being in a paper, “Considerations for incorporating “well-being” in public policy for workers and workplace”. The published literature abounds with many definitions of well-being. These definitions may be objective, subjective (focusing on satisfactory happiness, flourishing, thriving, engagement, and self-fulfillment), or some synthesis of both. Well-being may be thought of as a factor that has an impact on various outcomes, or in other contexts, well-being is the outcome. For well-being to be a useful concept in research and public policy it has to be defined and operationalized so that its social and economic determinants can be identified, and interventions can be developed so that inducements to “ill-being” in the activities and relations in which workers participate can be addressed. To that end we partnered with the RAND Corporation to develop a conceptual model of well-being as a first step towards operationalization and measurement of the concept. Then in 2015, we worked with RAND to develop a worker well-being survey instrument, and subsequently in 2016 pilot tested the instrument and analyzed survey results using standard psychometric approaches. Further refinement of the instrument is currently under way. Critical questions that arise include how useful is the well-being survey instrument for research, for use by employers, and as a target of authoritative guidance. Additionally, lack of well-being can be considered as a measure of burden of occupational injury, illness and distress. Clearly, since well-being is a broad construct it is influenced not only by work, but also by nonwork factors. This raises the question of who is responsible for the well-being of workers. Historically it has been the employer but nonwork determinants may influence that view and put some of the responsibility on the worker and other stakeholders. This is a controversial issue that will require much deliberation.

In this presentation these efforts will be described and the potential future use of the concept of well-being in OSH will be discussed. Given the seismic shifts occurring in the global economy, there is a need for exploring and using a concept such as “well-being” to capture the broad range of factors that affect the health of workers as well as the quality of their working lives. Disclaimer: The findings and conclusions in this report are those of the author and do not necessarily represent the views of the National Institute for Occupational Safety and Health.

### **K3 Keynote Address: Preventing and managing workplace bullying: The need for a well-functioning ethical infrastructure**

Ståle Einarsen

*University of Bergen, Bergen, Norway*

Ståle Valvatne Einarsen is professor of work and organizational psychology at the University of Bergen, Norway. Here he acts as head of the Bergen Bullying Research Group. Professor Einarsen has conducted research in the fields of bullying, harassment and destructive leadership for almost 30 years. He is a founding member of the International Association on Workplace bullying and Harassment, has acted as advisor to the Norwegian Government regarding workplace bullying, and has authored and edited a range of books on these issues, both in English and in Norwegian.



#### **Abstract**

After 30 years of research on the issue of workplace bullying, it is time to sum up the implications of our main research findings for how organization may and should prevent and manage workplace bullying and to start looking for a comprehensive organizational response to this pertinent problem. Research show that targeted individuals have a hard time managing such problems on their own, hence, an organizational strategy is needed. Furthermore, some studies indicate that the relationship between exposure to bullying and individual level outcomes, such as health and well-being, is strongest for presumably well-functioning targets with good individual resources and abilities when it comes to managing stress. Hence, organizations should not focus on preventing and managing workplace bullying in order to protect its vulnerable employees, but to secure that the healthy and strong remains that way.

Furthermore, we will introduce the concept of ethical infrastructures as an overarching organizational approach to the prevention and management of workplace bullying. Ethical infrastructures are the formal and informal systems that govern how and to what extent an organization actively prevents and effectively handles cases of unethical behaviors among its organization members, in our case the enactment of workplace harassment and bullying. In a range of Norwegian and other Nordic studies, some published some fresh, we will look at how such systems are related to the actual successful management of individual case, to the overall prevalence of the problem in the organization, as well as how such systems may act to prevent and reduce the effect of other known risk factors in the organization. An important concept in this regard is the concept of conflict management climate which is related to both less bullying and to reduced effects of risk factors such as role stressors. Data from studies among all Norwegian municipalities will be presented on the relationships between such elements in the ethical infrastructure and the management of complaints of bullying as well as the overall prevalence of workplace bullying.

One of the key contributions of recent research on organizational occupational health interventions is the understanding of how intervention processes and the context within which the intervention is implemented play a major role in determining intervention outcomes. This understanding has led to a call for moving beyond the simple question of whether an intervention works or not to asking the questions of what work for whom in which circumstances. In other words, we need to identify which aspects of the process that influence intervention outcomes. Some of these aspects I will discuss include 1) the role of employees and line managers in making changes happen, 2) the use of specific tools to facilitate the intervention process and 3) the importance of integrating the project into existing structures.



**EAOHP FORUMS**

## **F1 MEET THE EDITORS**

*Chair: Karina Nielsen, Sandra Ohly*

In this session organised by the EAOHP Research Forum, editors from the following major journals in OHP will be represented:

- Professor George Boustras, editor of Safety Science
- Professor Sharon Clarke, incoming editor of Journal of Occupational Health Psychology
- Professor Karina Nielsen, associate editor of Work & Stress
- Professor Sandra Ohly, editor of European Journal of Work & Organizational Psychology

The editors will briefly present each journal, its objectives and tips on how to get published. The presentations will be followed by Q&A.

## **PRACTICE FORUM: Are standards the panacea in mental health: An international practitioner perspectives**

*Chair: Peter Kelly*

The psychological health and safety of employees deserves the same attention as their physical health and safety. Positive psychosocial work conditions enhance workforce well-being, engagement and productivity. Adverse work conditions contribute to human suffering, organizational costs and social discord. This issue cuts across sectors, types of organization and national borders and has thus become a focus of increased research, policy creation and practice development. In order to capture and communicate the best of these efforts, a number of jurisdictions across the globe have created guidelines or standards for organizations to follow. The current panel will include presentations on the process of development and the successes and challenges of implementation of standards for workplace psychological health and safety in the United Kingdom, Australia and globally.

### **F2 Developing frameworks for managing workplace mental health in Australia: Opportunities and challenges**

Angela Martin

University of Tasmania, Tasmania, Australia

Australia has not pursued the development of management standards in relation to promoting psychological health of employees. However, there are currently two emerging workplace mental health frameworks intended to guide employer strategies and actions at the national level. One is the National Workplace Initiative via the Mentally Healthy Workplace Alliance, a collective of national stakeholders including NGOs, government, unions, business and industry groups and mental health organisations. The other is a Commonwealth Government framework to apply to public servants which includes a self-assessment and continuous improvement process which is being piloted with selected agencies. Angela will discuss the evolution of these approaches and share insights from both her research and practitioner experience in this area.

### **F3 ISO45003: Development the first international standard on psychological health and safety in the workplace**

Stavroula Leka

Cork University Business School, University College, Cork, Ireland

This presentation will outline the development process of ISO45003, the first international standard on psychological health and safety in the workplace. The International Organization for Standardization (ISO) introduced the first international standard on occupational health and safety in 2018, ISO45001. During the development of ISO45001, a proposal was submitted to ISO for the development of a guidance international standard that would supplement 45001 and would specifically focus on the psychosocial work environment and psychological health and safety in the workplace. The research behind this was the increased prevalence and impact of psychological ill health and a greater recognition of the importance of promoting mental health

and wellbeing in the workplace. The proposal presented to ISO built on developments in the UK and Canada. In the UK, PAS1010 was introduced by the British Standards Institution in 2011 following the development of the European Framework for Psychosocial Risk Management (PRIMA-EF). PAS1010 was the first standard in this area globally and it is a guidance standard. This was followed by the development of the first auditable standard on psychological health and safety in the workplace that was introduced in Canada in 2013. The presentation will provide an update on the development process of ISO45003 which is due to be launched in 2021.

#### **F4 A National Approach to Mental Health and Work-Related Stress: UK Experience of a Decade of Interventions**

Peter Kelly

Health and Safety Executive, Liverpool, United Kingdom

During the last 5 years there has been an explosion of activity in mental health, wellbeing and work-related stress. Much of the activity has focused on the individual level and not at the organisational level. The proliferation of individual interventions is leading to a culture of individualism on mental health programs of work which is taking the focus away from the organisation's responsibility to manage the risk to health from poorly managed workplaces. If standards are to be useful then they will have to focus on organisational primary interventions, secondary interventions and not solely on tertiary interventions as seen over the last ten years in interventions such as individual resilience and mindfulness training. The United Kingdom has for the last 15 years promoted an organisational primary intervention for work related stress. The Management Standards for Work Related Stress, the presentation will outline what we have learnt during this time and where standards for mental health will need to go next in the changing world of work.

#### **F5 EDUCATION FORUM: The connected curriculum - Occupational Health Psychology education valuable for a range of professions**

*Chair: Birgit Greiner*

The EAOHP Education Forum aims to promote occupational health psychology education and training by advising on the development of education and training programmes, fostering partnerships for the development of such programmes, and working together with similar bodies in other OHP organisations to do so. This interactive session is open to anyone interested in OHP education focusing on 'the connected curriculum - Occupational Health Psychology education valuable for a range of professions'.

#### **F6 RESEARCH FORUM**

*Chair: Karina Nielsen*

The EAOHP Research Forum aims to promote research and innovation in OHP. The Forum seeks to promote not only the development of research but also its translation into practice. The Forum, with input from both academics and practitioners, is involved in producing and making available high-quality outputs to all those interested in the area of OHP. This interactive session is open to anyone interested in OHP research.

#### **DOP INVITED SYMPOSIUM: Addressing occupational health psychology issues in the 21st century: Are we there yet?**

*Chair: Gail Kinman, Roxane Gervais*

The EAOHP and the British Psychological Society (the Division of Occupational Psychology, DOP), and the European Academy of Occupational Health Psychology (EAOHP), invite you to attend this special session (see Sym11: page 87).



**SYMPOSIA**

## **Sym1: Return to work for parents: Maintaining work-family well-being**

*Chair: Maria Karanika-Murray, Inés Martínez-Corts*

This symposium will explore issues and offer evidence-based solutions around return-to-work for new parents. We can do more to raise awareness of and address the reality of return-to-work for new parents, the difficulties it poses for their work or careers, for re-engaging with employment, for balancing the daily demands of a new family. Clearly, there is a need for employment, economics, and public policy to come together to address these major issues for thousands of working parents. However, because it may take years if not decades for broader policy issues to be resolved, it is more feasible to explore, in practical terms, what new parents can do to ease return to work for themselves, their families, and their workplaces. The symposium offers this grounded in rigorous evidence. The symposium appeals to parents, researchers/academics, and employers in any economy across the world. Ultimately, by offering evidence-based knowledge, it will support new parents' successfully re-engagement with work while maintaining their work-life wellbeing.

### **S1 Going beyond policies to ease parents back into work and rebalance roles: The importance of individualized-deals**

Inés Martínez-Corts, Juan Pable Moreno-Beltrán  
University of Seville, Seville, Spain

When employees become parents, organizations should focus on interventions to promote work-family enrichment experiences in addition to reduce WFC experiences. Going beyond formal policies, idiosyncratic-deals are proposed as a win-win solution for employees and organizations. Benefits for both organizations and employees are highlighted. Key learning and recommendations are suggested about what to negotiate and under which conditions. First, we explain how idiosyncratic-deals allow organizations to deal with the wide variety of employees rebalance needs due to the work-life ideology, social status, gender ideology or culture. Second, we highlight the roll of the organizational culture, the supervisors and the coworkers as key aspect that shapes the conditions of the negotiation and the outcomes.

### **S2 Building new parents' support network at work and outside**

Helen Pluut<sup>1</sup>, Sara De Hauw<sup>2</sup>

<sup>1</sup>Leiden University, Leiden, Netherlands. <sup>2</sup>Ghent University, Ghent, Belgium

It is imperative to investigate how parents who return to work after childbirth can avoid falling prey to the conflicting demands of work and family. This chapter looks for answers in the social support network of new parents. We conduct a literature review, focusing on the benefits of social support for working parents on the one hand and the challenges for return-to-work parents in building a support network on the other hand. We also identify key debates that have arisen in society and the scientific literature regarding social support of working parents. Our chapter ends with a discussion of emerging needs for research and practice in helping parents build a social support network. An overview of the key learnings and a list of recommendations for parents, organizational practitioners and scholars have been provided.

### **S3 Navigating parents' return-to-work: Lessons for maintaining work-family well-being**

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Starting a new family brings changes to life circumstances, goals, and resources. A considerable number of parents decide not to return to work after starting a family; but not everyone wants or can afford this. For those who decide to remain in the workforce, the return-to-work experience can be a major and lengthy re-adjustment whose success depends on a range of factors in the

individual, the family, employers, government support and infrastructure, and so on. Ultimately, there should not be a forced choice about whether work or family are more important. As the two domains are not mutually exclusive, the decision is often and truly about life fulfillment and work-family well-being.

The problem of return to work for parents is complex and multifaceted. It is likely that the range of solutions available have yet to fully capture this complexity to be effective. For example, part of this problem are societal and economic considerations related to fairness and equality in the workplace and in society, valuing and supporting families, and women's participation in the workforce. Furthermore, at the centre lie attitudes and beliefs about parenting, gender roles, and work, which are translated into societal/workplace norms and discussions about who should look after the children and who should focus on his/her career. In addition, work is not a two-actor relationship between employers and employees, but a parent's work experience is also lived and shaped by his/her family life and the workplace culture that encourages specific choices. Of course, everyone has an opinion and a vested interest in the matter. As our life domains form a complex system, supporting return to work for new parents is a complex problem composed of a number of constituent problems. It is not a personal, an organizational, a societal, or a policy problem—it is all of the above. The main barriers to achieving work-family well-being are not in the norms, attitudes, culture, infrastructure, policy, or legislation — it is in all above. And as a complex problem, work-family well-being can only be solved through collective effort. We start by understanding the experience of return to work for new parents.

We will present the lessons from a collective effort which is set within the background of the reality of new parents returning to work, the task of re-engaging with work and maintaining a career, and the difficulties that parenthood poses for balancing the daily demands of a new family. The book on which this presentation is based aimed to acknowledge and illuminate this reality, give voice to new parents, and synthesize what we know about these challenges and, most importantly, how we can start to address them. We will outline learnings from research, challenges for practice, and recommendations for solutions that can work.

#### **S4 Training and development for employees returning to work after parental leave**

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Large numbers of parents return to work following parental leave every day, yet evidence on the prevalence and impact of practices employed by organisations to support their return is sparse. Formal training and development for returning parents often places a focus on the practicalities of return, such as access to flexible working arrangements. While there are calls for organisations to offer management development to ensure that the psychological and emotional needs of returning parents are met by line managers, there is little evidence regarding the nature of the support offered or the outcomes of such practices to guide practice. In this paper we discuss relevant aspects in research and practice to highlight what trainings to assist returning parents should focus on. First, we review research in the field of gender-typical behaviours, attitudes and identity to highlight possible changes in behaviour after becoming parents. Second, we draw on the benefits of informal learning accrued through parenting as while parenthood offers opportunities to develop skills which are desired by employers, such as conflict management, communication and multi-tasking yet these are often overlooked within a work context. Finally, we turn to the literature on sickness absence to examine how models developed to support employees after long-term sickness absence may be helpful in guiding return-to-work programmes after parental leave. We conclude with practical recommendations and lay out a journey to navigate employees' training and development before, during, and after parental leave.



## **S5 I am a mother, I am a leader, I can do this! The moderated mediation of Psychological Capital, work-family conflict and having children on wellbeing of women leaders.**

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Psychological capital (PsyCap) is a multifaceted positive personal resource which potentially influences positive appraisals and a good understanding of situations. PsyCap's cognitive and affective mechanisms influences people's work burnout and engagement. Work burnout is characterized by a persistent mental state of negativity related to work. Engagement is characterized by high levels of energy, enthusiasm, and feeling immersed and concentrated while working. Work-family conflict is the interrole conflict in which the general jobs demands interfere with performing family-related responsibilities; and the general family demands interfere with performing work-related responsibilities. These conflicts between work and family have been found to be positively associated with burnout and negatively with engagement measures. Due to the sexual division of work, women are still responsible of caring for others also in the private scope. A strategy used by women with higher incomes-e.g. leaders- is to externalize at least part of their domestic chores to balance their work and family responsibilities, also regarding children. The aim of this study is to analyse the mediation role that work-family and family-work conflict plays between psychological capital and work engagement when moderated by the number of children.

We found by an on-line survey in 202 Spanish women leaders (Mage= 46.07, SD=8.73) by Model 14 of the PROCESS for SPSS, significant direct effects of PsyCap on engagement and burnout for both work-family conflict categories. There was a insignificant indirect pathway for PsyCap and both engagement and burnout through family interfering work conflict, and partial significant pathways for PsyCap and both engagement and burnout through work interfering family conflict. The moderating role of the number of children was significant through the pathway for PsyCap and both engagement (coefficient =0.05, SE=0.03, CI=0.01 to 0.13) and burnout (coefficient =0.06, SE=0.04, CI= -0.17 to -0.002) through work interfering family conflict. This pathway was not significant for PsyCap and both engagement and burnout through family interfering work conflict.

PsyCap influences engagement and burnout through direct and partially by indirect processes. In our moderated mediator model, we found that having children affects negatively engagement and positively burnout when having a conflict were family interferers work. However, PsyCap buffers these relationships by reducing burnout and increasing women leaders engagement. Dealing with work interfering family conflict when having children, does not affect the engagement or burnout of women leaders.

Our findings lend empirical support to the thesis that personal positive resources such as PsyCap contribute to enhance work wellbeing of women leaders, buffering the effects of having children on their family interfering work conflict. However, they are not affected by work interfering family conflict. It seems that these women could, because of their job's hierarchy, have access to organizational benefits related with their income, training, promotions and work-schedule flexibility. Organisational policies and practices should be designed with a gender perspective in order to enhance women's work wellbeing by reducing family interfering work conflict, also when having children.

## **Sym2: How to improve psychosocial risk management: new strategies & examples of good practice**

*Chair: Noortje Wiezer, Irene Houtman*

This symposium will explore how to improve psychosocial risk management, it will include five presentations which we will identify drivers and barriers for, present interesting examples of and aim to identify new strategies for psychosocial risk management from the UK, Italy, Australia, Netherlands and Finland.

The first paper will examine which factors served as drivers for the presence or absence of interventions to manage psychosocial factors in the UK, using data from the two waves of the European survey of enterprises on new and emerging risks (ESENER 1 and 2, UK responses) and national reports. The presentation will examine what we know about lowering thresholds or stimulating employers to engage in psychosocial risk management, based on secondary analyses of the ESENER and other relevant studies. The second paper will the Italian national approach for the identification and implementation of preventive and corrective actions to manage psychosocial risks at work. Based on case studies and organizations' experiences, the presentation will provide an analysis of the main barriers to the success of an organizational intervention for work stress prevention and the steps needed to move from the assessment to the management of risks, with a view to prevention.

The third paper will introduce Psychosocial Safety Climate (PSC) theory, assessed as shared employee perceptions of the organisation's policies, practices and procedures for preventing work stress and protecting worker psychological health and safety, and examine how leadership relates to PSC, and will provide some case study examples from in-progress-research regarding how the PSC framework is being implemented in practice in Australia. The fourth paper will investigate the effects of a guideline for the implementation of a participatory organizational level stress prevention intervention to reduce job demands, increase resources (autonomy, supervisor and coworker support) and to reduce work stress and increase job satisfaction of employees in primary education in the Netherlands. Finally, the fifth paper examines the efficacy of a skills for work programme designed as a life-course-focused intervention in Finland.

### **S6 The role of political, social, and economic factors in promoting a positive psychosocial work environment in the UK**

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Psychosocial factors at work continue to be an important challenge for management (Leka et al., 2017), and are linked to several important outcomes. These include employee health and wellbeing (ILO, 2016; Leka & Jain, 2010), creativity (de Jonge, Spoor, Sonnentag, Dormann, & van den Tooren, 2011), work engagement (Mauno, Kinnunen, & Ruokolainen, 2007; Schaufeli & Bakker, 2010), work satisfaction (Saija Mauno et al., 2005), productivity (Dollard & Nesser, 2013; Jourdain & Vézina, 2014), operational quality (Longoni, Pagell, Johnston, & Veltri, 2013; Yang & Yang, 2013), and public health (Marmot et al., 2012).

With more research linking these variables to outcomes of relevance to individual workers, employers, and society as a whole there is a need to stimulate organizations to better manage psychosocial factors (EC, 2014). However, there is limited research that has considered why organizations attempt to manage psychosocial factors through interventions. Several assessments of organizations throughout Europe suggest that the management of psychosocial factors still remains unsatisfactory despite an increase of awareness of these issues in organizations (EC, 2015). The underlying context of this paper is therefore the same question

that key stakeholders are faced with: how can organizations be motivated to better manage the psychosocial work environment? The answer to this question no doubt comes from initially understanding what it is that stimulates organizations to act in the first instance. The latter is the key question the present paper concerns itself with.

Intervention to improve the psychosocial work environment can be viewed as a form of organizational change (Giga et al., 2003; LaMontagne et al., 2007). McGuire and Hutchings (2006) make an explicit distinction between factors which create the need for change (drivers) and process factors which might facilitate (enablers) or restrict (inhibitors) the change process. It is the former that are of interest here, and the authors argue that drivers for change include economic, socio-political and legal forces. Senior and Swailes (2010) take a similar approach noting that the PEST factors (Political, Economic, Social, and Technology) cover most relevant factors which would drive change.

This study therefore aims to examine which factors served as drivers for the presence or absence of interventions to manage psychosocial factors in the UK, using data from the two waves of the European survey of enterprises on new and emerging risks (ESENER 1 and 2, UK responses) and reports from the Health and Safety Executive. The UK context is particularly relevant largely due to two factors. Firstly, psychosocial factors are salient in the overwhelming majority of jobs, and secondly there is heightened awareness of psychosocial risks from stakeholders has existed for some time. The policy landscape is also more mature as compared to other countries but there is a general consensus that more needs to be done (Leka & Jain, 2017). The presentation will further discuss the implications of the findings within the policy context in the UK.

## **S7 Integrated management of psychosocial risks: Moving from the assessment to the implementation of actions**

Cristina Di Tecco  
Inail, Rome, Italy

Managing psychosocial risks at work represents one among the main challenges for health and safety at work in consideration of their potential impact on stress and in turn on workers' health. From 2008, a great debate on how to assess and manage factors related to work stress started among policy makers, organizations, experts, academics and professionals in occupational health and safety with the common aim of providing valid approaches and tools for prevention. INAIL, the Italian workers compensation authority, developed a methodological proposal for assessing and managing the work-related stress risk. The proposal is an evidence based approach founded on the risk management and provides validated tools to support organizations in the assessment and management of psychosocial risks. It offers a dynamic path, made up of several key phases and based on a continuous improvement cycle, which should involve company's OSH professionals and workers in identifying, assessing and managing the risks related to work stress. From 2011 to date, the methodology is one of the most used by Italian organizations to tackle psychosocial risks at work. The management of psychosocial risks at work is a dynamic process of organizational intervention starting from the identification and assessment of risks aimed to identify critical aspects of the organization and content of work and the relative context in order to guide the actions that are fitting and effective. Nevertheless, moving from assessment to actions is not so easy for organizations and it happens that the process of intervention fails due to several factors. When an organizational intervention fails, it is complex understanding whether the causes are related to the identification or selection of ineffective or inappropriate actions to correct the critical situation, or to actual conduction of the assessment and management process. Studies conducted at national level showed that some elements are fundamental to guarantee the effectiveness of an organizational intervention process in managing psychosocial risks, such as workers' participation, the engagement of the organization in the intervention process and communication to and training of the actors

involved. The aim of this work is to present a process of identification and implementation of preventive and corrective actions to manage psychosocial risks at work through the Inail's methodology. Based on case studies and organizations' experiences, we provide an analysis of main barriers to the success of an organizational intervention for work stress prevention and the steps needed to move from the assessment to the management of risks, with a view to prevention. Finally, the ongoing research actions to evaluate the intervention process mechanisms will be presented.

### **S8 Benchmarking Psychosocial Safety Climate as a stimulus for improving work design and work conditions**

Maureen Dollard, Tessa Bailey

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Psychosocial Safety Climate (PSC) refers to the corporate climate for worker psychological health and safety. PSC is a group phenomenon, assessed as shared employee perceptions of the organisation's policies, practices and procedures for preventing work stress and protecting worker psychological health and safety. PSC is assessed with an evidence based short tool with established benchmarks for future risk of depression or job strain. PSC is a leading indicator of job design, employee psychological health, engagement and productivity (sickness absence). This paper will introduce PSC theory, explore how leadership relates to PSC, present PSC tools, and will provide some case study examples from in-progress-research regarding how the PSC framework is being implemented in practice.

### **S9 Decreasing employees' work stress by a participatory, organizational level intervention in primary education: A multiple-case study**

Maartje Bakhuis Roozeboom, Roos Schelvis, Noortje Wiezer

TNO, Leiden, Netherlands

**Introduction:** Work stress is an important problem among employees in education in the Netherlands. The present study aims to investigate the effects of a guideline for the implementation of a participatory organizational level stress prevention intervention to reduce job demands, increase resources (autonomy, supervisor and coworker support) and to reduce work stress and increase job satisfaction of employees in primary education.

**Methods:** This study makes use of a multiple case study research design with mixed methods. Questionnaires were filled out by 119 employees of 5 primary schools that were recruited through a network organization of primary schools at baseline and one year later, measuring job demands, resources, work stress, job satisfaction and implementation factors. Per school five interviews were conducted to collect detailed information on the implementation process.

**Results:** Multilevel analyses showed an increase on job satisfaction between baseline and follow up. Employees who were more satisfied with the communication about the intervention and employees reporting a more improved dialogue on work stress between employees and management showed relatively more improvements on job demands, supervisor support and job satisfaction. Regarding the implementation of the intervention, employees were satisfied about the communication during the intervention process, but the level of employee participation was relatively low.

**Discussion:** Results of the study underline the importance of the implementation process, especially communication about the intervention and the dialogue on stress, as a precondition for the effectiveness of the intervention. Results of the study support the hypothesis that, when successfully implemented, the intervention as described by the work stress prevention guideline is potentially effective to manage job demands, supervisor support and job satisfaction.

## **S10 Skills for Work Program as an example of life-course -focused intervention**

Salla Toppinen-Tanner, [Mervi Ruokolainen](#)

Finnish Institute of Occupational Health, Helsinki, Finland

Introduction: The need for developing professional competencies throughout working career is widely acknowledged. However, there is lack of effective methods realizing the idea of life-long learning and supporting individuals' motivation to occupational skill development at mid-career and beyond. Life Course Management approach could be one promising starting point as it could produce healthier and more sustainable working careers by fostering individuals' competence and career management during career transitions and link this with the aim of improving workplace management. This is expected to increase employees' motivation and participation, and to decrease psychosocial risks via improved fit between on one side employees' competence, motivation and well-being and on other side their work environment. Life course management utilizes knowledge of career and life phases and complements this with a bottom-up approach of proactive employees who actively manage their own careers as a central resource for well-being and sustainable careers.

The aim of this study was to develop and to study the efficacy of the Skills for Work Program. The study was conducted in the collaboration of the Finnish Institute of Occupational Health (FIOH) and the Haaga-Helia University of Applied Science. The group intervention utilized active learning and social learning principles and was implemented by two trained trainers in an institute of higher education. The program assignments included e.g. future career goals, job search skills, managing changes, and social networking. The program consisted of two half-day face-to-face training and web-based learning tasks. The two populations of the RCT study were bachelors of business and service professions and members of the Union of Professional Engineers living in the metropolitan area and aged over 40 years (about 11,000 persons). They were contacted by mail and provided with the opportunity to participate in the study by filling up and returning a web-based baseline questionnaire survey. The 1,119 (62% women) respondents were randomized into experimental and control groups. The members of the experimental group were sent an invitation to the training. A follow-up questionnaire survey was sent to all participants of the study one year later for studying the effects of the intervention on participating tertiary education and on job search activities.

Results: The study showed that the group program increased participation in education and decreased job search activity one year later. The probability to participate in a tertiary education was almost twofold among intervention group participants than among control group participants (19% intervention vs. 11% control group).

Discussion: Life-course management seems a promising approach for supporting sustainable careers in working life with continuous changes. Skills for Work -intervention was effective in enhancing continuous learning at mid-career. This is in line with earlier studies showing that health and motivation of employees can also be enhanced with interventions focusing on individual career management in a life-course perspective. Further studies should investigate the mediating effects of the intervention program and environment in these long-term effects.

## **Sym3: Safety training of migrant workers in construction**

*Chair: Karina Nielsen*

The health and safety of workers remains paramount across the globe. In spite of progress made, there are still 374 million non-fatal work-related accidents or illnesses every year and more than 2.78 million workplace fatalities (International Labour Organization [ILO], 2018). The construction sector in particular has been identified as one still lagging behind in terms of safety and, therefore, at increased risk of accidents and injuries (e.g., Buckley, Zendel, Biggar, Frederiksen, & Wells, 2016). For instance, the Statistical Office of the European Union report more than one in five

(20.9%) fatal accidents at work in a European Union Member State [EU-28] in 2015 took place within the construction sector (Eurostat, 2018). The construction industry has traditionally relied heavily on migrant workers, defined as persons who are engaged or have been engaged in remunerated activity in a State of which they are not national (United Nations [UN], 1990). During their first year in a new country, male migrants are predominantly employed in the construction sector, and are 1.4 times more likely to work in construction than are native-born men (Eurostat, 2011). The prevalence of migrant workers, particularly those with low levels of skill, has major implications for safety in the construction industry. They are a particularly vulnerable group, facing additional challenges to their safety as a result of language barriers, cultural differences, documentation status, and lack of knowledge of the host country's safety standards and regulations (Donaghy, 2009; Moyce & Schenker, 2018). These challenges lead to higher reported rates of accidents and fatal injuries in comparison with native workers (e.g., Dong, Choi, Borchardt, Wang, & Largay, 2013; Dong, Fujimoto, Ringen, & Men, 2009; Dong, Men, & Ringen, 2010). Thus, there is a critical need to enhance safety in the construction industry, principally for low-skilled, migrant workers who are particularly at risk. In the present symposium, we present the results of a European project on safety training migrant workers in construction in Italy, Spain and the UK. First, we will present the results of a comprehensive systematic literature review on the training transfer and effectiveness of safety training of migrant workers in construction and put forward a research agenda for the future. Second, we present the results of a qualitative study exploring the current state of the art of safety training in the construction industry and its focus on the needs of migrant workers. We will also present the needs identified. Third, we will present a training course developed specifically to address the challenges faced by migrant workers in terms of language barriers, cultural differences, and a lack of knowledge of the host country's safety laws and regulations. Finally, we will present a model for how we may evaluate the safety training based on realist evaluation with a view to answer the questions of "what works for whom in which circumstances".

### **S11 What is know on safety training of construction migrant workers and the main challenges for future research**

José M. Peiró<sup>1,2</sup>, Karina Nielsen<sup>3</sup>, Rose Shepherd<sup>3</sup>, Michela Vignoli<sup>4</sup>, Felisa Latorre<sup>5</sup>

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The construction sector has been identified as being at high risk for accidents and injuries, in particular for migrant workers. Training has been often used as a strategy to prevent those accidents and assure occupational safety. Nevertheless, specific features for training to be effective and suitable for migrant workers have hardly been analysed. The objective of the present paper is to review current state of the art on migrant safety training in construction with a view to understand how researchers and practitioners can plan, implement, and evaluate safety training of migrant workers and reduce the risks of injuries, accidents, and fatalities. Moreover, it aims to formulate suggestions for a research agenda on this topic. Our systematic literature review focused on papers that were published in scientific journals during last 17 years. A total of 18 papers focusing on safety training of migrant construction workers were included in the review. The review paid attention to the characteristics of migrant workers that influence their ability to learn, how the training delivered addresses the needs of migrant workers, the factors that facilitate or hinder the learning and what do they learn and transfer to the worksite.

We found important achievements in several training and transfer components but also we identified gaps and limitations of current research that require further research. To formulate our research agenda we have relied on the instructional models distinguished by Kraiger, (2008). Many studies reviewed primarily relied on first-generation instructional models, where migrant workers were seen as passive recipients of primarily technical skills. Our research agenda builds

up mainly on the second and third generation instructional models that view training as a dynamic process with an agentic trainee role involving active participation and co-elaboration of meaning and learning processes. In doing so, it goes beyond training itself, encompassing previous situations and relevant antecedent factors, along with post-training processes such as transfer and behavioural changes to ensure training effectiveness. Moreover, taking into account the specific needs of the trainees it pays special attention to the need for sensemaking or social interaction of trainees with diverse cultural values, communication constraints and lack of knowledge of the host country's regulations. The main points considered focus on: 1) trainees' individual characteristics, 2) training design, considering learning principles, contents and sequencing; 3) the role of context and 4) training and transfer outcomes and their assessment. This paper provides important insights and strengths to understand the state of the art and the challenges for research on these important issues and their practical implications.

### **S12 The challenges of training migrant workers in the construction industry: A qualitative study**

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Migrant workers typically make up a large proportion of the construction workforce; for instance, in the UK, nearly 15% of the 2.25 million workers in construction are non-nationals (Labour Force Survey, 2017). However, migrant construction workers report higher rates of accidents and fatal injuries in comparison with their native peers (e.g., Dong et al., 2013), as a result of additional challenges related to language barriers, cultural differences, and lack of knowledge of the host country's safety standards and regulations (e.g., Moyce & Schenker, 2018).

Safety training initiatives are considered a primary means of enhancing safety and reducing accidents and injuries for migrant construction workers (e.g., Cunningham et al., 2018). There is a lack of academic literature and empirical research, however, specifically focused on safety training in the construction industry and even less so on safety training for migrant construction workers. Thus, the aim of this study was twofold: 1) to explore the current provision of safety training for migrant construction workers in the UK, Spain and Italy; and 2) to examine the factors which influence training effectiveness, particularly in terms of antecedents (e.g., individual differences, organisational climate), the training itself (e.g., design, delivery) and outcomes (e.g., training transfer), alongside contextual issues (e.g., cultural differences).

Data were collected from a total of 88 participants – 19 migrant construction workers, 11 national construction workers, 20 supervisors, 17 safety experts and 21 safety trainers – across the UK, Spain and Italy between March 2018 and September 2018, via 34 semi-structured interviews and 8 focus groups. With participants' permission, interviews and focus groups were audio-recorded and transcribed verbatim. Data were analysed thematically using NVIVO software, with differing perspectives proffered by the stakeholder (participant) groups highlighted, to further enrich the analysis. Findings highlighted a number of antecedents at the individual, peer, supervisor and organisational level, which influenced, positively or negatively, safety-related knowledge, skills and behaviours learned during training and, subsequently, their transference back to the construction site. For instance, the limited language ability of migrant construction workers was mentioned, particularly by safety experts, trainers and supervisors, as an issue hampering both learning and training transfer. In terms of the training itself, safety experts reported training in 'soft skills' (i.e., communication, team-working, situational awareness) alongside technical skills to be crucial for training effectiveness. Construction workers, both national and non-national, also stressed the importance of practical, hands-on training (e.g., role-modelling) to enhance their learning. Finally, in relation to training outcomes, a supportive organisational environment, providing opportunities to practice newly learned skills and behaviours, was repeatedly mentioned as facilitating training transfer.

The study, therefore, provides critical insights into the challenges associated with safety training for migrant construction workers, with multiple factors (at individual, peer, supervisor and organisational levels), influencing the effectiveness of such training, particularly in terms of training transfer. It is vital these challenges are taken into account when designing and delivering safety training for migrant construction workers, in order to maximise its effectiveness and, ultimately, enhance safety and reduce accidents and injuries in the industry.

### **S13 A theory-based model for evaluating safety training of migrant workers in construction**

Karina Nielsen<sup>1</sup>, Rose Shepherd<sup>1</sup>, Michela Vignoli<sup>2</sup>

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As identified in the literature review and the qualitative study, the evaluation of safety training of migrant workers in construction is flawed. Training is rarely systematically evaluated and despite some models for evaluation having been developed for safety training (Vignoli et al., 2014, Pedersen et al., 2014), these models have not been tested nor are they developed to understand the specific population of migrant workers and the challenges faced by these workers. The present paper will present a model for evaluating training initiatives targeting migrant workers in construction. The underlying theory of the model is realist evaluation, which seeks to test the questions of “what works for whom in which circumstances” through the exploration of the mechanisms that bring about the intended outcomes the boundary conditions (context) that are needed for mechanisms to be triggered. We base our model on the training transfer (Baldwin & Ford, 1988) and training effectiveness (Kirkpatrick, 1994) literatures, with a particular view of understanding what happens after training has been completed (Blume et al., 2019) and apply a mixed methods approach. We propose a five phase model.

First, prior to training, trainees will be asked to complete a short survey exploring individual characteristics (e.g. training self-efficacy), and the contextual factors which may influence their active involvement in training (safety climate and safety leadership), together with baseline measures of our outcomes (safety compliance and proactivity). On the first day of training, trainees complete a questionnaire testing their safety knowledge. Second, during training we will conduct reflective interviews with trainers and observations to identify the mechanisms of training content and delivery methods (e.g. non-technical skills training, use of interactive material and e-learning).

Third, immediately after training, we will test trainees’ knowledge again. In a short questionnaire, we will explore the intermediate outcomes that we hope trainees have learned (non-technical skills), the context (work demands and a stable work site), and individual characteristics (safety self-efficacy and intent to transfer). Fourth, after three months we will interview foremen to explore whether they observe any changes in trainees’ safety behaviours and how they support trainees. We will also distribute a short questionnaire to the trainees, exploring intermediate outcomes again, mechanisms (actual transfer of training and whether they use training resources), and context (opportunities to use learning from training, peer and supervisor support).

Fifth, after six months we will interview trainees as to what has hindered and facilitated training transfer. Trainees will also fill in a short survey on the intermediate (non-technical skills) and distal outcomes (safety compliance and proactivity), the mechanisms (actual transfer and use of resources) and the context (whether they work at the same site). Together, the data collected can provide valuable information about how to design and evaluate safety training of construction workers in the future.



## **Sym4: Overview of the Healthy Work Design and Well-Being program and illustrative case studies**

*Chair: Regina Pana-Cryan, Tapas Ray*

We present an overview of the domain of the Healthy Work Design and Well-being (HWD) program, one of the seven cross-sectors within the research portfolio organized and supported by the National Institute for Occupational Safety and Health to advance research in worker safety and health and its transfer to practice. HWD focuses on protecting and advancing the safety, health, and well-being of workers by improving the design of work, management practices, and the physical and psychosocial work environment. HWD's holistic perspective focuses on how work affects overall safety, health and well-being, including physical, psychological, social, and economic aspects. We describe how elements of healthy work design affect work-related proximal (e.g., fatigue, stress), safety, health, economic, and other well-being outcomes. Then, we present a summary of the three levels of determinants of well-being: market and societal; organization and job; and worker.

HWD outcomes are presented at four levels of analysis, including the worker-level, family-level, organizational-level, and societal-level because it is critical to examine the different effects of work design for the groups on each level of analysis. Market and societal factors affect how employers recruit and manage workers, and thus worker-well-being. Organization and job level determinants of worker well-being include the mission and values of the organization; ownership structure and priorities; organizational culture; the scale and type of investment in workers; subcontracting; contractual agreements with workers; job design; supervision; and hours of work and work schedules. Worker-level determinants include physical and physiologic, psychological, emotional, cognitive, financial, behavioral, social, and experiential determinants. Interactions occur among the different level determinants. Three case studies illustrate high priority areas of focus for HWD: stress in teachers, work-life conflict and mental well-being outcomes for workers, and non-standard work arrangements. Poor teacher well-being is associated with turnover, burnout, and health issues. This case study uses nationally representative data on work organization variables, job stressors, and health and safety outcomes to examine what work organization and job design variables are most strongly associated with stress and health outcomes in U.S. teachers.

Conflict between work and life outside of work is prevalent despite numerous avenues organizations can pursue to lessen this burden. This case study reviews the prevalence of work-life conflict and discusses how that struggle relates to mental well-being. Following a public health perspective and the Total Worker Health model, we examine how comprehensive organizational supports can ameliorate the association between work-life conflict and well-being to promote worker health, safety, and well-being for all workers. While there is no consistent definition for non-standard work arrangements, they involve temporariness, instability, irregularity, and lack of legal protections and social and financial benefits for workers. This may affect worker safety, health, and wellbeing. This case study presents up-to-date prevalence and outcomes data from the U.S. using a matrix that includes work arrangement elements (job security, work schedule, compensation type, pay level and security, benefits, and having single versus dual or multiple employers) and categories (being employed or self-employed with or without own businesses).

### **S14 Work organization variables associated with stress in U.S. teachers**

Naomi Swanson

NIOSH, Cincinnati, OH, USA

In the United States, teachers are exposed to a number of workplace factors that result in high levels of reported stress. Some of these factors include the degree of control they have over decisions in their classrooms, such as instructional decisions and performance standards, disciplinary policy, and access to needed resources. Bullying, respect, work hours and social

support from supervisors and colleagues are also occupational factors that have been associated with teacher stress. This case study explores a broad range of work organization variables that can have an impact on teacher stress and mental health to determine variables that are possible candidates for interventions to reduce stress and improve health. These include work schedule, job design, organizational climate, and social support variables. Demographic and income variables were included as control variables.

Data from the 2002, 2006, 2010, and 2014 waves of the NIOSH Quality of Worklife (QWL) survey were used for these analyses. The QWL is a supplement to the biannual General Social Survey, which is administered to a nationally representative sample of U.S. employed adults, 18 and older. The data were pooled and teacher occupations (elementary, middle, and secondary school teachers, teacher assistants, instructors, and special education and other teachers) selected from the dataset. The teachers were grouped into three categories: elementary and middle school teachers (n=116), secondary school teachers (n=54), and teacher assistants and other teachers (n=72). The analyses were conducted in two phases. First, correlation analyses were conducted to determine which variables were significantly correlated with the outcomes of interest, which were “how many days during the past 30 days was your mental health not good,” “how often during the past month have you felt used up at the end of the day,” and “how often do you find your work stressful?” In the second phase, these selected variables were entered as predictor variables in a multiple regression for each outcome variable.

The results indicated that teacher category influenced reports of stress and days of poor mental health with secondary school teachers reporting significantly less stress than elementary and middle school teachers and significantly fewer days of poor mental health than teacher assistants and other teachers. Feeling used up at the end of the day was significantly influenced by age, by work spilling over into personal life, and by feeling that they were treated with a lack of respect at work. Feeling that work was stressful was significantly associated with the difficulty of taking time off work to deal with personal or family matters, by work spilling over into personal life, by a reduced freedom to decide how to do one’s work, by insufficient fringe benefits, and by harassment or threats at work within the past year.

The analyses indicate that work-nonwork conflict, workload, autonomy, respect, and workplace harassment had significant impacts on teacher reports of stress and mental health, and point to aspects of their work that can be targeted for interventions to improve their health and well-being.

### **S15 Examining support for workers to reduce consequence of work-family conflict**

Jeannie Nigam, Naomi Swanson  
NIOSH, Cincinnati, OH, USA

Conflict between work and life outside of work remains prevalent with 13% of workers saying that work often interferes with family, and 24% saying it sometimes does (NIOSH, 2019). This fact remains despite numerous avenues organizations pursue to lessen work interference with family. A previous study (Nigam, Swanson, Dunkin-Chadwick, 2008) found that the work-related stressors associated with work-family conflict differ some for men and women and provided insight into how to reduce that conflict. Role theory describes the different sets of expectations for men and women in the workplace and at home therefore it is not surprising that workplace stressors which are salient for work-family conflict vary for women and men. Specifically, for men, reducing time pressure and demands created by high levels of participation and workload, involving them in teamwork, and increasing job efficiency hold promise. For women, there is a need to reduce role conflict, involve them in teamwork, and reduce overall workload. The current study expands upon these findings to examine the association between work-family conflict with work-related stressors and employee well-being. Drawing upon conservation of resources theory, following a public health perspective and the Total Worker Health model, we consider

personal resources and demands (i.e., marital status, number of children) and examine how comprehensive organizational supports can ameliorate the negative association between work-family conflict and well-being.

This study investigates how healthy work design - that reduces occupational stress and provides support for employees - can protect and promote health, safety, and well-being for all workers. We focus on work-life conflict because it is prevalent, can affect all workers at some point during their working life, and is amenable to change. We examine work organization factors that represent demands (e.g., difficulty taking time off work, workload, ambiguity, insufficient staff) and those that are conceived of as being supportive (i.e., participation in decision making, having the ability to take time off work as needed, supervisor support, trusting management, taking part in decision-making, and availability of stress management programs). We use general health, poor days of mental health, poor days of physical health, and burnout as indicators of well-being. We expect to find a negative association between occupational demands and well-being outcomes that will be reduced when the presence of work-provided resources (e.g., supportive factors) is considered.

We use data from the 2018 Quality of Worklife (QWL) Survey to examine this hypothesis. QWL is a supplement to the General Social Survey, a nationally representative sample of working U.S. adults. We use a mediated regression model for all workers and separately for men and women to see how and whether results differ by sex. This study contributes to our knowledge about work-family conflict by considering the effects for both men and women (rather than using sex as a control variable), using nationally representative data, and examining a range of personal factors plus work characteristics. Findings will point toward aspects of work that could be enhanced to more fully support workers and help mitigate the negative consequences of work-family conflict.

### **S16 Prevalence, trends, and effects of non-standard work arrangement dimensions: Focus on work schedules**

Regina Pana-Cryan<sup>1</sup>, Abay Asfaw<sup>1</sup>, Tim Bushnell<sup>2</sup>

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Problem statement: NIOSH uses a matrix of elements (job security, work schedule, compensation type, pay level and security, benefits, and having single versus dual or multiple employers) and categories (being employed, being self-employed, or volunteering) to assess work arrangement prevalence, trends, and effects on worker safety, health, and well-being. It is also important to understand if worker placement in this matrix is by choice. Here, we focus here on work schedules (hereafter schedules).

Analyses: We used the General Social Survey-Quality of Worklife (GSS-QWL) and Survey of Household Economics and Decisionmaking (SHED), to conduct descriptive analyses on the prevalence and trends of schedules, and assessed the literature on the links between our findings and worker safety, health, and well-being outcomes. Questions varied among sources and included: *what is your usual schedule; how far in advance do you know about your schedule; how often are you allowed to change your schedule; can you predict well your schedule; and how many hours per week do you work.*

Results: Responses to the GSS-QWL (2002-2018) question on usual schedule included: day, afternoon, night, split, rotating, and irregular shift. The percent reporting an irregular shift/on-call decreased from 2002 (10.05%) to 2018 (6.67%). The percent reporting a night shift has increased since 2010 and was 7.38% in 2018. GSS-QWL (2002-2018) also asked how often respondents were allowed to change starting and ending times. The percent reporting 'often' was highest in 2006 (33.9%) and lowest in 2010 (31.6%). Responses to a similar SHED (2018)

question included: normally work the same hours; schedule varies, primarily at my request; schedule varies, primarily based on my employer's needs. Nearly 17% of respondents said their schedule varied primarily based on their employers' needs. GSS-QWL (2014, 2018) asked how far in advance workers knew their schedule; more than 40% (both years) reported one week or less. One-third of respondents to a similar SHED (2018) question whose schedule varied answered one day or less in advance. GSS-QWL (2002-2018) asked: *How hard is it to take time off during your work to take care of personal or family matters?* Nearly three out of ten respondents (all years combined) said that it was somewhat or very hard.

Maestras et al. (2018) found that preferences for working conditions varied by demographics and wage level, and that accounting for differences in preferences often exacerbated wage differentials by race, age, and education, and intensified wage inequality. Schneider and Harknett (2018) found that routine schedule instability was more strongly associated than low wages with psychological distress, poor sleep quality, and unhappiness. Golden et al. 2013 found that being able to take time off during the workday and varying starting and quitting times daily, were both associated with greater happiness; the associations were stronger among hourly paid than salaried workers. Henly and Lambert (2014) found that those with unpredictable schedules reported greater work-life conflict than those with more predictable work schedules.

Practical implications: Tracking and improving schedule flexibility and predictability is likely to benefit workers experiencing overlapping vulnerabilities more.

### **Sym5: "HealthyHealthcare": Staff wellbeing Interventions in the healthcare sector**

*Chair: Annet de Lange, Kevin Teoh*

The concept of HealthyHealthcare draws on the complexity within the healthcare sector where key concerns around challenging working conditions, healthcare staff wellbeing, and patient care are all inherently interlinked. While numerous studies have sought to examine the pathways that link these different constructs, the intervention research into what and how to improve healthcare staff wellbeing has been lagging. This is important given healthcare staff wellbeing has been posited as an antecedent (and outcome) to both their work environment and patient care. This symposium aims to further our understanding of the existing intervention literature in the healthcare sector. We include studies that address different aspects of the intervention literature including job crafting, psycho-education, participatory team and organisational-based interventions. Drawing on healthcare workers from diverse European countries, these studies link with constructs and issues such as aging, sustainable work, stigma, digital interventions, and successful intervention designs. These lessons are important not only for those working and researching in the healthcare sector, but have implications for the wider field of occupational health psychology as well.

The first presentation by Annet de Lange creating a sustainable workforce through the retention of older workers. This draws on job crafting and future time perspective literature to examine them as predictors of indicators of sustainable work ability in a panel of Dutch healthcare workers. Next, Asta Medisauskaite presents on a psycho-education based intervention where doctors in the United Kingdom took part in a randomised control trial to challenge mental health stigma in medicine.

The final study relates to interventions at the group level. Kevin Teoh reflects on the challenges of execution and measurement of a hospital-level intervention to reduce workplace conflict and improve staff wellbeing and performance. The symposium will be completed by summarising conclusions for future avenues of research and practice in this field.

## **S17 Successful aging and job crafting to sustain at work: Examining relations between job crafting and work ability of healthcare workers**

Annet de Lange<sup>1,2,3,4</sup>, Karen van Dam<sup>1</sup>, Karen Pak<sup>2,5</sup>, Marit Christensen<sup>4</sup>, Lise Lovseth<sup>4</sup>, Eghe Osagie<sup>2</sup>, Tjerry Verhoeven<sup>6</sup>

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Introduction: Due to the ageing and dejuvenization of the western workforce, employers in these countries face a challenge to enhance a sustainable working life to maintain older workers (De Lange et al., 2015). As a result, there is accumulating research attention for the question how to effectively retain older workers in the labour market. Likewise, there is an increased practical as well as scientific interest in interventions that facilitate a prolonged working life of employees (Kooij, 2015). One of these research lines focuses on the positive effects of job crafting at work to enhance work ability (e.g., Kooij, Tims, & Kanfer, 2015). According to Tims, Bakker, and Derks (2012), job crafting can be defined as the self-initiated changes that employees make in the demands and resources of their job to attain or maintain a balance with their personal abilities and needs. However, few empirical studies have examined the relations between job crafting at work and indicators of sustainable work ability (measured with the work-ability index; Ilmarinen, Tuomi, Klockars, 1997). This study therefore aims to fill this research gap by examining relations between aging (measured as calendar age and future time perspective), job crafting and sustainable work ability. Based on earlier research, we tested the following hypotheses: (1) Calendar age is negatively related to indicators of sustainable work ability; (2) Job crafting is positively related to indicators of sustainable work ability; and (3) Future time perspective is positively related to indicators of sustainable work ability.

Method: We will present results of a 2-wave complete panel study (the "Healthy healthcare" project) on the sustainable work ability and employability of a panel of 1474 Dutch healthcare workers (mean age= 46.8; SD= 11.62; mean job tenure= 13,2 years; 83.6% is female).

Results: Results of our hierarchical regression analyses using data from Time 1 and Time 2 for the outcome work ability (controlling for job tenure and gender), revealed a significant negative relation with calendar age ( $\beta = -.09$ ;  $p < .05$ ), a positive cross-lagged relation with future time perspective ( $\beta = .10$ ;  $p < .01$ ), but no significant effects of job crafting in predicting work-ability of healthcare workers across time. In the presentation we will also discuss the interaction effects found.

Discussion: Our preliminary results indicate significant relations of future time perspective in predicting across-time changes in the work ability of healthcare workers, indicating the importance of taking a life-span perspective in relations between aging and work ability. However, we only focused on data of healthcare workers and therefore cannot generalize the results to other professions or sectors. Few studies to date have been able to examine relations between aging, job crafting and work ability at work. As a result, the results of our complete panel including 2 waves can bring important new insights to the question how to sustain ageing workers in the labour market.

## **S18 Intervention for doctors reducing stigma around mental distress: Randomised controlled trial**

Asta Medisaukaite<sup>1</sup>, Caroline Kamau<sup>2</sup>

<sup>1</sup>UCL Medical School, London, United Kingdom. <sup>2</sup>Birkbeck, London, United Kingdom

Introduction: Studies report a high prevalence of doctors in the UK experiencing burnout (31–54%, Imo, 2017), sleep problems (11% have insomnia, Medisaukaite & Kamau, 2019), fatigue (69%, Medisaukaite & Kamau, 2019), etc. However, there are very few randomised controlled trials testing interventions against these problems. The aim of this study was to test an

intervention which challenged the stigmatising culture of mental distress in medicine. Such a culture puts doctors at risk of blaming themselves for suffering from mental distress which may link to the development of more severe health problems.

Methods: 227 UK doctors (52% women, 58.1% hospital doctors) were randomly and blindly assigned to one of 5 trial groups (study registration identifier: NCT02838290; ClinicalTrials.gov, 2016): The outcomes were tested before and after the interventions with a 7-14 days time-lag. The outcomes measures were: burnout (MBI-HSS), anxiety (GAD-7), psychiatric morbidity (GHQ-12), grief (The Texas Revised Inventory of Grief); alcohol dependence (PHQ), alcohol use (AUDIT), drug use, insomnia (Insomnia Severity Index), binge-eating (Eating Disorder Diagnostic Scale), physical symptoms (The Physical Symptom Inventory), and coping strategies (COPE).

Results: There were significant reductions in emotional exhaustion (burnout), depersonalisation (burnout) and anxiety among doctors who completed all modules about the psychology of distress (Module 4;  $F \geq 5.12$ ,  $p \leq .03$ ). After completing module 2 doctors' grief, insomnia, and binge-drinking decreased significantly ( $F \leq 4.03$ ,  $p \leq .05$ ) and doctors started using emotional support to cope with stress more often ( $F = 0.91$ ,  $p = .02$ ). While learning module 3 showed some positive effect on doctors' health, unfavorable results were found regarding personal accomplishment and the use of avoidance strategies to cope with stress after module 1.

Discussion: The current intervention is unique as it helps doctors to stop seeing psychological distress as something that is atypical among doctors, or a source of stigma. Changing doctors' understanding of what is "normal" in medicine is an important method of helping doctors move away from problematising themselves. This intervention helped to reduce various distress symptoms, however, different educational modules had different impact on health suggesting that the most effective were modules with all topics. Distress impairs cognitive functioning and clinical decision-making (Leblanc, 2009) and it is proven that doctors burnout affects patients care, e.g. increases risk of patient safety incidents, lowers professionalism, and quality of care (Panagioti et al., 2018). Therefore, interventions reducing distress among doctors are extremely important for patient care improvement.

## **S19 Reflections of an organisational-level wellbeing intervention: What worked and what did not**

Kevin Teoh

Birkbeck, University of London, London, United Kingdom

Introduction: In the United Kingdom, 8% of healthcare staff reported being harassed by colleagues in the workplace while 40% reported being stressed at work (NHS Staff Survey, 2018). These statistics reflect concerns about the harassment and wellbeing of healthcare staff, both in the United Kingdom and abroad. To date, most interventions to improve staff wellbeing have been in the form of secondary and individual-type interventions (Regehr, Glancy, Pitts, & LeBlanc, 2014) which have been argued to be less effective and sustainable than primary and organisational-level interventions (Kinman & Teoh, 2018). Although organisational-level interventions aim to address issues at source, in reality they are difficult to implement and evaluate. As such, organisational-level interventions are not only uncommon but when carried out their findings and learning are less likely to be reported (Nielsen et al., 2010). Sector specific challenges within healthcare, such as multidisciplinary teams, difficult work environments, bureaucracy and under-resourcing present additional challenges when carrying out organisational-level wellbeing interventions in this sector. This presentation draws on a case study of an organisational-level intervention to reduce conflict within teams and improve staff wellbeing within a hospital. Its aims are two-fold. First, to discuss the operationalisation of the intervention according to Nielsen et al.'s (2010) five-phases of an intervention. Second, to reflect on learnings on the barriers and factors critical to the intervention's success.

**Method:** This intervention is set within a large multi-site hospital in the United Kingdom. The intervention itself focuses on reducing the number of teams and healthcare staff that are in conflict by improving team-functioning and behaviours through building awareness, understanding and skill. The intervention is overseen and guided by a steering group representing various stakeholders within the hospital. As a participatory-based intervention the exact methods are not pre-determined but are guided by both the Steering Group and the teams involved. Alongside the development of a new behaviour policy, potential actions include conflict-resolution training, individual and team coaching, observations and feedback, skills training and changes to work processes.

**Results and Discussion:** Evaluation and feedback is obtained through routine data collected (e.g., sickness absence), staff surveys, organisational records and interviews with key stakeholders. This would not only provide some indication of the effectiveness of the intervention but perhaps more importantly, what aspects of the intervention worked (or not) for whom. The intervention and data collection is still ongoing. Preliminary results on the effectiveness of the intervention and reflections on the intervention implementation process will be shared during the symposium.

### **Sym6: The importance of sleep and recovery for work-related well-being and performance**

*Chair: Jana Kühnel*

In times of long work hours and increasing work intensification (Kelliher & Anderson, 2010; OECD, 2018), recovery from job-related stress is of crucial importance for employees. Recovery is the process of psychophysiological unwinding that counteracts the strain process triggered by demands, and is important to sustain employees' health, well-being, and performance (Sonnentag, Venz, & Casper, 2017). The current symposium consists of diverse studies investigating the relevance of both off-the-job and on-the-job recovery for work-related well-being and performance, and brings together researchers from six different countries.

Employing a diverse set of longitudinal and diary designs, the six studies in this symposium will reveal how employees' recovery activities and recovery experiences promote work-related well-being and performance. More specifically, the studies draw attention to sleep as a crucial recovery activity, to vacations and short breaks from work as important recovery opportunities, and to psychological detachment as important recovery experience. By looking on the importance of sleep, recovery opportunities, and recovery experiences for diverse indicators of well-being and performance, the authors of the studies show that recovery matters not only for well-being during non-work time, but also for on-the-job experiences and behaviors.

The first study in this symposium is from Christine Syrek and colleagues. In a longitudinal study with 274 white-collar workers, they investigated whether vacations are related to changes in creativity, and whether recovery experiences during vacations modify vacations' effect.

The second study is from Wladislaw Rivkin and Stefan Diestel. In a daily diary study with 51 participants over ten workdays, they investigated the day-specific energetic and motivational mechanisms that link sleep duration to work engagement.

The third study in this symposium is from Despoina Xanthopoulou and colleagues. In their daily diary study, they focused on social media use during work breaks – an activity that has become very popular. In a sample of 41 employees who answered questionnaires during one workweek, they tested whether social media use is related to subsequent recovery and well-being during and after work.

The fourth study in this symposium – authored by Stefan Diestel and Elvira Radaca – looks on sleep quality, creativity, and work-related well-being. In a daily diary study with 119 employees and four measurement occasions during each workday, they focused on how sleep quality is related to flow experiences and vitality during the day and subsequent creativity at work.

The fifth study in this symposium is from Jana Kühnel and colleagues. In a longitudinal study with 155 employees, they investigated whether the shift to daylight saving time is related to impairments in employees' sleep and work engagement, and whether effects are more severe for later chronotypes. Angela Kuonath and colleagues author the sixth study in this symposium. In a longitudinal study with 713 judges, they investigated whether surface acting is a risk factor for judges that threatens their workability in terms of increased emotional exhaustion and decreased work engagement, and whether psychological detachment serves as a protective factor.

The chair of this symposium will encourage participation of the audience by inviting questions after each presentation.

### **S20 Do vacations affect creativity? A longitudinal study**

Christine Syrek<sup>1</sup>, Jessica de Bloom<sup>2,3</sup>, Dirk Lehr<sup>4</sup>

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**Introduction:** The goal of this empirical study was to investigate employees' creativity before and after their vacation. Specifically, we analyzed employees' self-reported creativity as well as observer-rated creativity (fluency, cognitive flexibility, originality). To examine the relationship between recovery and changes in creativity, we follow Newman, Tay and Diener's (2014) model to differentiate between six recovery experiences (i.e. detachment, relaxation, autonomy, mastery, meaning, affiliation). In this study, theories and methodological approaches are derived from tourism research, leisure sciences and psychology and aim to connect research fields and build bridges between hitherto only loosely connected areas of expertise.

**Method:** The Alternative Uses Test was applied to assess observer-rated creativity. We developed a longitudinal research design with repeated measurements before, during and after a vacation period. Multilevel modeling was used to analyze the relationship between recovery experiences and creativity within persons as well as between persons. The study encompassed data from 274 white-collar workers.

**Results:** Analyses showed that employees subjectively perceive their creativity to be lower after vacation, whereas observer-rated indicators of creative performance suggest that they generate more original ideas than before vacation. Within persons, detachment was significantly and negatively related to subjective creativity (i.e. during times in which employees perceived difficulties detaching from work, they perceived their creativity to be higher compared to points in time in which they detached better), while mastery experiences explained interindividual differences in creativity (i.e. employees who generally experienced more mastery reported higher creativity compared to employees with fewer mastery experiences).

**Discussion:** Our analyses showed a discrepancy between employee's self-reported and observer-reported creativity after vacation: Employees subjectively perceive their creativity to be lower, whereas observer-rated creativity indicators suggest that they generate more original ideas. This study provides a nuanced picture of the intraindividual changes in creativity across a vacation period and indicates that employees may benefit from their vacation in terms of creativity. More research is needed to understand the underlying processes, which affect changes in creativity across longer leisure time periods.



## **S21 The flow of energy from daily sleep to work engagement: The role of positive affect, basic needs satisfaction and trait self-control**

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Previous research identified sleep as a processes of energetic resource recovery, which facilitates work engagement. While there is consistent evidence for the beneficial effects of sleep quality findings on the relation between sleep duration and work engagement are mixed. Moreover, the day-specific mechanisms underlying this relation remain largely unexplored. Finally, identifying boundary conditions, of the relations between sleep and work engagement may help employees and organisations alike to alleviate the impact of insufficient sleep.

In the present study, we aim to extend research linking sleep duration to work engagement by exploring first the shape of the recovery function of sleep, second the interplay of energetic resource availability and motivational processes linking sleep to work engagement, and third personal boundary conditions, which help maintain work engagement even during states of low energy availability due to insufficient sleep. Therefore, we integrate notions about sleep as a process of homeostatic recovery, the broaden and build theory of positive emotions, self-determination theory, and trait self-control to develop a conceptual model in which a) there is a concave relation between day-specific sleep duration and morning positive affect, b) morning positive affect and basic needs satisfaction (autonomy, competence, and relatedness) jointly mediate the day-specific relation between sleep duration and work engagement, and c) person-level trait self-control moderates the relation between morning positive affect and basic needs satisfaction and thus the concave mediation model.

We test our model in a daily diary study across 10 days with a sample of N=51 employees. Our findings reveal that the concave mediating effect of morning positive affect and basic needs satisfaction, which links sleep duration to work engagement is moderated by trait self-control. Subsequently, we discuss theoretical and practical implications as well as limitations of the study.

## **S22 Work- and non-work-related social media use during work breaks: Effects on daily employee well-being and recovery**

Despoina Xanthopoulou<sup>1</sup>, Konstantina Foti<sup>2</sup>, Savvas Papagiannidis<sup>2</sup>

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Introduction: Social media usage is a popular activity that employees engage in on a daily basis. Work breaks offer an opportunity to go online and use services such as Facebook, Twitter and Instagram. However, the evidence so far is inconclusive as to whether social media use during work breaks is favorable or unfavorable for employee functioning. To shed light on these inconclusive findings, in this diary study we focused on the degree to which social media use during breaks concerns work- or non-work-related (i.e., personal) issues. Our aim was to test whether work- and non-work social media use during work breaks relate differentially with recovery during and after work, and whether employee well-being during work (i.e., exhaustion and work engagement) mediates this process. Drawing upon the effort-recovery model and the recovery literature, we hypothesized that social media use for work-related purposes during work breaks will inhibit, while social media use for personal purposes will facilitate the state of recovery after the breaks. In turn, employees, who manage to recover successfully after their breaks, will be more engaged and less exhausted at work and consequently, will experience a lower need for recovery at the end of their shift. Finally, we hypothesized that reduced need for recovery after work will relate with successful recovery before bedtime.

Method: Forty-one employees completed a general survey and a daily diary for three to five working days, twice per day: at the end of their shift and before bedtime. Data were analyzed with multi-level analysis.

Results: Results showed that using social media for work-related purposes during work breaks was unrelated to the state of recovery after work breaks, while using social media for non-work purposes related positively to the state of recovery after breaks. Social media use for personal purposes during breaks related negatively to exhaustion during work through the successful recovery after breaks, while social media use for work purposes during breaks had a direct negative relationship with work engagement. Successful recovery after work breaks related negatively to exhaustion during work, which consequently, resulted in a lower need for recovery at the end of the workday. Finally, need for recovery at the end of the workday related negatively to recovery at bedtime.

Discussion: Our findings advance previous studies on the role of social media usage during work breaks by highlighting the importance of accounting for the content of use in order to understand when these activities facilitate and when they inhibit employee functioning. Also, we found that employee well-being during work, and particularly exhaustion, is the core mechanism that links recovery during work breaks and recovery during leisure. The reliance on self-report data and the fact that break-related experiences were assessed at the end of the workday (and not right after each break) are important study limitations. This study underscores the importance of social media use during work breaks not only for employee functioning during work, but also after work is done.

### **S23 How does daily sleep quality shape vitality and creativity throughout the working day? The mediating role of flow-experience and the moderating role of mindfulness**

Stefan Diestel, Elvira Radaca

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On the basis of a daily diary study with ten working days, we analyzed a multilevel moderated mediation model, which predicts mediating effects of flow-experiences in the positive relations of sleep quality to day-specific creativity and vitality as well as moderating effects of day-specific mindfulness on the positive relations of sleep quality to flow-experiences and flow-experiences to both outcomes. Our predictions derive from Personality-System-Interaction theory and recent models on sleep quality, according to which recovery processes of sleep quality facilitates autonomous regulation at work as reflected by integrative as well as holistic information processing and subjective vitality. In addition, mindfulness as a form of receptive awareness and present-oriented consciousness stabilizes well-being, even in cases of low availability of regulatory resources, and allows for translating processes of flow into creative thinking. In line with our predictions, data from 119 employees (697 data points) from different occupational and organizational contexts show that sleep quality of the last night (measured at the morning) exerts significant indirect effects on creativity (measured at the evening) and vitality (measured at the afternoon) via flow-experiences (measured at the midday). Moreover, we identified differential patterns of moderating effects of daily mindfulness (measured at the morning) on the positive relations of flow-experience to both outcomes: whereas the positive effect of flow on vitality was attenuated as a function of mindfulness, the positive impact of flow on creativity was amplified as a function of mindfulness. However, contrary to our predictions, no interaction effect of sleep quality and mindfulness on flow were found. The differential moderating effects of mindfulness provide important insights into underlying psychological mechanisms of the integrative self and associated processes of protective resilience during self-regulation at work. Our findings imply that sleep quality and mindfulness should be facilitated through appropriate training programs, to prepare employees for complex task, which require high creativity, and to ensure psychological well-being, even when flow experience is low.

## **S24 Does the shift to daylight saving time impair employees' sleep and their work engagement?**

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Around 70 countries around the world observe daylight saving time (summer time) and set clocks ahead one hour in spring. With the current study, we investigate whether the shift to daylight saving time matters for employees' sleep and their work engagement, and whether some people are more affected than others. We expected that employees report worse sleep and lower work engagement after the shift to daylight saving time. Moreover, we hypothesized that harmful effects should be especially strong for later chronotypes, so-called "night owls". One-hundred-and-fifty-five full-time employees participated in the field study. They answered six questionnaires around the shift to daylight saving time in 2019: two on the weekend before the shift to daylight saving time, two on the weekend of the shift, and two on the weekend after the shift. Results from multilevel analyses showed a decrease in sleep quality and work engagement after the weekend of the shift to daylight saving time. One week after the shift to daylight saving time, sleep quality was still negatively affected, whereas work engagement was not. In line with expectations, the impact of the shift to daylight saving time on work engagement was more pronounced for later chronotypes. Contrary to expectations, we did not find chronotype-specific effects for sleep quality. Results of this study imply that the transition from standard time to daylight saving time has an adverse impact not only on private life but also on working life.

## **S25 The role of surface acting and detachment for changes in judges' employability**

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Behaving in line with occupational or organizational emotional display rules is a key requirement for employees in merely any profession that includes the frequent interaction with people. This often brings along a considerable amount of effort - also referred to as emotional labour (Grandey, 2000) as the emotions that have to be shown overtly do not necessarily have to match those felt by the employee. A profession that, until now, has largely been neglected in the context of emotional labour is that of being a judge. Despite being confronted with highly emotional situations judges need to keep composed and stay neutral which surely constitutes an emotionally highly demanding work situation.

One way of easily coping with the discrepancy between the emotions that are felt and the emotional display that has to be shown is by applying surface acting (i.e., faking one's emotions to the outside without truly changing one's emotion; Grandey, 2000; Hochschild, 1983). Surface acting has been shown to bring along an array of negative work-related consequences (e.g., Brotheridge & Grandey, 2002). At the same time, this adverse coping strategy often cannot be avoided due to occupational or situational factors and may even play a prominent role for judges as it has been shown to be especially relevant when confronted with neutral display rules (Troughakos, Jackson & Beal, 2011). Thus, identifying protective factors that buffer negative consequences of surface acting is of special importance. Besides personal and occupational factors that already have been identified to act as a boundary condition in the functioning of surface acting (Grandey, Fisk, & Steiner, 2005; Chi, Grandey, Diamond, & Krimmel, 2011) we argue that identifying malleable factors is a crucial addition to prior research. This is why we focus on detachment that - as a central recovery experience which can be trained (Hahn, Binnewies, Sonnentag, & Mojza, 2011) - should interrupt rumination on negative affective experiences and thus counteract the maladaptive functioning of surface acting over time.

In the present longitudinal study with two measurement occasions 713 German judges took part over the course of eight weeks. Regression analyses showed that surface acting predicted both a reduction in work engagement and an increase in emotional exhaustion over time through increased negative affect. However, when the judges had a tendency to detach themselves from work in non-working hours both indirect effects were dissolved.

This study emphasises that the use of a "fake" emotional expression via surface acting is a relevant risk factor for judges which threatens their workability (i.e., increased emotional exhaustion and decreased work engagement) through increased negative affect. We further showed that psychological detachment from work acts as a boundary condition in this process. By identifying a protective factor in the emotional labour process that is open to change this study brings along important implications for both research and practice.

### **Sym7: Drivers of change in organisations – and the importance of context**

*Chair: Karina Nielsen*

Improving working conditions and wellbeing in organisations is proving challenging with disappointing results (Richardson & Rothstein, 2008), despite the recommendations that poor wellbeing needs to be addressed at source (WHO, 2001, EU-OSHA, 2010). A growing body of research has suggested that a possible explanation for the disappointing results is that the process by which interventions are implemented are as important as the content of the intervention (Nielsen & Noblet, 2018). An important aspect of the process may be role of change agents or drivers of change. The drivers of change have often been defined as line managers or consultants (Nielsen & Noblet, 2018), however, also others may play an important role in making changes happen in the workplace.

In the present symposium, we present studies across a range of organisational settings to explore the context of drivers of change. Line managers have been identified as important drivers of change (Nielsen, 2017) and their transformational leadership style has been found to be of particular importance to making changes happen (Abildgaard et al., in press; Lundmark, Hasson, von Thiele Schwarz, Hasson, & Tafvelin, 2017), however, training transformational leadership is a challenge and leadership training often fails to achieve its intended outcomes (Avolio, Reichard, Hannah, & Walumbwa, 2017) and as a result the context of training transformational leadership has received increasing attention.

The first study explores the extent to which how followers and leaders agree on the degree of formalisation and leaders being employee-oriented impacts leaders' ability to change transformational leadership behaviours post-training. The second study focuses on the role of safety representatives in making organisational interventions happen. It explores the mental models of safety representatives and the roles they take on to make the intervention happen. The third study focuses on employees as the drivers of change. In this study, selected employees were selected as drivers of change and trained in running dialogue workshops. We explore whether these employees' job satisfaction increased if these drivers of change perceived they were a good fit to the role. In the fourth and final study, we explored teams as drivers of change. In this study we focused on whether leaders and followers' agreement on a good participative safety climate influenced intervention outcomes.

These studies offer complementary perspectives on the drivers of change for organizational interventions, and combined, they clearly show how vital it is to not only focus on the intervention, but also the contextual factors that will have a significant impact on the success of organizational interventions.

## **S26 Does seeing eye to eye on pre-training context influence followers' perceptions of leadership training outcomes?**

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**Introduction:** Leadership research has been criticized for not sufficiently considering the organizational context that leadership takes place in. The same can be said for leadership training research. Despite prominent training-transfer models suggesting that contextual factors such as work climate and supervisor support are important factors for learning acquired during training being translated into behaviours at work, empirical focus on context is lacking. It could be argued, that context is particularly important in the case of leadership training as the ultimate beneficiaries of leadership training are not leaders themselves but their followers. Previous research has found that contextual factors have an important impact on the outcomes of training. Other have revealed how differing perceptions between managers and their subordinates on context have detrimental impact on employee, leader and organisational outcomes. In the present study, we examined the (dis)agreements, i.e., perceptual distance, between leaders and their followers on two contextual factors, the degree of formalisation and employee orientation on followers' ratings of changes in their leaders' transformational leadership behaviours as a result of an leadership training intervention.

**Method and Results:** The present paper is based on data from a natural experiment; a leadership training program in the Swedish forest industry. Thirty-seven leaders and their employees (n= 158) completed surveys before and after training. Polynomial regression with response surface analyses revealed that the agreement between leaders and their followers regarding organizational practices including formalization and employee orientation before training was positively related to training outcomes in terms of improved transformational leadership. Leaders who rated formalization and employee orientation higher than their employees before training had less favourable training outcomes.

**Limitations and Implications:** There was no control group that did not participate in the leadership training, therefore causal inferences cannot be made. However, our study suggests that agreement between leader and their teams on perception of the organizational context impacts outcomes of leadership training, and organizations therefor needs to consider these prior to training.

**Originality/Value:** The study contributes to the literature on leadership training, by suggesting that leader-team perceptual distance on the organizational context may influence the effectiveness of leadership training.

## **S27 The role of safety representatives' sensemaking in implementing organizational interventions**

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**Purpose:** The aim of this study is twofold: to explore 1) How do safety representatives make sense of their own contributions towards organizational interventions and 2) what consequences does that sensemaking have for the organizational intervention process? Nordic countries have broad concern of work on democratization, cooperation between the parts in work life, and alternative ways of work organization. These contextual characteristics have been

institutionalized as shared attitudes towards work, the responsibility of organizations towards employees and the focus on worker health, meaning and productivity (Christensen, Saksvik, & Karanika Murray, 2017). Although safety representatives are important actors in bottom-up organizational interventions, the safety representative's mental models throughout the five phases of an organizational intervention process (Nielsen & Noblet, 2018), have not been investigated before. This information is important for understanding how to secure successful implementation of organizational interventions through a better understanding of the role of the safety representative.

**Design:** Findings are based on results from 15 semi-structured qualitative interviews with safety representatives in one large Norwegian university participating in the ARK intervention programme. ARK is a comprehensive research-based plan and tool for 1) systematic mapping of the psychosocial work environment and 2) development and implementation of interventions for improving well-being, health and performance (Innstrand et al., 2015). ARK is built on the suggested five phases of Nielsen and Noblet (2018) as a framework for the processual work with organizational development including 1) initiation, 2) screening, 3) development of interventions, 4) implementation of interventions, and 5) evaluation of interventions. Thematic analysis was used to analyze the transcriptions of the interviews.

**Results and conclusions:** This study adds to the organizational intervention literature by adding knowledge on the safety representatives' mental models of their contributions to organizational interventions. According to the results the safety representatives make sense of their own contributions as threefold: a watchdog, a counsellor, and/or a driver. These sensemakings impact how the safety representative participates in the intervention processes in different ways. The watchdog safeguards either the work environment or the intervention process. The counsellor discusses with the middle manager how to implement the intervention activities. The driver leads and implements the organizational intervention. To include safety representatives more in the intervention processes, show promise as a way to implement truly employee-participatory organizational interventions.

## **S28 What about me? The impact of organizational changes on organizational change agents**

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**Introduction:** Interventions in the context of organizational change to ensure a health change process that does not have a detrimental impact on employee wellbeing is rare (Abildgaard, Nielsen, & Sverke, 2018). As a result, there has been a call for understanding the role organizational members play in the change process and how change processes can be planned and implemented to facilitate a healthy change process, i.e. a change process that considers the input from organizational members (de Jong et al., 2016; Nielsen & Randall, 2012). In the present study, we present the results of a change process aimed at improving the organization's capacity to provide eHealth services in a large healthcare trust with four hospitals where regular employees were appointed change agents and trained in how to implement change and run dialogue workshops. Based on person-job fit (Kristof-Brown et al., 2005), we propose that the extent to which change agents feel their role is a good fit will influence the impact their job satisfaction. We also propose that those low in job satisfaction prior to the intervention will benefit the most. To the best of our knowledge this is the first study to explore the impact of participatory interventions on employees who act as change agents themselves.

**Method:** We conducted a two-wave study with a baseline before the implementation of the supportive, participatory intervention with a follow-up 12 months after the first phase of the

implementation of the eHealth services had been completed. All change agents were invited to participate in the surveys. In total, 221 change agents (66%) responded to the questionnaire at baseline and 169 (%) at the follow-up. Change agents were asked questions about their perceived fit to the role, i.e. whether they had the right competencies for the role, and job satisfaction.

Results: Multi-level analyses showed that the extent to which change agents felt they had the necessary competencies to perform the role as change agent (at time 1) was positively associated with increases in job satisfaction at T2. Baseline job satisfaction interacted with person-role fit such that those who were less satisfied with their jobs and report a good fit to their new role experienced higher levels of change-specific self-efficacy and increased job satisfaction at T2.

Conclusions: We need to understand how assuming particular roles during the organizational change impact these change agents. Assuming a role that you do not have the competencies for how employees being allocated a specific role during interventions, experience this role and how this benefits them. This is likely to have implications for recruiting for these roles in future interventions.

### **S29 Congruence rules! Increased self-efficacy after an occupational health intervention – but only if leaders and teams agree about participative safety climate**

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To succeed with participatory occupational health interventions, teams need to be able to engage in problem solving, goal setting, and development and implementation of action plans around emotionally charged topics. This implies that participative safety climate, a construct that focus on employees' active involvement in group interactions that is characterized by a non-threatening interpersonal atmosphere of trust and support, may be a context factor that influence the outcome of such interventions. Yet, it is not sufficient to only consider employees or managers ratings of participative safety climate, as the perceptual distance between leaders and teams have shown to have an independent effect on outcomes. The aim of this paper is to investigate the impact of leaders- and teams perceptions of participative safety climate on employees confidence in their ability to 1) interact socially at work (social self-efficacy), 2) manage emotions at work (emotional self-efficacy) and 3) solve tasks at work (cognitive self-efficacy), following a participatory OHS intervention. Thirty leaders and 758 employees in 28 teams from 5 organizations participating in a participatory OHS intervention completed surveys before and after the intervention. Polynomial regression with response surface analyses was used analyze the data. We found that the participative safety climate itself was not related to the intervention outcomes in terms of improved self-efficacy. It was only when the leaders and teams levels of congruence on the climate was introduced that a relationship to the outcomes was found. These results show not only that participative safety climate may be an important contextual factor to consider for optimizing the outcome of an intervention. It specifically points to the importance of comparing leaders' and their team's perceptions of context factors in intervention research, as well as the need to consider non-linear relations in intervention research. Congruence matters. For practice, the findings suggest that organisations conducting participatory OHS interventions should assess and potentially address pre-intervention climate factors in order to succeed with interventions.

## **Sym8: Work Flexibility in the US and Europe**

*Chair: Tapas Ray, Naomi Swanson*

Work practices are going through major changes globally. Though historically economic, technological, and demographic forces have molded how work is organized, the current changes seem more pronounced. In recent years, the populations of many nations have aged, and gender differences have been bridged, with women joining the workforce in large numbers. These trends combined with rapid reductions in certain types of transaction costs such as labor monitoring costs that are accommodated by technological advances, have altered organizational practices making work operations more flexible. We use the term work flexibility to describe several work practices that are changing, including flexible work hours, flexible schedules, work load sharing through new work arrangements, work space fluidity, and work scope broadening. Work flexibility is often also sought by workers who seek to address their personal and family needs, including child care, eldercare, schooling, and healthcare. Sometimes, the nature of a job itself calls for flexibility as is the case in creative professions.

Work flexibility may have positive and negative consequences for both workers and employers. For workers, it often provides a sense of job control, increased engagement, and increased job satisfaction, thereby improving their health and well-being. However, studies show that the blurring of the line between work and non-work life comes with negative consequences for workers and their families. Employers benefit from engaged workers who is more productive. While work flexibility may result in lower employer costs associated with turnover, absenteeism, and presenteeism, it may also result in employers incurring costs. We have a limited understanding of the global trends in work flexibility. Available data shows that 10% to 35% of European workers use flexible work spaces. Approximately 20% of the workers in the United States have access to work flexibility, depending on the definition of the term.

This symposium brings together a group of researchers from various countries dealing with diverse aspects of flexible work organization in the new economy. The symposium will include presentations on five studies. The first study focuses on work flexibility trends in the United States and the potential effects of work flexibility on the future of work. The second study describes the effects of work flexibility on worker well-being, using several years data from the United States. The third study presents a review of flexible work practices and its consequences for European economies. The fourth study describes the effects of an activity-based flexible office structure on distractions and whether changes in distractions are related to various outcomes, including engagement, job satisfaction, and fatigue. Comparing work flexibility prevalence and trends across continents and investigating the health and well-being impacts of work flexibility across cultures may help to better understand its role on the future of work.

### **S30 Work flexibility trends in the United States and the potential effects of work flexibility on the future of work**

Regina Pana-Cryan

National Institute for Occupational Safety and Health, Washington, DC, USA

**Introduction:** This study assessed the determinants, prevalence, and trends of work flexibility and discussed the potential effects of work flexibility on the future of work.

**Method:** We searched the literature to understand the common definitions and determinants of work flexibility. We used 2002-2018 data from five nationally representative sources to conduct descriptive analyses on the prevalence and trends of work flexibility by demographics, industry, and occupation. Sources included data on the employer's perspective (National study of employers (NSE)) and the worker's perspective (Current population survey-Work schedules and work at home supplement; American time use survey-Flexibility module; National study of the changing workforce; and General social survey-Quality of work life module). We searched the literature and information from initiatives of the National Institute for Occupational Safety and Health (NIOSH) to understand the relationship between work flexibility and the future of work.



Results: In the U.S., work flexibility is often defined in terms of flexible work hours, flexible work locations, and access to paid leave. From the employer's perspective, work flexibility refers to workers readily responding to changing circumstances and expectations. From the worker's perspective, it provides workers with autonomy over when, where, or how to allocate resources in work and non-work domains. The determinants of flexibility vary for employers and workers. Employer choices for flexibility are determined by: the labor market (demographics, globalization); technology (digitization, globalization, culture); and their profit motive in the global market (globalization). Worker's choices for flexibility are determined by: personal needs and preferences (demographics); education and skills (demographics, technology); and flexibility policies at work (digitization). We use one example to illustrate results on the trends of work flexibility. We used 2005-2016 NSE data on employers allowing time and place flexibility for at least some workers, including: periodically or daily (two options) changing starting and quitting time; compressing work week; varying work hours; having control over overtime or shifts (two options); taking sabbaticals; regularly or occasionally (two options) working from home; and taking time during work for family needs. The option with the largest change was occasionally working from home with 34% and 66% of employers offering this option in 2005 and 2016, respectively. The determinants of flexibility --demographics, technology, and globalization --are also important determinants shaping the future of work. In addition, work flexibility can moderate some of the negative effects of changes in demographics, technology, and globalization. For example, work flexibility has been shown to be negatively associated with turnover and the effect was stronger for low-wage workers.

Discussion: It is important to understand the determinants, prevalence, and trends of work flexibility, as well as its effects on employers, workers, and the future of work. Through its Future of Work (FOW) initiative, NIOSH is compiling studies that connect trends in workplace, work, and workforce changes. Also, NIOSH and its partners are developing research priorities to address aspects of the FOW within the context of the NIOSH Healthy Work Design and Well-being program.

### **S31 Work flexibility and work-related well-being**

Tapas Ray

National Institute for Occupational Safety and Health (NIOSH), Cincinnati, USA

Introduction: This study investigates whether work flexibility is associated with work-related well-being, expressed as job satisfaction, job stress, and health-related quality of life (HRQL).

Method: Data from the Quality of Work life (QWL) module of the General Social Survey (GSS) is used to understand the relationship between work flexibility and work-related well-being. GSS is a biannual nationally representative cross-sectional survey of U.S. households conducted by the National Opinion Research Center. Developed by the National Institute for Occupational Safety and Health (NIOSH), QWL assess an array of psychosocial working conditions and quality of work life topics among GSS respondents who are either employed or looking for work. We analyzed pooled cross-sectional data from 2002, 2006, 2010, 2014, and 2018 (weighted sample of 7400 observations). We assess work flexibility in terms of the following variables: 1) Time flexibility – i) Ability to take time off work for non-work matters, ii) How often allowed to change daily starting and quitting time; 2) Location flexibility – Telework; and 3) Scope flexibility – Freedom to decide how to do the job. Job satisfaction is assessed using responses to the question, All in all, how satisfied would you say you are with your job? (yes = very satisfied, somewhat satisfied; no = not too satisfied, not at all satisfied.) Job stress is assessed through the question, How stressful is your work? Responses are collapsed from a 5-point Likert scale into a binary variable: (1) those who reported being stressed at work (response options 5 = always, and 4 = often), and (2) those who reported not being stressed at work (response options 3 = sometimes, 2 = rarely, and 1 = never). HRQL is assessed through healthy days based on two items from the Centers for Disease Control and Prevention (CDC) HRQL-4 index. The

questions are (1) Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?; (2) Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? Controlling for age, gender, marital status, education, income sufficiency, health, effect of family on work, and work arrangement type, we conducted logistic regression analyses and assessed the effect of individual work flexibility variables on work-related well-being variables.

Results: Overall, work flexibility changed minimally during 2002-2018, although some individual flexibility variables followed cyclical trends. Work flexibility is positively related to job satisfaction and healthy days and is negatively related to job stress. Working from home is associated with more healthy days. Working from home is positively associated with job stress though the relationship is not statistically significant. Both location and time flexibility are positively associated with job satisfaction and the feeling of being productive. In addition, work arrangement is an important determinant of work flexibility.

Discussion: The study demonstrates the importance of work flexibility for well-being and provides valuable information about flexibility by work arrangement type.

### **S32 Flexible work practices and its consequences in European economies**

Aditya Jain

Nottingham University Business School, Nottingham, United Kingdom

Non-standards jobs have become more prevalent due to changes in the world of work, such as increasing digitalisation and the creation of new business models. In the so-called gig economy temporary positions and short-term contracts with independent workers are common. The 'gig economy' refers to an economic system that uses digital platforms to connect workers with consumers and clients (Harris, 2017). Some of the household organisational names in the gig economy include Uber, Lyft, and Deliveroo which are increasingly important players across multiple countries worldwide. Estimates of the scale and growth of the gig economy vary greatly. Definitions of terms such as "gig economy", "platform economy", and "crowd work" differ significantly. According to the World Development Report 2019 "the best estimate is that less than 0.5% of the active labour force participates in the gig economy globally, with less than 0.3% in developing countries". In the EU, the number of freelance workers doubled between 2000 and 2014, making freelance work the fastest growing labour group in the EU labour market.

Gig workers hold similarities with other forms of contingent labour. On one hand, the gig economy presents a major concern as it exposes individuals to financial risk, along with social insecurities and inequalities, while on the other, it has been highlighted as providing people with the opportunity to take back control on their work life with the individual deciding to work when they want. However, there is significant potential for this working arrangement to deprive workers of short-medium and long-term employment security. While there is much public discourse on the positives and negatives there is little empirical research to help inform us.

In 2016, one out of four employment contracts in Europe was for atypical forms of work. Recognising that the labour market requires flexible work contracts, policy makers in Europe reiterated that flexibility must be combined with minimum protection. On 16 April MEPs adopted new rules introducing minimum rights for all employees. This legislation grants new rights for the most vulnerable employees on atypical contracts and in non-standard jobs, such as gig economy workers. The new rules include measures to protect workers by ensuring more transparent and predictable working conditions, such as free mandatory training and limits on working hours and the length of the probationary period. The rules would also prevent employers from stopping a worker from taking up another job outside of working hours and require that all new employees get key information on their responsibilities and working conditions within a week. The new rules

would apply to anyone being paid to work at least 12 hours per four weeks on average, including domestic, on-demand, intermittent, voucher based- and, platform workers as well as trainees and apprentices. Within this context, this presentation will discuss the impact of the gig economy of workers health and well-being in Europe and discuss the implications of the forthcoming legislation to address the challenges posed by the gig-economy.

### **S33 Moving to activity based flexible office: Effects on work-related outcomes in a longitudinal study**

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**Introduction:** An important trend in the current office work are activity-based flexible offices (A-FO). The main motives for implementing A-FOs are decreasing costs while enhancing collaboration, communication and consequently productivity, but evidence for these benefits so far are scarce. One of the commonly mentioned downsides of implementing flexible and innovative office designs is a decrease in audiovisual privacy and an increase in distractions. The focus of the present study are the effects of distraction on well-being in a specific work setting (A-FO). More precisely, we examine how distractions after switching to an A-FO relate to employees' fatigue, engagement and job satisfaction. Using a within-subject design, we compare work and well-being related outcomes before and after the implementation of the new office design. Moreover, we were interested in exploring potential moderators of these relationships.

**Method:** Work Engagement, fatigue, job satisfaction, distraction, time pressure and unpredictability were assessed two months before the company changed to new office spaces (T1) and two months after this change (T2).

The total sample consisted of 252 employees who were matched for T1 and T2. The sample included slightly more men (53.6%) with the average age of 43 years (SD=10.18) and average tenure of 15.36 years (SD= 14.1).

**Results:** Changing the office environment and moving to the A-FOs had negative consequences. In the first place, the level of distraction increased significantly ( $\Delta\text{DIST1-T2} = 0.25^{***}$ ) while engagement significantly decreased ( $\Delta\text{ENG1-2} = -0.15^{***}$ ) and fatigue increased ( $\Delta\text{FAT1-2} = 0.23^{***}$ ) after the move to new offices. Furthermore, the obtained results showed that distraction was a significant predictor of work engagement ( $B = -0.24^*$ ), fatigue ( $B = 0.34^*$ ) and job satisfaction ( $B = -0.40^*$ ) after moving to an A-FO, even after controlling for all the outcomes and distraction at T1. Finally, significant three-way interactions showed that the negative effect of distraction on the measured outcomes was more pronounced in situations of increased time pressure and unpredictability.

**Discussion:** Three main contributions of the present study in comparison with the previous ones are: first, clear theoretical guidance for justifying the research questions and explaining the obtained results; second, methodological design that includes within-subject assessment of working conditions and outcomes before and after switching to an A-FO with the fairly large sample size; and third the focus on distraction and potential moderators to comprehend better the effects of A-FO's on employees' well-being, satisfaction and motivation. The obtained results highlight the importance of having quiet zones for concentrated work to avoid distractions. Additionally, a detrimental interplay between distractions caused by the office design and time pressure and unpredictability implies that the focus should not only be on office re-design and changing the environment but also on job re-design and taking care of job demands and resources. Study limitations include a lack of a control group which limits making conclusions about causal effects of the new office environment; the data was collected from only one organization which limits the generalization of the results to other organizations and other work contexts; use of self-report measures.

## **Sym 9: Still encountering a glass ceiling? Developments for women and work**

*Chair: Paula Brough*

This symposium showcases new research being conducted within the broad field of women and work. Four presenters from across the globe provide their perspectives and research findings relating to current issues experienced by working women. In the first paper, Paula Brough presents research demonstrating how levels of job demands, control, and support work differently for the prediction of wellbeing for female and male police leaders. The implications for the engagement and retention of female (police) leaders are discussed. In the second paper, Mina Westman discusses the past, current and future implications of psychological crossover research. The crossover of both positive and negative constructs such as resources and engagement, impact the resilience of both families and workplaces. Crossover within work units, can have significant implications for female leaders in particular. In the third paper, Almuth McDowall and Mark Stringer reflect on the rather precarious rise of female executives. They discuss how much female success is reliant on 'image management' and the typically negative implications for their personal relationships. Finally, in the fourth paper, Claire Hardy discusses the topical issue of menopause in the workplace. Commonalities in what women do and do not want from their managers and employers in relation to their menopause are highlighted.

### **S34 Different experiences of job characteristics for female and male leaders**

Paula Brough

Griffith University, Brisbane, Australia

The attraction, promotion and retention of women to senior leadership positions is a major challenge facing many organisations, especially police services. Female leaders in male dominated occupations, commonly report substantively different experiences of their workplaces, as compared to their male colleagues. The aim of this research was to empirically examine differences in the psychosocial working conditions reported by male and female senior officers and the differential impacts of these factors on their wellbeing. The research design consisted of the administration of two self-report surveys, individually tracked over time, with a time lag of 14 months between administrations. The surveys contained key assessments of psychosocial working conditions and dependent variables of psychological strain, work engagement, job satisfaction, and work-related wellbeing. Two organisational wide surveys were administered to a matched sample (N = 463) of police officer managers employed in one Australian state police service. Results indicated marked gender differences in the results. For male leaders, higher job demands and lower perceived control predicted higher psychological strain, whereas supervisor support had no significant impact upon psychological strain. For female leaders, lower supervisor support predicted higher psychological strain over time, with both job demands and job control being non-significant predictors of psychological strain. These results indicate that there is a difference in the experience of psychosocial working conditions for male and female police managers and this has a significant impact upon their level of psychological health over time. It appears that police service policies and practices to improve leader wellbeing and retention require different approaches for male and female leaders. The implications for how police services can offer senior leaders increased levels of job control (for male officers) and job support (for female officers) are also discussed.

### **S35 Crossover research: Past, present and future**

Mina Westman

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Crossover was defined by Bolger et al. (1989) as the interpersonal process that occurs when the job stress or psychological strain experienced by one person affects the level of strain of another person in the same social environment. Thus, crossover is a dyadic interindividual transmission of psychological states and experiences. While the original definition of crossover focused on

stress and strain, Westman (2001) expanded the crossover focus by broadening its definition to include positive experiences and states, specifically engagement and satisfaction. A new stream of research investigates the crossover of resources. Neff et al. (2012, 2013) for example, demonstrated how two resources; self-esteem and job-related self-efficacy—crossed over from one spouse to the other. They based their research on self-expansion theory (Aron et al., 1991) and on the assumption that in an intimate relationship, individuals increasingly incorporate their partners' resources, perspectives, and identities into their own self-concept (Aron & Aron 1986). The findings that certain resources are not only beneficial for the individuals but also affect their partners via crossover processes have practical implications for dual-earner couples and their organizations. Supporting employees' job-related resources at work might positively affect their partners via crossover processes, which may, in turn, positively affect the partners' work engagement, ultimately leading to improved performance. Consequently, the crossover of resources between partners may contribute to a more resilient family, more resilient organizations, and gradually a more resilient society. Whereas most crossover studies focus on couples, some researchers have recently focused on crossover of burnout and engagement from leaders to employees. Thus, an additional domain of crossover study focused on the work setting. However, the focus of crossover at the workplace also includes other family members. To elaborate, leaders' burnout which crosses over to subordinates might originate from stress at home, which spills over to the leaders' work and crosses over to the employees. This paper also discusses new direction in crossover research including the inclusion of resilience, female managers, national culture, generational differences, and methodological issues.

### **S36 The song remains the same: The precarious journey to the top**

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Gender equality is progressing at snail's pace: FTSE 100 boardrooms are about a fifth female, only 10% of top level jobs are held by women, and only six out of 100 CEOs are female. Data is also bleak in the public sector and in academia, where dedicated leadership programmes to support for instance women in STEM subjects exist, yet do not appear to trigger sufficient change. So why is this happening and what is the impact on females who have progression aspirations? This paper will investigate this topic from a critical perspective, using music and song analogies to embed the data. Our broad research question was to investigate 'push and pull factors' which help or hinder female board aspirations, encompassing both personal qualities and characteristic as well as the organisational context to identify common patterns and threats but also preserve unique insights. We undertook 17 interviews with a self-selected sample of senior women asking them about their journey to date as well as future plans. We focus on how organizational cultures, demarcated by patriarchy and power prompt women to self-consciously engage in image management and either adapt and become more 'male' thus relinquishing their identity, or conversely become 'hyper-feminine' to facilitate their career paths. Either path is marked by self-sacrifice and loss to some extent, as identity is compromised and personal relationships take a back seat. We discuss the findings in relation to notions of power and hegemony as well as the tangible wellbeing implications.

### **S37 Menopause and the workplace – What do menopausal employees want and what can we do? Insights from the United Kingdom**

Claire Hardy

Lancaster University, Lancaster, United Kingdom

With an aging working population, more women than ever before are working through their menopausal transition. Typically occurring at the age of 51 in Western culture, the menopause (a women's last menstrual period) is a naturally occurring event in a women's life. It occurs as a result of changing reproductive hormones in the woman's body. Experiences of the menopause

are highly unique and variables and can bring about a variety of symptoms and experiences. These symptoms can last on average 4 years but for some it can be up to 10-12 years. Research has shown that women can find the work context the most difficult in terms of managing their menopausal symptoms and experiences. It can affect their confidence at work and potentially their decision to leave the workforce. Yet, disclosure of their menopause and associated difficulties are typically not disclosed to workplaces or line managers for fear of stigmas and negative repercussions. Until recently, the menopause was a significantly under-researched occupational health area. However, several recent studies have been conducted that explore what workplaces can do to help to help this population of their workforce. This talk will share the results of research conducted on UK samples of working menopausal women and provide insight into what women want (and do not want) from their line managers and employers in relation to their menopause. The talk will share findings of a literature review carried out on menopause and workplace guidance documentation from key professional bodies and trade unions in the UK, highlighting the key themes of content and recommendations that are being advised. Finally, the results of two workplace interventions that were developed and tested to improve the menopausal experience for working women and increase line manager awareness about the menopause. The talk aims to share this recent research, discuss future research plans, as well as open up discussions with attendees to share experiences across our respective countries and explore future opportunities and directions for this important body of work.

### **Sym10: Evaluating reflective practice groups for nursing staff in an acute care hospital setting**

*Chair: Prudence Milliar*

Burnout, compassion fatigue, and high rates of staff turnover amongst nurses present an ongoing concern for the health sector, as nurses combine advanced clinical skills with interpersonal aspects of caregiving. Interventions using support groups can be effective, although findings are inconsistent when managerial support or attendance are low. The Dawber Model of Reflective Practice Groups (RPGs) was developed to support the caring and interpersonal aspects of nursing and to explore complex issues in a supportive group environment. RPGs promote reflection and critical thinking, provide support and foster team cohesion, and can prevent burnout and compassion fatigue. The Dawber Model has operated within Sunshine Coast Hospital and Health Service (SCHHS), Queensland, Australia, for over 9 years and this symposium reports on five studies over two years evaluating the processes and outcomes of the Dawber model. Using the Jobs Demands-Resources model, it was proposed that RPGs may act as a forum for job crafting, allow nurses to build skills and personal resources to enable nurses to better manage their workplace demands.

Paper 1 (N=221, 84.6% female) explored effects of RPGs sessions attended, over and above the nurses' personal and workplace resources, on nurses' professional quality of life (ProQoL, i.e. burnout, compassion satisfaction [CS], secondary traumatic stress [STS]) and psychological distress. Whilst all resources and RPG attendance were positively correlated, limited resources predicted psychological distress, burnout and STS, skill discretion and RPG attendance predicted compassion satisfaction. Paper 2 (N=221, 84.6% female) focused on whether nurses had improved outcomes within wards using RPGs compared to usual educational activities in other wards or whether personal attendance was more important. Interestingly, ward involvement in RPGs did not change outcomes for the nursing work group, however, higher levels of personal attendance were beneficial.

Paper 3 (N=187, 88.3% female) explored mediation of the benefits of RPGs (measured by Clinical Supervision Experience Questionnaire) on PROQoL by personal and job resources, i.e., quality of RPGs builds resources to manage job demands. Full mediation was shown, where

quality of RPGs predicted greater person and job resources, which in turn predicted greater compassion satisfaction, less burnout and less STS. Paper 4 (N=22, 86.4% female) used focus groups in a mature RPG. Thematic analysis found that a skilled facilitator, with agreed rules of engagement, professional identification, and confidentiality created a safe space for nurses to authentically express emotions and share experiences. Group reflective practice provided a sense of universality of the nurses' emotions, building self-efficacy in their nursing role.

In Paper 5 (N=190, 88.36% female), facilitator effects, frequency, and preferences for attending RPGs were explored, finding attending 'as needed' was associated with better outcomes, and facilitators were equally effective. Qualitative responses identified benefits of attending, similar to Paper 4, but barriers were also identified, particularly high workloads or rostering, and discomfort with sharing in groups. The combined results show that RPGs, as a nurse-led, voluntary, and supportive group process offer a useful and effective intervention that builds personal and job resources which nurses can utilise to balance their clinical and caring roles.

### **S38 Reflective practice groups and professional quality of life: A predictive model accounting for the effects of person and job factors**

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**Introduction:** Nurses may be exposed to traumatic stressors, when providing personal and clinical care. Professional quality of life is defined as compassion satisfaction (i.e., satisfaction with the care provided for patients) and compassion fatigue (i.e., burnout and secondary traumatic stress [STS]). Reduced professional quality of life leads to turnover and poorer outcomes for nurses. Using the Jobs Demands-Resources model, the current study explored whether attendance in the Dawber Model of Reflective Practice Groups (RPGs) would buffer the effects of traumatic stressors at work and increase professional quality of life. Specifically, would attending RPGs predict more compassion satisfaction and less burnout, STS, and psychological distress for nurses, over and above their existing personal (e.g. optimism) and workplace (e.g., job autonomy, job social support) resources.

**Methods:** Nurses (N= 221, 84.6% female) in a new, regional teaching hospital were recruited during their ward's RPG or educational time. Volunteers completed a survey of demographics, personal resources (i.e., self-efficacy, optimism), job resources (i.e., psychosocial safety climate, job social support, job autonomy, skill discretion), and numbers of RPGs attended (scored as 0, 1-6, 7-12, 13-18, 29-24, 25-30, 31+ sessions). Outcomes were psychological distress and professional quality of life (ProQoL-5; compassion satisfaction, burnout, and STS). Hierarchical Multiple Regressions (HMRs) were conducted for each of the outcomes, with variables entered as age and personal resources (Block 1), job resources (Block 2), & RPG attendance (Block 3).

**Results:** Nurses ranged from 20 to 69 years (M=41.8 years, SD=11.2) and worked from 8 to 64 hours/week (M=33.0 hours/week, SD=7.3). There was a spread in RPGs attended, although about half attended 6 or less (58%), compared to 25 or more (10%). Higher numbers of RPGs attended were positively correlated with increased skill discretion and compassion satisfaction ( $ps < .01$ ), although not with psychological distress, burnout, and STS. These three outcomes were strongly and positively correlated with each other ( $ps < .001$ ). The HMRs had medium to large effect sizes. In the HMRs, the absence of personal resources, as optimism ( $\beta_s = -.24^{**}$  to  $-.41^{***}$ ) and self-efficacy ( $\beta_s = -.14^*$  to  $-.20^{**}$ ), significantly predicted greater psychological distress, burnout, and STS. Psychological distress was also predicted by being younger (age,  $\beta = -.15^*$ ). Burnout was additionally predicted by the absence of a positive psychosocial safety climate ( $\beta = -.29^{***}$ ) and job autonomy ( $\beta = -.19^{**}$ ). Interestingly, compassion satisfaction was predicted by greater skill discretion ( $\beta = .27^{***}$ ), job autonomy ( $\beta = .21^{**}$ ), and self-efficacy ( $\beta = .15^*$ ).

Discussion: Although greater participation in RPGs had significant correlations with the outcomes, attendance alone was not a separate resource for nurses, rather it was personal and job resources that increased professional quality of life and reduced psychological distress. In particular, optimism reduced burnout and psychological distress, more skill dissection increased compassion satisfaction, and psychological safety climate reduced burnout. Whilst the study is limited by the cross-sectional design and that about half of the nurses had attended six or fewer reflective practice groups, greater personal and job resources predicted higher quality of nurses' work and lower any distress that may arise

### **S39 RPGs for nurses – Comparing between wards and on levels of personal attendance**

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Introduction: Building on the first paper, the current study further explored the effects of the Dawber Model of Reflective Practice Groups (RPGs). The RPGs have strong support within the Sunshine Coast Hospital and Health Service (SCHHS) with educational time also available where RPGs are not operating, overcoming past limitations of low managerial support. It was hypothesised that first, being in a ward where RPGs were available would have more positive outcomes (e.g., reduced burnout) for nurses who attended RPGs, when compared to nurses from their own wards and other wards who did not attend the RPGs. Second, it was hypothesised that nurses who attended RPGs most frequently would have better outcomes than those with few or no attendance and moderate attendance.

Method: Nurses (N=221, 84.6% female) at a new, regional teaching hospital were recruited during their ward's RPG or educational time. Volunteers reported whether the ward on which the nurse worked had RPGs available (Yes/No), and if the nurse had attended RPGs (Yes/No) and numbers of RPGs attended (scored as Limited (0-6 sessions, n=124), Moderate (7-18 sessions, n=60), and Extensive (24-31+, n=31). Outcomes were cognitive flexibility, professional quality of life (as compassion satisfaction, burnout, and secondary traumatic stress [STS]), psychological distress, psychosocial safety climate, and group cohesion. ANOVAs compared firstly, the effect of RPGs being available on the nurses' ward (Yes/No) and the nurse's own RPG attendance (Yes/No) [as three groups: YY (Yes, RPG on ward, Yes attend, n=170), YN (Yes, RPG on ward, No, do not attend, n=14), and NN (No, RPG not on ward, No, do not attend, n=34)]. Second, ANOVAs compared the effect of attendance at RPGs, regardless of ward, with nurses grouped as Limited, Moderate, and Extensive attendance. Pairwise comparisons, with Bonferroni adjustments, followed up the significant F-tests.

Results: First, comparing personal and ward involvement in RPGs, the nurses were similar across the outcomes, although low power, due to the small effect sizes were evident for the analyses. Second, comparing personal attendance in RPGs, nurses did not differ for STS and psychosocial safety climate, but those with extensive attendance reported more compassion satisfaction and group cohesion ( $p < .05$ ) and slightly less burnout ( $p < .10$ ) than the Limited or Moderate groups, and the Moderate and Extensive groups had significantly less Inhibitory Anxiety ( $p < .01$ ) and slightly less psychological distress ( $p < .10$ ) than the Limited group.

*Discussion:* Rather than being associated with availability on a ward, personal attendance was important, with both Moderate and Extensive RPG attendance benefiting the nurses, particularly reducing anxiety for the future, in addition to long-term benefits of RPG attendance increasing compassion satisfaction and group cohesion. The results may reflect an accumulation of resources, as some benefits occurred for Moderate and Extensive attendance, and others only in the Extensive group. However, the study was cross-sectional, limiting explanation for difference between attendance groups and some of the groups were much smaller than others (although assumptions for ANOVAs were met). Taken together, RPG attendance had positive occupation outcomes and improving their professional lives.



## **S40 Exploring how quality of RPGs build resources and improve professional quality of life for nurses**

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**Introduction:** The current paper explored whether the experiences at attending Reflective Practice Groups (RPGs) may represent a form of job crafting, i.e., nurses actively seeking out the RPGs as a tool to build skills and manage their work demands. The Dawber Model is specifically designed to be nurse-led, to share knowledge and experiences, and to learn skills from the facilitator and nursing peers in the groups. Therefore, higher quality RPGs should increase self-efficacy, job autonomy and use of skills, and nurses will feel greater group cohesion and social support. Further, it is hypothesised that RPGs will indirectly increase of professional quality of life (PROQoL, measured as compassion satisfaction, burnout, secondary traumatic stress [STS]), through the mediators of personal and job resources.

**Methods:** Nurses (N=187, 88.3% female) at a new, regional teaching hospital were recruited during their ward's RPG time, completing a survey of demographics, personal (i.e., self-efficacy) and job resources (i.e., job autonomy, skill discretion, job social support, group cohesion), quality of group supervision (rated on Clinical Supervision Experience Questionnaire [CSEQ]), and the outcomes, compassion satisfaction, burnout and STS. Mediation analysis was conducted with multiple parallel mediators (PROCESS macro, Model 4) from the quality of the RPGs (X variable; CSEQ) to each outcome, i.e., compassion satisfaction, burnout, STS (Y variables). The mediators (M1-M5) were self-efficacy, job autonomy, skill discretion, job social support, and group cohesion.

**Results:** Correlations were in the expected direction, assumptions were met, and mediation models had large effect sizes ( $f^2 > .35$ ). For the mediation models, first, CSEQ was a positive and significant predictor of self-efficacy, job autonomy, skill discretion, job social support, and group cohesion (i.e., significant *a* paths). The total effects (*c* paths) of quality of RPGs were significant for burnout and compassion satisfaction, but this was mediated by the resources (i.e., *c'* paths were NS). Suppression was evident for the total and direct effects for STS. Of the mediators, self-efficacy, job autonomy and social support were significant predictors of all outcomes (*b* paths,  $ps < .05$ ), adding skill discretion for compassion satisfaction. Quality of RPGs had significant indirect effects (i.e., CIs did not include 0) through self-efficacy and social support for all outcomes, adding the indirect path through autonomy for burnout and compassion satisfaction, and through group cohesion for STS.

**Discussion:** The current study found that where nurses rated their RPGs as better 'quality' (e.g., positive shared experiences), this predicted greater job and personal resources, and indirectly better professional quality of life. Greater personal and job resources, particularly self-efficacy, social support, and autonomy, improved nurses' compassion satisfaction, buffering burnout and STS. The findings highlight the importance of the Dawber Model of RPGs as an avenue for job crafting, allowing nurses can take advantage of group and facilitator knowledge and develop resources to manage the demands they face every day. Although this is a cross-sectional study and causality cannot be established, the current study indicates that beneficial experiences in RPGs provide an opportunity to build resources that allow nurses to better manage the demands of their work.

#### **S41 Group cohesion in nurse group clinical supervision**

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**Introduction:** Caring and interpersonal skills are central to nursing, but it can also involve emotional labour, compassion fatigue, and burnout. The Dawber Model of Reflective Practice Groups (RPGs) was designed and implemented by a nurse-practitioner to both prevent stress and to develop caring and interpersonal aspects of nursing. Using thematic analysis, focus groups examined the group processes within a mature clinical supervision group, using the Dawber model.

**Methods:** A convenience sample was recruited from the Intensive Care Unit at a regional teaching hospital from nurses who had previously attended RPGs. The participants (N=22, 86.4% female) ranged from 23 to 60 years (M=36), had 2 to 32 years of nursing experience (M=12), and on average had been attending RPG for 5 years. Three focus groups were held, with 8, 10, and 4 participants respectively. Theoretical saturation was achieved after two focus groups and confirmed by the third focus group.

**Results:** Thematic analysis found that key themes had a hierarchical relationship. First, nurses attending RPGs shared a professional group identity, were voluntary participants, and with an effective facilitator in the RPGs could build a safe environment that encouraged self-disclosure. A skilled facilitator was central to this process, exemplifying the skills and knowledge of the ideal nurse, maintaining ground rules, and demonstrating genuine care for the group. Second, self-disclosure led to an increased sense of universality of their experiences, increased empathy, and emotional respite. By sharing emotions and issues, group members gained a sense that they were not alone in their experiences or responses, although maintaining confidentiality within the group was vital for self-disclosure to occur. In sharing experiences of difficult patients, families and colleagues, the group and the facilitator could provide insight into what patients and families may be experiencing and strategies to manage. Self-disclosure thus built empathy with patients, families and colleagues. Authentic emotional expression provided an opportunity to rest from emotional labour, thereby regenerating resources for nurses to cope with job demands. A product of sharing difficult experiences and emotions was a sense of release, that issues once shared, were no longer a burden.

**Discussion:** This study adds to the understanding of group processes in group clinical supervision for nurses and confirms the link between group process and positive outcomes. For ICU nurses, group identity is salient, for both participants and the facilitator. The facilitator embodied the ideal professional nurse, with expertise in the interpersonal realm, which helped the participants develop their interpersonal and caring skills. Self-disclosure enabled the nurses to explore shared emotions and responses to nursing situations, with this universality improved their self-evaluation against their group identity prototype. Future research could apply social identity theories to help improve practitioner models and explore how group identity, task interdependence and homogeneity operate in group clinical supervision. In addition, this study focused on understanding group processes, and a phenomenological study could further explore social identity theory in relation to intra-individual processes. Limitations are that the sample was based on convenience and may not represent all nurses.

#### **S42 Exploring the influences on attendance and effectiveness of Reflective Practice Groups: The role of facilitators, preferences, and perceived benefits and barriers**

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**Aim:** This last paper further explored Reflective Practice Groups (RPGs), through facilitator-effects, frequency, and preferences of when to attend. It was expected that more experienced

facilitators, more frequent attendance (by total number and when possible) would lead to greater professional quality of life, more job satisfaction, and less psychological distress. Expanding on Paper 4's focus groups, open-ended questions allowed nurses to note benefits and barriers to attending RPGs.

**Methods:** Nurses (N=190, 88.3% female) at a new, regional teaching hospital were recruited during their ward's RPG time, completing a survey of demographics, their facilitator, numbers of sessions attended, as Limited (1 to 5, n=95), Moderate (6 to 19, n=69), or Extensive (20 to 60+, n=26), their preferences for attending, i.e., 'when convenient' (n=43), 'as needed' (n=25), 'as often as possible' (n=122), and outcomes of quality of RPGs (as Clinical Supervision Experience Questionnaire [CSEQ]), compassion satisfaction, burnout, secondary traumatic stress, job satisfaction, and psychological distress. Nurses also answered open-ended questions on benefits and barriers of attending RPGs. ANOVAs compared the outcomes for attendance x facilitators groups and on preferences to attend. Thematic analysis was used to the qualitative responses.

**Results:** The ANOVAs found that in this sample, facilitators were regarded as equally effective (above average on CSEQ), and outcomes were similar regardless of numbers of sessions attended. However, there were significant differences between the outcomes for nurses who only attended when they 'needed it', as these nurses had significantly less psychological distress and STS, whilst nurses who rated the RPGs as more effective (i.e., higher scores on CSEQ) went as often as possible. Qualitative analyses found that the benefits (n=153 responses) of attending were primarily discussing issues (n=53) and supportive colleagues (n=33), then group bonding (n=17), self-improvement (n=16) and finally the facilitator (n=7). The barriers (n=125) to attending were workload (n=38), rostering (n=25), time constraints (n=21), and interestingly, being uncomfortable sharing in the group (n=22). This last issue is a concern for the program, as confidentiality is central to the openness within the group and sharing of sensitive information.

**Discussion:** The final paper on RPGs adds the importance of personal preference for attending and may explain why simply attending and facilitator effect was non-significant. Having facilitators equally well regarded, whether experienced or recently trained may indicate both high quality facilitators and facilitator training. The benefits of RPGs mirror the themes of Paper 4, that sharing problems and work issues with their peers helped the nurses to find solutions to the issues they faced and to feel connected to their work group. The barriers are illustrative of the staffing problems of high workload and unfavourable rostering, in that nurses could not access the RPGs to gain their benefits, whereas being uncomfortable with sharing and lacking trust in the group are issues that must be addressed by strengthening group processes. The current paper indicates that attending RPGs represents is a personal decision that fills a current need for assistance and its voluntary and confidential nature of RPGs is essential to its ongoing success.

### **Sym11: DOP INVITED SYMPOSIUM: Addressing occupational health psychology issues in the 21st century: Are we there yet?**

*Chair: Gail Kinman, Roxane Gervais*

This invited symposium is sponsored by the British Psychological Society's Division of Occupational Psychology in line with the recent Memorandum of Cooperation that formalised the existing links between the Society and the Academy that has been growing in recent years. The symposium comprises five papers that focuses on new and continuing challenges to the wellbeing of workers. A range of methodological and theoretical approaches is used to examine key issues relevant to occupational health psychology in the 21<sup>st</sup> century.

The need to raise awareness among employers of issues surrounding neurodiversity in the workplace has been emphasised in order to enable neurodivergent staff to be better valued and supported. The first paper in this symposium systematically reviews the online advice provided to adults with Attention Deficit Hyperactivity Disorder. It employs template analysis to identify the extent to which recommended interventions are based on research evidence and presents an agenda for future research.

Telecommunications technology offers new possibilities for people to transcend traditional work structures and work at times and in locations of their choosing. The second study provides insight into a new working pattern by using a job demands-resources framework to analyse data obtained from semi-structured interviews that explore the work-life experiences and wellbeing of digital nomads. This type of worker is loosely defined as those who use the internet to work remotely, often combining paid work with travelling abroad.

Cycle commuting can benefit the health and wellbeing of individuals and have implications for public health, due to decreases in emissions and carbon. Nonetheless, little is known about the psychological processes and individual differences that influence the choice over the mode of commuting. The third study uses thematic content analysis of interviews with cycle commuters to investigate the psychological determinants of cycling to work and the factors that are likely to encourage more people to do so.

Positive thinking is generally considered crucial for wellbeing and optimum job performance, but little is known about its meaning and potential benefits. The fourth study uses a grounded theory approach to examine how people in organisations define positive thinking, the workplace situations that require it and how it might be practised and developed. Data were obtained from semi-structured interviews that included photo-elicitation and vignettes.

The negative implications of insufficient and poor-quality sleep for individuals and organisations is widely acknowledged. The fifth and final paper initially provides an overview of the individual and economic impact of poor sleep and discusses the findings of a survey that examines how different aspects of sleep might affect stress and mental health.

### **S43 Is online workplace advice for ADHD paying attention to the research? Is online workplace advice for ADHD paying attention to the research?**

Kirsty Lauder, Almuth McDowall

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Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental condition estimated to affect 3.5% of employees globally. More recently, it has been considered a type of neurodiversity. Challenges experienced at work include frequent lateness, missing deadlines, difficulties with attention and emotion regulation and forgetfulness. Employees with ADHD often report poorer general and workplace-related wellbeing including low self-esteem and anxiety. The delay in recognising ADHD as a condition that continues to adulthood has resulted in stigma related to the diagnosis and treatment of ADHD later in life. A significant impact of this stigma in the workplace is an increased avoidance of disclosure which, in turn, leads to many adults seeking advice online. The findings of a systematic analysis of 161 interventions for adults with ADHD undertaken as part of a current programme of doctoral studies highlights a limited evidence-base for work-related support; no interventions involved the workplace context and less than 4% evaluated work-related outcomes. These findings formed the basis of an a priori template of themes which was applied to 27 publicly-available online articles aimed at supporting employees with ADHD and their managers. The aim of the present study was to critically examine whether online advice applies the available research evidence. The study also aimed to bridge the gap between research and practice which is of considerable concern in organisational psychology.

Article sources ranged from commercial productivity websites to ADHD charity websites and were written by a variety of people including recruitment consultants and mental health journalists. Results from the template analysis highlighted the disparity and similarities between the research on interventions and the online guidance. The template was adapted to reflect these findings and higher-order themes included the definition of ADHD, the type of support provided, and the legal advice offered. A sub-theme from the online advice was the emphasis on the 'one size fits all' approach and another encompassed the advice limited to office contexts. In comparison, research largely focuses on medical treatments and neglects the workplace context altogether. Similarities between the research and online advice focuses on changing the individual rather than the environment, which is contrary to the legal wording and guidance for supporting adults with ADHD. Online advice did, however, acknowledge personal strengths associated with ADHD which was not observed in the intervention literature. These strengths include resilience, creativity, and a strong work ethic. In sum, more research is needed that focuses on supporting adults with ADHD in the workplace using a personalised and multidisciplinary approach involving managers and colleagues. Moreover, the online advice needs to be evidence-based and created by those with ADHD or experts on ADHD, or ideally a co-creation. With the neurodiversity movement shifting understanding of disabilities like ADHD and emphasising the importance of people being valued for their strengths and differences, there is a clear need for research and practice to adopt this approach and unite in providing evidence-based advice and support.

#### **S44 Digital nomads – the implications for wellbeing and work-life balance**

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Telecommunications technology offers new possibilities for people to work flexibly, both in terms of schedule and location. Digital nomads use technology to conduct their life in a nomadic manner. Currently, around 5 million independent workers in the United States describe themselves as digital nomads and they are diverse in terms of gender, age, socio-economic status and sector of employment. A predicted rise in the number of people who intend to become digital nomads means that insight into their work-related wellbeing is required. There is very little research on digital nomadism for wellbeing from an occupational health psychology perspective. There is some evidence from other disciplines, however, that people wish to combine freedom and the opportunity to explore new locations with paid work and career development. Nonetheless, while there is evidence that flexibility can be beneficial for wellbeing and productivity, the implications of working nomadically may not necessarily be positive. This study uses a job demands-resources framework to consider the effects of digital nomadism on work-life balance and wellbeing. Semi-structured interviews were conducted with 26 digital nomads who work in different sectors such as computer programming, journalism, design, marketing and translation services. More than half (66%) of participants worked (or attempted to work) on a full-time basis and most (72%) had worked nomadically for more than two years. Interview questions covered the benefits and disadvantages of the digital nomadic lifestyle for work-life balance, wellbeing and productivity. Strategies used to balance work with personal life and the resources that were most effective were also considered. Interviews were analysed using thematic content analysis. Participants initially described the digital nomadic lifestyle as freeing, exciting and satisfying. Some were generally able to maintain a 'healthy' work-life balance, but others struggled to meet the demands of paid work in unfamiliar and often unsuitable environments. Work-life balance was generally thought to be inconsistent and many examples of time-based/strain-based work-life conflict were provided by participants. Several negative emotions in relation to the digital nomadic lifestyle, such as frustration, anxiety and fear, were disclosed. Uncertainty about the continued availability of work, the time spent travelling time and practical challenges such as lack of internet connectivity encouraged digital nomads to work very long hours. This could engender a sense of disillusionment about the nomadic lifestyle and a sense

of pessimism for the future. The online community was thought to provide valuable information and support, but participants frequently felt lonely and experienced difficulties in forming a meaningful connection with people. Face-to-face relationships were often superficial and unsatisfying. This encouraged participants to make themselves constantly available on-line to gain support as well as for work-related purposes, meaning that recovery opportunities and time to explore new locations were often limited. Participants generally believed that the lifestyle was not suitable for everybody and most had encountered people who had burned out. Participants who were more realistic about their productivity, who preferred their work and personal lives to be integrated and who had more social resources tended to cope with digital nomadism more effectively.

#### **S45 The psychology of cycle-commuting: Encouraging healthy and sustainable behaviours for wellbeing at work**

Alan Redman

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The daily commute to work is an extension of the working day that has significant implications for healthy and sustainable ways of working. Motorised modes of transport are used for 84% of commuting journeys and create 93% of carbon emissions. The daily commute in its present form contributes to critical contemporary problems affecting health and sustainability; environmental harm, congestion, poor public health, lack of exercise and adverse impacts on well-being at work. Workers commuting by motorised modes have been found to spend 40% less exercise than those who adopt active travel behaviours and report higher levels of stress and poor health. The benefits of cycle commuting appear self-evident, with evidence of positive contributions to personal health, well-being, public health, and decreases in emissions and carbon. Cycle commuters have been found to benefit from a 40% reduction in the risk of dying early compared with those who travel by car, train, or bus. Commuters who switch from car to cycle for their daily trips for work on benefit from a reduction in the Body mass index and an average weight reduction of 0.75kg. A recent systematic review identified that research examining the determinants and benefits of cycle commuting generally overlooked the psychological processes and individual differences that determine commuting mode choice. To understand how people at work can be encouraged to switch to cycle-commuting requires a greater understanding of the psychological process driving behaviour change. This session presents research investigating the psychological factors around riding to work, which investigated the determinants of cycle commuting using a sample of UK cycle commuters. The research identified themes that articulated the determinants that influence choices, decisions, habits, and perceived benefits associated with cycle commuting. The research identified core psychological themes relating to well-being, health, exercise, perceived control, and social attitudes relating to cycle commuting. This presentation will present an initial explanatory model describing the interaction between psychological determinants and physical/objective factors such as infrastructure that drives the behaviour change process away from motorised commuting modes to the healthier and more sustainable alternatives of cycling. The session will discuss potential change-actions for individuals, organisations and policy-makers who want to foster healthy and sustainable work places, as well as directions for future research.

#### **S46 Positive Thinking in organisations: To fake or not to fake? An interview study**

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Positive Thinking (PT), defined as experiencing and expressing positive thoughts and suppressing negative thoughts, is a mysterious concept. Commonly regarded as vital for health and wellbeing and important for performance, it finds a strong presence in popular and practitioner literature, HRM consultancy, and organisational discourses. However, theoretical

understanding has not kept pace. Its extant definitions refer to optimism, positive attitudes, outlooks, and emotions and do not clarify if 'positive' implies the content or effects of thoughts. There is also a lack of consistent research evidence for its benevolent effects. Given these issues, promoting PT appears premature. To date, research examining PT in organisations is limited. This study aimed to address the conceptual confusion surrounding PT by exploring what people in organisations understand and mean by it. The following research questions were explored: How do individuals in organisations define PT? How different/similar are understandings and experiences of employees and managers? A qualitative design and grounded theory method were used to explore definitions of PT in organisations. The sample comprised of 20 participants in employee (40%) and managerial (60%) positions in the UK, US, and Middle East. Participants were aged 31-66 (58% female) from White British (50%), Asian, Hispanic, Mediterranean, and Hispanic American (50%) backgrounds and were working in local (50%) and global (50%) organisations (from 50 to 75,000 employees in size), representing private and public sectors. Interviewees were recruited through convenience (initially) and theoretical (later) sampling. Semi-structured interviews (on average, 52 minutes) involved the use of photo-elicitation and vignettes. The interview questions clustered around definitions of PT, workplace situations involving the use of PT, and practising and developing PT. Open, axial, and selective coding were used to analyse the data. Axial coding used the paradigm model to identify conditions (causal, contextual, intervening), inter/actions involved, and consequences of PT. The study developed a conceptual framework of PT encompassing the following categories: psychological safety and individual-organisation congruence (contextual conditions), motivation (causal condition), wellbeing, self-efficacy (intervening conditions), framing, self-regulation (inter/actions), vision (core category), skill development, dark sides (consequences). Reciprocal relationships between the categories of psychological safety-dark sides, self-efficacy-dark sides, and wellbeing-dark sides were identified. Definitions of PT varied from 'focusing on what you can do' to 'turning things on their head'. There was some consensus on the importance of framing issues positively and focusing on actual and potential benefits. While PT was deemed a useful skill to handle challenging situations and lead others, the request to think positively made by someone else, particularly, from a manager, was perceived as a pressure and a form of criticism implying that an individual is being negative, thus making them feel bad about themselves. Participants distinguished between genuine and faked PT with the latter undertaken in response to social expectations reflected in organisational and managerial discourses. Participants recounted that when managers fake PT this is seen as a form of manipulation and surface acting. Faking PT by employees disables their ability to voice concerns and affects wellbeing, self-evaluation, and interactions.

### **S47 Sleep and its links with work relevant mental health**

Roxane Gervais

Independent, Goole, United Kingdom

Insight into the effects of sleep on work-relevant outcomes is required to understand the factors that adversely affect the well-being of workers and thereby their performance levels. In 2018, Crain and Barber highlighted the need to understand both elements of the sleep process, i.e. sleep quality (the ease in falling asleep, sleeping throughout the night, and/or feeling refreshed after waking up) as well as sleep quantity (the number of hours slept per day). They admit, however, that workers who achieve eight hours of sleep every night may still experience poor sleep quality, and this in turn may stop workers achieving a high level of work performance. Sleep is a basic biological need; the lack of sleep, commonly specified as lower than seven hours for the average person, can impair individuals' long-term health, safety, and performance. The economic impact of poor sleep has also been established. This paper explores how sleep can influence mental health. A review of the literature and empirical research has been conducted and the results of one of these studies is presented. The study participants completed outcome measures of depression, anxiety, stress and perception of health, and various independent

variables including the average amount and quality of sleep, positive and negative affect, hassles and uplifts and demographic information. The analyses of the data included psychometric testing to assess the robustness of the variables, followed by correlation and regression analyses. The participants in the study presented (N = 412) were between 23 and 69 years old (M = 51.20; SD = 6.19) and averaged around seven hours of sleep per night (M = 6.92; SD = 1.16). The regression analyses showed that quality rather than quantity of sleep was a stronger predictor of mental ill health. This was in respect of depression (overall model: Adj R2 = .58,  $\Delta R2 = .35$ , F[15, 256] = 26.19,  $p < .001$ ; quality of sleep -  $\beta = -.36$ ,  $p < .001$ ), anxiety (overall model: Adj R2 = .43,  $\Delta R2 = .25$ , F[15, 256] = 14.81,  $p < .001$ ; quality of sleep -  $\beta = -.16$ ,  $p < .01$ ), and work-related stress (overall model: Adj R2 = .51,  $\Delta R2 = .28$ , F[15, 256] = 19.49,  $p < .001$ ; quality of sleep -  $\beta = -.35$ ,  $p < .001$ ). The increasing focus on sleep as a contributor to mental ill health is welcomed. The review of the literature and the results from the studies reflect that more insight is needed. Workers function more effectively when their well-being is ensured. This present research shows that good quality sleep is likely to have wide-ranging benefits for mental health and therefore job performance.

## **Sym12: The future of the office: Multiple perspectives on the impact of innovative workplaces**

*Chair: Rein De Cooman, Anja Van den Broeck*

There is a trend in today's organizations to implement new ways of working in terms of the place where work-related tasks are performed (e.g. activity-based office spaces). However, consequences of this increased flexibility and variety are not well understood. The key feature of these changes in office design is that the different working locations match the requirements of different kinds of work activities, customer or service-related demands and/or employee needs. This may change well-established work routines, such as having assigned desks, monotonous physical work posture and invariable social contacts with colleagues which might affect employees' wellbeing, motivation and performance. At the individual level, innovative office design are seen as an idiosyncratic flexibility tool meant to improve employees' demands-abilities as well as their needs-supplies fit and as such their health and wellbeing (mentally as well as physically) and their willingness, capability and opportunity to perform. Likewise, from the organization's perspective innovative ways of organizing offices are seen as a strategic tool for improved productivity, collaboration and customer service. However, the underlying mechanisms why innovative office designs and increased autonomy in choosing where to work lead to diverse consequences are still unclear (Wohlers & Hertel, 2017). This symposium combines different perspectives on the impact of innovative workplaces in an attempt to better understand how both organizational and individual level objectives are obtained. Multiple forms of office designs (i.e. standing desks, activity-based office spaces, teleworking, experience-driven office spaces, shared offices...) as well as multiple consequences (i.e. performance, motivational and physical outcomes) will be discussed in a set of four presentations and a general discussion.

## **S48 Telework and its associations with employee well-being and performance: Employees' self-identity as a key individual difference?**

Maria Gaudiino<sup>1</sup>, Anja Van den Broeck<sup>1</sup>, Rein De Cooman<sup>2</sup>, Marijke Verbruggen<sup>3</sup>

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The introduction of ICT working has led towards increasing changes in office environment and in the way employees can accomplish their tasks. One of the most common implementation introduced by many companies in the last decades is teleworking, which involves the possibility to work from home, allowing employees to decide, to a certain extent, when or where they prefer to work. Although this shift to a greater flexibility in the work location was positively embraced as



an opportunity for employees and organizations, results from research have shown a certain level of ambiguity as not all studies could support the assumed positive outcomes of telework. Consequently, a more detailed approach to this issue should take into account the role of individual aspects that can come at play in telework context.

In line with this assumption, we examine the potential moderating role of self-identity in affecting employees' well-being and performance. Self-identity, or the extent to which employees perceive themselves as intensely related to others, is expected to influence the impact of telework on employee well-being and performance. Different self-definitions correspond to different patterns of values, motives, needs, and preferences affecting in turn personal perceptions of and reactions to other people and events, such as changes in work location.

Data are currently being collected in a sample of employees from a Belgian research firm that started implementing telework. If the hypotheses are corroborated, findings will give support to the need for a closer attention to personal factors when studying the effects of teleworking in organizations, by revealing the moderating role of self-identity. We will thus show that a successful and beneficial implementation of telework and – by extension – flexible work arrangements should not be separated from the awareness of employees' individual preferences.

#### **S49 Place and time independent working: Meant to benefit employee and organization, but what about the customer?**

Rein De Cooman<sup>1</sup>, Jonas De Kerf<sup>1</sup>, Lynn Germeys<sup>2</sup>, Sara De Gieter<sup>3</sup>

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During the last decades several “new ways of working” have arisen, including all sorts of flexibility in working time and place. Work arrangements like working in a satellite office or from home and working outside regular working hours seem indispensable in present-day organizations (Nijp et al., 2016). Question is whether such temporal and spatial flexibility implementations referred to as “time and place independent work” are merely related to favorable behavioral and well-being outcomes that are vital for business outcomes (i.e. job-related outcomes, organizational performance) and/or employees' quality of life (i.e. work–nonwork combination and well-being). So far, findings are mixed, pointing towards both desired and undesired outcomes (Charalampous et al., 2019). Moreover, all attention goes to employee and management whereby a third and crucial party remains unstudied, i.e. the customer and how well (s)he is served. Beyond the performance and well-being outcomes that are traditionally considered in human resource management and organizational behavior studies, we broaden the scope by devoting attention to service effectiveness outcomes of time and place independent work arrangements.

Effective services may include on-time delivery, timely response to clients' requests, accurate information and problem-solving, which may ultimately increase organizational performance and employees' feelings of fulfillment (Yuan et al., 2018). We thus take a particular interest in service effectiveness as a relevant performance outcome and test whether making use of time and place independent work arrangement relates to how customers are served, over and above how employees enact in- and extra-role behaviors and how they feel about their jobs, and the interface between their work and nonwork roles.

Data was gathered in a large service-delivering organization in Belgium with 4105 employees participating in a survey. Valid responses were obtained for 80% of the entire staff. Analyses confirm that the more regularly a staff member works from home and outside regular working hours, the more effective the service is, with the highest impact on the particular item referring to timely response to client requests. This, above and beyond higher in-role performance in case

of teleworking and higher job satisfaction in case of regularly using temporal flexibility. However, these beneficial effects for the customer, employee and organization are accompanied by more counterproductive work behaviors and stress in both types of time and place independent work and additionally by more work-nonwork conflict when making more use of temporal flexibility. All forms of time and place independent working were positively related to more extra-role performance. Service effectiveness can thus be considered as an important and relevant outcome of working from home and outside the regular hours.

### **Sym13: The show must go on. Precarious work in the performing arts**

*Chair: Almuth McDowall*

The performing arts make a significant contribution to the European economy, yet are notably absent from labour force statistics. Little is known about how people work and earn, as well as any diversity issues in this industry. There is a paucity of research which considers the arts as 'work' and 'employment' given that this industry comes with unique work set ups and challenges including demanding production periods, evening and overnight work and touring. Work structures long established in other industries such as job shares are rare yet evening and overnight working common. We undertook the first ever worklife balance survey of on- and off-stage workers across theatre, music and dance to investigate earnings, worklife balance, career opportunities and penalties, as well as job security and wellbeing. We present this data in a four-paper symposium which focuses on (a) precarious work and wellbeing, (b) careers and gendered effects, (c) qualitative data on sources of support, and (d) a paper which outlines the implications for practice.

### **S50 Precarious work in the performing arts and implications for wellbeing**

Kevin Teoh

Birkbeck, University of London, London, United Kingdom

The first paper will outline precarious work and implications for wellbeing. Drawing on the work of Vivek et al. (2010) and Benach et al. (2010) we operationalise precarious work to consist of contract security, earnings from the performing arts, underemployment, career penalties, employability and work-life balance. Participants consist of all 2,551 responses to a national survey of performing arts in the United Kingdom. 54% of participants worked freelance, substantially more than in the UK general population (15%); and 53% of participants spent more than 10% of their time working outside the performing arts industry to subsidise income. Participants reported *higher* than average levels of engagement. However, work-life balance is *lower* than in comparable data in other industries and other countries (Haar et al., 2014). We observed very low levels of employability as nearly 60% indicated that they would find it hard to get a similar job if they lost their current one. Mediation analyses show that psychological precariousness (e.g., employability, career penalties) to mediate the relationship that contract security and earnings have on wellbeing. We discuss the findings in the context of precarious work (Kalleberg, 2009) and 'flexploitation' (Morgan, Wood and Nelligan, 2013).

### **S51 Career penalties and well being. Do women become invisible as mothers?**

Almuth McDowall

Birkbeck, University of London, London, United Kingdom

This paper will focus on worklife balance, earnings and career structures. Comparing the 1,151 participants with caring responsibilities with the 894 participants without such responsibilities shows that carers were far more likely to be self-employed/ freelance or part-time and far less likely to be in full-time employment. This was particularly pronounced for females as 81% of women with caring responsibilities indicated that they either worked part-time or freelance,

compared to 59% of women who do not have caring responsibilities. Carers earn on average £3,000 less through a loss of opportunities, with this gap even bigger for female carers. Findings will be discussed with regards to gendered assumptions of working and worklife balance (e.g. Lewis & Humbert, 2010), but also the effects of under employment on health and well being. This will be illustrated with qualitative data from relevant survey items which indicate female specific issues. For instance, they are more likely to be ignored by casting agents once they are pregnant, not likely to be supported when they return and are breast feeding and in general find it more difficult to access work as they carry the brunt of the caring duties, the 'double shift' (Hochschild, 1989).

### **S52 “Why do we not value creative people and their input to society?” Sources of strain in the performing arts.**

David Gamblin, Almuth McDowall, Kevin Teoh  
Birkbeck, University of London, London, United Kingdom

The performing arts industry makes a significant contribution to the UK economy. Despite this, the industry is not well represented in traditional employment surveys. Investigating working conditions in the performing arts, we undertook one of the largest worklife balance surveys for on- and off-stage worker across theatre, music, and dance. The first two papers in this symposium present quantitative data from this survey, revealing issues regarding precarious work, career penalties, and gendered effects. The current paper unpacks the qualitative data, revealing a range of inter-related psychosocial hazards, which includes perceptions of embedded traditional work practices. The paper also explores the reasons for people staying in or leaving the performing arts, as well as the sources of support that performing arts workers rely on or are missing.

### **S53 What are the performing arts doing about worklife balance and well being for carers?**

Cassie Raine<sup>1</sup>, Almuth McDowall<sup>2</sup>

<sup>1</sup>Parents in Performing Arts, London, United Kingdom. <sup>2</sup>Birkbeck University of London, London, United Kingdom

The last paper will draw out the practitioner implications from the current research which has informed a best practice Charter (PiPA, N.D.). This is aimed at encouraging employers to implement more inclusive work practices through the employment lifecycle and implement more flexible workplace policies, structures and practices. Consideration will be given to the process of engaging employers, generating wider interest in this topic and next steps for research and practice.

### **Sym14: The Life Course: Exploring work-relevant changes over time and generations**

*Chair: Roxane Gervais*

The workplace has changed over the past few decades in respect of the age diversity of the workforce. This is with regard to, it has been hypothesised, up to at least five generations who are engaged in active employment. The different generations have been labelled, since around the turn of the millennium into the Silent Generation/Traditionals, Baby Boomers, Generation X/Gen Xers, Generation Y/Millennials and Generation Z/iGeneration. While any age diverse workforce is welcomed, the research in respect of its work ethics, work values, expectations and entitlements has not been consistent in determining if differences exist between the groups or if they are, how they are likely to change over time. This present symposium has five papers that explore various aspects of the life course as assessed by the different age groups and life experiences, within the context of the workplace.

The first paper, 'Assessing long work hours and organisational outcomes across the generations' seeks to determine if any differences exist in how the generations view those outcomes that contribute to overall work satisfaction. The second paper, 'Job and life satisfaction over the life course: do life choices matter', explores these positive life constructs over the various stages of workers who are in assorted roles. It tries to determine if differences do exist and if so, within which of the groups. The third paper, 'Preferences for work and family roles: Exploring work patterns, choices and perceptions across the life course', focuses on lifestages to determine how the interaction of work and family roles, as well as personal preferences for work, influence satisfaction with career levels. The research seeks to understand at which life stage workers decide that they no longer wish to progress within an organisation, and are content with their role and career choice.

The fourth paper, 'Exposure to trauma as part of your job: exploring effects on generations and presence of illegitimate tasks' uses first responders and case management groups to assess the impact of illegitimate tasks, as an additional stressor on the compassion satisfaction and fatigue, over and above the secondary traumatic stress of the groups' work. The analysis was by generation, i.e. Gen X, Y and Baby Boomers, to determine any differences. The fifth and final paper, 'Exploring demands and resources in the workplace and the impact of generations and job positions' explores the interaction between job position and generation in order to grasp the distribution of resources and demands in the workplace, as well as focusing on the impact of generation and job position on work engagement and burnout.

These five papers are designed to further understand if, or how, differences exist between workers, as delineated by their generations or as they progress through the life course. It may be that individuals do change over time, but this may be due to maturity and life events, rather than relying on one perspective from a specific snapshot in workers' lives. These issues will be discussed in the symposium.

#### **S54 Assessing long work hours and organisational outcomes across the generations**

Roxane Gervais<sup>1</sup>, Prudence Millear<sup>2</sup>

<sup>1</sup>Independent Practitioner, Goole, United Kingdom. <sup>2</sup>University of the Sunshine Coast, Sippy Downs, Australia

**Introduction:** The 24/7 'always on' culture has led to the hypothesis of the blurring of work boundaries and the development of a 'long hours' culture. There are perceptions also that younger generations, i.e. Gen X and Gen Y, have different values to the older generations, i.e. Baby Boomers and the Traditionals, which should result in different outcomes at an organisational level. The findings thus far from the research undertaken among the generational groups is not consistent. This present study therefore focuses on various organisational outcomes in respect of understanding overall work satisfaction at a generational level.

**Method:** The study used a cross-sectional design, which included collecting the data using an online survey. The participants completed measures of work engagement, work-life conflict, organisational commitment, turnover intentions, job performance, and job satisfaction as work outcomes, and hours of work, work climate, personal need non-fulfilment, meaning in life, skill discretion, decision authority, co-worker social support, job autonomy, work locus of control, psychological job demands, amount of work hours, and positive and negative affect (PANAS) as independent variables, along with demographic information. The data analyses consisted of psychometric testing to assess the robustness of the variables, correlation and stepwise regression analyses.

**Results:** The participants ( $N = 461$ ) were between 17 and 76 years old ( $M = 31.23$ ,  $SD = 14.27$ ) and consisted of more women than men ( $M = 1.79$ ,  $SD = 0.41$ ). They worked an average of 23

hours ( $M = 22.78$  hours,  $SD = 15.56$ ). The overall regression analysis was significant for work engagement  $\text{Adj } R^2 = .59$ ,  $\Delta R^2 = .05$ ,  $F[15, 296] = 17.06$ ,  $p < .001$ ; hours at work -  $\beta = .07$ ,  $p = .015$ ). Similar results were found for work-life conflict, job performance, and job satisfaction. While organisational commitment and turnover intentions did not achieve an overall significant result in the regression analyses, they were influenced also by working hours. The different age groups did not influence any of the outcome measures.

Discussion: There has been a tremendous amount of publications about the work values and organisational outcomes among the generations in the workplace: the Traditionals, Baby Boomers, Gen X, Gen Y and now Gen Z. The findings of these publications vary and as such there is not a definitive understanding of any differences that exist, if any, among these groups. The results from this present study show that age was not a contributor to organisational outcomes, but rather those that were, were the support system and working practices that exist within the workplace. As organisations will continue to have workers of different ages it is essential to understand what they require to function effectively and remain safe and healthy. These issues will be discussed.

### **S55 Job and life satisfaction over the life course: Do life choices matter?**

Roxane Gervais<sup>1</sup>, Prudence Milllear<sup>2</sup>

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Introduction: The relationship between job and life satisfaction and their impact on quality of life is ongoing. Generally, it is acknowledged that one positively effects the other, which is of benefit to workers. However, as it has been hypothesised that the different generations may have varying perspectives on life, this present study explores if differences exist between these two concepts across the generations. Specifically, it focuses on the life course, which assesses, not only generation, but those life choices that individuals make as they move to the next stage of their lives.

Method: The study used a cross-sectional design, which included collecting the data using an online survey started by a snowball method. The participants completed measures of job satisfaction, satisfaction with life, dispositional optimism, positive and negative affect (PANAS), self-efficacy, work climate, job autonomy, skill discretion, social support, work-family culture, work locus of control, work hassles, work uplifts and demographic information. Life course consisted of: marital status (used independently), age and parental status - devised into six life stages (Roehling et al., 2001). The data were subjected to psychometric testing to assess the robustness of the variables, correlation analyses and regression analyses. These analyses provided insight into the nature of the relationships and the interdependence of the factors in the present study.

Results: The women participants ( $N = 334$ ) were between 23 and 70 years old ( $M = 51.47$ ;  $SD = 6.74$ ). The hierarchical stepwise regression analyses had three dependent variables: job satisfaction, satisfaction with life, dispositional optimism. The other variables as listed were entered as independent variables. All of the models were significant on the last step, with none of them showing an overall influence from the different life changes. In terms of job satisfaction ( $\text{Adj } R^2 = .75$ ), when first entered the parents with children aged younger than 13 showed a significant effect ( $\beta = 1.47$ ,  $p = .023$ ), but this was not consistent in the rest of the model. The factors that significantly affected job satisfaction were country, marital status, PANAS, climate, autonomy, skill discretion, support (co-worker), family culture, locus of control, hassles and uplifts. In terms of satisfaction with life, the life stages did not influence, but country, marital status, PANAS, and locus of control did. Dispositional optimism was influenced by country, marital status, PANAS, self-efficacy, family culture, and locus of control.

Discussion: Overall, the stages where we are in life do not seem to have a major impact on how we respond to the workplace. It would seem that an organisation's climate, culture, support systems along with those other resources that are in place, are the factors that are more likely to affect positive work/life outcomes. Interestingly, self-efficacy did not impact on job satisfaction and satisfaction with life, but it did for dispositional optimism. Dispositional optimism has been found to positively influence satisfaction with life and may be worth exploring in future studies.

### **S56 Preferences for work and family roles: Exploring work patterns, choices and perceptions across the life course**

Prudence Millear<sup>1</sup>, Roxane Gervais<sup>2</sup>

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There is considerable discussion in the media about women's participation in the upper echelons of large companies (as chief executive officers or senior managers) and in politics (as leaders of political parties or as government ministers). The implication is that businesses and political parties should be doing 'more' to ensure that there is a gender balance in leadership roles across these domains, which has resulted in the imposition of quotas across several countries to ensure that gender balance occurs. It is perhaps not unreasonable that more women should now be in leadership roles, as the employment participation rate of women in the 'formal' sectors continues to grow. This increased rate is supported and encouraged by many countries due to the value of women's contribution to the labour force and subsequent positive impact on economies. Against the growing importance of the work role, are women's traditional roles as mothers and homemakers and the necessity of balancing both of these important life domains.

Achieving a balance between work and family roles is not static, but depends on many, interrelated and dynamic factors. One of these factors focuses on the job and can include career stage, type of job, location of workplace and commuting time, level of work role, as well as the ambition and salience of the work role. The family relevant factors can include marital status, age and the number of children (particularly the age of the youngest child), and the availability of childcare and schools. Lastly, finding a balance between roles depends on the person who is doing the balancing in respect of age, gender role ideology, preference for work and/or family roles.

This presentation will explore the interaction of work and family roles and personal preferences for work. Whereas men have traditionally identified themselves as breadwinners and in terms of their work role, this is not the case with women and there is considerable variation amongst women in this regard. There has been great diversity in women's attitudes to paid work with some women identifying completely with their careers, others identifying completely with their families, and a large proportion in the middle, who combine both roles. In contrast, most men identified more strongly with the work role, with only a small portion seeing work and family equally. The results will explore these preferences in the context of lifestages (as assessed by the persons' age and or number and ages of their children), career stage (early, middle or close to retirement), type of job (working within a team or solo, functioning as supervisors working in upper management, or being a business owner), workplace conditions (as job demands and resources), and barriers to advancing in the workplace. The factors listed will be used to answer the question, 'Why do women and men get to a certain level within their work and stay there?' With changing attitudes and expectations for both genders to equally combine careers and family roles, generational differences and similarities will also be assessed.

## **S57 Exposure to trauma as part of your job: Exploring effects on generations and presence of illegitimate tasks**

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Introduction: Occupations that deal with trauma as an everyday occurrence place additional demands on employees, where this may be dealing with individuals in great distress, those who have committed crimes, or dealing with the aftermath of crime or family dysfunction. Burnout and compassion fatigue are common amongst police and ambulance officers, and amongst those employed as case workers for disadvantaged children and adolescents. This study considered the effects of illegitimate tasks on compassion satisfaction and fatigue, over and above the secondary traumatic stress of one's work and the demands and resources of the employee, and the role of generations to moderate the effects of employment stressors.

Methods: Police officers, firemen, and paramedics (first responders,  $n=112$ ) and employees of child safety and youth justice (case management,  $n=113$ ) were recruited from south-east Queensland to complete an online survey. ANOVAs compared the sample by generations (Gen Z ( $n=18$ ), Y ( $n=102$ ), X ( $n=80$ ), and Baby Boomers ( $n=24$ )) and then as regressions for each outcome (job satisfaction [JS], compassion satisfaction [CS], burnout, turnover intentions), with variables added as demographics, personal resources (Block 1), job autonomy, social support, and appreciative leadership (Block 2), job demands and secondary traumatic stress [STS] (Block 3) and unnecessary and unreasonable tasks (Block 4).

Results: Participants ( $N=224$ , 59.6% female) worked mostly Monday to Friday rosters (56%) or rolling shifts (39%). ANOVAs found that the generations did not differ on most variables, except for turnover intentions, where Gen X, Y and Baby Boomers were more likely to wish to than Gen Z. All HMRs explained large and highly significant effects ( $\text{Adj } R^2 > .35^{***}$ ). In particular, higher levels of STS strongly and highly significantly predicted the outcomes ( $ps < .001$ ), reducing job satisfaction and compassion satisfaction and increasing burnout and turnover intentions. In addition to effect of STS, more resources improved outcomes (e.g., self-efficacy, autonomy and social support increased JS and CS), older generations also had greater CS, whilst additional demands, including unnecessary and unreasonable tasks decreased CS, JS and increased burnout and turnover intentions.

Discussion: The traumatic experiences on these employees' work had a significant and detrimental effect of their well-being, increasing burnout and intentions to leave their jobs, and reducing satisfaction with their jobs and the quality of the care they provide. This is not unexpected, given that the sample is drawn from people whose work involves going toward danger and managing difficult personal situations every day. More personal and job resources and less demands, including fewer illegitimate tasks, were important to the outcomes, as expected from the JDR. Traumatic experiences on the job may be expected and factored into the support for coping with one's work but the unnecessary and unreasonable tasks may represent the final straw from already overstretched employees. Recognising what may be perceived as 'a waste of time' may allow overstretched frontline staff, regardless of age, to manage their stressors, without overloading their ability to cope with emotionally difficult and physically dangerous work.

## **S58 Exploring demands and resources in the workplace and the impact of generations and job positions**

Prudence Millear, Clare Farley

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Introduction: The quality of the workplace is explained by the balance between each worker's demands and resources. More senior positions may have more autonomy in conducting their work, but this comes with additional demands from responsibility and time pressures. It could be

assumed that all older workers share the benefits of seniority in the workplace, meaning that the Baby Boomer generation should be advantaged over the younger Generation X, Y, and Z. This study explores the interaction of job position and generation to understand the distribution of resources and demands in the workplace, and the impact of generation and job position on work engagement and burnout.

Methods: Employed adults (N=351, 75.5% female) were recruited by snowball sampling to complete an online survey. Ages were converted to generations, Gen Z (n=26), Y (n=93), X (n=134), and Baby Boomers (n=100), and positions in 3 levels of seniority as team members (n=198), middle managers (n=64), and in senior positions (e.g., business owners, senior managers (n=91), and used as groups for ANOVAs to assess differences in workplace conditions. Regressions were conducted for each outcome (work engagement, emotional exhaustion [EE], cynicism, and professional efficacy), with variables entered as personal characteristics (Block 1, includes generation), job resources (Block 2), job demands (Block 3) and illegitimate tasks (Block 4)

Results: Participants worked from 2 to 85 hours/week (M=36.8, SD=13.8). Cross-tabs showed that the proportions of Gen Y, X and Baby Boomers were similar between the levels of jobs, although fewer Gen Z were managers or in senior positions than working as team members. ANOVAs highlighted that younger generations were more cynical, with less professional efficacy, whilst older generations experienced more unreasonable tasks, had more responsibility and greater work engagement. Those in senior positions also reported fewer illegitimate tasks and more job resources. The HMRs explained large effects (Adj R<sup>2</sup> > .30\*\*\*) for the outcomes, and greater skill discretion and self-efficacy increased work engagement and professional efficacy, and reduced EE and cynicism. The effects of one's generation were moderated by job resources and demands, particularly the illegitimate tasks. Both unnecessary and unreasonable tasks increased cynicism and EE.

Discussion: In the current study, employee outcomes were improved where the individual had greater availability of personal and job resources and the absence of demands, particularly illegitimate tasks, rather than one's age or position. Rather than accepting the stereotype that 'old people' having the best of the job market, it is more important to focus on designing jobs that provide additional resources and mitigate demands to promote work engagement and reducing burnout. Senior managers and business owners should consider ways to ameliorate in particular the unnecessary and unreasonable tasks in the workplace, whilst encouraging growth in employees' resources, personally and at work, to increase the well-being of staff at all levels and across all generations.

### **Sym15: Psychosocial Safety Climate: New evidence**

*Chair: Amy Zadow, Maureen Dollard*

Psychosocial Safety Climate (PSC) theory explains the role of managerial and organisational level factors in the development of work conditions that precipitate adverse worker psychological health, providing a multilevel systems framework to manage workplace mental health (Dollard & Bakker, 2019). The recent book publication, *Psychosocial Safety Climate; A New Work Stress Theory* (Dollard, Dormann, & Idris, 2019), highlights areas for new research to further validate "core" PSC theory (Dormann, Dollard, & Idris, 2019). The papers presented in this symposium highlight new unpublished data that address a selection of the future research directions identified by Dormann et al. (2019).

Zadow, Yantcheva and Dollard present the first paper (N = 55, 4 waves) which uses new data collected in an Industry 4.0 engineering organisation developing embedded transformative



technologies within a dynamic work environment. The theoretical relationship between PSC and creativity, innovation and performance is examined, addressing a current gap in the PSC literature. This paper also addresses two methodological gaps in PSC research identified by Dormann et al. (2019) by using 4 waves of multilevel data and short weekly time lags or a “shortitudinal” research design (see Dormann & Griffin, 2015).

Ertel and Formazin present the second study conducted in Germany in two stages; first a qualitative ( $N = 29$ ) study using cognitive interviews to identify words and items in the PSC tool (Dollard & Bakker, 2010) that are difficult to understand for German workers, leading to revisions of items; and second a quantitative study across 16 organisations ( $N = 2000$ ) examining the factor structure of the revised PSC tool and relationships with work conditions, job satisfaction, work engagement and intention to quit. The studies examine the comprehension of PSC items cross culturally with a range of recommendations put forward to improve the comprehensibility and utility of the tool in the German context.

The third study, using new healthcare data across 63 teams ( $N = 380$ ) examines the concept of a PSC loss cycle. The authors, McLinton, Jamieson, Owen, & Dollard, conduct a multi-level analysis in a sample of frontline healthcare workers nested within teams using the Johnson-Neyman technique to establish the range of significance for a PSC moderated pathway from co-worker support to burnout. The results support the notion of a reciprocal relationship between burnout and co-worker support, which are both triggered and moderated by PSC. The findings support a loss cycle interpretation between burnout and social support, where workers lacking support from colleagues have greater susceptibility to experience burnout, and in so doing further isolate themselves from social support, particularly when PSC is low, thus perpetuating the cycle. Afsharian and Dollard present the fourth study, using data across 67 organisations ( $N=632$ ) examining the PSC construct through the lens of composition (organisational level), and dispersion (PSC Strength) models. This study introduces a new concept to consider both composition and dispersion perspectives simultaneously, identified as PSC Ideal (*PSC/SD*). The moderation effects of PSC Ideal identified in the study imply that understanding the relation between PSC and demands might require more information about PSC levels and dispersion in combination.

### **S59 Psychosocial safety climate, creativity, innovation and performance: A multilevel longitudinal study in a dynamic technological work environment**

Amy Zadow, Bella Yantcheva, Maureen Dollard  
University of South Australia, Adelaide, Australia

The fourth industrial revolution (Industry 4.0) has transformed the way organisations operate in terms of the growth of advanced automation and robotics, human-to machine communication and the Internet of Things, artificial intelligence and machine learning, and sensor technology and data analytics. Within this embedded dynamic technological environment this study examined the relationship between Psychosocial Safety Climate (PSC), work conditions, engagement, creativity, innovation and performance ( $N = 55$ ) in an international software engineering firm using 4 waves of data collected using short weekly time lags or a “shortitudinal” research design (Dormann & Griffin, 2015), and combining longitudinal and multilevel research design to understand multilevel causal effects (Arenalto & Bond, 1991). Results indicate that emerging analytics and business-intelligence capabilities have changed the psychosocial work conditions experienced within these dynamic organisations and it is critical to ensure that the psychological health of workers, by promoting a strong PSC, is protected to manage psychosocial risks associated with rising data volumes, increased connectivity and computational power, and embedded augmented and virtual reality systems, to enhance creativity, innovation and performance.

## **S60 Validating the PSC tool in Germany by applying mixed methods - Results of an ongoing study**

Michael Ertel, Maren Formazin

Federal Institute for Occupational Safety and Health, Berlin, Germany

Although Psychosocial Safety Climate (PSC) is an established construct in Australia and Malaysia, so far, it has rarely been applied in Europe. E.g., in Germany, there is no validated instrument for assessing PSC even though it could be a useful tool for workplace risk assessment or national surveillance of working conditions. Finally, the dimensionality of the construct has not been in the focus of research in the past – in most cases, a sum or mean score, assuming one underlying factor, has been used. Accordingly, our project aims to fill this gap by validating and applying the PSC tool in Germany. First, we investigate the comprehensibility of the PSC items in Germany, i.e. in another culture and language than where this tool was originally developed. Second, we test the structure of the PSC tool with regard to its underlying factors. Third, we study PSC's relations with other psychosocial working conditions as well as health-related outcome measures, considering the multi-level nature of data assessed in a workplace setting (i.e. workers in organizations). We have applied a two-stage procedure using qualitative and quantitative methods to achieve these objectives. In stage I, after translating and adapting the English PSC items into German, cognitive interviews using think aloud and probing techniques were conducted to identify words and items that were difficult to understand for workers, leading to revisions of items (Ertel & Formazin, 2019). In stage II, the revised questionnaire - together with the Copenhagen Psychosocial Questionnaire - was applied in the quantitative main-study of around 2000 employees in 16 organizations.

Our results of both the quantitative as well as the qualitative approach reveal that items relating to “senior management” have higher rates of missing data than items relating to the organization as a whole. Accordingly, employees have voiced in the interviews that – albeit having a definition of “senior management” – they find it difficult to describe what senior management does with respect to psychological health. In confirmatory factor analysis considering the nested data structure, the fit of a two-factor model, distinguishing between a factor for senior management (PSC-SM) and a factor for the organization (PSC-O) as a whole, proved superior to the fit of a g-factor model. A four-factor model has even higher model fit but encompasses latent factor correlations close to unity and is hence not preferred for reasons of parsimony.

Relations of the scores for PSC-SM and PSC-O are highest with those working conditions that relate to social relations and leadership, e.g. quality of leadership, trust and justice as well as predictability, with a tendency of higher associations for PSC-SM. A similar pattern can be shown for relations with health-related outcome measures like job satisfaction, work engagement and intention to quit. Further analysis will focus on the possibility to shorten the questionnaire to render it a measure more easily applicable in an applied setting (e.g. Dollard 2019). Based on these results, we will enrich the symposium by presenting a revised version of the established PSC instrument ready for application in the German context.

## **S61 Caught in a loss cycle: Breaking the reciprocal relationship between burnout and poor social support using Psychosocial Safety Climate**

Sarven McLinton, Stephanie Jamieson, Mikaela Owen, Maureen Dollard

University of South Australia, Adelaide, Australia

Burnout has been studied extensively as a product of working conditions, but little is known about how it might be perpetuated over time. Using Conservation of Resources theory (COR) our study identifies a loss cycle between burnout and social support, whereby workers without support from colleagues are more likely to burn out, and in so doing further isolate themselves from such supports. The extended processes in Psychosocial Safety Climate (PSC) theory suggest that

PSC acts as an 'upstream' predictor of that pathway from social support to burnout, and in addition PSC may moderate the relationship. Hierarchical linear modelling (HLM) was used to conduct a multi-level analysis in a sample of frontline healthcare workers ( $N=380$ ) nested within teams ( $n=63$ ). The Johnson-Neyman technique was also used to establish the range of significance for the PSC-moderated pathway from co-worker support to burnout. Results support the notion of a reciprocal relationship between burnout and co-worker support, which was both triggered and moderated by PSC. Interventions targeting PSC may serve to; 1) break an existing loss cycle, rescuing a worker trapped in a downward spiral between poor social supports and burnout, and; 2) prevent the burnout-support loss cycle from developing in the first place.

## **S62 The beneficial effects of PSC Ideal as a clear and strong PSC message**

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This study aimed to investigate the composition and dispersion perspectives of Psychosocial Safety Climate (PSC) – facet of organisational climate – which refers to shared perceptions concerning managerial to protect employees' psychological health and safety. PSC theory is developed through an extension of Job Demands and Resources theory, a well-established work stress theory. The antecedent role of PSC aggregated at the team and organisational levels were investigated by many PSC scholars to predict job design and psychosocial issues. Yet, the variability of PSC at the higher levels were neglected. The current study aimed to shed light on the PSC construct through the lens of composition (organisational level), and dispersion (PSC Strength) models. Substantially, we introduced a new concept to consider both composition and dispersion perspectives simultaneously, PSC Ideal (PSC/SD) — at high levels this indicates a strong and clear message of PSC, the mean level is high, and the SD is low.

We proposed that the positive association between job demands (psychological and emotional) in and employees' psychological health (psychological distress, emotional exhaustion and depression) could be conditional upon PSC. To expand our understanding about how PSC works, we proposed three PSC conceptual moderators; PSC Level, PSC Strength and PSC Ideal at the organisational level. Specifically, we expected that PSC Ideal because of its 'clear message' would have the most interactive effects on the job demands to psychological health relationship.

We used a sample of 67 organisations ( $N=632$ ; Females: 392 Male: 240) ranging from 18 to 71 years old ( $M = 47.51$ ,  $SD = 10.64$ ) from a longitudinal (2009–2014) and national (from Australian Capital Territory;  $n = 85$ , New South Wales;  $n = 111$ , Northern Territory;  $n = 33$ , South Australia;  $n = 188$ , Tasmania;  $n = 96$ , and Western Australia;  $n = 147$ ) survey, Australian Workplace Barometer (AWB). SPSS-25 and HLM-7 software were used to analyse the data given the nested nature of the data. One-way ANOVA was used revealing a significant difference between group variance for PSC mean level.

Despite the significant correlations between PSC Level, PSC Strength and PSC Ideal, only PSC Level showed significant correlations with job demands and psychological health outcomes. For the six moderation tests, PSC Ideal was a moderator in four tests; PSC Level in one, and PSC Strength in three. Results showed the depression effects were most likely to be attenuated (four of six tests) because of PSC (in any of its forms), followed by psychological distress (3 tests) and emotional exhaustion (1 test). Together the results support the role of PSC as a predictor, and moderator of demands, depending on its conceptual form. The promising results of the moderation effects of PSC Ideal imply that understanding the relation between PSC and demands might require more information about levels and dispersion in combination. Theoretical and practical recommendations were discussed to highlight the role of strong and clear message of PSC (Ideal) to prevent psychosocial risk factors at work. Conducting a longitudinal research including in-depth qualitative interviews were suggested to eliminate the research limitations.

## **Sym16: Assessing and discussing occupational health in academia**

*Chair: Ellen Peeters*

In the overall industrial and organizational research field, we strongly encourage a good scientist-practitioner link and stimulate evidence-based practice. Although the evidence-based paradigm has been voiced to practitioners, it does not seem to be embedded in the academic practice itself. Research shows high levels of stress, burnout, bullying and malpractice in academia (e.g., Alves, Oliveira, & Paro, 2019; Takeuchi, Nomura, Horie, Okinaga, Perumalswami, & Jagsi, 2018) and shows no differences between research domains (Haven, Tjldink, Martinson, & Bouter, 2019). This is striking, especially since industrial and organizational psychologists have extensive knowledge about efforts and rewards, resources and demands at work. Several research and academic misconducts, abuses, and malfunctions have been raised and several explanations for these issues and the resulting culture have been mapped out (Grand et al., 2018). Although we understand the mechanisms and we seem somewhat aware, dynamics linger on and tend to continue. Recently, the discussion about sustainable future academic work in our field increasingly arises and efforts are being made. The recently published Manifesto (Bal et al., 2019) discusses recommendations and related practices and stirs up this discussion. Another example are the rules towards healthier research labs (Maestre, 2019).

This symposium has three aims: (1) we want to fuel the critical perspective on the issue of not applying our findings in our own academic settings, especially for industrial and occupational health psychologists, (2) we want to shed light on more moderate interpersonal misconducts in academia in order to make the issues with the current culture and system more explicit so that they can be part of the discussion, and (3) we want to identify several specific research fields that have potential to be implemented in our own academic surroundings and how we can put research into practice in academia. In sum, we aim to improve working conditions and social relationships at work in university faculties that focus on well-being at work.

This symposium applies an alternative approach: first, we start with a brief pitch where every panel member presents his or her background and perspective on occupational health in academia. Second, in the 'discussion phase' of this symposium, each panel member adopts a specific point of view concerning occupational health in academia and makes this explicit. Third, in the 'construction phase' of this symposium, each member suggests a specific approach to improve occupational health in academia, which is presented and discussed within the panel and with the audience. Fourth, we wrap up by making a recap and summarize shared points of view. In sum, this symposium is less oriented or focused on the content of one study, but more on sharing thoughts and discussing occupational health with four issues that we use as focal points. We welcome an open discussion and interaction with the audience.

### **S63 Assessing quality of working life in academia**

Margherita Brondino<sup>1</sup>, Marco Depolo<sup>2</sup>, Emanuela Inguscì<sup>3</sup>, Barbara Loera<sup>4</sup>, Francesco Pace<sup>5</sup>, Margherita Pasini<sup>1</sup>, Paola Spagnoli<sup>6</sup>

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Research on quality of working life in academia appears surprisingly rare in many countries, and in some cases nearly absent. Trying to fill this gap, a team formed by W/O psychologists from 16 Italian universities developed a tool for the assessment of psychosocial risks as well as workers health and wellbeing in universities. The validation of this tool is theoretically based on the Job Demands-Resources model. QoL@Work proposes an evaluation method based on the J-DR Model and composed by a set of research tools focused on antecedents, mediators/moderators

and outcomes. In order to finalize the validation of the tool a study was conducted on a sample of 1000 researchers/teachers from universities of North, Centre and South Italy. Factorial analysis and reliability check reported satisfying and promising evidence of the robustness of the tool. Measurement invariance across some socio-demographic variables was checked. Results indicated that the proposed tool is reliable and could be used for depicting university researchers/teachers' health, wellbeing, and working conditions. Moreover, useful insights for implementing organizational interventions could also be obtained. The tool, proposed by a team of W/O psychologists from 16 Italian universities, aims to offer the academic community with a scientifically reliable diagnostic tool, able to suggest also useful insights for the improvement of working conditions and wellbeing.

Proposition 1 (to discuss with panel and audience): Not only focusing on autonomy of academics, but also on increasing social support and lowering moral distress, would improve academics' optimal functioning and the culture of academia.

### **S64 Translating code of conduct, deontology and integrity into common practice in academia**

Ellen Peeters

Open Universiteit, Heerlen, Netherlands

Putting resilience of academics on the agenda and taking account specific hindrances and challenges for academics, would improve academics' optimal functioning and the culture in academia. Especially the interpersonal dynamics and networks are important in academia, since this appears to be a context where boycott seems to happen more often than we voice issues, tackle them, and guide and support each other. We may want to ask ourselves whether we apply our insights and knowledge to our own context in academia. In this symposium, we aim to turn research into research practice in academia. For example, conferences may want to include an academia-focused topic in each session. This symposium provokes scientific researchers to perform introspection into their own practices and compare it to the general implications and suggestions it makes towards practice. When experiences in academia are shared, we acknowledge the misconducts and struggles we encounter in the academic world (e.g., Greiner, Karanika-Murray, & Peeters, 2018). Whereas some trajectories-in-academia-related sessions or workshops draw some attention and individuals fear to share struggles, an implementation of a shared practice to discuss how things are going may lower this barrier.

Proposition 2 (to discuss with panel and audience): Each I/O health study can and should be performed within academia and can be translated in specific actions for academia.

### **S65 Consequences and implications of common practice in academia**

Thomas Rigotti

Johannes Gutenberg Universität Mainz, Mainz, Germany

Code of conduct, common practice, and interrelations in academia might have more indirect effects than we expect at first. For example, students might also feel tensions or debacles in I/O departments. Universities may want to write a code of contact for the interrelations between academics of all levels. Not only authorship rules or rules on the use of data, but also on how we interact with each other.

Proposition 3 (to discuss with panel and audience): Enabling to raise and voice power issues and indirect effects of malpractice would improve academics' optimal functioning and the overall culture in academia.

## **S66 Consequences and implications of a code of conduct in academia**

Rein De Cooman

KU Leuven, Leuven, Belgium

The consequences of misconduct in academia can be underestimated easily. At least three underestimations of consequences can be identified: (1) while we often limit our focus to the work we are currently doing, our practices, behaviors and attitudes will probably also affect students and future practitioners as well as future academics, (2) because misconducts have been studied in terms of corruption, sexual harassment and fraud, other 'moderate' issues like boycott and sabotage stay under the radar and have negative effects because they are not discussed nor tackled, and (3) since many colleagues fear burning bridges by denouncing issues and are very much aware of politics and the 'small size' of the academic world ("everyone knows everyone"), many issues will not be raised. At the same time, we know and are aware of how important work-related social networks are, so we need to appreciate these and optimize their functioning. The consequences of the interpersonal struggles in academia are understudied and receive less attention in codes of conduct.

Future studies might start by performing the study in the own academic context; test questionnaires, experiments, interviews, etc. first at the universities. This may seem to be controversial; but would enable to draw substantiated conclusions, and improve academic work contexts. As industrial and organizational psychologists, it is our duty to be pioneers to shape optimal work. Each of us could apply his or her own research domain in our own work context, before we take the step towards practitioners. It would 'force' us to (a) look critically to our own studies and implications, and (b) to understand what we do and improve the validity of our research. Especially in industrial and organizational psychology, we should care more about ourselves and our surroundings, we know how important they are.

Future articles may require academics to reflect upon their own study not only in terms of general practical implications, but also upon the implications the study might have in their own context ('academic implications'), or how their own context might lead to different results. It can also take the author back to the test in its own context and indicate how results are translated in best practices at their own working environment.

Proposition 4 (to discuss with panel and audience): Scientific papers often include a section on practical and scientific implications, we should encourage researchers to also think about practical implications for their own (academic) context.

### **Sym17: Effects of working time on employees' work-life balance, recovery and health**

*Chair: Anne Wöhrmann, Sandrine Schoenenberger*

So called "normal working hours" with regular daytime work from Monday to Friday are actually not that normal for a large share of employees. Many employers expect flexibility from employees such as shift and night work, overtime work, and availability during free time resulting in shortened rest periods and disturbed recovery. Research has shown that the organization of working time is related to employees' well-being. However, on the one hand, intervention studies focusing on shift characteristics are still scarce (Axelsson, Sallinen, Sundelin, Kecklund, 2018). Thus, there is still a lack of understanding of how working time can be organized to improve work-life balance and to maintain health in spite of night and/or shift work. On the other hand, increasing flexibility is also expected from employees who do not work in relatively predictable shift systems. Not much is known on how these working time demands and their combinations affect the work-life balance, recovery and health of employees in different countries and different economic branches.

Thus, the aim of this symposium is to present and discuss findings on the effects of different aspects of working time on employees' work-life-balance, recovery and health. In the first part of the symposium three working time intervention studies are presented. Schoenenberger and Ramez present findings from a study in which employees of an intensive health care unit changed from 8 to 12 hour shifts. In a chemical company, Strauß, Brenscheidt and Tisch present an intervention study comparing employees who changed from 12 to 8 hour shifts, to others staying in 12 hour shifts. Karhula et al. present findings from an intervention study in a public sector social- and health care department in which ergonomic working time principles were implemented. The studies present findings on different aspects of work-life-balance, fatigue and health. In the second part of the symposium, three studies using representative survey data are presented. Wöhrmann and Karhula conducted two parallel studies on health care/hospital workers in Germany and Finland using the representative German BAuA-Working Time Survey and the Finnish Public Sector Hospital Survey combined with objective working hour data. They present relationships of different working time dimensions on work-life conflict, perceived health, sleep difficulties, and fatigue. Backhaus, Brauner and Tisch examined the relationship of shortened rest periods between work days with psychosomatic health complaints and work-life balance using data from more than 6500 full time employees who took part in the BAuA-Working Time Survey. Finally, also based on data from the BAuA-Working Time Survey, Vieten, Wöhrmann and Michel examined the role of recovery experiences in the relationship of aspects of temporal boundarylessness such as permanent availability and working overtime with recovery state.

Using different study designs, these studies confirm that the organization of working time is an important factor when it comes to employees' work-life balance, recovery and health. The results undermine the importance of working hour regulations and give indications to understand effects of changes in working time arrangements for organizations. Some contradictory findings provide relevant aspects for future research.

### **S67 From 8-h shifts to 12h-shifts: What advantages for work life balance and rest? A longitudinal study in an intensive care unit**

Sandrine Schoenenberger<sup>1,2</sup>, Damien Ramez<sup>3</sup>

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The aim of this research is to study the impact of a change from 8-h shifts to 12-h shifts for HCPs with regard to work life balance and rest periods. In French hospitals, the proportion of health care providers (HCPs) who work in 12-h shifts is increasing. This change is desired as much as by the hospital authorities who expect to save money by it as from HCPs who wish to go to work less often and improve their work life balance (Harris et al., 2015; Schoenenberger, Gilibert & Banovic, 2015). A hospital is a specific kind of workplace. As its activities continue 24 hours per day, it requires professionals all days and all nights. The organisation may either include permanent night workers or shift work with rotations (8-hours shifts, 12-hours shifts). However, this kind of activity does not correspond to human circadian rhythms. It may therefore cause specific issues in health: sleep deprivation; increase of work/non-work conflicts, fatigue, errors, stress.

Shift work involves rhythm changes and so increases difficulties for workers. Organising of private life is more complex and requires forward planning, for example for childcare, errands, etc. Among the several kinds of shift work, 12-hour shifts seem more regular and better for rest periods for employees than 8-hour shifts (Axelsson, Sallinen, Sundelin, Kecklund (2018). Regularity helps employee to organise their work and non-work lives. For this reason, 12-hours shifts could reduce work/non-work conflicts.

H1: HCPs feel they have a better work life balance in 12-hours shifts than in 8-hours shifts, especially when they have children to take care of. However, 12-hours shifts mean that work periods increase by 4 hours. As a result, the rhythm is more regular but working periods are longer, causing more tiredness. One question is whether the regular rhythms and the increase in rest periods balance the longer work periods.

H2: HCPs feel less fatigue in 12-hours shifts than in 8-hours shifts.

Method: This longitudinal research takes place in a French intensive care unit, which has changed from an 8-h shift to a 12-h shift. We collected data at five precise periods. The methodology is based on both quantitative data (SWING, Geurts, 2000) and qualitative data (open questions and interviews). Interviews focus on HCPs' expectations for their work and the new organisation. The population is composed of HCP's: nurses and nursing auxiliaries in a French intensive care unit.

Results: Previous analyses indicate that when they work in 8-hour shifts (T1), about 2/3 HCPs declare health troubles: fatigue, sleep deprivation, difficulties of adaption to rhythm changes. In 12-hour shifts, they explain they have more fatigue at the end of the work and the third day. More analyses will be made and discussed during the symposium.

### **S68 Work-life balance of shift workers transitioning from 12-hour shifts to 8-hour shift**

Roland Strauß, Frank Brenscheidt, [Anita Tisch](#)

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Introduction: Research shows that working 12-hour-shifts goes along with higher risks for employees. Working in those shifts is linked with higher risk for (near-) accidents at the workplace and commuting accidents. Other consequences are increases of fatigue, and decreases of alertness and efficiency. There are also concerns about the risk of exposure to toxic substance, noise and heat. On the other hand, 12-hour-shifts are quite popular among workers themselves. Studies show higher satisfaction regarding working hours among the mentioned group. 12-hour-shift-workers profit from fewer working days, long time-off-blocks, brief shift-blocks and exceptionally work on weekends. Another advantage are shorter commuting times. The current study situation is unclear regarding health issues, insomnia, absenteeism and childcare.

Methods: The Federal Institute for Occupational Safety and Health in Germany gained data from a longitudinal study on social, psychological and physiological consequences of 12-hour shifts. The researched population were shift workers in a chemical company. The data used for this analysis, was collected with paper-pencil questionnaires on two waves, first in December 2017 and January 2018 and second in May 2018. For this analysis, data on 176 workers was analysed. While during the first wave all employees worked 12-hour shifts, the company switched shifts for 84 of the questioned employees to an 8-hour shift. To measure the effects of the transition, the analysis focuses on the differences between the newly 8-hour-shift workers and the remaining 12-hour-shift workers. For the analysis, different scales were used, including the work-family conflict-scale by Matthews et al. 2010 (German short version with 4 items, translated by Wolff et al., 2011), scales on life, family life and leisure time satisfaction and a scale for measuring recovery experiences (Sonnentag & Fritz, 2007).

Results: Results show a significant decrease of satisfaction for the modified shift-group, regarding to life in general, family life and especially according to leisure time. Only around 7% of the workers with changed shifts, indicate to have the feeling of been giving enough time for leisure and social activities, while nearly 97% of the reference group agreed with this item. The potential conflict between work and family got smaller during the first and the second point of measurement for the reference group, but increased for the 8-hour-shift workers. Similar effects were measured for recovery experiences. Most of the workers where not supporting the change. Two-thirds of the workers that had to make an adjustment rated the transition as "critical" or "very critical".



Discussion: The given analysis shows a big disparity between the two groups of shift workers. All examined aspects were rated worse by the shift workers with adapted shift plans at the second point of measurement, compared to the reference group and compared to the first point of measurement. Further examination is needed to explore, to what degree the differences are connected to the shift change or the change of working habits in general. The ongoing longitudinal study design allows measuring potential adjustment effects, by comparing those findings with a later questioning.

### **S69 The effects of working time ergonomics intervention on ageing employees' well-being**

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Introduction: Observational studies using self-reported data suggest that older employees may benefit from healthy working hours. However, studies using objective working times are lacking. The aim of this study was to investigate whether implementation of ergonomic working time principles is beneficial on older employees' well-being, i.e., subjective sleep quantity and quality and mental health status.

Methods: A social- and health care department of a large municipal employer in Finland implemented compulsory working time planning principles that included, e.g., restricting number of short (< 11 h) shift intervals, number of consecutive night shifts, maximum shift length, weekend work and total number of working hours. The effects of intervention were studied by comparing older (over 50 years) employees' actual realized working hours and well-being at work to a control group of age-matched shift workers from Finnish Public Sector Study. The groups were compared by using survey responses concerning sleep quantity and quality and subjective mental health status (GHQ, general health questionnaire) from 2007/2008 and 2012 (intervention group n= 402, control group n= 1 477) and employer's register data on realized working hours from 91 days preceding the surveys (available from n= 192 in the intervention group n= 192 and n= 409 in the control group). The statistical analysis was conducted with repeated-measures GLM (general linear model).

Results: The objective working hour data showed that the proportion of short shift intervals and weekend work decreased more in the intervention group than in the control group (p= 0.01). The data showed also a tendency of decreasing proportion of more than two consecutive night shifts and evening shifts, but the difference did not reach statistical significance (p-values >0.05).

Self-reported sleep quantity and sleep difficulties remained in the same level in the intervention group, but slightly increased in the control group. Subjective assessment of mental health status indicated less symptoms in the intervention group (p= 0.07).

Conclusion: Among ageing health care employees, implementation of ergonomic working time planning principles was followed by favourable changes in actual realized working hours and beneficial changes in sleep length.

### **S70 Working time and health care sector employees' well-being**

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Background: In the health care sector 24/7 availability and thus work days (and nights) have to be ensured to take care of clients and patients. Therefore, many employees in the health care sector face working time demands – especially with regard to timing (e.g., shift work) and

flexibility (e.g., on-call work). We use the framework of dimensions from Anttila et al. (2015; adopted from Adam, 1995; Fagan, 2001) to investigate the role and importance of five temporal dimensions of working time for employees' work-life conflict, perceived health, sleep difficulties, and fatigue.

**Methods:** We conduct two parallel studies including three data sources to investigate the importance of different working time dimensions regarding employees' work-life conflict and health aspects. First, we use the Titania® objective working hour data combined with data from the Finnish Public Sector Hospital Survey (N=5,050; all hospital employees). Second, we use data from the representative German BAuA-Working Time Survey (N=1,450 participants with NACE occupational class Q86).

**Results:** Findings from logistic regression analyses reveal that hospital/health care workers' sleep, health, and work-life balance are differentially related to the working time duration (hours per week), timing of work (shift work, weekend work), working time autonomy, and demanded flexibility (on-call work). Work tempo as indicated by deadline and performance pressure, however, associates consistently most detrimentally with well-being across the data. In addition, weekend work and working time autonomy are rather important for employees' work-life balance, but less important regarding employees' subjective health status across different samples.

**Discussion:** Our study contributes to the understanding of the role of different dimensions of working time characteristics for hospital/health care workers' health aspects and work-life balance. Thus, the results suggest that hospital/health care workers' well-being can be improved especially by increasing employees' control over work tempo, taking breaks and reducing long working hours, and weekend work. Thus, the results point to the fact that hospital/health care workers' well-being is at risk as the identified stressors, such as time pressure, weekend work, shift work, and long working hours are very common amongst them.

### **S71 Shortened rest periods and well-being of full-time employees in Germany: Evidence from the BAuA Working Time Survey 2017**

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**Background:** Debates on the liberalization of working hours increasingly challenge existing working time regulations, such as statutory rest periods. While some expect potential benefits for reconciling work and private life and a higher competitiveness in the globalized 24/7 economy, others warn that an extension of work into evenings and night times can impair employees' recovery and well-being. Existing research on shortened rest periods focuses primarily on quick returns in shiftwork whereas effects of shortened rest periods for the well-being of non-shiftworkers are not well examined. This raises the question of who experiences shortened rest periods, which working time characteristics are associated with shortened rest periods, and how they are related to different aspects of well-being.

**Methods:** Shortened rest periods are examined among a representative sample of full-time employees in Germany (n = 6,564) who took part in the BAuA Working Time Survey 2017. Shortened rest periods, defined as periods shorter than the statutory minimum rest period of 11 hours (European Working Time Directive 2003/88/EG), were assessed via employees' self-reports. First, the prevalence of shortened rest periods in several groups of employees is reported. Second, relationships of shortened rest periods and psychosomatic health complaints and work-life balance are analyzed using path models. In addition, stratified models were calculated for gender and shift- vs. non-shiftworkers.

Results: Analyses reveal that shortened rest periods are more common among young employees, managers, and employees in the service sector and often co-occur with long working hours, overtime, atypical working time arrangements, and high flexibility requirements. Moreover, shortened rest periods are associated with more psychosomatic health complaints and impairments of work-life balance. Further, shortened rest periods partially mediate relationships between working time duration and overtime on well-being.

Discussion: There are indications of the negative effects of shortened rest periods on health and work-life balance also among non-shift workers. The results therefore suggest that minimum rest periods are important and meaningful instruments of occupational safety and health. They limit the daily exposure duration to work demands and thereby ensure a minimum time for recovery from work strain. Therefore, derogations from the regulation on statutory rest periods must be critically assessed.

### **S72 Temporal boundarylessness of work and recovery state: The role of recovery experiences**

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Introduction: Recent changes in the working world have contributed to an increasing number of employees being confronted with flexible working hours. Although flexible working hours can bring advantages not only for employers but also for employees, e.g. more autonomy, many scientists warn against negative consequences. Research has shown, for example, that flexible and unusual working hours can pose a risk to employees' recovery. However, little is known about the role of the four recovery experiences presented by Sonnentag and Fritz (2007) in the relationship between flexible and unusual working hours and recovery state. Based on the effort-recovery model (Meijman and Mulder, 1998) and conservation of resources theory (Hobfoll, 1989, 1998), we aimed to examine whether recovery experiences play a mediating and/or moderating role in this relationship. We considered three aspects of flexible or unusual working hours, namely overtime work, work on Sundays, and permanent availability, and summarized these under the term temporal boundarylessness of work, as they increasingly blur the boundaries between work and private life.

Methods and Results: We used data from 8586 dependent employees between 15 and 65 years of age. This sample is part of the BAuA-Working Time Survey 2017, a representative study of the German working population. Regression analyses were used to test the mediating and moderating role of recovery experiences in the relationship of temporal boundarylessness of work and recovery state. Analyses showed that overtime work, work on Sundays, and permanent availability were associated with a lower state of recovery. The recovery experiences of psychological detachment and relaxation mediated these relationships. Control during leisure time also mediated the relationship of work on Sundays and recovery state. However, no moderation effects were found.

Conclusion: Our findings indicate that various aspects of temporal boundarylessness of work pose a risk to employees' recovery state and that especially the recovery experiences of detachment and relaxation play mediating roles in these relationships. The results also lead to the assumption that the negative relationship of temporal boundarylessness of work and recovery state cannot be attenuated by a high degree of recovery experiences in leisure time. Therefore, employers and employees alike should try to keep temporal boundarylessness at a minimum. For example, clear rules on when employees have to be available during free time and when overtime work really is necessary, should be implemented.

## **Sym18: Craft and recover: Creating well-being in a changing working life**

*Chair: Miika Kujanpää*

A globalized economy, an aging labor force, technological advances and societal changes such as flattening organizational structures, freelance work, and emphasis on work agility and flexibility cause major changes in the ways work is organized, accomplished, and experienced. Also, spatial and temporal boundaries between work and non-work vanish, thereby weakening the separation of work and home, and increasing employees' opportunities for autonomy at work. In this symposium, the focus will be on job crafting, off-job crafting, and recovery from work, highly topical areas of research that explore ways to improve employee well-being in response to the challenges of modern working life.

A core contribution of this symposium is to deepen the understanding of both crafting and recovery as complex phenomena and study their relationship to employee well-being using state-of-the-art research methods. The studies utilize data from intervention, daily diary, and longitudinal studies to contribute to the understanding of how to improve crafting and recovery and what are their short- and long-term outcomes. The studies presented utilize advanced statistical methods to answer novel research questions, for example, by using person-centered approach to identify job crafting and recovery profiles.

In the first contribution describes findings on the role of DRAMMA experiences (i.e., detachment, relaxation, autonomy, mastery, meaning, and affiliation) for optimal employee recovery based on his longitudinal study with 279 German employees, covering both leisure and work episodes. The second contribution further builds on this work in applying the DRAMMA model to recovery during workday breaks in relation to well-being in the afternoon and in the evening in a daily diary study of 107 Finnish teachers. Also focusing on recovery during workday breaks, the third contribution examines the relationship of recovery activities across different temporal settings. In a sample of 97 Finnish employees undergoing a recovery intervention, results suggest that engaging in lunchtime recovery activities increases time spent in recovery activities in the evening after work.

The fourth contribution uses longitudinal data with 664 Finnish employees over a period of two years to identify profiles of recovery-enhancing processes (psychological detachment from work, physical activity and sleep), and to examine the profiles' antecedents and consequences for well-being. Similarly adopting a person-centered approach, the fifth contribution identifies diverse job crafting profiles in order to understand how employees combine and use multiple job crafting strategies simultaneously and how this impacts their well-being. Her research is based on data collected over 6 months with 3 measurement occasions among 296 Finnish employees. The last contribution brings crafting and recovery themes together by focusing on employees' off-job crafting efforts. She will present results from pilot testing and process evaluation of a randomized controlled trial aimed at helping employees to actively shape their leisure activities.

### **S73 Need satisfaction and optimal functioning at leisure and work: A longitudinal validation study of the DRAMMA model**

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In recent years, there has been an increasing interest in psychological need satisfaction and its role in promoting optimal functioning. The DRAMMA model integrates existing need and recovery models to explain why leisure is connected to optimal functioning (i.e., high well-being and low ill-being). It encompasses six psychological needs: detachment, relaxation, autonomy, mastery, meaning, and affiliation (DRAMMA). While the individual needs of the DRAMMA model have

been previously shown to relate to different aspects of optimal functioning, a longitudinal study examining the entire model has not been conducted before.

In this longitudinal field study covering leisure and work episodes, we tested the within-person reliability and (construct and criterion) validity of the operationalization of the DRAMMA model in a sample of 279 German employees. Participants filled out measures of DRAMMA need satisfaction and optimal functioning at five measurement times before, during, and after vacation periods in 2016 and 2017. The six-factor model showed good fit to the data. In the multilevel models, relaxation, detachment, autonomy, and mastery had the most consistent within-person effects on optimal functioning, while the relationships between optimal functioning, meaning, and affiliation were considerably weaker. In conclusion, DRAMMA need satisfaction can aid and nurture employees' optimal functioning.

#### **S74 Do break recovery experiences mediate the relationship between daily emotional job demands and affect in the afternoon and in the evening?**

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**Introduction:** Recovery from work is an important factor which protects against the harmful effects of high job demands on employee well-being (e.g. Sonnentag, Venz, & Casper, 2017). Despite the fact that most people spend a third to a half of their day at work, within-working day recovery, also called *internal recovery*, has gained much less attention in research than recovery occurring outside working hours (see Sianoja et al., 2015). The target group of this study were Finnish teachers, a highly strained occupational group. We examined six break recovery experiences (detachment, relaxation, autonomy, mastery, meaning, and affiliation) based on the DRAMMA model (Newman, Tay, & Diener, 2014) as possible mediators between daily emotional job demands, and positive as well as negative affect both in the afternoon and in the evening.

**Methods:** The study was conducted as a daily diary study (N = 107) during one regular working week (Monday-Sunday) in November 2017. The participants filled in three paper-and-pencil questionnaires on weekdays and two on Saturday and Sunday. They also filled in a short background questionnaire before the start of the actual diary study. The average age of the participants was 50 years, and 88% of them were women. Of the participants, 92% worked in comprehensive schools (teaching students aged 7 to 16). The data was analyzed with multilevel path modeling in Mplus.

**Results:** Analyses revealed that daily emotional job demands were negatively related to break detachment, relaxation, autonomy, and meaning. However, they were not associated with mastery or affiliation. Detachment and affiliation were related to higher positive affect in the afternoon, whereas meaning and affiliation were associated with lower negative affect in the afternoon. Break detachment mediated the relationship between daily emotional demands and afternoon positive affect, and break meaning mediated the relationship between daily emotional demands and afternoon negative affect. Break detachment and meaning were also related to higher positive affect in the evening. Meaning mediated the relationship between daily emotional demands and evening positive affect.

**Conclusions:** Our results suggest that some break recovery experiences act as mediators between daily emotional job demands and affect both in the afternoon and in the evening. In addition, our findings give further support to the DRAMMA model: meaning and affiliation, which have received limited research attention as recovery experiences, also seem to play a role in within-workday recovery. Our study also offers new insights regarding the relationship between break recovery and well-being after the workday, which is a relatively unexplored issue in recovery research.

## **S75 Recovery activities across different temporal settings**

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Recovery from work stress can occur in various temporal settings. For example, recovery during lunch breaks, free evenings, and vacations has been found to improve employee well-being (Sonnentag, Venz, & Casper, 2017). However, various temporal recovery settings have generally been examined in isolation. As Sonnentag et al. (2017) noted in their recent review, how different temporal recovery settings are interconnected is not yet well understood. According to the COR theory, in order to recover from work stress, employees must engage in activities that help them to replenish the resources lost at work, such as energy and positive mood (Hobfoll, 1989). Furthermore, the relationship between activities and resources is viewed as reciprocal (Gorgievski & Hobfoll, 2008; Hobfoll, Johnson, Ennis, & Jackson, 2003). That is, not only do certain activities result in a resource gain but also gained resources facilitate engaging in recovering activities.

The aim of the current study is to examine whether engaging in recovery activities at one temporal setting increases the time spent in recovery activities at a later temporal setting. As recovery activities, we focused on lunchtime park walks and relaxation exercises, and evening time physical exercise, physical activity in natural surroundings, and social activities, as these activities have been previously shown to advance recovery from work stress (Sianoja, Syrek, de Bloom, Korpela, & Kinnunen, 2018; Sonnentag et al., 2017). We expected that on days when employees engage in park walks and relaxation exercised during their lunch breaks, they spend more time in recovery activities in the evening after work.

We conducted an intervention study where participants were randomly assigned to park walk (n = 51) and relaxation (n = 46) groups. Employees were asked to complete a 15-minute park walk or relaxation exercise during their lunch breaks on 10 consecutive working days. We asked the participants to report the time they spent in recovery activities in the evening in a paper-and-pencil booklet that was filled out at bedtime. The measures were collected on Tuesdays and Thursdays one week before, two weeks during, and two weeks after the intervention. The data were analyzed with multilevel models in R. After controlling for daily working hours, on days when employees engaged in park walks during their lunch breaks, they also spent more time exercising in the evenings and being physically active in natural surroundings. Completing a relaxation exercise during lunch breaks was not related to physical exercise or physical activity in natural surroundings in the evening after work. Neither park walks or relaxation exercises were related to time spent in social activities in the evening.

Our study shows that engaging in recovering activities at lunch breaks can increase the time spent in recovering activities in the evening after work. The similarity of recovery activities during different temporal settings may play an important role, as park walks were related to physical activity in the evening, but relaxation exercises were not. Perhaps experiencing park walks as enjoyable may explain why employees are likely to engage in similar recovery activities again later in the day.

## **S76 Working flexible, staying healthy – Development of a resource-oriented web-based training**

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Introduction: In the modern working world increasing digitalization promotes the transition to flexible working time and place. By using information and communication technologies workers can work anywhere and at any time. Flexible working conditions can have benefits for workers (e.g., organization of working time according to one's needs, balancing work and family roles). However, they can also have negative impacts on well-being, recovery, work-life balance, and

performance (e.g., prolonging and intensification of working hours, permanent availability, blurring of boundaries between different life domains, insufficient detachment). In line with the job demands-resources theory (Bakker & Demerouti, 2014), personal resources (e.g., self-regulation, self-efficacy, boundary management and recovery skills) and work-related resources (e.g., social support, control over flexibility) should help to cope with the demands of flexible working conditions. Therefore, we develop two resource-oriented individual trainings to promote self-regulation of flexible work. To examine the most efficacious conditions under which workers can be empowered to self-regulate their flexible daily routine, we develop both a web-based and a blended learning training. We expect both interventions to foster personal resources. In addition, we hypothesize that social resources will be enhanced in the blended learning training. Further, we assume that strengthened resources will positively affect well-being, performance, recovery, and satisfaction with one's work-life balance.

**Method:** To test our hypotheses, we will conduct two randomized controlled trials. Changes in multiple outcomes will be measured in a longitudinal waitlist-control group design with multiple follow-ups. Intervention participants will learn self-regulation strategies regarding daily task management, detachment and recovery as well as boundary management according to individual segmentation preferences. Control group participants will start the training after the follow-up measurement.

**Discussion:** The interventions are specifically designed for workers with flexible working conditions. This research will amplify knowledge on the effectiveness of a self-regulation training as well as differences between web-based and blended learning training approaches.

### **S77 Improving employees' psychological well-being and job performance with the help of a hybrid off-job crafting intervention**

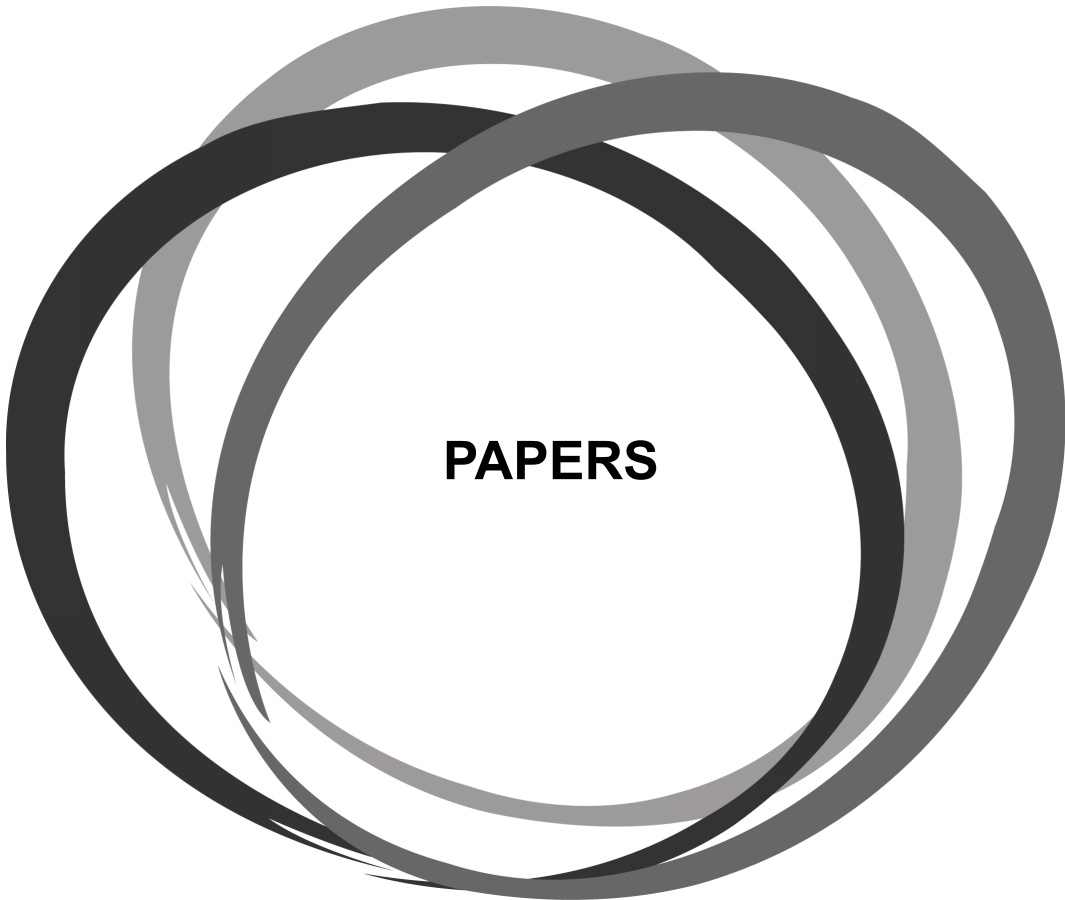
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Demographic and economic changes have led to an aging workforce and prolonged work careers. Employees dealing with job demands such as high workload and permeable work-life boundaries could benefit from bottom-up well-being approaches, which help them to juggle different roles in life. So far, limited research exists on the benefits of proactively adjusting one's off-job time activities to satisfy psychological needs during non-work time, referred to as off-job crafting. This intervention study examines whether off-job crafting can enhance employees' well-being and job performance through psychological needs satisfaction.

We will implement a hybrid off-job crafting intervention among Finnish employees. The intervention program focuses on six psychological needs (detachment, relaxation, autonomy, mastery, meaning, and affiliation) proposed by the DRAMMA model (Newman, Tay and Diener, 2014). Participants take part in an onsite off-job crafting workshop, develop an individual crafting plan for the following four-week intervention period, fill out seven weekly questionnaires, and participate in a reflection workshop. A smartphone app called Everydaily will support participants by presenting them with Dailys, short daily activities stimulating off-job crafting behaviors. This intervention will be evaluated in a randomized controlled trial with a waitlist control group. We expect that off-job crafting can be stimulated with the intervention, and can in turn increase well-being and performance in both non-work and work domains during and after the intervention (compared to baseline and to the control group). Initial results from the pilot testing will be presented and the preliminary results of process evaluation will be discussed.

Brief, accessible and app-supported off-job crafting interventions could help employees who need additional resources for dealing with stressors to retain high well-being and job performance. Besides the potential well-being benefits for employees, off-job crafting may offer performance benefits for employers such as increased organizational citizenship behaviors.



**PAPERS**



## **O1 What is wrong with not being restricted to a single work location? A further validation to the E-Work Life (EWL) scale**

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**Introduction:** The increased technological change enabled a major shift in the way people work. The changing nature of the working environment has not only changed how organisations operate, but has also shifted individuals' desires and expectations from their jobs. Data by Gallup, in 2017, suggested that gaining control over when and how individuals work becomes crucial, with employees suggesting that they would leave their organisation for a new job offering flexitime (51%), and (at least some) flexibility in their location (37%). Remote e-working was found to have a multi-faceted impact on individuals' working and personal lives (Charalampous et al., 2019). It was, in particular, associated with increased job satisfaction, improved productivity, and reduced work-life conflict (e.g., Allen, Golden, & Shockley, 2015). Concurrently, findings suggested that remote e-workers' well-being may suffer as individuals might become socially isolated, experience increased interruptions, and overwork (Roloff & Fonner, 2010; ter Hoeven, & van Zoonen, 2015). Notwithstanding the growth of this working practice, there are no available measures that can capture how this way of working might be associated to individuals' well-being and work outcomes. The E Work Life (EWL) scale, developed by Grant et al. (2019), attempts to fill this gap. The 17-item published version of the EWL scale focuses on the four theoretically relevant areas of: work life interference, job effectiveness, organisational trust, and flexibility. Following qualitative data, collected by the researchers, inspired the development of five additional items. The objective of the present study is to provide further validation for the 22-item version of the EWL scale.

**Methods:** Data was collected using an online survey. The performance of the EWL scale items was tested on a sample of 359 U.K. remote e-workers (65% female, *Mage* = 40.25). Confirmatory factor analysis (CFA) was conducted to examine the proposed factor solution. Correlations of the EWL scale with measures of positive mental health, detachment from work, social support, sleep problems, technostress, and general self-efficacy were tested to provide evidence of construct validity.

**Results:** CFA was implemented using Mplus. Two items were removed since one of them presented a loading lower than .30 and the other one loaded on more than one factor (Tabachnick and Fidell, 2013). The 4 factor solution, of this final 20-item version of the scale, resulted in a good fit: Chi-square=346.982 (d.f.= 161;  $p < .001$ ), RMSEA=.057 (C.I.: .049-.065;  $p = .0087$ ); CFI=.947; SRMR=.056. Factor determinacies for all dimensions were above .900 indicating scale's very good internal consistency. Significant correlations against the four factors confirmed construct validity.

**Discussion:** The snowballing sampling method used, restricted researchers' control over the characteristics of the recruited sample. Additional longitudinal data would allow confirming the strength of the EWL scale, enabling test-re-test reliability checks.

The EWL is a unique and innovative tool which might aid organisations to monitor and support the remote e-working experience. Its measurement considers three levels: individual, supervisory and organisational, whereby practical strategies for improvement can be suggested. The scale could pinpoint any issues linked to remote e-workers' work life interference, job effectiveness, organisational trust, and flexibility.

## **O2 The appraisal of resources: A valid extension for current demand and resources theories?**

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For stressors, the importance of cognitive appraisal as a challenge, hindrance or threat is emphasized in the transactional stress model. With the advent of the challenge-hindrance framework the concept of primary cognitive appraisal has gained new attention. Studies have shown that to better understand strain as well as motivational gains caused by exposure to demands, cognitive appraisal is an important mechanism. The transactional stress model suggests also a second appraisal process which determines the coping behavior. This secondary appraisal is focused on personal resources, and the action repertoire. Whether job resources (i.e. contextual resources) are also evaluated, and if this evaluation may help to explain differential resource-outcomes relationships remains an open question. Hence, with this study, we aim to provide first evidence on a cognitive appraisal process triggered by job resources. In addition to the common items to measure resources (here: opportunities for delegation, autonomy, and social support), we asked if these resources were available (when needed), sufficient and helpful. We will respond to the following questions: (1) Can the quantitative aspect of resources and their qualitative evaluation be conceptually distinguished? (2) Do qualitative evaluations provide incremental validity above the quantitative evaluation? (3) And does a qualitative resource assessment act as a mediator for the relationship between the quantity of resources and several outcomes?

We will present results from different samples, with different study designs. For one of these studies 236 headmasters answered weekly for a period of five weeks (n = 935 weekly surveys) to an online survey. The assessment of quantity of resources and their qualitative evaluation proved to be sufficiently distinct constructs. Qualitative appraisal of the resources showed incremental validity in motivational as well as health outcomes. Furthermore, indirect effects could be confirmed. This provides first evidence to a parallel cognitive appraisal process for resources, not only for demands. Limitations of the studies are that potentially not all relevant qualitative appraisal dimensions were taken into account. Although we will provide results from cross-lagged analyses, causality of the proposed process still needs further investigation. Overall, results are promising, and suggest that models like the transactional stress theory, the job demand resources theory as well as the conservation of resources theory might gain through the incorporation of a qualitative appraisal of job resources. We will also discuss a number of practical implications. Occupational health interventions on the person level might further the qualitative appraisal of resources (like it is done concerning challenge appraisal of demands). In addition our results might also be useful for leadership feedback, and job design. The inclusion of resource appraisals seems to offer an advantage and also opens opportunities for tailor-made behavioral as well as preventive approaches.

## **O3 Individual characteristics, work demands and work environment affecting the performance of the worker**

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Efficient work performance might be achieved by the balance between individual characteristics and work demands. If the needs and values of the worker meet the work demands, then work could be part of a healthy life. On the other hand, work might affect in a negative way worker's health due to physical or psychosocial factors that do not meet worker's abilities and expectations.

A nationwide study has been conducted through questionnaires and interviews revealing factors affecting positively and negatively the ability to work. Variables such as work demands and the work environment, features of work organisations, company/ organisation and employee characteristics such as age have been tested as possible factors affecting the performance of the workers. The findings of this study define psychosocial factors as crucial for the performance of the workers of all age groups and that poor working conditions affect the workers, especially the older ones. Also, poor health and sleep quality might be major factors affecting older workers while gender and years of experience are factors affecting younger workers.

By identifying these factors, a Work Individual Performance (WIP) tool has been developed in order to measure in a practical way the ability of the worker to stay at his/ her current position. WIP provides the user (worker, employer, etc.) with practical measures and recommendations on how to deal with major factors affecting their performance in this changing environment. WIP could be seen as a tool to predict early pensioning, long term absence and other conditions, thus its promotion could be used as a supporting tool to the holistic approach to Occupational Health and Safety management, aiming to a healthy and sustainable work.

#### **O4 Longitudinal changes in employees' appraisal of their job demands: A latent transition analysis**

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Introduction: Researchers have been interested in understanding how different types of job demands (i.e., challenge and hindrance demands) influence employee outcomes, assuming that these job demands have the same meaning for all employees. Yet, this variable-centered approach ignores the possibility that there may be subpopulations of employees who differ in their appraisal of job demands. A person-centered approach has the potential to extend this field by identifying distinct subpopulations of demands appraisals that differentially combine challenge appraisal and hindrance appraisal. Building on Lazarus & Folkman's (1984) transactional stress theory, we investigated (a) the potential existence of distinct latent appraisals profiles of selected job demands (time pressure, role conflict, and emotional demands), (b) the antecedents and outcomes associated with particular appraisal profiles, (c) and the stability of these profiles overtime.

Method: We conducted a cross-sectional ( $n = 375$ ) and a two-wave longitudinal study ( $n = 152$ ) in China. Both studies examined challenge appraisal and hindrance appraisal from a person-centered approach.

Results: Using latent profile analysis we identified and confirmed four distinct profiles of appraisals in both studies. The participants in high challenge/low hindrance appraisal profiles reported the highest levels of engagement and job satisfaction, and the lowest levels of burnout. One year later, this group still showed the highest levels of employee-well-being, in-role and extra-role performance. In addition, job demands and job resources influenced employees' appraisal profiles. Interestingly, over time most participants changed in the way they appraised their job demands.

Discussion: Our results shed light on the dynamic nature of demands appraisal in the work context and how different employees may characteristically use distinct combinations of appraisal to address their work demands at work.

## **O5 Compulsive internet use and romantic partner conflict in long-hour workers: impact of two brief interventions on participants symptoms and partners' perceived relationship improvement**

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The amount of time people spend working has increased at a great pace. This is supported by technology advancements which allow many of us to work "anywhere, anytime". Within this context, psychological detachment, a recovery process needed to avoid chronic stress, has become a challenge. Technology and internet also plays a large part in our leisure. Interestingly, some people struggle to integrate internet adaptively in their lives, to the point of experiencing loss of control what has been called "Compulsive Internet Use" (CIU). Although CIU only affects a minority, a much larger proportion of adults report some of the early signs of CIU. This can be problematic if used as a long-term strategy to cope with daily stress. Early CIU signs include cognitive salience and relationship conflict. The latter is also commonly reported in long-hour workers. Given the comorbidity of overwork and CIU, relationship conflict is highly prevalent in those individuals. Compulsive behaviours are executed on "automatic pilot". Mindfulness-Based Interventions (MBI) help individuals to relate more consciously with their environment. Thus, they could be used by individuals to develop adaptive relationship with work and technology, thereby removing this source of relationship conflict. Importantly, the length of effective MBI makes them a less viable option for the target population. Hence, brief and effective interventions at the early CIU symptom stages are required. When examining the impact of the intervention on relationship quality, it is important that those who are directly affected by it are included. Thus, the aim of this study was to examine the impact of a brief mindfulness intervention in relation to the classic gradual-muscle-relaxation technique (both 10 minute a day for two weeks) on early signs of CIU and romantic relationship quality both from the perspective of the participants and their partners.

Randomized controlled trial (RCT) with pre-post measurements was used. This included validated instruments and open-ended questions, particularly to assess relationship quality (these were also sent to their partners). Participants had to work more than 45 hours per week, met the high engagement profile in the CIU scale, lived with their romantic partners, lacked mindfulness experience. After screening, participants were allocated to a mindfulness-group (n = 343), gradual-relaxation (n = 301), or a wait- list control group (n = 350).

Both interventions were equally effective to reduce distress, but the mindfulness intervention was more effective reducing CIU. In relation to open-ended questions, both interventions received similar positive feedback about (1) participants and their partners expectation of continuing practice, (2) and the expectation of sustained long-term effects (80-86%). Around 50% of the participants perceived their practice had a positive effect in their relationship quality. Interestingly, only the partners from the mindfulness group participants found a significant effect of the intervention in their relationship. Given the large sample sizes of this RCT, these results are promising, although follow-up studies are needed. Considering health and romantic relationship hazards of the "always-on-culture", the effectiveness of easy-to fit-in daily life health practices is a positive development.

## **O6 Why would board of directors' care about occupational health and safety? An interview study of boards' motives to engage in occupational health and safety**

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Board of directors retain the ultimate responsibility for corporations and as such, plays a vital role for how occupational health and safety (OHS) is governed and managed in those organizations.

Yet, very little scholarly attention has been paid to the role of board of directors in relation to OSH. Instead, the focus has mostly been on the operative management – that is, the first-line managers and the senior managers. Whereas there are some descriptive studies of how board of directors act (e.g. Boardman & Lyon, 2006), with a few noticeable exceptions (e.g. Smallman & John, 2001), very few have taken the perspective of the boards themselves, investigating the role of the board for OSH from the perspective of the board. The aim of this study was to explore the strategic governance of occupational health and safety, by studying what drives board of directors' engagement in occupational health and safety. Simply: why would a board of director care about occupational health and safety, in their own words?

A total of 34 semi-structured interviews were performed with board members and chief executive officers of large companies (>500 employees) in Sweden, from four major industries: manufacturing, construction, trade, and health/social care. All interviews were audiotaped and transcribed and an inductive thematic analysis was conducted. The results show that drivers for boards' engagement in OSH spans from the rudimental, reactively acting to avoid threats to the company, and ensuring compliance with regulations, through increasingly more holistic motives that also encompass OSH as a business driver and as a moral obligation. High competence and owners with high expectations act to expand the focus on OSH. Concurrently the focus is lessened in boards that considers OHS solely an operational matter, and all boards always has to balance the focus on OSH in relation to other, competing interests. It is concluded that board of director's focus on OHS can be likened with a piece of a pie, where different drivers forms layers of increasing complexity. Yet, the size of the piece, that is, the extent to which OHS is focused on in comparison to other issues, is affected by the directors' OHS competence, the company owner's level of priority on OHS, and, concurrently, determined by what competing issues that calls for the directors' attention.

## **07 High-performance work practices and employee well-being: Effects on engagement and workplace bullying**

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Although previous research has shown that high performance work practices (HPWPs) are associated with improved organizational performance, questions have been raised as to how they affect employee well-being. To examine the relationship between HPWPs and well-being, this study focused on two different aspects of well-being: engagement as an example of employee happiness and the occurrence of workplace bullying as an example of interpersonal well-being. The latter aspect, i.e. the relationship between HPWPs and interpersonal well-being, has so far received scant attention in research. Based on the mutual gains perspective, according to which both individual employees and organizations benefit from HPWPs, we argue that: H1: High performance work practices are associated with (a) higher employee engagement and (b) lower risk of workplace bullying.

Further to examining the influence of HPWPs on employee well-being, we also propose a mechanism to account for this relationship. Namely, we examine whether organizational identification acts as an explanatory mechanism of the relationship between HPWPs and well-being. Organizational identification - defined as a sense of belongingness to an organization – is important to both individuals and organizations. We surmise that HPWPs promote organizational identification through the signals that these emit of the organization's commitment to its employees. Organizational identification, in turn, has been found to promote employees' pro-social attitudes and behaviors, such as cooperation, trust, and citizenship behaviors. We hypothesize that: H2: Organizational identification mediates the relationship between (a) HPWPs and engagement, and (b) HPWPs and workplace bullying.

A cross-sectional survey (n=659) was conducted among psychologists in Finland. Validated measures were used to measure high performance work practices (Chuang & Liao, 2010), organizational identification (Mael & Ashforth, 1992), workplace bullying (Notelaers, Van der Heijden, Hoel & Einarsen, 2018), and engagement (Schaufeli, Shimazu, Hakanen, Salanova & De Witte, 2017). To test our research hypotheses we used Model number 4 in Hayes' Macro for IBM SPSS Statistics. As expected, the results show that HPWPs were associated with higher engagement (H1a) and less bullying (H1b). Furthermore, in line with H2a organizational identification acted as a partial mediator of the relationship between HPWPs and engagement. In contrast, organizational identification did not mediate the relationship between HPWPs and workplace bullying, as organizational identification did not decrease bullying. H2b was therefore not supported.

The contribution of this paper is thus three-fold. First, it contributes to the HRM literature, furthering our understanding of how high-performance work practices affect employee well-being and interpersonal well-being. Second, it increases our understanding of how HPWPs affect engagement, by pointing to the role of increased organizational identification. Third, the study contributes to our understanding of workplace bullying, examining how work environment factors and organizational practices, here high-performance work practices, reduce the risk of workplace bullying. Interestingly though, it suggests that social embeddedness in the form of organizational identification does not reduce the risk of bullying.

## **O8 Relationship between bullying, resilience and job satisfaction among Pakistani university employees**

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The objective of the study was to ascertain the relationship between workplace bullying, resilience and feelings associated with job satisfaction. The study is conducted in a university setting amongst the university academic staff. The data was collected from administrative staff at a private university in Pakistan. Three questionnaires along with the demographic profile were used to measure the variables. The questionnaires used were: Work and Meaning Inventory (Steger, Dik & Duffy, 2012), Brief Resilience Scale (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008), and Negative Acts Questionnaire Revised (Einarsen, Hoel & Notelears 2009). Descriptive and Inferential Statistics were done. The results indicated a weak correlation between the variables under study i.e., workplace bullying, resilience and job satisfaction. The results are discussed in light of review of the literature. There are myriad implications of the study, for example to make people in workplace setting aware of workplace bullies and to make laws to control it so that the workers can enjoy a healthy and positive work environment.

## **O9 Explaining situational triggers of incivility in tightly cooperating teams: Towards a theory of micro-coordination conflict**

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Some teams are characterized by especially tight coordination requirements. Surgery is an example for this type of team, and uncivil behaviors have been observed in the Operating Room (OR). In the medical literature, uncivil behavior is often attributed to organizational aspects (hierarchy, culture) and to personality ("the difficult surgeon"), largely neglecting situational triggers. Psychological theories dealing with incivility and related concepts, as well as conflict theories, seem to offer more detailed explanations. However, incivility research focuses on

*consequences* of incivility and treats antecedents in very general terms (e.g., stress; personality). Conflict is defined in terms of differences in opinion only. What is missing are aspects of difficulties in joint task execution, reflecting impaired coordination. For teamwork requiring tight coordination requirements, such aspects deserve attention.

We propose a conceptual framework called “micro-coordination conflict”. It refers to tensions arising from poorly coordinated execution of tasks that need to be carried out by two or more team members in a well synchronized way. It represents a classic example of frustration, defined as “interference with on-going, goal-directed behavior”, which has been linked to aggression via negative affect (notably irritation and anger). Its effect on stress has been demonstrated in research on interruptions, both in general and in surgery. We see three mechanisms operating:

In line with this approach, our observations in the OR showed that irritated and uncivil communication episodes were largely triggered by impaired coordination, as when the surgeon is not handed the appropriate tool at the appropriate time. The concept of micro-coordination conflict explains why such coordination impairments induce irritation. Why this irritation sometimes is expressed in an uncivil way must be explained by additional factors, including personality; background stress, etc., but also lack of self-regulation and attribution processes. In practical terms, our approach implies going beyond interpersonal training for preventing tension. Specifically, teams should be trained in smooth coordination, based on shared mental models and situation awareness. An ongoing intervention focusing on improving communication with the aim of enhancing coordination by ensuring shared cognitions and raising situation awareness actually reduced the number of tensions, although tension reduction was not its focus. This result can be regarded as supporting our approach.

## **O10 Onset of workplace bullying, violence and changes in health-related behaviors: A multi-cohort study**

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**Introduction:** Bullying and violence are common workplace stressors and have been suggested to be novel risk factors for type 2 diabetes and cardiovascular disease. Prolonged exposure to bullying and violence at work can trigger the change of health-related behaviors, in order to help people cope with these traumatic stressors. The aim of the study was to assess the relationship between onset of workplace bullying/violence and changes in health-related behaviors, i.e. becoming obese, starting excessive alcohol drinking behavior, changing into physical activity/inactivity, smoking cessation and smoking relapse.

**Methods:** We used repeated biennial survey data from four Nordic cohort studies including a total of 130,074 participant-observations aged between 18 and 65. Those who were bullied / targeted for workplace violence were excluded from the baseline. Specific restriction criteria were applied in order to study the change of health-related behaviors after the onset of workplace bullying/violence. Each health-related behavior was analysed as a separate outcome. We applied multinomial logistic regression for the analysis under the framework of generalized estimating equations. Cohort-specific estimates were combined using fixed-effect meta-analysis.

Results: Among those non-bullied at the baseline, 6-8% of participant-observations experienced onset of workplace bullying at the first follow-up, while among those free from workplace violence at the baseline, 4-6% had onset of workplace violence at the first follow-up. Onset of workplace bullying compared with the non-bullied was associated with becoming obese (OR=1.31; 95%CI 1.12-1.53) and initiation of excessive alcohol consumption (OR=1.26; 95%CI 1.09-1.47). Smokers with onset of bullying were more likely to quit smoking (OR=1.16; 95%CI 0.99-1.36). These associations did not differ in terms of sexes, occupational grades and age groups. Onset of workplace violence was associated with a higher risk of becoming obese (OR=1.13; 95%CI 1.00-1.27) and starting drinking alcohol excessively (OR=1.11; 95%CI 0.99-1.24). There was a higher risk of becoming physically active after having onset of workplace violence (OR=1.10; 95%CI 1.03-1.19).

Discussion: Both onset of workplace bullying and workplace violence are associated with changes in health-related behaviors. This implies the existence of health-related behavioral pathway between workplace bullying/violence and the development of cardiometabolic diseases.

### **O11 ‘That’s not my job’’: Measuring behaviours around communal kitchens as markers of positive workplaces**

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Introduction: The JDR model emphasises that social support is essential in buffering work demands and stressors. The current study builds on the preliminary development of a Kitchen Behaviours Scale to confirm the scale’s factor structure and validity. It was expected that measuring active involvement in a shared workplace kitchen can be considered as distinct forms of social support and further increase the individuals’ job satisfaction, affective commitment (AC) and organisational citizenship behaviours (OCB), over and above usual measures of the social environment.

Methods: Volunteers (N=214, 75% female) completed an online survey about interactions with colleagues in communal workplace kitchens, along with demographics, personal (i.e., self-efficacy, optimism) and job resources (i.e., work climate, job social support, perceived fairness, group cohesion) and the outcomes (job satisfaction, AC and OCB). Data analysis was first, exploratory factor analysis (EFA) of the kitchen behaviours, second, regressions of the behaviours on the outcomes, and third, hierarchical multiple regressions (HMRs), if the behaviours predicted the outcomes over and above age, personal and job resources.

Results: Participants ranged from 17 to 68 years (M=28.73), were mostly married or living with their partner (71.6%) and worked from 4 to 75 hours/week (M=29.6). First, the EFA showed good fit (KMO=.884, explaining 65.2% variance) with four factors; ‘*Collegiality*’ (e.g., ‘it feels like a genuine team’), ‘*Socialising*’ (e.g., ‘I participate in the social activities in my work area’), and ‘*Clean kitchens*’ (e.g., ‘kitchen never stays clean long (reversed)’), and ‘*it’s Someone Else’s Problem*’ (SEP, e.g., ‘the cleaners should be looking after the kitchen’). Second, collegiality alone predicted of job satisfaction, collegiality with less ‘it’s SEP’ predicted AC, whilst socialising together and less clean kitchens predicted OCB. Third, for the HMRs, job satisfaction was predicted by fairness, collegiality, for women and in more positive work climates. AC was predicted by older age, fairness, positive work climate, collegiality and less SEP. Finally, OCB was predicted by longer working hours/week, fairness, and socialising together, but having less clean kitchens.



Discussion: The current study identified additional and meaningful social resources that explain positive work outcomes and support previous research that genuine, spontaneous fun with work colleagues is more important than merely being involved at work. In addition to fairness and positive work climates, the four factors added significantly to the outcomes. Collegiality, measuring fun and enjoyment with colleagues, was particularly important for job satisfaction, and for affective commitment, along with willingness to help in the kitchen. Interestingly, the negative relationship between OCBs and having a clean kitchen may indicate that employees balance helping colleagues on work tasks with performing extra-role cleaning tasks, which are separate from OCBs' positive relationship with socialising with colleagues. The current study shows how interventions could target work cultures, such as recognising the vital role of communal kitchens as sources of collegiality or discord and encouraging activities that build cultures that have fun and work together. Future research should include the impact of leadership and organisational structures on the developmental and expression of collegiality within the workplace.

### **O12 The importance of friends while having fun at work: A serial mediation model of workplace fun on employee wellbeing**

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In recent years, many organizations have devoted significant resources to create a work environment that emphasizes workplace fun. It is with little surprise that workplace fun has been linked to numerous positive employee outcomes, but there remains an important need to better understand how and under what conditions workplace fun has positive effects. This research seeks to investigate a serial mediation model of employee participation in fun activities on team member influence via friendships and subsequently work engagement.

Drawing insights from job crafting theory, we hypothesize that employees who craft their job role by choosing to participate in fun activities experience unique social opportunities to interact with others, thereby strengthening their friendships in the workplace. This relationship is strengthened for non-managers, compared to managers, because managers often feel the need to maintain their professional boundaries, which prompts managers to limit the extent of their workplace friendships. Drawing insights from the motivational pathway of the job demands-resources (JD-R) model, strong friendships in the workplace serve as an important relational resource that makes employees feel more engaged in the workplace. In turn, building on JD-R research that highlights the effect of work engagement on employee attitudes, engaged employees demonstrate dedication, vigor, and absorption, which allows them to have a greater influence on team decisions. Taken together, we propose a moderated serial mediation model, whereby participation in fun activities has a positive indirect effect on team member influence via friendships and work engagement, which is strengthened among non-managers.

Data was collected in a high-tech startup in Canada, which embodies a fun work environment, which makes it a particularly useful context to empirically test our hypotheses. This sample comprised of data collected via employee surveys at three points in time using a time-lagged design with one-week intervals (n = 163). Previously established scales were used to measure all constructs. The manager status variable was collected from organization records. The results provide support for all hypothesized relationships, thereby suggesting that participation in fun activities has an indirect positive effect on team member influence via friendship and work engagement. Moreover, non-managers were most likely to relish the positive effect of their participation in fun activities on workplace friendships.

This research offers three important contributions. First, while some extant research has linked workplace fun with work engagement, this research shows that workplace friendships serve as a key mediating mechanism to explain why fun activities lead to higher engagement. Second, this research is among the first to point towards the differential effects of fun activities for managers and non-managers. Interestingly, this research shows that non-managers derive more relational resources (i.e., friendships) from their participation in fun activities compared to managers. Third, this research is the first to link workplace fun with team member influence. Specifically, we provide a serial mediation explanation for why participation in fun activities make employees feel that they have greater influence in their teams by showing that their friendships and increased work engagement are critical mediating mechanisms.

### **O13 Brave new world? New forms of work and psychological well-being**

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Today's working world is undergoing a fundamental change. With the increasing digitalization and virtualization, employees are confronted with new forms of work and collaboration. Diebig et al. [1] speak of an "increase in work density" as a result of an accelerated work and increased work pressure. A meta-analysis [2] provided evidence for the interrelation between a high work intensity and health consequences, such as impaired psychological well-being. However, with regard to new forms of work, the findings are confusing due to the different operationalization of requirements and consequences. In order to identify the specific demands and consequences of these "new forms of work", we conducted group interviews with employees and experts from different companies. Furthermore, we summarized the findings from existing studies within a meta-analysis. The results of these two perspectives were converted into a systematic model.

Based on group discussions with currently 25 employees and 25 experts (e.g., management, works council, professional associations, company doctors), we identified the specific demands and consequences of new forms of work. Furthermore, we elaborated organizational and individual strategies for dealing with these demands. In particular, the group discussions revealed that the new forms of work intensification are very complex and variable in their causes and (unintended) consequences. For example, work intensification can occur due to different levels of digitalization across collaborating business units or may manifest as a result of extended accessibility.

In addition to the group discussions a literature review was carried out in order to specify the demands that are associated with the new forms of work as well as their causes and consequences for psychological well-being. The search for publications took place in the relevant databases. The processing took place via an independent coding of the described requirements of two scientists. The results of the meta-analysis provide a systematic overview of new demands in the working world, which manifest themselves as phenomena of work intensification. The findings of the group discussions and the meta-analysis were incorporated into a model that distinguishes between causes, forms and consequences of work intensification due to new forms of work. The model also includes organizational resources and individual strategies serving as starting points for coping with these new challenges.

### **O14 The role of job crafting in coping with work intensified demands and enhancing well-being in the workplace**

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Job crafting captures what employees do to redesign their job by actively performing changes in tasks, relations and perceptions to foster positive outcomes (Wrzesniewski & Dutton, 2001). As

a bottom-up job redesign approach, job crafting could benefit both organisations and employees. Regarding its impact on employees, the nature of job crafting and previous theories reveal that is a positive approach which allows individuals to take control over different aspects of their job aiming to create a more meaningful job for themselves. Job crafting enhances job satisfaction, commitment, happiness and engagement. The current study has several recommendations to make for employees and organisations regarding the practical implications of its findings in the workplace. The purpose of the current study is to investigate the role of job crafting in work intensification demands such as tight deadlines, shortage of time to finish a task and high work speed.

The current study followed a mixed methodology design, implemented in two phases. Study 1 was the qualitative phase that explored employees' experiences regarding work intensification and their coping mechanisms. By conducting twenty semi-structured interviews with office-based employees, Study 1 allowed for the development of a research model and hypotheses. The emerged themes of Study 1 were work intensification; resource loss, gain and investment; task, relational and cognitive crafting; organisational practices and well-being outcomes. Study 1 showed that work intensification could be experienced as a positive phenomenon by employees that perceive it as a challenging stressor. As a result, they experience resource gains and engage in task crafting behaviours. This was a critical finding indicating that the level up to which an individual experiences a stressor is less significant than the way it is perceived, as either hindering or challenging.

Study 2 was the quantitative phase that investigated the assumed relationships of the model between work intensification perceptions, work-related resources, task crafting, flexible working practices and job satisfaction, using 255 office-based employees, with a two-lag longitudinal online survey design. Study 2 confirmed all hypotheses of the model indicating that, even in intensified working environments work-related resources motivate higher engagement in task crafting which increases job satisfaction over time. Additionally, remote working was identified as a facilitator for employees to engage in task crafting behaviours.

The current study aims to promote job crafting as an approach for employees to take the initiative to redesign their jobs so that it would better fit their skills and interests thus, to enhance positive well-being outcomes, especially within work intensified circumstances. To sum up, the study highlighted the importance of work-related resources and organisational practices as top-down approaches to be perceived by employees as opportunities that spark their engagement in bottom-up approaches such as job crafting. The study falls under the area of Positive Occupational Psychology by researching on individual initiatives to cope with challenges and enhance well-being in the workplace, promoting healthier and sustainable work in the long term.

### **O15 From flailing to gaining platform workers: Shedding light on the job demands and resources in platform work and how platform workers can rebalance them via job crafting**

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During the past few decades, several "new ways of working" have arisen, including 'platform work'. Platform work refers to an employment form in which an online platform is used to access individuals who provide specific services in exchange for payment (e.g., Deliveroo). Working as a platform worker differs from working in a traditional organization because job characteristics such as fixed working hours and fixed working places are substituted by demanding job characteristics such as loneliness and work transience (Ashford, Caza, & Reid, 2018). This is fundamentally at odds with the traditional job design theories resulting in a rather inferior quality of work. Yet, organizations such as Deliveroo and Uber are currently faced with waiting lists of

individuals who want to work for them. This contradiction implies that platform workers can compensate for demanding job characteristics by making self-initiated changes, for instance via job crafting, and that platform jobs contain resourceful job characteristics as well. What are these demands and resources and how can platform workers rebalance them via job crafting? This study aims to answer these questions by using a qualitative examination. Data is currently gathered by interviewing Belgian platform workers who are occupied in platform work as a main profession (i.e., individuals who work as a platform worker as a secondary activity are excluded). Participants were contacted via social media (e.g., online community blogs). This study contributes to the literature by introducing platform work in the job design literature and by reformulating job crafting behaviors in that they are more applicable to platform work.

### **O16 Technology use at work and the impact on staff wellbeing: It makes things easier...or does it?**

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Increasingly, organisations are investing in new technologies (Kumar et al, 2013) due to the perceived benefits technology can bring for efficiency and cost-effectiveness. However, despite having implications in the longer term for the sustainability of workforces, how staff perceive the use of technology, and the impact this technology may have on staff wellbeing at work is currently under-researched. Drawing on semi-structured interviews with mental health care workers, this study explores ways in which technology impacts employee daily working lives, and examines the effects on employee wellbeing. With a contextual backdrop of increasing pressures in mental health care settings, (for example, increased acuity of patient illness, a growing move towards 12 hour shift working patterns), additional stressors may have a cumulative detrimental effect on staff wellbeing. At a time when national healthcare systems are experiencing significant issues in recruitment and retention, poor staff wellbeing can jeopardise the sustainability of the workforce. A nuanced understanding of the way in which technology is used at work and is perceived by staff is therefore pertinent.

Thirty-five interviews were conducted with 3 layers of participants (ward managers, registered nurses and healthcare assistants) from a large mental health Trust in the UK to qualitatively evaluate employee perceptions of the use of technology in the workplace, and to explore the perceived impact on staff wellbeing. Key themes arose around how technology impacts daily working lives with reference to access to social and practical support, patient care, ease of use, and quality of reporting. Drawing on the Job Demands-Resources model (Bakker and Demerouti, 2007), findings suggest that technology use could be perceived by staff as either a demand or a resource, depending on individual characteristics, such as age, experience or job role. Moreover, the same technology could be viewed positively or negatively by the same respondent contingent on whether the technology was perceived as a demand or a resource with respect to current competing demands or access to resources in a dynamic workplace. For example, the use of technology to record patient notes removed staff from the ward and so was perceived as a negative demand, impacting patient care. However, on a particularly stressful shift, this technology use was viewed as a resource as it afforded participants the opportunity to leave the ward removing staff from a demanding environment.

This research contributes to extant literature with empirical data and analysis illuminating a nuanced impact of technology on workers and how this affects their wellbeing. The findings highlight, for example, how the introduction and use of technology intended as a resource can paradoxically exacerbate stress by placing demands on workers. Research recommendations suggest the need for evaluation of technology use at work in order to identify ways in which organisations can best use technology in the workplace to maximise efficiency whilst minimising any potential negative impact on staff wellbeing.

## **O17 The impact of organisational culture and business strategy incongruence on employee wellbeing: Competing values & psychological contract violations**

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The importance of alignment between culture and strategy for organisational outcomes of performance and effectiveness is well recognised (e.g. Schein, 2004; Schwartz & Davis, 1981). However, the impact of such incongruencies on employee wellbeing is an unexplored area. Whilst Schein (2004, p. 91) maintained that "strategic options are limited by the culture of the organization", the limitation relates solely to the effectiveness of such options; in reality organisations can - and do - adopt strategies which reflect a significant departure from previous ways of operating and existing cultural norms. Competing values framework (CVF, Quinn and Rohrbaugh, 1983) outlines four cultural emphases, distinguished by two key organisational dimensions: control-flexibility and internal-external focus. Together these two dimensions form four quadrants, each representing a distinct type of organisational culture: clan (characterised by a concern for people), adhocracy (characterised by an emphasis on innovation), market (characterised by an emphasis on results), and hierarchy (characterised by an emphasis on innovation). Whilst acknowledging that in reality all cultures will contain elements of each, the CVF recognises that these different cultural emphases are likely to be in tension – for example, a focus on people and wellbeing is often in tension with a focus on results.

This paper provides an exploration of these tensions, with specific emphasis on the impact of changing strategic priorities on employee wellbeing, and on the implementation of organisational initiatives to enhance wellbeing. Findings are presented from a case study of a large UK-based professional services organisation, which aimed to explore how organisational culture influences the effectiveness of wellbeing initiatives, but also revealed the impact of changing strategic priorities on employee wellbeing and engagement. Interviews were conducted with 22 employees across three different geographical locations, in addition to 2 focus groups involving 14 employees, and analysis of organisational policies and strategy documentation. Interview and focus group participants were from a variety of teams and departments with various roles represented up to and including senior executives of the firm.

The findings are explored in relation to the competing values framework (Quinn and Rohrbaugh, 1983), and highlight how failure to take sufficient consideration of the changing strategic context or internal reality in terms of organisational culture can not only impede the success of such initiatives, but also generate significant feelings of dissatisfaction and frustration among employees as a result of psychological contract violations, ultimately increasing employee disengagement and intention to leave. The findings suggest that superficial efforts to promote employee wellbeing, which fail to translate into deeper organisational changes, are unlikely to be effective and may even be detrimental.

The findings highlight the potential impact that incongruence between organisational culture – for instance, norms and core values – and strategy can have on employee wellbeing, undermining the effect of initiatives to enhance wellbeing by creating a gap between discourse and reality. In addition, findings suggest that organisations which claim to be making efforts to promote employee wellbeing but fall short in practice will not only potentially diminish employee wellbeing, but also risk losing perceived legitimacy with employees.

## **O18 The influence of enterprise social media on employees' wellbeing: A research agenda**

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As part of their digital transformation, companies increasingly adopt social platforms (e.g., Slack, Yammer, Podio, Asana) to support knowledge work and company communication. These platforms do not only transform work processes, they also affect how employees relate to each other, how they share content and how they work effectively (Kane, 2015). With social platforms, companies transform their decision processes, increase transparency and creativity, and work processes like recruitment, training or vocational adjustment are changed. However, social media usage at the workplace can be challenging, e.g., leading to an oversupply of information or an invasion of working issues into private life (Bucher, Fieseler, & Suphan, 2013). Social platforms change working processes and organizational culture, thereby indirectly influencing employees and their wellbeing.

Ipsen and Jensen (2012) found that knowledge workers can experience the same work-related or organizational issues as both an opportunity and a source of stress. E.g., while social media communication can provide the opportunity for some knowledge workers to ask questions and get answers from different co-workers, it might be a threat for others who feel that they always have to be online to be able to answer (Kirchner & Seim, 2019). The aim of this study is to understand the influence of social media use on employee well-being. In order to derive open research questions, we conducted an in-depth literature review. We searched Web of Science, ScienceDirect, PubMed and Google Scholar, using search words like enterprise social platform, wellbeing, social media, work environment, psychosocial work environment and mental health. Afterwards, we analyzed and clustered the articles. We found that existing literature focuses on psychosocial effects of private use of social media on the individual in general. Furthermore, previous research concentrates on the organizational use and impact on work performance of social media platforms but ignore the effect on the individual worker. Besides, literature rarely investigates the influence of changed work processes due to social media use on the wellbeing of the individual.

We conclude that there is a need to understand the influence of the use of social media for internal communication and knowledge sharing on the well-being of employees. This field is not well researched. Based on our findings from the literature, we derive a research agenda with open questions that can be a guideline for other researchers in this field.

## **O19 Defining and measuring dignity at work**

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Dignity at work has been an emerging topic in psychology in the last decade and is thought to be related to employee well-being (Khademi, Mohammadi, & Vanaki, 2012; Utriainen & Kyngäs, 2011). However, dignity at work has been difficult to assess. The main problem with assessing this new construct is the lack of a clear definition and that no measure of workplace dignity is available (Lucas et al., 2013). In his seminal work, Hodson (2001) defined dignity as "the ability to establish a sense of self-worth and self-respect and to appreciate the respect of others" (p. 3). However, most dignity researchers focused on organizational constructs related to a lack of dignity (e.g., management abuse and overwork) instead of the construct of workplace dignity itself. Aside from the lack of a clear definition of workplace dignity, very little research in the area has been purely quantitative (Rubin, 2004). The seminal research on workplace dignity was conducted by Hodson (2001) which was based on extensive ethnographic data (i.e., primarily qualitative).

The purpose of this study was to develop and validate a measure of workplace dignity. Based on the current definitions and theorized aspects of dignity at work, a more extensive definition of workplace dignity is offered. Dignity at work involves both self-respect and respect from others, a feeling of worth and value and being recognized by others, and a sense of autonomy and control over one's own behaviour. This definition formed the basis of the newly developed scale. A 24-item Dignity at Work scale was created based on previous definitions and theorized dimensions. An online sample of 420 employed English speaking individuals completed a survey containing the new measure and theoretical and/or empirical antecedents and outcomes of dignity. To identify the best items for each of the Dignity at Work dimensions and reduce the number of items, a series of factor analyses were conducted. Cross-loading or construct irrelevant loadings were deleted resulting in a final set of 12 items. A four-factor solution provided the best fit to the data and each factor demonstrated satisfactory internal consistency (control; work and value; respect from others; self-respect).

Autonomy, incivility, and psychological safety were found to predict at least one of the dimensions of workplace dignity. The Dignity at Work dimensions significantly and uniquely predicted mental well-being, dimensions of love of job, counterproductive work behaviour (CWB), and organizational citizenship behaviour (OCB).

As workplace dignity is difficult to define, our scale can aid in creating not only a definition of workplace dignity, but also a consensus on a definition. Our scale can also aid in the assessment of workplace dignity, which is severely lacking in the current literature (Hodson, 1996; Lucas et al., 2013). The creation of a workplace dignity scale will facilitate research on the construct of dignity at work. As shown in the current study, workplace dignity is related to important outcomes such as mental well-being. Further research on this construct may allow for new paths and ideas to improve these outcomes.

## **O20 Design, implementation, and evaluation of a psychosocial risk intervention program in an emergency unit of a Chilean public hospital**

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In Chile, the health sector is one of the economic sectors that is most exposed to work-related stress. Also, the health sector reports one of the highest sick-leave indicators (Chilean Labor Inspection, 2014). However, to date, there are no reports in Chile regarding psychosocial risks interventions adapted to the "Health" organizational context. The study aimed to design, implement and evaluate the effectiveness of a work-related stress intervention program in an "Emergency" unit of a public hospital located in Chile. To achieve the objective, it was used the "Job Demands - Resources" model (Bakker & Demerouti, 2002) and the "Context, mechanisms and outcomes" model (Nielsen & Randall, 2013) as a theoretical background. The study was implemented during September 2018 and April 2019, in which the following actions were carried out: i) Initial assessment, ii) Presentation of results to the hospital stakeholders, lii) Focus group in the "Emergency" unit, iv) Design of the intervention program, v) Validation of the intervention program with the senior management of the hospital, vi) Presentation of the intervention program to the "Emergency" unit, vii) Implementation of the intervention program in the unit, and viii) Return of results of the intervention to the hospital senior management.

To identify the main issues of the unit, the Chilean FONDECYT research project No. 11160583 instruments was utilized, which includes the SUSESO/ISTAS21 questionnaire (Alvarado et al., 2012), the organizational justice perception scale (Colquitt, 2001), the labor conflict-family /

family–work scale (Gutek, Searle & Klepa, 1991; Netemeyer, Boles, & McMurrian, 1996), the coping strategy indicator (Amirkhan, 1990), the job satisfaction scale (Hart, Griffin, Wearing, & Cooper, 1996) and the sleep problems scale (Jenkins et al., 1988). After obtaining the results, a focus group was implemented to complement the unit, in which different stakeholders participated. The analysis of quantitative inputs was done through descriptive analysis, specifically using Pearson's bivariate correlations, Student's t-tests and analysis of variance (ANOVA). As for the qualitative inputs' analysis, the content analysis technique was utilized. It was identified that "the relationship with the patient" was the main concern for the "Emergency" unit. To tackle the issue, an "Organizational Care Policy" was designed, in which a training program for organizational care monitors was carried out. This, to facilitate emotional relief instances in workers who had experienced a highly emotional demanding event.

The training program also included a pre and post-intervention evaluation through the "Psychological capital questionnaire" (Luthans, Avolio, Avey & Norman, 2007), a knowledge evaluation test and a satisfaction survey regarding the training program. The main results were a slight increase in the 4 dimensions of the psychological capital questionnaire, 98.70% of right answers in the knowledge test and an average score of 6.68 in the satisfaction survey.

In conclusion, in Chile it is necessary to keep developing research projects that would allow to deepen into the contextual elements that facilitates the implementation of an intervention program in psychosocial risks. This, in order to guide the country's institutions on how to carry out effective actions to promote workers well-being.

## **O21 Mental Health of Brazilian army military personnel deployed in Federal Intervention operations in Rio de Janeiro**

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In 2018 for ten months the state of Rio de Janeiro was under federal military intervention that arose from the decision of the federal government to intervene in the autonomy of the state. This decision aimed to reduce crime rates and to recover the operative capacity of the public security organs of the State of Rio de Janeiro, among others things. The operations applied a large number of military units from all over Brazil which performed patrolling activities on public roads and in communities dominated by drug traffic gangs as well as actions to ensure law and order. These activities generate imminent life risk, high level of fatigue and psychological stress for the professionals involved. Stress can be considered as a pattern of behavioural and physiological responses to deal with situations that exceed the individual's ability to respond and adapt, and also as a process in which perception and response to situations - called stressors - which are interpreted or perceived as threatening and dangerous.

In this context, the present study aimed to assess the stress level of military personnel employed in federal intervention operations in Rio de Janeiro and to verify associations between stress, resilience and affectivity. We evaluated 595 military personnel through psychometric scales. The most expressive results showed that a small portion of the sample is in the stress resistance phase, measured through the Lipp Adult Stress Symptom Inventory (ISSL). By using the PCL-5 - trace level to detect people who have high risks for post-traumatic- stress disorder (PTSD) it was found which percentage of the sample had this probability. Significant positive associations were found between stress (ISSL and Perceived Stress) and post-traumatic stress (PCL 5) scales, as well as positive associations between positive affect and resilience and negative associations between stress and resilience scales. Positive affect also appeared to be inversely related to stress measures. It was also found in the sample studied high scores on the Resilience Scale and median values on the Positive Affect and Negative Affect scales, which may explain



the large number of subjects without any manifestation of stress. Thus, we can conclude that investing in programs to promote resilience and mental health is essential to prevent the illness of Brazilian Army soldier. There are many possibilities for action, from specific programs for stress control and management to more basic measures such as planned leaving and varied leisure activities.

## **O22 The psychological and behavioural resources model of team flow (PBrTF) in project teams.**

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This paper explores the development and testing of a psychological and behavioural resources model of team flow (PBrTF) in project teams. Through the lenses of the social cognitive theory and the Broaden and Build Theory (B&B), the PBrTF model frames team efficacy, the collaborative zone of proximal development (CZPD) and team flow to form an integrated model of team effectiveness. The PBrTF model proposes that team efficacy and CZPD act as psychological and behavioural resources of team flow and that these three team level phenomena share a positive, mutually reinforcing relationship. A total of 113 graduate students project teams participated in a two-wave longitudinal study. We used Mokken scaling based on Item Response Theory (IRT) to test the validity of the measures. Longitudinal Structural Equation Modeling was employed to test the proposed model. The results demonstrated that team efficacy and CZPD share a mutually reinforcing relationship across time and that CZPD promotes the experience of team flow. This relationship is completely mediated by the antecedents of team flow. Counterintuitively, however, the results also demonstrated that team efficacy and team flow share a negative relationship across time. Discussion of the results and Implication of the findings are provided.

## **O23 Chronic stressors, strain, and coping resources in Dutch police officers**

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Police officers face numerous stressors on a daily basis. Long-term exposure to stressors can undermine personal wellbeing and may lead to burnout (Burns et al., 2016; Folkman et al., 1986; Van der Ploeg & Kleber, 2003). In turn, this may have serious consequences for the organization, for instance through absenteeism and increased turnover (Anshel, 2000; Kop & Euwema, 2001; LePine, Podsakoff, & LePine, 2005) and society, for instance through excessive force towards civilians and deterioration of the police-community relationship (Kop & Euwema, 2001; Slate, Johnson, & Colbert, 2007). In addition to the acute stressors police encounter (e.g., aggressive suspects), chronic stressors are prevalent among police agencies. Chronic stressors relate to ongoing and daily encountered, long-term stressors with a high chance of recurrence. Interviews with police team leaders in Amsterdam have shown that high workload, changes and decisions made by the organization (change-related stress), and introduction of advanced technologies (technostress) are chronic stressors of concern among the forces.

To cope with these stressors police officers need the right coping resources. In line with Conservation of Resources theory (Hobfoll, 1989) and job crafting research (Tims, Bakker, & Derks, 2013), seeking social resources may reduce the impact of the stressors on police officers. Also, police officers need coping self-efficacy, which is an individual's belief in the ability to cope with stressful situations. While theory and research suggest that coping resources can buffer the relationship between chronic stressors and chronic strain, findings also indicate that coping resources can be depleted due to chronic strain. To our knowledge, this depletion process is still

poorly investigated, in particular in the police domain. The goal of this study was to investigate this resource depletion process. In particular, we examined whether coping resources (i.e., coping self-efficacy and seeking social resources) buffer the relationship between chronic stressors (i.e., workload, change-related stress, and technostress) and chronic strain (e.g., emotional exhaustion), and whether coping resources are depleted due to chronic strain.

To investigate our research model, a two-wave online questionnaire study under Amsterdam police officers was conducted. The first wave (T1) has been completed in April and May 2019. The second wave (T2) will take place approximately nine months later in January 2020. Ideally, a third wave will take place another nine months later, in October 2020. A total of 175 (approx. 400 approached, one police district; approx. 190 registered) participants completed the survey at T1, of which 160 gave permission for follow-up research. The questionnaire that we use is the resilience monitor ('Weerbaarheidsmonitor'), developed by TNO, which is chiefly based on previously validated and published scales (e.g., UBOS-C, UWES, JCS; Kamphuis, Delahajj, Venrooij, & Smit, 2017; Paradies, Putnik, Venrooij, & de Korte, 2017). Findings of the T1 provided evidence for the reliability of the scales. Multilevel modelling will be used to analyse the data, which will be available after T2. At the conference, we will present the findings of both waves.

## **O24 Just striving, or thriving? Underlying mechanisms for the link between challenge and hindrance stressors with employee resilience**

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**Introduction:** Challenge stressors such as time pressure or job complexity are known as double-edged sword within empirical stress research, based on the fact that this set of stressors have the potential to energize employees and are also linked to an increase in strain (Cavanaugh et al., 2000). Scholars showed the positive impact of challenge stressors to foster employee resilience, whereas typical hindrance stressors (i.e. role ambiguity, role conflict) decreased the resilience capacity. It seems fruitful to consider potential underlying mechanisms why challenge stressors and hindrance stressors have these reverse effects on employee resilience.

**Methods:** A structural equation model (SEM) was used to investigate the effects of job complexity (challenge stressor) and role conflict (hindrance stressor) on employee resilience ( $N = 444$ ; 86.7% male). Furthermore, potential indirect effects with thriving at work and irritation as indicator of strain were examined. All variables were modeled as latent constructs with items as indicators.

**Results:** The first conducted model included job complexity and role conflict as exogenous and employee resilience as endogenous variable. There was a significant positive relationship with job complexity and resilience ( $\beta = .25, p = .03$ ), whereas the relationship between role conflict and resilience was significant negative ( $\beta = -.21, p = .03$ ). After adding thriving and irritation as potential mediators, the direct effects of job complexity ( $\beta = .03, p = .77$ ) and role conflict ( $\beta = .04, p = .58$ ) on resilience were no longer significant. There were significant indirect effects of job complexity via thriving ( $\beta = .23, 95\% \text{ CI } [.09, .38]$ ) and role conflict via thriving ( $\beta = -.13, 95\% \text{ CI } [-.21, -.05]$ ) and irritation ( $\beta = -.11, 95\% \text{ CI } [-.18, -.05]$ ) on employee resilience.

**Discussion:** Based on the empirical findings, the positive indirect effect of job complexity as challenge stressor on employee resilience is explained better via an increase in thriving, whereas the negative indirect effect of role conflict on resilience is the result of an increase in strain and a decrease in thriving, simultaneously. After adding the potential mediators, the direct effect of work related stressors on employee resilience was no longer detectable, indicating the substantial effect of mediators as explaining mechanisms.

The results highlight the influence of potential underlying mechanisms, which help us to understand, why challenge and hindrance stressors have reverse effects on employee resilience. A better understanding of underlying mechanisms within empirical stress research on employee resilience help us to derive targeted interventions to foster employee resilience, resulting in a higher capacity to successfully handle challenging as well as hindering working conditions. Study limitations include data analysis that was cross-sectional, resulting in a lack to proof potential causal relationships. Longitudinal three-wave studies are needed to enable complete tests of mediation over time. Only self-report measures were used, resulting in a potential common method bias.

## **O25 The dynamics of affect regulation: How demands and resources shape reactivity and inertia**

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This study examines how work influences regulation of affect and specifically how job demands and resources and personal resources can shape the dynamic processes that govern changes in affect. To date, research focusing on the dynamics of work and affect typically examines how job content such as demands and resources influence affect at the between and within person levels. At the between level, the question is how overall demands and resources influence well-being, whilst at the within level the focus is on how deviations from the overall job demands and resources instigates changes in emotions or momentary affect. In this paper, two additional mechanisms through which job demands and resources and personal resources influence affective dynamics are hypothesised. First, work influences affective reactivity (or variability) so that high job demands and low job or personal resources can lead to higher levels of affect fluctuations. Second, work influences affective inertia so that high job demands and low job or personal resources will lead to more lingering affective states, taking longer to return to baseline affect.

To examine these two mechanisms, daily data were collected from 106 individuals over 21 days on their job demands and resources, personal resources and their daily affect. The later was measured as the two dimensions of the circumplex model: anxiety-contentment and depression-enthusiasm. Core self evaluations (CSE) were also measured to capture personal resources. CSE are not expected to fluctuate over the short-term, so it was only measured at the beginning of the study. A multivariate hierarchical Bayesian model was used for the analysis of the data where inertia were modelled as the varying (random) autoregressive coefficients and reactivity was captures by specifying hierarchical residuals. Thus, the model is multilevel both in terms of the means and in terms of the errors of the two affect dimensions. For inertia, the results showed that resources influenced inertia in depression-enthusiasm but not anxiety-contentment, personal resources influenced inertia in both affect dimensions, and job demands in neither. For reactivity, it was found that job resources reduced reactivity for both affect dimensions whilst personal resources reduced reactivity only for depression-enthusiasm. However, for demands the results were in the opposite direction of what was hypothesised, reducing the amount of affect variability. Finally, it was found that job resources influenced the relationship between the two affect dimensions so that they were more independent of each other when individual enjoyed higher job resources.

The key contribution of this paper is that it extends our understanding of how job demands and resources influence well-being and affect through emotional regulation. By incorporating inertia and reactivity the model presented here complements the within and between person effects of demands and resources to provide a more intricate account of the dynamics of affect. Finally, the paper also makes methodological contributions as it is one of the few papers that have used intra-individual variability as latent estimates to understand dynamics in intensive longitudinal data.

## **O26 Does commuting strain affect the relationship between work stress and detachment? A diary study**

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Job stress does not only influence the work domain but is also associated with negative outcomes at home (Spillover-effect). The stressor-detachment model (Sonnentag & Fritz, 2015) emphasizes the importance of psychological detachment for the relationship between job strain and impaired well-being. A common daily demand for many employees is the commute, that is, the journey between home and work settings. Past research has linked negative commuting experiences to impaired health-related outcomes (e.g., Evans & Wener, 2006; Novaco & Gonzalez, 2009). In this presentation, we want to focus on the impact of negative commuting experiences on the relationship between job stressors (i.e., time pressure) and psychological detachment from work.

To address this research question, we used a diary-approach with assessments on five consecutive workdays. Our sample consisted of  $N=189$  commuters (52.8% female) from different occupational fields who travelled to work at least three times a week. The majority used their cars/motorcycles (46.1%) or trains (36.5%) to reach their destination. During the registration procedure, participants reported on their commuting habits (average commuting time, transportation mode, description of their daily route, etc.) and gave information on personality traits (e.g., extraversion, neuroticism). During a self-selected week, participants received two short questionnaires per day: One had to be filled out after arriving at work, the other one during the evening.

We tested our research model using Multilevel Analysis (i.e., a hierarchical linear modeling approach; Raudenbush & Bryk, 2002). Our results support the stressor-detachment model by showing that on days with higher time pressure at work, people were less likely to detach themselves from work in the evening. Moreover, and most importantly for the present research question, negative affect during the work-to-home ride moderated this relationship: On days with higher negative affect during the commute, people were less likely to detach from work stress in the evening. Our study complements the theoretical view on spillover processes by integrating a so-far missing link, that is the commuting experience.

As a limitation, one has to keep in mind that we used self-reported data only. Additionally, since all daily constructs considered in the present analysis had been collected in the evening, potential method biases have to be taken into account.

From a practical point of view, although commuting cannot be completely avoided, we think that employees might profit from strategies that might help to make commuting less stressful. These strategies should be investigated in future studies.

## **O27 What makes for a good active lunch break? A diary study on lunch break workouts in relation to creativity at work.**

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Creativity can be defined as a mental and social process of generating ideas, concepts and associations. Employees' creativity is important at the workplace, since it may help creating value for an organization's multiple stakeholders to adapt to the ever-changing and competitive

environment. Research suggests that physical exercise - bodily activity that enhances or maintains physical fitness and health - may foster creativity, but it is unknown whether this relationship also holds for work-related creativity (i.e., the production of novel and useful ideas at work). Furthermore, it is unknown how an exercise session should look like to foster (work-related) creativity best. Therefore, in this study, the dose (duration and intensity) and experience (pleasure) of exercise in relation to creative divergent thinking (i.e., creative idea generation) and work-related creativity was studied. Furthermore, it was studied whether the absence or presence of (positive or negative) thoughts about work (i.e., psychological detachment, positive work reflection, and affective work rumination) during exercise moderated the exercise dose-creativity relationships.

This is an ongoing project. Final results will be presented at the conference. So far, a total of 88 employees filled out a general survey and then completed a diary questionnaire on 3 workdays at which they performed physical exercise during their lunch break. Exercise (duration, intensity, experienced pleasure), cognitions during exercise and creative divergent thinking were measured immediately after the physical exercise lunch break (T1) and work-related creativity was measured at the end of the workday (T2). All outcomes were measured by self-reports, except for divergent creative thinking, which was measured by the Alternative Uses Task. Preliminary analyses were conducted by means of regression analyses using grand mean centered variables. Final data will be analyzed using multilevel analyses. Results show that exercise duration and exercise pleasure were positively related to self-reported work-related creativity, but not related to creative divergent thinking. Exercise intensity was not related to both self-reported work-related creativity and creative divergent thinking. Positive work reflection during exercise moderated the relationship between exercise duration and self-reported work-related creativity. That is, the positive relationship between exercise duration and self-reported was stronger for employees with higher levels of positive work reflection during exercise compared to employees with lower levels of positive reflection during exercise. Psychological detachment and affective rumination during exercise did not moderate the exercise dose – creativity relationships. Preliminary results of this diary study suggest that a longer exercise session during lunch break in which employees positively reflect on aspects of their work may foster creativity at work. Additionally, an exercise session that is experienced as pleasurable may foster work-related creativity as well.

## **O28 Is there a potential in integrating staff-assessed care quality in workplace surveys? A prospective study**

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**Introduction:** Dental caries is the most prevalent non-communicable disease worldwide. Typically, the main strategies for disease control strategies directed towards the patients. An innovative strategy could be also to integrate work environmental factors of importance for the quality of work performed at the clinics. The aim was to evaluate staff-assessed care quality as an indicator of register-based measures of care quality at dental clinics, more specifically register-based measures of early failure of dental fillings.

**Methods:** The study has a prospective design integrating questionnaire data with register data on care quality. Questionnaire data on care quality were collected in 2014–15 among staff at all public dental clinics in 4 regions of Sweden as part of psychosocial workplace surveys. Data is included from 75 general public health dental clinics, based on 872 individual ratings (response rate 73%). Staff-assessed care quality was measured by 3 proprietary items: A global one (also included in the COPSOQ III), and 2 items addressing communication with patients and technical

quality in treatments. Five response options were given (to a very small extent-to a very large extent). An additive index was constructed and an average scale score for staff-assessed care quality was calculated for each clinic. Outcome data on survival of dental fillings during a 3-year period after the workplace survey took place were obtained from the Swedish Quality Registry for Caries and Periodontal Disease, SKaPa. Data on 9997 dental fillings were included in the analyses. Demographic background data on the patients were obtained from Statistics Sweden. Cox proportional hazards models were used. Hazard ratios (HR) for the risk of replacement of a dental filling during a three-year period after the treatment were calculated with staff-assessed care quality as dependent variable and patient age, sex, income level and country of birth as covariates.

**Results:** The results showed that staff-assessed care quality predicted the risk of replacement of dental fillings during the following 3-years follow-up period, controlling for potential confounding due to patient demographic characteristics (age, sex, income and country of birth).

**Discussion:** Staff-assessed care quality as measured in the present study can be regarded as a valid quality indicator of the survival of dental fillings. Thereby, there is a potential for integration of the measure in workplace surveys and follow-ups. It is a cheap and easy measure to collect and monitor continuously in dental practice, for example in connection with regular workplace surveys. This would facilitate organizational integration of processes for quality management with processes aiming at improvement of the work environment.

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## **O29 Self- and Other-oriented strengths use at work: Daily relations to in- and extra-role performance**

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**Introduction:** Most research on strengths use at work has focused on universal employee outcomes, such as work engagement and performance. However, employees with different concerns may use their strengths to different ends. For example, strengths can be used for one's own purposes, but also to help others. According to the self-concern and other-orientation hypothesis, employees differ in their extent of concern for the self and for others, which can have different consequences for their performance at work depending on the situation in question. In this quantitative diary study, we investigate whether these differing concerns interact with fluctuations in strengths use and how these interactions relate to in-role and extra-role performance at work on a day-to-day basis.

**Method:** Dutch employees from various work sectors (e.g., 21% healthcare; 17% service industry; 10% IT sector; 10% finance; and more) used a smartphone application to fill out (a) a general survey including scales for self- and other concern, and (b) a diary survey twice a day for one workweek. In total, 216 employees (49% male), aged 17 to 65 ( $M = 31.80$ ,  $SD = 12.06$ ), participated for at least two full days. During lunchtime, we measured frequency of strengths use in the morning. After work, we measured work engagement, organizational citizenship behavior, and in-role task performance in the afternoon.

**Results:** Preliminary aggregated analyses revealed that self-concern moderates the relationship between strengths use and in-role task performance, such that strengths use in the morning is

positively related to task performance in the afternoon, especially for those who are high (+1 SD; vs. low) on self-concern,  $b = .08$ ,  $t(245) = 2.22$ ,  $p = .028$ . Furthermore, we found a three-way interaction between self-concern, other-orientation, and strengths use in relation to colleague helping behavior (OCBi), such that other-orientation boosted the positive relationship between strengths use and OCBi only when self-concern was also high,  $b = .20$ ,  $t(241) = 2.19$ ,  $p = .029$ . Initial cross-level analyses in Mplus revealed that this relationship was also evident on a day-to-day basis,  $b = .12$ ,  $SE = .04$ ,  $p = .001$ , 95% CI [.05, .20]. Because the constructs we measured are short-lived behaviors, we are interested to further explore to what extent these traits affect the day-to-day relations between strengths use and in-role and extra-role performance at work by conducting multilevel structural equation analyses using Mplus.

**Conclusions:** The present study shows that strengths use can have different daily outcomes for work-related behavior depending on the employees' trait orientations. These findings imply that employees may use their strengths at work to different ends, which can provide recommendations on whether and in what way strengths-based interventions should be tailored more to the individual.

### **O30 My leader just cares for me – Do leaders profit from health-oriented leadership?**

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Health-oriented leadership consists of high awareness for health, valuing health and showing behavior to enhance health. The positive impact that health-oriented leadership towards followers has on employees is well documented in the literature. However, it remains untested so far, if health-oriented leadership is beneficial for persons in leadership positions. According to the concept of health-oriented leadership by Franke, Felfe, and Pundt (2014), the self-care of the leader is the basis for showing health-oriented staff-care. According to the model, high self- and staff-care should enhance followers and leaders' health. Therefore, we aim to investigate the question, if health-oriented self-care influences the level of health-oriented staff-care. Moreover, we aim to test whether staff-care mediates the relationship between self-care and well-being of leaders.

We conducted a weekly survey during five consecutive weeks among school principals. The final sample consists of 234 school principals from Germany who participated on average 4.1 of the 5 weeks. We measured well-being by work engagement, emotional exhaustion and self-esteem. Multilevel structural equation modeling revealed that self-care significantly predicts staff-care on the within and on the between level. Moreover, on the within level self-care and staff-care significantly predict self-esteem, work engagement and emotional exhaustion. Interestingly, on the between level, only the relationship of self-care with the outcomes and of staff-care with work engagement showed to be significant, while we could not find a significant relationship of staff-care with self-esteem and emotional exhaustion.

The hypothesized indirect effects are all significant on the within level. However, on the between level, we only find the significant indirect effect for work engagement as an outcome. Interpretation of these results leads to the conclusion that in weeks where school principals show more self-care, they also show more staff-care, which in turn leads to higher self-esteem and work-engagement and fewer feelings of emotional exhaustion. However, this does not hold in general, since we do not find significant indirect effects of self-care on self-esteem and emotional exhaustion via staff-care for school principals in general. In the short term, showing high levels of staff-care seems to unfold a motivational process, as proposed within the JD-R model. Concerning longer periods, this motivational effect seems to wear off. A limitation of the study is

that we surveyed a specific group of leaders; therefore, the generalizability to other occupations might be limited. Future research should include other than the self-report measures of the variables. It would be interesting to use employee rated staff-care as a mediator. Moreover, one could go more into detail concerning the relationship between staff-care and well-being of leaders. An empirical test of the possible mechanism of motivation is pending. Moreover, possible boundary conditions of the relationship between staff-care and well-being of leaders should be accounted for, as for example the health of the team or the organizational climate.

**O31 “It’s not what you do, it’s you that makes the difference!” Interpersonal emotional regulation and employee well-being: The moderating role of managerial trustworthiness.**

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**Introduction:** Failure to attain a salient goal at work is a significant event for the self and a potent elicitor of emotions. Interpersonal emotional regulatory strategies are frequently employed by a manager to deal with an employee’s failure-related distress. Trustworthiness has been posited as an important antecedent of interpersonal emotional regulation (IER) efficacy, but to date, this relationship has not been explicitly examined. Drawing on Niven et al. (2009, 2011, 2012a, b) classification of IER strategies, this research examines the moderating role of managerial trustworthiness on the relationship between IER strategies and employee’s affective well-being, cognition, behavioural and motivational outcomes in the context of salient goal failure.

**Method:** 500 participants were recruited through Amazon’s Mechanical Turk to complete an experimental vignette study. Participants were randomly assigned to one of four IER conditions (situation modification, attentional deployment, cognitive change, modulation of the emotional response) or a control condition and were evaluated to assess their affective wellbeing, cognition, volition and future behavioural responses towards their manager.

**Results:** Preliminary findings indicate that trust in management moderated the impact of IER strategies on employee’s affective well-being and subsequent behavioural responses in such a way that the relationship between the IER strategies and employee outcomes was stronger when trust in the manager was high than when trust in the manager was low. This moderating effect was especially strong for females. The limitations include the experimental design which requires replication in field settings.

**Discussion:** This is one of the first studies to examine the inter-relationship between employee’s perceptions of trustworthiness in their manager and the efficacy of interpersonal emotion regulation strategies on affective and behavioural outcomes. Practically, it demonstrates that the efficacy of any strategy designed to reduce failure-related emotion is contingent on prior levels of trustworthiness in the manager. There is a paucity of research examining the relational characteristics that influence the efficacy of IER processes for wellbeing.

**O32 Need-supportive leadership behaviors, need satisfaction, and sickness absenteeism: Direct and indirect associations**

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**Introduction:** Sickness absenteeism from work is increasing and the total cost of work-related illnesses in Sweden amounts to 70 billion SEK each year in form of loss of production and health care expenses (OECD, 2013). Leadership is assumed to play a central role in follower’s



absenteeism-patterns, however, research exploring direct and indirect relations between leadership and sickness absenteeism is scarce. Grounded in self-determination theory (SDT; Ryan & Deci, 2017), the purpose of the present study was to examine: (1) the relationship between need-supportive leadership and sickness absenteeism; and (2) the indirect association between need-supportive leadership and sickness absenteeism through satisfaction of the basic psychological needs of autonomy, competence, and relatedness.

**Method:** Municipal employees ( $N = 347$ , 78% women, age span = 19-66 years) provided baseline data on perceived need-supportive behaviors from their manager and basic psychological need satisfaction at work using the *Need Support at Work scale* and *Need Satisfaction at Work scale* (Tafvelin & Stenling, 2018). One-year follow-up of sickness absenteeism records were obtained from the municipality and data from the year before the baseline measure were included as control variable. Sickness absenteeism was defined in three different ways: (1) the total number of sick days; (2) the number of distinct periods of sickness absenteeism; and (3) long-term sickness absenteeism (> 40 days). To account for the censored dependent variables (i.e., 28% reported zero days and periods), two-part regression models (Muthén, Muthén, & Asparouhov, 2016) were used to estimate the direct and indirect associations. Logistic regression was used to estimate models with long-term sickness absenteeism as dependent variable (coded as yes/no).

**Results:** Higher levels of need-supportive leadership was directly associated with fewer sick days ( $B = -0.275$ ,  $p = .001$ ). Need-supportive leadership was also positively associated with all three needs (range of  $B = 0.20-0.35$ ,  $ps < .001$ ). An indirect effect of need support through autonomy need satisfaction on the number of sick days was observed ( $ab = -1.84$ , 95% CI [-5.46, -0.25]).

**Discussion:** These findings suggest that perceived need support from the manager and autonomy need satisfaction at work may function as protective factors against sickness absenteeism among employees. Need support and experiencing autonomy at work may provide employees with opportunities to deal with symptoms of ill-health before they turn into sickness absenteeism.

### **O33 Does leadership training affect subordinates' intended and actual turnover? Evidence from a field experiment**

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Leaders are important determinants of those working conditions that many theories highlight as drivers of job quit. However, in spite of the association between intentions and actions, surprisingly little empirical attention has been paid to leadership antecedents to intended turnover and its association with actual turnover (Holtom et al., 2008; Hom et al., 2017). In this study, we investigate, using a field experimental design, how leadership training affects subordinates' turnover intention and the association between turnover intention and actual turnover. More specifically, 427 Danish leaders from different organizations and sectors (daycare centers, elementary schools, and high schools) were randomized into one of four groups: three different leadership training programs (stand-alone or combined use of transactional and transformational leadership behaviours) or a control group.

The training programs lasted nine months, and consisted of four modules (whole day classes) combined with activities in between the modules. The programs were designed to enhance the

leaders' use of the trained behaviours through for example action learning, applying varied learning formats (Curry, 2012), and providing multiple source feedback (Bailey and Fletcher, 2002). The teaching and learning structures were held constant across the training programs, while the theoretical content varied according to the specific leadership behavior we intended to train, such that differences in effects would reflect changes in training content and not training practice.

In our analysis, we employ survey data from the 2,907 subordinates who responded to both pre- and post-training surveys, combined with registry data. Our results show that training in the combined use of transactional and transformational leadership reduces subordinate turnover intention by eight percent, while training in stand-alone transactional leadership reduces subordinate turnover intention by five percent. Training in transformational leadership does not appear to reduce subordinate turnover intention. Our results also show that the leadership training does not affect actual turnover. While the literature suggests that turnover intention is the factor that best predicts job quit, in our study the effect of leadership training on turnover intention is not strong enough to lower actual turnover. We address future implications for theory as well as practice in our presentation.

### **O34 Longitudinal associations between witnessed and instigated workplace incivility, well-being and psychosocial work factors**

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Workplace incivility has been described as ubiquitous in organizations (Andersson & Pearson, 1999). Research suggests that workplace incivility is a common workplace stressor, associated with various detrimental outcomes (for two recent reviews, see Cortina, Kabat-Farr, Magley, & Nelson, 2017; Miner et al., 2017). Furthermore, workplace incivility has been described as a virus, that may spread among coworkers in the workplace (Fouk Woolum, & Erez, 2016). For instance, a behavioural outcome of workplace incivility is an increased tendency among victims to instigate incivility towards others (Fouk et al., 2016; Rosen, Koopman, Gabriel, & Johnson, 2016; Vahle-Hinz, Baetghe, & van Dick, 2019). However, in several Swedish studies, the association to instigated incivility was found to be stronger for witnesses of incivility, rather than targets (Holm, Torkelson & Bäckström, 2015; Torkelson, Holm & Bäckström, 2016). Although research on workplace incivility has increased over the past years, few studies have focused attention on witnessed incivility in the workplace (Schilpzand, de Pater, & Erez, 2016). In addition, there has been a lack of longitudinal studies, that explores the development of workplace incivility over time.

In light of this, the present study aims to explore possible change over time in witnessed and instigated workplace incivility and well-being, and associations to psychosocial factors. The study also aims to explore the relationship between witnessed and instigated workplace incivility, as well as the relationship between witnessed incivility and well-being, over time. An additional aim is to explore whether witnessed incivility is indirectly related to instigated incivility and well-being via perceptions of organizational injustice. Lastly, the present study aims to investigate whether psychosocial factors such as control, social support and job embeddedness moderate the relationship between witnessed and instigated incivility. Such moderating effects have previously been demonstrated in cross-sectional studies (Holm et al., 2015; Holm, Torkelson & Bäckström, 2019), but not investigated over longer time periods.

In order to explore the associations over time, an online survey is administered to a sample of Swedish engineers at three time points, each occasion separated by a 6-month time lag. The survey is sent out to 5000 randomly selected members of a trade union organizing civil engineers.

The first two waves of data were collected at the start (N = 517), and in the middle of 2019 (N = 498), respectively. The third and final wave of data will be collected during the start of 2020. Results from the three waves of data will be presented, investigating possible change in workplace incivility and well-being over the course of a full year, and associations to psychosocial work factors.

The study contributes knowledge about the workplace incivility-process over time, and addresses gaps in the literature regarding the lack of longitudinal studies of workplace incivility. In addition, the study contributes knowledge about long-term consequences for bystanders of uncivil experiences, as well as which factors that may underlie these associations, or constitute boundary conditions for them. Increasing the understanding of how workplace incivility develops over time could be important for establishing and maintaining healthy and sustainable workplaces.

### **O35 IGLOO resources enabling sustainable return to work following mental ill-health**

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**Introduction:** Sustainable return to work (SRTW) for workers with mental ill-health presents a major societal challenge with approximately 38.2% of the EU population suffer from a mental disorder this year. Many experience difficulties returning to work, while research suggests that approximately 19% of workers subsequently relapse, taking subsequent periods of absence or exit the workforce (Koopmans, Bültmann, Roelen, Hoedeman, van der Klink, & Groothoff, 2011). Current research has been limited by a focus on absence and initial return and a siloed approach where work and non-work domains are considered separately. We used the recently developed IGLOO framework as a guiding heuristic to examine the Individual, Group, Leader, Organisational and Overarching context (e.g. national legislation) This approach draws on the conservation of resources theory (COR; Hobfoll, 1989) and aimed to identify the resources in and outside the workplace that promote sustainable return to work. Specifically, we asked the question: What are the resources that help workers with common mental disorders stay and be productive after return to work?

**Method:** We conducted longitudinal semi-structured interviews with workers who had returned to work after a period of prolonged sickness absence due to stress, depression or anxiety; and managers who had managed returning workers. Interviews were conducted at monthly intervals, over a period of four months. In total, we interviewed 38 returned workers and 20 line managers. the majority of whom we spoke to at multiple points following their return. Data was analysed using thematic analysis (King, 2004), analysing resources at the five IGLOO levels.

**Results:** A range of resources at work and at home supported sustained return to work. At work resources included creating structure within their working day to help maintain focus and concentration (Individual); Gaining feedback on tasks from colleagues (Group); continued support and access to work adjustments (Leader) and flexible working practices and leave policies and work-focused counselling (Organisational). At home resources included prioritising self-care and the establishment of clear boundaries between work and leisure (Individual); non-judgemental support from family and friends (Group); a consistent point of contact (Links to Services, e.g. GP); and access to work-focused counselling (Organisational).

**Discussion:** This study, the first to our knowledge to follow returned workers post-return using a qualitative approach, provides valuable insights into the resources required by returning workers to stay in and be productive at work. It identifies practical actions that can be taken by workers

and may provide valuable information for allied professionals, working in occupational health, general practice or Human Resources, to better support those returning to work. It highlights the complex range of resource in and outside of work leveraged by workers and managers. Future research will benefit from better understanding the synergistic effects of the resources at home and at work across the IGLOO levels.

### **O36 Workplace bullying: A predecessor for mental health problems**

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Workplace bullying is an escalating issue that can affect the mental health of employees with negative consequences on their job. In European countries, an increase in workplace bullying has been reported, and harassment and violence in the workplace have been associated with poor mental health (Eurofound Report, 2015). Consequently, this study focused on Cypriot employees and their possible exposure to workplace bullying.

The aim of this quantitative study was to examine the relationship between experiencing bullying behaviors in the workplace and mental health deterioration in terms of anxiety, depression, stress, and as a result, their impact on employee well-being (which is further examined in a separate study). The participants completed an online survey (accessed via a web link), which included a questionnaire on demographic data, the DASS 21-Revised mental health scale (Depression, Anxiety, Stress Scale) and NAQ-R, the Negative Act Questionnaire-Revised behavior scale. The participants were (using non-probability convenience sampling), 272 Cypriot employees (female = 186 and male = 86) working in eight main occupation sectors. Approximately half of the participants were married, and 90% were University graduates. The statistical analysis included frequencies, the Shapiro test for normality, the Wilcoxon test, the Mann-Whitney U test, Factor analysis, Simple Linear Regression analysis and Linear Regression Stepwise analysis.

The result of this study indicated that Cypriot employees were at a high risk of being bullied, and two out of three employees reported that they had been bullied at work. It also showed that female employees are more likely than males to be exposed to bullying behavior at work. Additionally, this research demonstrated that teachers, auditors and service employees are more likely to receive “persistent criticism of their work and performance” compared to other occupational sectors. A significant difference appeared to be related to stress levels, where teachers scored higher on the stress scale compared to the other occupational sectors. Moreover, the study indicated that bullied participants compared to non-bullied, scored higher on the scale of anxiety, stress and depression, and that the bullying factor accurately predicted the anxiety, stress and depression factors. Also, employees who held less powerful positions within their organizations were at a higher risk of being bullied.

Concluding, it seems that the organizations under study lack the provisions for adequate measures in avoiding bullying and anxiety and that the majority of them at the time of this study (2018), did not have written policies to manage neither bullying, nor anxiety. Additionally, it was reported that these organizations did not provide support in the form of interventions to reduce bullying and anxiety at work. Based on the question “which are the most important measures you would like to apply to your organization in order to avoid bullying and anxiety”, the respondents preferred mostly psychological support given by professionals, informative and educational seminars, and personal programs/professional development programs.

### **O37 Work-related well-being in the legal profession: An integrative literature review**

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Over the past 50 years, the way that law is practised has undergone a substantial transformation. Several related factors are suggested to have influenced this change, including global commercialization, rapid technological advances, and increased regulation of legal services. These socioeconomic forces converged on legal professions worldwide over a relatively short space of time to form a dominant paradigm in legal practice, the law-as-business model. This paradigm has presented opportunity for significant financial growth in the legal sector, particularly for 'Big Law' firms operating globally in commercial and corporate sectors. Firms that have responded to the increasing competition and evolving marketplace demands have enjoyed rising profits year-on-year. However, the law-as-business model has started to create a growing disquiet among those working in the profession. With legal practice now conceptualized as a business service, the work of lawyers, particularly in large international law firms, is increasingly associated with unrelenting demands of long hours, poor work-life balance, pressure to bill, and hyper-competitiveness. Against this backdrop, and in more recent years, self-report surveys conducted by the Law Society of England and Wales and the General Council of the Bar point to increases in work-related stress, anxiety and depression in lawyers, sparking concerns about mental health and well-being in the UK legal profession. Similar reports have been noted in Spain, America, Canada, and Australia, generating a global discourse among respective legal regulators, professional bodies, educators and practitioners. Does the institutional practice of law in contemporary society negatively impact the well-being and performance of those who work within it, and if so, why?

This presentation outlines the authors' protocol for the systematic mapping and review of the literature concerning work-related well-being in lawyers. A scope of the literature points to two competing perspectives. The first is individualized and proposes that lawyers possess certain personality traits that disadvantage their occupational health, while the other offers a more contextual focus and attributes concern to the rising prevalence of negative workplace factors. Recent structural and systemic changes affecting how today's lawyers work, and the work environments in which they operate, are discussed, along with data from preliminary interviews with panel experts. By adopting a pragmatic realist approach, the review seeks to integrate and evaluate our current understanding in this area, and to open the space for future ideas and frameworks to develop.

### **O38 Staff-rated quality of work is related to perceived stress**

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Introduction: Work demands have been shown to predict stress-related health outcomes. However, some jobs characterised by high demands and limited resources, e.g. many human services jobs, are also perceived as intrinsically meaningful. A small but growing literature indicates that, at least in such occupations, quality of work is an important determinant of stress. We therefore investigated the relationship between perceived quality of work and stress in both human services and other sectors, based on the hypothesis that quality of work is especially important for stress in human services work.

Methods: The study uses data from two surveys based on the Copenhagen Psychosocial Questionnaire (COPSOQ). One is a nationally representative cross-sectional survey sent by Statistics Sweden to a random sample of 12,000 persons aged 20-65 years and registered as gainfully employed. We received 3642 responses, (30.9% of eligible persons). Because of low response rate in the age group below 25 years, we restricted all analyses to ages 25-65. Business owners and respondents stating that they did not have a superior/colleagues were

excluded. Quality of work (QW) was assessed by two items from COPSOQ III: (1) To what extent do you find it possible to perform your work tasks at a satisfactory quality? (2) Are you satisfied with the quality of the work performed at your workplace? The second was an electronic survey about the work environment in public dentistry clinics in four Swedish counties/regions with a response rate of 75%. There were 1345 respondents, 90% women, mean age 48.5 years. 51% were dental nurses, 25% dentists, 18% dental hygienists, while 6% had other roles. Quality of care was measured by three items developed for the study: (1) Are you satisfied with the quality of the work performed at your workplace? and (2) To what extent do you think that the following characterise your ward/department? (a) Is the quality of communication with patients good? and (b) Is the quality of the actual treatment of patients good? All other measures come from the Swedish COPSOQ ([www.copsoq.se](http://www.copsoq.se)). Stress, Quality of Leadership, and Quantitative Demands were measured by three items each in the national survey, while the dentistry study included also a fourth item per scale. The range of all scales was set to 1-100. Age and sex were available in both surveys.

Results: Higher Quality of Work was consistently related to lower Stress levels in both studies, and both in relational and non-relational jobs (B between -0.41 and -0.56,  $p < 0.001$ , with adjusted R square between 0.08 and 0.17), and with higher values in relational work. Addition of age, sex, Quantitative Demands, and Quality of Leadership in the models attenuated the association somewhat, particularly in relational work at dentistry clinics, but it remained substantial for all groups (B between -0.25 and -0.34,  $p \leq 0.001$ ).

Discussion: Staff-assessed quality of work is cross-sectionally related to lower employee stress, indicating that improvements in production quality could also benefit employee health. Future studies should investigate if this association is causal.

### **O39 Burnout and exhaustion in Malaysian academia: implications for the growing landscape of South East Asian higher education**

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With ever-increasing student numbers and a global ambition to be an international hub of education, the ASEAN education landscape stands poised to become one of the fastest-growing in the world. However, this golden period of growth brings with it psychological consequences, as members of academia find themselves facing ever-increasing workloads as a result. This study examines the relationship between the ever-expanding higher education industry and the mental well-being of academics in Malaysia, one of the leading member nations of ASEAN leading the charge towards internationalisation and the expansion of ASEAN higher education, using a national sample of 350 academics. Results indicate that Malaysian academics suffered from high levels of work-related burnout as a result of the expansion of the industry, similar to their international counterparts in Europe and the Australasian region. Implications for the higher education infrastructure and policies of Malaysia as well as the ASEAN region at large are further discussed, including required changes to the national higher education infrastructure as well as human resource and management policies for higher education institutions in the ASEAN region.

### **O40 A six-year effect evaluation of an occupational health intervention – Contextual challenges made a positive effect vanish**

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Introduction: Interventions to improve organizations are undertaken quite often in both practice and research, but relatively little research focuses on the long-time effects of an intervention. In

2013 an organizational intervention focusing on developing employeeship in a university unit (the intervention unit; IU) was carried out and its implementation process and effects were evaluated. Specifically, the intervention was designed to strengthen the psychosocial work environment through raising employees' awareness and competence in interpersonal relationships and increasing their responsibility for their everyday work and working environment. Both process and effect evaluations found that the intervention had been successful in achieving its outcomes in the first three years until 2015 (Authors, 2015; 2018). In 2106, a major organizational change was initiated which involved a merger of external academic institutions into the university, which made this university grow, reorganize, and become the largest university in the country. As a consequence of the merger, the IU grew with quite many new employees, but we wanted to know more about the consequences for the psychosocial work environment.

**Method:** The present effect evaluation was a follow-up to examine the effects of the intervention on the psychosocial work environment using three waves of the organization's internal survey and comparing changes in the intervention unit (n = 77) at three points and against the rest of the organization (n = 4998). The last survey was in 2017, one year after the merger. In addition to the survey, a contextual analysis of the intervention unit was also conducted through organizational records and interviews with stakeholders.

**Results:** ANOVA analyzes showed that the intervention was effective in improving the psychosocial work environment through reducing conflicts among employees and strengthening the social community, empowering leadership, and increasing trust in management between the baseline survey in 2012 and the next one in 2014, but the positive results culminated in the same survey undertaken in 2017. The contextual analysis pointed to main changes in the intervention unit connected to the reorganization in 2016 and the subsequent rise of sickness absenteeism, change of leaders, termination of an internal work group, and turnover due to many new employees from other units being merged with the IU.

**Discussion:** More attention should be paid in intervention research to follow an intervention organization over several years after the intervention. Contextual factors may have a buffering effect on the link between an intervention and its outcome and may help exclude alternative explanations for which outcomes occur.

**Practical implications:** An intervention must remain a high and steady impact regarding resources to benefits employees and the working unit. Understanding contextual factors can also help to adjust an intervention or to implement 'booster activities' to maintain its positive impact in the long term. Although organizational-level interventions are complex processes, evaluations over time offer insights into the workings of how to maintain successful intervention outcomes.

#### **O41 Developing and delivering trauma response in the British Police Service**

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It is critical for trauma-exposed organisations to provide support to staff at the time of, or immediately following, an incident. This paper details the conception and operationalisation of a Trauma Response in the British Police Service.

Brief crisis intervention, often given the generic term psychological debriefing, is designed in part to ease emotional distress following exposure to trauma. In an organisational context, such as Policing, Mitchell described debriefing as a "*meeting between the rescue worker and a caring individual (facilitator) who is able to help the person talk about his feelings and reactions to the critical incident*" and stated that it should be delivered to groups.

Although debriefing is not designed to prevent or treat PTSD, provision of an organisational early intervention following a traumatic incident meets several needs for police leaders and their teams including: a) facilitating mutual support that is highly valued by workers, b) providing an opportunity to identify workers requiring clinical support, c) increasing levels of social cohesion, d) reducing harmful responses (e.g. alcohol abuse), e) reducing levels of sick-leave, and f) increased workplace performance. Advocates of debriefing posit that the benefits of early interventions such as debriefing are in its delivery soon after the trauma (often between two and ten days), its provision of psychosocial support and opportunity for expression of emotions about the trauma experienced, and its provision of education about stress management. In addition to mitigating distress, early interventions may reduce absence in trauma-exposed employees. The three best known post-trauma interventions based on debriefing principles are Critical Incident Stress Debriefing, Psychological Debriefing; a model with a specified framework, as opposed to the generic term used to denote early interventions; and Trauma Risk Management. This paper will unpack these trauma interventions and conclude with the conception and practical delivery of what is understood to be an optimum model for the British Police Service.

#### **O42 Competence profile for the occupational clinician**

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We aim to explore an innovative competence profile in the area of occupational health psychology, and especially in the diagnosis and follow-up of burnout or other work-related psychological disorders. This Belgian project launched in 2019 was funded by the Minister of Social Affairs and Public Health as part of the new burnout initiatives, more particularly that related to the creation of a training program and networking device in occupational clinic.

The competence profile was developed according to the needs identified among health professionals: The first need is being able, as occupational clinicians, to self-evaluate and identify the necessary relevant training for their own formation. The second one is checking if their practices are appropriate in the area of occupational health psychology. The next one refers to having a guide to create a training program for both first-line prevention actors (i.e. occupational physician, general practitioner, prevention counsellor) and second-line health professionals (i.e. occupational clinicians). The fourth need was enhancing recognition of the role of the occupational clinician and to protect the activities involved in occupational clinic.

Regarding the methodology, 12 focus groups were conducted by 2 animators and transcribed by 2 observers. 19 practitioners were divided into 3 groups of 6-7 practitioners and each group took part in 4 sessions. The objective was to highlight the behaviours implemented in critical situations (e.g. through a clinical case). In order to collect the behaviours, we chose different methods as the group analysis method (Van Campenhoudt, Chaumont & Franssen, 2005), the nominal group (Ouellet, 1987), the SPC (Sens-Process-Content) method (Poncin, 2010) and the focus group method with the critical incident technique (Flanagan, 1954).

Concerning the results, we first realized a qualitative analysis, based on the SPC method, which give us 521 behaviours. Secondly, a categorization of these behaviours was carried out with a group of 5-6 occupational clinicians. Finally, based on this categorization, a coordinator and a researcher realized the competence profile. The validation of the profile was based on an iteration process of reviews conducted by all the experts including in this project (project coordinators, psycho-pedagogue, occupational clinicians, scientific committee with representatives of different Belgian universities, pilot committee).



This competence profile includes seven skills: therapeutic setting (e.g. legitimacy, professional confidentiality), communication (e.g. with the worker, the health professionals, the prevention actors), network (e.g. how to develop and mobilise the network), diagnosis (e.g. anamnesis, tools, differential diagnosis), follow-up (e.g. work on resources, on demands), return-to-work (e.g. preparation for the return-to-work or for a professional transition) and sensitization (e.g. of the worker, of the hierarchical line). Furthermore, according to the competence profile for occupational psychologists (Wopsy, 2019), these skills are divided into some objectives that include behaviours and abilities. Then, the competence profile was linked to a variety of resources. We also focus on the reflections in terms of practical and pedagogical scopes, the ethical and deontic position of occupational clinicians and the relevance of our competence profile as a guideline for health professionals practising or not yet as occupational clinicians

### **O43 Evaluation of a participatory intervention: Interprofessional working in healthcare settings**

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Midwifery departments are highly dynamic environments characterized by intensive interprofessional working. Midwives work alongside obstetricians, anaesthetists, nurses and physiotherapists, and liaise closely with social workers, health visitors, and other agencies. In addition, through structured interprofessional education student midwives gain greater understanding of their roles and opportunities for respectful challenge. When skillfully undertaken, interprofessional working is essential for effective services and the quality of care. Poorly executed interprofessional collaboration can contribute to poor outcomes, including high stress levels in many staff groups and associated links with anxiety, depression, burnout, low motivation, and poor quality care. Nevertheless, there is currently a lack of effective interventions for work practices that incorporate interprofessional working among midwives. The aim of this study was therefore to examine the effectiveness of a participatory intervention that focused on improving interprofessional working practices.

This was a non-randomized controlled study, with an intervention group of midwives in 3 sites and a control group of midwives in 3 sites. The intervention was developed by the researchers with the close involvement of the organisations and focused on a process of participatory redesign of work practices related to interprofessional working: work organization; structures and management; employee-driven improvement; and shared leadership. Specifically, the activities focused on job redesign, teamworking, data recording, appraisal and performance, change, shared learning, communication, representative participation, and management behaviours. The intervention evaluation combined both outcome measures (e.g., job satisfaction, support) and process measures (e.g., acceptance). Data were collected via a survey at baseline, at the end of the intervention period, and at follow-up (the latter was not included in the analyses as the retention rates were too low). The analyses revealed an improvement in outcomes in the intervention group, both at the end of the intervention and at follow-up. Observed changes were as expected, in variables indicating immediate outcomes rather than longer term impact. Changes in the control group were also observed which are explained via analysis of the background context. In conclusion, this intervention study offers evidence for the effectiveness and acceptability of a participatory approach to work organization for multi-professional working among midwives. We conclude that combining changes in the work environment with a highly participatory approach to developing and implementing interventions can positively safeguard employee health in highly dynamic hospital settings.

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## **O44 Sustainable livelihoods: Experiences of Female Informal Traders (FIT) during the 2017 – 2018 cholera outbreak in Lusaka**

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For street vendors whose livelihood is dependent on daily selling of goods, the cholera outbreak of 2017 – 2018 was a major economic and social shock affecting over 5919 individuals and resulting in 59 fatalities mostly in Lusaka. The outbreak resulted in the closure of Lusaka business activities, trading spaces, markets, churches, and schools to curb the spread of the epidemic. The impact of this outbreak was severe amongst survivalist informal traders (SITs) due to the trading ban for an extended period over 6 weeks. The main objective of the current study was to understand the experiences of female SITs during this period and to determine what coping strategies were used to counter the absence of income generation. Sustainable development goals (SDG) were as a lens of understanding issues affecting the target research population.

A cross-sectional descriptive exploratory design was used. Purposive convenient sampling was used to select female participants for one-on-one structured interviews which were conducted at four targeted markets. Participants were regular vendors with established sites and social networks reporting each day for trading. Observations were made of the environment within which trade was taking place. Thematic content analysis was used for analysis. Observations of SITs work environment revealed scattered garbage that surrounded the stalls at which the SIT operated due to the absence of garbage disposal bins. The study findings show context-specific factors that contribute to the seasonal outbreak of cholera at the study sites, these included poor infrastructure and behavioral hygiene issues. The surroundings were not attractive or conducive to the sale of food, especially the vendors near a taxi rank where plenty of trash was polluting the area. Participants reported despair in dealing with the council for poor service provision. The lack of access to services fostered a hostile attitude towards payment for council levies since they did not feel supported. In some instances, SITs were harassed by the police and local government authorities, and their goods confiscated to prevent them from selling when no trading was allowed. While the SDG approach provided a useful guide to the understanding of the complexity of issues affecting SITs, the participants were not optimistic about achieving a sustainable livelihood due to contradictions between the SDGs and their lived experiences.

From the study findings it was established that a need exists for direct intervention to address environmental and behavioral issues that contribute to the seasonal disruption of livelihood for SITs. Conclusion: This was quite revealing in that it was evident that there is a need for direct, physical intervention to support the SITs in harnessing the resources in that community to address economic and social issues that manifest due to seasonal epidemics. The study recommends caution when incorporating SDGs that aim to alleviate people's suffering and that consideration should be given to the social, human and capital systems that are rooted in each community and utilize these towards sustainable livelihoods.

## **O45 The 'Balance in Educational Tasks App': An intervention facilitating work stress management and professionalization**

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Work-related stress and burnout are considerable problems in the sector of education, particularly in the primary and secondary education. In a previous project it was shown that teachers in secondary education experience a lot of work-related stress because of the non-teaching tasks (Houtman & Stege, 2015). Performing these tasks takes a considerable amount

of their time (almost half of their working hours). The 'task policy' at school, which is the way tasks are divided amongst the teachers at school, is often mentioned as one of the important causes of work-related stress by teachers. In many schools this task (division) policy - once developed to manage stress and take into account the task load and capacity of teachers- has grown into a system in which time per task has become the main target. The quality of task performance is often not considered anymore. Follow-up research showed that there are still schools that have developed a task (division) policy which was considered by the teachers as having a low risk for work related stress. These task (division) policies were characterized as having a short list of tasks, not identify detailed tasks and not linking a number of hours to these tasks, put the responsibility for the division of tasks low in the organization (e.g. in the teams) and taking into account which tasks the teachers would like to do because they are good at it, would like to learn, which tasks are experienced as stressful or instead are considered engaging, allowing teachers to find a good balance between demands and control and to learn new things.

A digital App was developed in which all the tasks to be divided at school are included, and for each task the teacher is asked whether he or she performs the task right now, whether he or she can do the task (on their own), (if not) wants to learn it, wants this task at all, and whether the task is stressful or engaging. When the teachers (in a team, a division or school (location)) have completed the App, the App provides two sorts of output. It provides the individual teacher with feedback on his or her 'match' with the task(s) and his or her work capacity (only the teacher can see this and can decide whether he/she wants to share it with colleagues or discuss it with his/her supervisor). At the aggregate level (team, division or school (location)) it shows the match of the group of teachers in the team, division or school (location), where professionalization is warranted as well as issues for discussion, e.g. tasks which better should be dropped, and directions for recruitment of new personnel. In the presentation, the App will be presented as well as quantitative and qualitative information on the process of its' implementation in a school of about 90 teachers, and experiences with this App from management, supervisors and teachers.

#### **O46 Well-being as a mediator of the relationship between human resource practices and employee performance – the case of a multinational corporation in Finland**

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Human resource (HR) management practices and systems form the basis of any personnel management in all organizations. Previous research shows the positive link between HR practices and well-being as well as between HR practices and performance. However, there is an ongoing debate whether HR practices increase performance at the cost of well-being (conflicting outcomes) or whether HR practices affect performance through increased well-being (mutual gains). Although these perspectives have been studied extensively, the evidence for either perspective is inconclusive. Many of these studies have explored either the well-being aspect or the organizational performance aspect but rarely both at the same time. In order to understand how HR practices impact well-being and performance, we need to look at both simultaneously. Also, there has been a dominant focus on organizational performance but not employee performance. The objective of the study is to assess whether central aspects of well-being, such as engagement, turnover intentions, stress and work satisfaction, mediate the relationship between HR practices and employee performance. Data for the present study was collected in a large multinational corporation in two waves, one year apart (N = 11,967). Longitudinal mediation analysis was done using Model 4 in the PROCESS macro for IBM SPSS Statistics. Results showed that when baseline employee performance was controlled for, work satisfaction and turnover intentions mediated the relationship between HR practices and employee performance. Engagement and stress did not mediate the association between HR practices and employee performance. HR practices increased work satisfaction and decreased turnover intentions, which in turn led to higher employee performance. This study demonstrated

that having and consistently implementing HR practices can lead to improved well-being and employee performance. Exploration of employee performance will allow for researchers to focus on the person unit of analysis which can yield greater insight into developing better health and well-being HR policies at the individual level.

#### **O47 Home-to-career interference within dual-earner families**

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Home-to-career interference refers to degree to which employees experience that their private life has constrained their career decisions to date (Schooreel, Shockley & Verbruggen, 2018). Schooreel and colleagues (2017) introduced this concept based on the observation that workers often take family-related career decisions (e.g., starting to work part-time to take care of young children), which later turn out to have negative career consequences. Schooreel et al. (2017) showed that home-to-career interference is a real phenomenon, which can have lasting consequences on people's career goal self-efficacy, perceived career support and, subsequently, their career satisfaction. In this study, we aim to extend our understanding of home-to-career interference by examining its antecedents and consequences within a couple setting. More specifically, we investigate which partner in a couple is most likely to experience work-to-home interference and how this experience impacts both partners' life satisfaction. By applying a couple perspective we take into account that people often discuss and make career decisions together with their partner.

First, at the couple level, we expect that home-to-career conflict will be higher in families with children compared to families without children. This is because children may induce a need for more family time, which may stimulate parents to make career sacrifices. Second, at the individual level, we expect gender, differences in education and differences in career priority to affect which partner in a couple is most likely to experience home-to-career interference. In particular, since the gender role patterns are still quite traditional, we expect women to be more likely to make career sacrifices in favor of the family and therefore to experience more home-to-career interference. In addition, building on the relative resources perspective, we expect that the partner with the lowest level of education is most likely to make career sacrifices – and therefore to experience more home-to-career interference – that way, the couple “loses the least”. Furthermore, since couples may also take career decisions based on each person's personal preference, it could be expected that the partner with the lowest career priority would be most likely to make career sacrifices and thus experience more home-to-career interference. Third, we expect that a partner who experiences much home-to-career interference, will be less satisfied with his/her life because the experience of conflict is a stressful and negative experience. However, we also expect that the career sacrifices made by one partner may improve the family functioning of the couple, which may result in more life satisfaction of the other partner (i.e., cross-over effect).

Hypotheses are tested using multilevel analyses with data collected from 197 Flemish dual-earner couples (i.e., 394 employees) at two moments in time, one year apart. Preliminary analyses show support for most of our hypotheses on the antecedents. However, no link with life satisfaction has been found. The results are informative about how couples make career decisions and help to better understand the construct of home-to-career interference.

#### **O48 Challenges in managing psychosocial risks in EU countries: A qualitative case study**

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Findings from quantitative studies repeatedly reveal that good practice in managing psychosocial risks in EU countries is harder to achieve than good practice in managing traditional safety and

health risks (EU-OSHA 2010, Eurofound 2014, EU-OSHA 2018). Against this background, our aim was to gain an in-depth understanding of the challenges in managing psychosocial risks in organizations in four European countries with a qualitative case study approach. We considered organizational and contextual facilitators for and barriers to addressing and managing psychosocial risks with a focus on management commitment and worker participation.

We used a case study approach that allows the reproduction of a complex phenomenon in its broader context (Yin 2014), particularly by relating the management of psychosocial risks in organizations to the broader - i.e. country and cultural context - in which it is situated. Organizations were recruited with the support of national OSH contact persons. Altogether 41 semi-structured, in-depth interviews with key players (management, worker representatives and OSH experts) from ten organizations representing different sectors (health, hotel, manufacturing) and sizes in four EU countries (Sweden, Denmark, the UK and Spain) were conducted between April 2014 and November 2015. The interviews were tape-recorded, transcribed and analyzed along thematic categories (in particular the procedural steps of psychosocial risk management and differences in workplace culture). This targeted analysis is based on the data of a larger study on comparing approaches to psychosocial risk management in Europe, conducted by the BAuA with the financial support of the Hans Boeckler Foundation (Janetzke & Ertel 2017).

We identified a wide range of workplace practices as to how psychosocial risks were perceived, addressed and managed. These practices were characterized by the dynamic interaction between various factors, mainly the level of management commitment, i.e. the capacity and willingness of management to act upon problems concerning worker psychological health, and the participation of workers and their representatives. Management commitment was more pronounced in countries with consensual workplace relations (Denmark and Sweden). Conversely, when management commitment to address psychosocial risks was not present initially, it developed where worker representatives exercised their participation rights (e.g. in a manufacturing company in Spain). Participation by workers was more effective when it was based on a strategic orientation (e.g. in Spain) as compared to a short-term, reactive orientation (e.g. in a manufacturing company in the UK). Moreover, differences in risk perception proved to be an important underlying, contextual factor. In particular, this was about whether workers regard work-related stress and psychosocial risks in general either as a “normal” part of their job or whether they see it as changeable in a workplace culture that allows them to openly talk about stress at work. The organizations we surveyed represented different stages in the development of workplace cultures that are - more or less - conducive to worker psychological health. Overall, our study tried to complement quantitative analyses on psychosocial risk management by using a qualitative case study approach demonstrating relevant mechanisms how contextual factors impact on psychosocial risk management without aiming at statistical representativeness.

#### **O49 Employment relationship and precariousness of work: The effect on the quality of working life of Portuguese veterinarians**

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This research aims to investigate the quality of life of Portuguese veterinarians to analyze the effect of precariousness and employment relationship on fatigue, compassion satisfaction, burnout and stress in this professional group. This research was based on the Professional Quality of Life Scale (ProQOL-IV). The sample consisted of 1351 veterinarians aged between 24-80 years-old, 57% (n = 775) had paid employed, 27% (n = 359) had self-employment and 16% (n = 217) worked in the civil service, 53% (n = 718) had an indefinite employment relationship, and the remaining 47% (n = 633) had a precarious employment relationship. The results obtained showed a positive relationship between individuals' monthly gross income and

their quality of working life, since the individuals with the highest salaries were those with the highest average compassion satisfaction and the lowest burnout and secondary traumatic stress. The precariousness that results from the type of contract influences the quality of professional life. Professionals with indefinite employment contracts had higher values in the index of quality of professional life. Professionals with part-time, fixed-term contracts or supply contracts had higher stress and burnout values and lower compassion satisfaction. In turn, self-employed and civil servants are those with the highest levels of quality of professional life. The results of the Portuguese sample are in line with Scotney (2016) and Volk et al. (2018) studies: Older veterinarians are more able to overcome psychological obstacles inherent in the profession and are less likely to have problems with younger colleagues. Regarding the year of graduation were those who finished their studies longer and, therefore, had a stable and permanent employment relationship, those who showed lower rates of burnout and secondary traumatic stress. Conversely, professionals who graduated recently were those who presented higher levels of burnout and secondary stress. Furthermore, jointly with older professionals, younger professionals with higher job stability presented higher values of compassion satisfaction and lower levels of stress, burnout and compassion fatigue than the professionals with lower job stability.

### **O50 A Multi-method Approach to Investigating Psychological Resilience in a Conscripted Basic Military Training Environment**

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Discrepancies remain in the way psychological resilience as a construct is conceptualised, operationalised, and measured. One reason for this divergence is that psychological resilience is context-dependent; adversity experienced may vary across situations and populations, and positive adaptation is manifested differently under various conditions. This research was conducted with conscripted recruits from the Singapore Armed Forces to address the gap in knowledge of psychological resilience in a conscripted military environment. Specifically, this research focused on the basic military training (BMT) phase when the recruits were newly enlisted.

Four studies were conducted to: (1) conceptualise and operationalise psychological resilience specifically in the current BMT context; (2) measure the recruits' psychological resilience in BMT; (3) assess the criterion validity of psychological resilience in BMT; and (4) examine how psychological resilience in BMT could be enhanced. Study 1, a qualitative study, examined what the recruits considered as adversities in BMT and what helped them to adapt positively. Thematic analysis on semi-structured interviews conducted with recruits ( $n=22$ ) elicited a number of themes which mapped to 10 psychological variables (e.g., optimism), five skills including goal setting and three external support (e.g., peer support), and these were found to have helped the recruits to adapt positively during BMT. Consequently, psychological resilience in BMT was conceptualised and operationalised as an internal capacity and psychological process. As an internal capacity, psychological resilience is made up of multiple internal psychological variables or protective factors (e.g., pride and optimism) and as a psychological process, it involves the recruits appraising the adversities and how internal and external protective factors facilitate them to adapt positively.

To keep this research focused and to better understand the internal factors, Studies 2, 3 and 4 examined psychological resilience as an internal capacity. A questionnaire was subsequently developed to measure the internal psychological variables found in Study 1, and psychological resilience and performance in BMT. Study 2 found that the recruits' ( $n=378$ ) sense of pride, hope,

perseverance, purpose and optimism were positively related to psychological resilience and performance in BMT as measured by self-report, peer appraisal and qualification for leadership training. Study 3 further found that psychological resilience in BMT was a higher-order construct that comprised pride, perseverance, purpose and optimism and it was also positively related to the recruits' ( $n=437$ ) performance. Finally, Study 4, a randomised controlled trial, examined whether psychological resilience in BMT could be enhanced with a targeted training intervention. The recruits in the treatment group ( $n=242$ ) took lesson on how to enhance their pride, perseverance, purpose and optimism while the recruits in the control group ( $n=238$ ) learnt deep breathing and visualisation. A 2 x 2 repeated measures factorial ANOVA was carried out with time (before and after intervention) and training intervention (intervention and control) as IVs, and psychological resilience scores as the DV. Recruits' psychological resilience scores improved following the training for the treatment group but not for the control group. The theoretical and research implications, limitations of the research and possible future research directions, and implications for organisation practices will be discussed.

### **O51 Prevention program in connection with vocational rehabilitation in Iceland**

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In Iceland there is one organization, VIRK Vocational Rehabilitation Fund, that oversees and provides vocational rehabilitation for those that have not been able to return to work after long term sick leave. VIRK has been around since 2008 and is funded by the Icelandic unions and pension funds as well as the government. VIRK provides individually tailored vocational rehabilitation services covering everything from psychological support to all kinds of retraining. In addition to vocational rehabilitation services VIRK has been involved in a prevention program with the aim of reducing the drop out from the job market secondary to illness caused by stress and overload. The prevention program consist so far of four aspects - a) an awareness campaign; b) a research project; c) an informative website; and, d) criteria for a healthy workplace. More specifically:

- (a) The awareness campaign focuses on humorous advertisements that aim to raise awareness on stress/overload. The campaign has been a huge success and goes by the title: "Are you insanely busy?".
- (b) The research project is in a preparation phase and results are expected in the new year. The aim of the research is to isolate variables that are different amongst those who are able to return to work after long term sick leave as opposed to the ones that have not been able to do so. The research is questionnaire based and we ask about mental as well as physical challenges at the workplace, personal situation and health. The cohort is everyone that received sickness pay from one particular union in Iceland during the years 2016 and 2017 apart from the ones suffering from substance abuse; a total of 1800 individuals.
- (c) The website, [www.velvirk.is](http://www.velvirk.is), was launched on the 1st of December 2018. It is divided into two main sections; one aimed at providing information pertaining to wellbeing and the other one aimed for supporting workplaces; providing information about wellbeing at the workplace, stress and good management. The website is visited by anywhere from a few hundred up to around thousand people every day which is quite a bit considering the fact that the entire population of Iceland only measures up to about 350.000 persons.
- (d) The last part of the prevention program is a project aimed at coming up with criteria for a healthy workplace. The project is a collaboration between VIRK, the Directorate of Health and the Occupational Safety and Health Administration of Iceland.

The Directorate of Health is already providing criteria for healthy schools and municipalities that the workplace criteria are inspired by. The criteria will hopefully be ready for testing this fall in different types of workplaces for a period of 6-12 months. Measurements will be done at the beginning and end of the testing period. After the testing the criteria will be made available for all workplaces in Iceland free of charge.

## **O52 Relationships between work and physical activity during vacation**

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**Introduction:** Taking a vacation from work is an important opportunity for employees to recover from job stress and maintain health and well-being (for a meta-analysis, see De Bloom, Kompier, De Geurts, De Weerth, Taris, & Sonntag, 2009). Moreover, research on leisure-time activities show positive effects of physical activity during off-work times, as it helps to unwind from work and, thereby, protects mental health (e.g., Sonntag, 2001; van Hooff, Benthem de Grave, & Geurts, 2018). However, often employees fail to meet minimum recommendations for physical activity (Guthold, Stevens, Riley, & Bull, 2018). With this study, we sought to investigate how work and organizational factors affect physical activity during vacation. We, thereby, focus on i) job design, i.e., job demands and job control (Häusser & Mojzisch, 2017), and ii) organizational health behavior climate (OHBC; Sonntag & Pundt, 2016), as potential organizational barriers and promoters of physical activity during vacation.

**Method:** We conducted a prospective study with two waves of measurement (T1: up to six weeks in advance of a vacation; T2: one week after returning back home). The first survey was completed by 320 employees that met the inclusion criterion of a planned vacation trip within six weeks. All participants answered measures of job demands, job control, and OHBC. Additionally, they indicated their planned physical activity behavior during vacation. The second survey was completed by 252 of the 320 participants one week after returning back home from vacation. Again, they answered measures with regard to job demands, job control, and OHBC. At the time of measurement, they also indicated their actual physical activity behavior during the past vacation trip.

**Results:** Our results show that OHBC is positively related to employees' intention to be physically active during vacation (T1). Furthermore, analyses reveal an indirect effect of OHBC on actual physical activity during vacation (T2) through planned physical activity (T1). There are no relationships between job demands and control and (planned and actual) physical activity during vacation.

**Discussion:** These findings support the idea that OHBC has the potential to positively influence long-term exercising of employees, as it acts as a predictor for physical activity during vacation. However, we did not find relationships between job demands and control and physical activity during vacation. The absence of effects of job demands and control on physical activity during vacation might be explained by the dynamic relationship of job design features with physical activity (i.e., effects might unfold over shorter time frames, like evenings and weekends).

## **O53 Into the wild! Greening and pleasure as predictors of psychological well-being after a recreational walk**

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Recovery is very important for individual long-term health-promotion. Most people prefer natural and green environments for their recreational leisure time and activities and choose those activities, which are perceived as pleasant. The current study aims to investigate, whether subjective perceived greening and pleasure during a walk are predictors of enhanced psychological well-being afterwards. Moreover, we claim, that relaxation and psychological detachment from work are mediators in these relationships. In total, 151 participants were instructed to engage in a 30-minutes walk during lunch-time. We assessed positive and negative



affect, fatigue, serenity and satisfaction as indicators of psychological well-being before and after the walk. Greening and pleasure during the walk were measured with each three new items. We conducted multiple linear regression to predict psychological well-being after the walk. The specific dimension of well-being at time 1 was in each case a significant predictor for the data at time 2. Greening turned out to be a significant predictor for all observed indicators of psychological well-being, except for fatigue. The subjectively perceived pleasure during the walk was a significant predictor for all observed dimensions of well-being. Using bootstrapping based estimation, relaxation was confirmed as mediator between experience of nature and psychological well-being. Psychological detachment did not act as a significant mediator. All in all, current results underline the day-to-day belief, that green environments and pleasant activities support recovery processes and leads to increased psychological well-being via experiencing relaxation. This knowledge might be useful for planning of recovery-focused leisure during lunch break.

#### **O54 The impact of migraine on work-role functioning of employees: preliminary findings of a diary study**

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**Introduction:** To determine the impact of migraine on daily work-role functioning of employees, and examine whether favourable psychosocial job conditions in terms of workload, autonomy, social support from supervisor and colleagues, and worktime and -place flexibility might limit the impact.

**Method:** A baseline questionnaire was filled out by 55 employees who met the criteria of experiencing at least two migraine attacks per month and being employed for a minimum of 24 hours per week. Subsequently, this sample was asked to fill out a short daily questionnaire for 28 consecutive days. Twenty-five participants consistently filled out the daily questionnaires and experienced at least one migraine attack during this period. In the baseline questionnaire information on socio-demographic characteristics, migraine characteristics, psychosocial job characteristics (Leiden Quality of Work Questionnaire), and flexibility of worktime and -place, and work-role functioning (Work-Role Functioning Questionnaire) was gathered. The daily questionnaire included questions regarding experienced migraine/headache and the short version of the Work-Role Functioning Questionnaire. On the baseline data, regression analyses were conducted to determine to which extent migraine characteristics predicted work-role functioning and whether psychosocial job characteristics and worktime and -place flexibility explained additional variance. In the diary data, migraine days were identified. Consecutively, the day preceding the migraine day was labeled as a prodromal day, and the day after the migraine day as a recovery day. All other days were labeled as regular days. For each employee, scores on work-role functioning were aggregated for these four types of days, and paired t-tests were used to compare these scores on migraine, prodromal, and recovery days to regular days.

**Results:** In the baseline data, work-role functioning was only significantly predicted by the type of migraine (with or without aura) ( $\beta = .56, p < .01$ ), and not by the number of migraine symptoms experienced during an attack, nor the number of headache days in the previous three months. Employees experiencing migraine with aura were more impaired in their work-role functioning than employees experiencing migraine without aura. None of the psychosocial job characteristics, nor workplace and -time flexibility explained additional variance in work-role functioning. The diary data indicated that work-role functioning was significantly reduced on migraine days in comparison to regular days ( $t = -3.27, p < .01$ ). Work-role functioning on prodromal days and recovery days did not differ from functioning on regular days.

**Discussion:** In these employees with frequent migraine, work-role functioning seems mainly affected in employees experiencing migraine with aura. Psychosocial job characteristics and

worktime/place flexibility did not play an additional role in explaining work-role functioning. Furthermore, as would be expected, work-role functioning was impaired on migraine days. However, this negative impact did not extend to prodromal and recovery days. The small sample size in the diary data did not allow further analyses on the role of the work context in the impact of migraine attacks on daily work-role functioning. However, data collection is ongoing, and this will permit additional analyses in the near future.

### **O55 What does a single-item measure of job stressfulness assess?**

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**Introduction:** It has become commonplace in occupational health research and practice for workers rate their global job stressfulness on a single-item measure. These measures are useful when the objective is to produce an overall indication of job stressfulness based on respondents' perceptions of personally salient factors rather than a pre-determined set of characteristics. They have become popular with researchers and practitioners keen to minimise assessment burden and maximise survey response rates. However, the construct validity of such measures remains unexplored. This study explores through interviews the frames of reference that underlie self-ratings of global job stressfulness elicited by a single-item measure.

**Method:** Data were collected from a convenience sample of 55 adults in full-time employment. Participants provided a global rating of their job stressfulness on a common single-item measure involving the stem question, "In general, how do you find your job?" with five response options: 1 = not at all stressful, 2 = mildly stressful, 3 = moderately stressful, 4 = very stressful, 5 extremely stressful. A cognitive interview involving two questions explored the frames of reference underlying participants' responses. The first question was "What were you thinking about when you answered [insert response] to this question?" This question relates to the first cognitive task involved in providing a response to a question, namely comprehension. The second question was designed to explore the referent timeframe: "When answering the question, did you think about a specific timeframe or period?" To identify the frames of reference transcripts were analysed using Braun and Clarke's method of thematic analysis.

**Results:** The most common frames of reference were the presence of problematic psychosocial working conditions, particularly job demands. Health characteristics, predominantly poor psychological wellbeing, emerged as a further less dominant secondary theme. Almost half the sample cited four or more referents. In terms of the timeframe under consideration, most participants referred to a long timeframe such as their work in general, with some specifying their current job and, a few, recent weeks.

**Discussion:** These findings shed light on the frames of reference used to inform judgements on global job stressfulness elicited by a single-item measure and in doing so contribute to the evidence base to support the application of such measures in occupational health research and organisational psychosocial risk management activities. Psychosocial working conditions were the dominant frame of reference for self-reports of global job stressfulness elicited via a single-item measure. These are often modifiable either through action by the employer or self-initiated changes made by the employee. Thus, reports of high job stressfulness on a single-item measure can be viewed as indicative of problematic exposure to psychosocial working conditions that left unchanged might lead to impairment to health. Reports of high job stressfulness can be used to identify groups of workers that could benefit from stress-reduction interventions and act as a starting point for more detailed analysis of stressors. Reports might also be used to initiate employee-driven job crafting activities to reduce exposure to undesirable working conditions.

## **O56 Work-related stress in the healthcare sector: A tailored psychosocial risk assessment approach**

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**Introduction:** One among the key aspects of a good psychosocial risks management is using approaches and validated tools tailored to specific critical aspects as size of organization, productive sector and workforce specificities. This can help in enabling practical impact and in developing effective action plans and fitting interventions. The Italian Workers' Compensation Authority (INAIL) has started a process of contextualization of its methodology for the assessment and management of risks associated to work-related stress (Inail, 2013) in a at-risk sector as the healthcare one. In doing this, it was decided to use integrative measures for specific risks related to this context along with the standard measures used in all other settings.

This study aims to present the implementation of the methodology in two healthcare organisations where the tailored assessment tools were administered to employees in the last year. Starting from collected data, this study has the following objectives: 1) to investigate the psychometric properties of the tailored tools, with a particular focus on the new dimensions developed to identify specific risks; 2) to develop and test a new scoring system in which the tailored part could reweighting the risk level generally obtained by the standard measures.

**Methods:** Two large Italian health organizations have been involved in this study. The total sample is composed of 7,163 workers split into 123 work units. Two assessment phases were conducted: 1) a preliminary assessment where a Checklist was filled in for each work unit, as an organisational tool aimed to evaluate the conditions of risk through 3 different dimensions: sentinel events (possible outcomes of work-related stress), work content and work context factors; 2) A self-report questionnaire filled by employees and composed by the Management Standard Indicator tool and new additional measures corresponding to specific risks as emerged from the Literature and a previous pilot study (Balducci, 2016). Since all the standard measures and indicators have had a standardised system to obtain the risk level by the assessment, we decided to define and test proper criteria for the development of a new scoring system where the tailored part could contribute in reweighting the risk level emerged by the standard measures scoring system. This also allows to highlight the unique contribution of the tailored measures in identifying the risks of work stress in this context.

**Results and Discussion:** Findings show good quality of the tailored assessment measures in the healthcare sector and interesting relationship between the new and standard measures included in the risk assessment. The new scoring system will be presented in detail including comparison among the risk obtained by the standard measures and the unique contribution of the new tailored one. As output of this study a full tailored methodological proposal to the healthcare sectors will be offered to organisations.

## **O57 Proactive personality and job satisfaction: The mediating role of psychological capital and work engagement**

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This study examines the role of proactive personality in predicting job satisfaction and the potential mediating effects of psychological capital and work engagement. A plethora of studies have demonstrated the positive relationship between proactive personality and job satisfaction,

however what is less clear are the intervening mechanisms which underlie this association. In this study it is suggested that psychological capital and work engagement mediate the relationship between proactive personality and job satisfaction. Although very little is known, it seems that proactive personality is one of the major antecedents of psychological capital (Avey, 2014), and also, positively related to some of the components of psychological capital such as resilience (Sarkar & Fletcher, 2014) and self-efficacy (Parker & Collins, 2010). Moreover, it seems that psychological capital facilitates work engagement (Sweetman & Luthans, 2010), as it has been addressed as a personal resource (Grover, Teo, Pick, Roche, & Newton, 2018) within the Job Demands-Resources Model (JD-R; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Lastly, highly work engaged employees are more likely to experience positive emotions at work (Sonnentag, Mojza, Binnewies, & Scholl, 2008), such as job satisfaction (Weiss, Nicholas, & Dauss, 1999).

Driven by the literature on proactive personality and the job demands-resources model, it is hypothesized that employees with a proactive personality are more likely to demonstrate high levels of psychological capital (Hypothesis 1), which will in turn facilitate their work engagement (Hypothesis 2) and increase their job satisfaction (Hypothesis 3). In addition, it is proposed that proactive personality will be positively related to job satisfaction (Hypothesis 4), through first psychological capital and then work engagement (sequential mediation).

Data was collected from a sample of 229 participants working in the medical and paramedical domain, who were asked to individually complete a questionnaire which included the shortened version of the proactive personality scale, the psychological capital questionnaire, the 9-item Utrecht work engagement scale and the short form Minnesota satisfaction questionnaire. Results of SEM analyses offered support for the proposed model. Employees' proactive personality was found to be a significant predictor of psychological capital, which in turn was predictive of work engagement. Moreover, engaged employees were more likely to experience job satisfaction. Taken together, the results indicate that proactive personality is positively associated to employees' job satisfaction, and this relationship can be explained by the sequential mediating effects of psychological capital and work engagement.

The results of this study add to the proactive personality literature by revealing potential intervening mechanisms which explain the link between the particular trait and job satisfaction. From a practical point of view, organizations could benefit from the particular findings, as they might consider selecting personnel on the basis of proactive personality in order to promote positive organizational outcomes. Cross-sectional data which does not usually allow cause-effect conclusions to be drawn, along with the self-ratings of proactive personality and psychological capital are considered as two limitations of the study. Future research should examine other occupational fields as well and potentially include dyads or teams of co-workers who work together on a regular basis and could reliably rate each other.

### **O58 Reducing in-service teachers' burnout through social and emotional learning interventions: A meta-analysis**

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The 2030 Agenda for Sustainable Development sets education and mental health as sociopolitical and scientific key-concerns of the 21st century worldwide. Hence, schools and, specifically, teachers, are expected to be actively involved in students' holistic development attending equally their academic, social and emotional needs. Due to such difficult work demands, research has recognized teaching as a high-risk for occupational ill-health job, with teachers being quite predisposed to high levels of occupational stress and burnout. Owing to

burnout's negative personal, organizational and social impacts, teachers' burnout tends to be referred as a phenomenon of epidemic proportions, negatively affecting not only teachers' mental health and well-being but also their work performance, the classroom climate and student's well-being, engagement and learning. Therefore, teachers' burnout has caught the interest of researchers, practitioners and education policy leaders in establishing its determinants and developing practices and interventions aimed at preventing/reducing its prevalence.

Previous literature suggested that teaching-specific stressors are mainly socially and emotionally related. Additionally, teachers with better social and emotional competence (SEC) seem to have more adaptive coping strategies, higher levels of well-being, and more effective classroom-management approaches. Within this scope, teachers' SEC have been referred in the literature as one of the main protective factors to prevent teachers' burnout and the development of Social and Emotional Learning Interventions (SELI) for teachers, which directly aim to increase their SEC, have substantially increased in the last decade with promising results. Nevertheless, the emergence of this specific approach to teacher training requires systematic literature overviews regarding the impacts of SELI on teachers' burnout, in order to better understand its impact and contributions. Therefore, in the present study a meta-analysis on the impacts of worldwide SELI for in-service teachers on teachers' burnout levels was conducted.

After a systematic screening, a total of 12 empirical studies which met all the eligibility criteria were considered in the analysis. Within this final sample, all studies assessed the efficacy of school-based SELI on teachers' burnout levels, involving 760 in-service teachers from pre-kindergarten to grade 12. Results indicated a medium positive and significant effect of SELI on the personal accomplishment dimension of burnout ( $g=.48$ ,  $SE=.16$ ,  $95\%CI [.11, .85]$ ,  $I^2=64.6\%$ ). The data analysis also showed that the analyzed SELI for teachers didn't have a significant direct impact either on teachers' overall burnout ( $g=-.18$ ,  $SE=.13$ ,  $95\%CI [-.46, .10]$ ), or on their emotional exhaustion ( $g=-.45$ ,  $SE=.20$ ,  $95\%CI [-.09, .01]$ ) and/or depersonalization ( $g=-.71$ ,  $SE=.32$ ,  $95\%CI [-1.47, .05]$ ).

Findings suggested that SELI for in-service teachers seem to promote mainly teachers' sense of professional self-efficacy, a dimension of burnout that is particularly related to job resources as opposed to the other two dimensions that are more related to job demands (i.e., emotional exhaustion and depersonalization). These findings are partially in line with previous literature and add to growing empirical evidence regarding the impact of SELI for teachers on in-service teachers' burnout levels. This knowledge, in turn, may inform future teacher training policies and intervention practices and thus promote teachers' mental health and well-being.

### **O59 Killing two birds with one stone: Coaching helps to prevent and cure burnout among physicians - a controlled coaching intervention to reduce burnout and foster personal resources**

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Introduction: Healthcare professionals experience a variety of stressful demands including time pressure, emotionally taxing patient-interactions, and an increasing bureaucratic burden. As a consequence, burnout (i.e., feeling exhausted, dissociated and less efficient) is increasingly common in healthcare professionals, leading to long-term absenteeism and posing a threat to the quality of care. Interventions are needed that not only cure the symptoms of burnout, but also prevent its onset through the development of personal resources. Although the benefits of professional coaching for well-being and functioning have been demonstrated in various

organizational settings, coaching is not common in medical practice, and if applied, often limited to problem elimination rather than prevention.

**Methods:** In a controlled field experiment we evaluated the effectiveness of a 10-month long coaching intervention consisting of six individual coaching sessions with a professional coach. The coaching program was voluntary and offered to pediatric specialists and residents from two academic hospitals in the Netherlands. Based on the Job Demands – Resources Model we assessed job demands (i.e., workload, job insecurity, work-life-interference), job resources (i.e., social support, autonomy), and personal resources (i.e., psychological capital, self-compassion, psychological flexibility), as well as burnout and work engagement. Measurements were taken before the intervention at baseline (T1) and after the intervention (T2). Compared to a control group ( $n = 57$ ) that did not receive any treatment, physicians who participated in the coaching intervention ( $n = 57$ ) were expected to show increases in personal resources, well-being and work engagement. We did not expect changes on job demands and job resources.

**Results:** We tested our hypotheses with separate 2x2 ANOVAs ((treatment vs. control group as between factor) and two measurement points as within factor)) for each of the outcomes. We followed up on these analyses with a series of paired comparisons. Our results showed support for our hypotheses. Specifically, physicians in the treatment group showed a reduction in burnout symptoms (i.e., exhaustion) and an increase in personal resources (i.e., psychological capital, self-compassion) at T2, with all  $p$ 's < .05, while no such changes occurred in the control group. No effects were found for work engagement.

**Discussion:** Our results imply that professional coaching is a promising route to reduce burnout symptoms in healthcare professionals. Moreover, it strengthens personal resources that play a crucial role in the prevention of burnout. All in all, coaching that fosters personal development and growth, may help healthcare professionals to deal with stressful job demands, ultimately leading to a happier, healthier and safer working environment.

## **O60 The mediating effect of embitterment on psychological contract breach and burnout**

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The foundation of employment relationship lies in the psychological contract, which involves employees' beliefs about reciprocal obligations between themselves and their employers. Breach of psychological contract occurs when employees perceive that his or her organisation has failed to fulfill one or more obligations. Such perceptions of breach can have detrimental consequences for both employees and the organisation. Research has already supported the relationship between psychological contract breach and burnout. However, the mechanism that underlies the relationship between psychological contract and burnout is still not known. The aim of the present study was to test the mediating effect of embitterment in the relationship between psychological contract and burnout. Embitterment is the emotion triggered by an event that is perceived and experienced as unjust, as a personal insult and psychologically as a violation of basic beliefs. A growing body of research, both in clinical and occupational settings, has provided evidence for the negative consequences embitterment can have on employees' mental health and job performance.

Employees' perceptions that his or her organisation has failed to fulfill one or more obligations could generate feelings of embitterment, resulting in burnout. It was thus hypothesized that employees' feelings of embitterment will mediate the relationship between psychological contract breach and burnout (exhaustion, cynicism, professional inefficiency). In total 206 employees completed an online survey (more data is being collected). Measures included the (PCBS;

Robinson & Morrison, 2000), post traumatic embitterment disorder scale (PTED scale; Linden et al., 2009) and the Maslach Burnout Inventory-General Survey (the MBI-General Survey; Schaufeli, Leiter, Maslach, & Jackson, 1996). Mediation analysis was completed by using the PROCESS macro in SPSS.

The mediation analysis showed that psychological contract indirectly influenced exhaustion and cynicism through its effect on embitterment. A bias-corrected bootstrap confidence interval for the indirect effect of embitterment ( $= 0.501$ ;  $= 0.500$ ), based on 5000 bootstrap samples was entirely above zero (95% CI[0.3426, 0.6703]; 95% CI[0.3256, 0.6841];), indicating a significant effect, respectively. There was no evidence that perceptions of psychological contract breach influenced exhaustion nor cynicism independent of its effect on embitterment because the direct pathway ( $= 0.1068$ ;  $= 0.2274$ ) was not statistically significant, respectively. These results represent a total mediation effect of perceptions of psychological contract breach through embitterment for its effect on exhaustion and cynicism. No mediation effect of perceptions of psychological contract breach through embitterment for its effect on professional efficacy was found.

Results from the mediational analysis suggest that perceptions of psychological contract breach can lead to feelings of exhaustion and cynicism by generating feelings of embitterment. Employees who perceive that their organisation has failed to deliver on promises can become emotionally exhausted and cynical as they feel embittered by their organisation or an individual within it. Given the detrimental consequences embitterment might have for both the organisation and the employee, these findings suggest that the toll of psychological contract breach on employees might be much bigger than what research has suggested so far.

### **O61 Team-level PsyCap and its interaction with perceived visionary leader behavior in the context of burnout**

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Work-related stress reactions cause substantial costs (Hassard, Teoh, Visockaite, Dewe, & Cox, 2017). Organizations are thus striving to understand and prevent sources of employees' work-related stress reactions such as burnout. To explain the emergence of burnout and to derive recommendations for its prevention, scholars build on the framework of the Job-Demand-Resource (JDR) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). According to this model, positive resources (personal as well as job resources) are crucial when it comes to increasing employee well-being the face of job demands. Psychological Capital (PsyCap) has been shown to be a meaningful set of personal resources (i.e., self-efficacy, hope, optimism, and resilience) in the context of organizational health outcomes in general as well as burnout in particular (e.g., Cheung, Tang, & Tang, 2011). It is argued that PsyCap is associated with beneficial goal-setting and planning behavior (e.g., Luthans, Youssef, & Avolio 2007) whereas people who suffer from burnout seem to be lacking appropriate strategies to successfully set and stick to their goals in the face of difficulties (Pines, 1993). Besides this individual level, research increasingly emphasizes the need to take multiple levels into account when it comes to determinants in the JDR framework (e.g., Bakker & Demerouti, 2017). Accordingly, personal resources, and more specifically PsyCap, may not only operate on the individual but also on the team level. Team PsyCap is defined as "the team's shared positive appraisal of their circumstances and probability for success under those circumstances based on their combined motivated effort and perseverance" (Peterson & Zhang, 2011, p.134). In some initial studies, team PsyCap has already been shown to affect work-related outcomes (e.g., Dawkins, Martin, Scott, Sanderson, & Schüz, 2018). However, until now, research has left its beneficial potential for health-related outcomes unexplored. Furthermore, researchers point out that there are

boundary conditions (such as contextual job resources) under which PsyCap might work even better. We assume leadership (i.e., visionary leader behavior) to be a contextual job resource thereby acting as a boundary condition in the functioning of team PsyCap. Through communicating a vision, leaders paint an attractive picture of the future for the whole team. They thereby set goals that may support the team's planning of further steps and therefore channel the team's interaction and resources. This should support the beneficial role of team PsyCap in the context of burnout.

Overall  $N = 168$  employees of various occupational fields nested in  $N = 53$  teams took part in our online field study. As expected, hierarchical linear modeling (HLM) showed that team-level PsyCap perception negatively predicted team members' individual-level exhaustion. Furthermore, employees' individual-level perception of their leader's vision moderated the relationship between team-level PsyCap and individual exhaustion in such a way that the relationship was stronger when perceived leader's vision was high. Our results indicate that integrating resources on different levels may help to further understand the complexity of organizational functioning. The present results thereby support the development of a more comprehensive theoretical models as well as prevention programs.

### **O62 Mediating variables between pace of work and burnout in high-skilled migrant workers**

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The concept of burnout is used to refer to a type of chronic work stress. Although it is not exclusive to a single profession, it appears more frequently among professionals linked to direct contact with people and the relationship of help. (Hyman et al., 2011). Within the group of workers, migrants may be one of the most vulnerable populations to develop burnout since they can present a reactive picture of stress that is characterized by high-intensity stressors such as greater job insecurity, lack of social support in the recipient country loneliness, forced separation of loved ones, feelings of failure, lack of opportunities, or discrimination problems, among others (Morales, Espeso and Achotegui 2015; Teoh and Hassard, 2017; Urzúa, Heredia and Caqueo, 2016). However, the relationship between immigrant workers and burnout continues to have several limitations, since most studies have been conducted on immigrants in existing low-skilled jobs in addition to the danger of perpetuating the negative stereotype of the immigrant.

This project aims to expand the existing literature by exploring the relationship between organizational, labor and psychosocial factors, and its impact on the depletion of immigrant workers, with its objective analysis being the emerging psychosocial risks analyzed by workers in qualified positions and its incidence in burnout. For this, a study was carried out with a sample of 278 skilled workers (50.4% foreigners and 49.6% nationals) in Ecuador, mainly in the education and health sectors, to whom applied the Copenhagen Psychosocial Questionnaire, Psychological Capital Questionnaire and the Maslach Burnout Inventory, as well as other sociodemographic questions. The data collected showed significant differences in pace of work in both subsamples  $t(276) = 3.75$   $p < 0.05$ . In addition, using the macro PROCESS software for SPSS, we observed the mediating relation of some cognitive variables such as the meaning of work and recognition in the indirect effect between pace work and burnout. This effect was much greater in the case of the subsample of migrant workers.



### **O63 Longitudinal effects of workaholism on burnout: Mediating role of mental health**

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Conceptualization of the term “workaholism” has evolved over the last 50 years from merely working long hours to having an uncontrollable compulsion to work (e.g., Spence & Robbins, 1992; Matuska, 2010). The current study conceptualizes workaholism as an addiction to work (Andreassen et al., 2012). Workaholism is positively associated with both physical and mental health impairments and various other health symptoms including anxiety, depression, and burnout, which are examined in the current study (Matuska, 2010; Sussman, 2010; Van den Broeck et al., 2011). The constant feelings of compulsion to work contribute to the feelings of exhaustion and disengagement associated with burnout (Maslach & Leiter, 2016). Additionally, mental health indicators are often overlooked variables of interest in the workaholism literature, but they often play an integral part in other addictions (e.g., Regier et al., 1990). Anxiety and depression were chosen in the context of this study because of their comorbidity with addictions, both substance and behavioral (e.g., DuPont, 1995). Prior research established a relation between workaholism and anxiety (e.g., Andreassen et al., 2016; Clarke, 2016; Patel et al., 2016) and workaholism and depression (e.g. Matsudaira et al., 2013), though most of the relationships are assessed with cross-sectional data. Both state and trait anxiety have been linked to behavioral addictions in that they enhance the severity of the addictive behavior along with burnout (Richardsen et al., 1992; Ste-Marie et al., 2006; Turnipseed, 1998). Additionally, workaholism has been found to be a risk factor for depressive mood (Matsudaira et al., 2013), and the current study provides directionality to enhance the claim that past depression predisposes individuals to burnout (Nyklicek & Pop, 2005). Thus, anxiety and depression were identified as a potential explanatory mechanisms for why workaholism leads to burnout.

The current study aims to examine the longitudinal effect of workaholism on burnout over time, mediated by both anxiety and depression. We recruited a sample of 1,000 full-time working adults recruited via Amazon’s Mechanical Turk, with 397 individuals completing three waves of longitudinal surveys. Participants were mostly white (72%), male (51%), and had college degrees (47%) with a mean age of 37 and average job tenure of 7 years. Longitudinal structural equation modeling was used to test the just-identified hypothesized structural model. Bootstrapping was used to test the indirect effects of workaholism at Time 1 on burnout at Time 3, through anxiety and depression at Time 2. The results support the hypothesized model where workaholism predicted burnout over time ( $\beta=.11, p<.05$ ), with significant indirect effects through anxiety and depression ( $\beta=2.4, p<.05$ ) over time, corroborated by Sobel tests ( $z'=5.5, p<.05, z'=2.5, p<.05$ , respectively). These findings corroborate previous research highlighting the importance of including mental health in models of workaholism along with the contribution mental health makes to overall physical health. The findings bring directionality to previous research done with cross-sectional data to further our understanding of how these constructs relate to one another across time.

### **O64 "It was such a good idea" – A case of implementing a participatory innovation framework in health care**

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Introduction: Employee-driven changes are thought to result in sustainable work that balances organisational performance and employee wellbeing. Explicating in-house knowledge about problems and potential solutions aligns the direction of change with employees’ knowledge of what is needed and professional insight. Consequently, employees support the identified changes and welcome their implementation, increasing wellbeing at work and improving the work practices.

Method: A large Danish university hospital developed an innovation program, entitled a “Wealth of Ideas” (Wol), to engage employees across all functions and seniority in the incubation and implementation of their ideas to introduce new or improve existing procedures and practices in the hospital. Retrospectively, we interviewed the head of the innovation program and four of the 10 participants about their experiences with program roll-out and the subsequent implementation of the selected work-related changes. Two of the respondents had received funding for their ideas. The Wol program invited employees to submit ideas for innovation projects, and through a three-stage selection process, 60 project proposals were analysed and 10 projects were awarded funding allowing the employees to work on the innovations full-time for six months. The participants were further trained in innovation methods and implementation to support the development of their innovations. Following the development phase, the employees were to return to their original wards and implement their ideas for change. Building on acknowledged principles for sustainable changes, the designers of the innovation project hypothesised that this particular participatory program and generation of new ideas for work practice would motivate employees to bring forward ideas that would improve daily patient care and gain immediate support from their wards.

Analysis and results: Upon returning to their wards, the program participants discovered that the wards were not aligned with the changes they were about to implement. From the wards’ perspective, the changes represented the participants’ personal interests, not the wards’ interests. From a ward management perspective, this particular participatory and bottom-up innovation process created tension within the wards. The hospital’s top management supported the participants and the changes; however, the ward managers were not included in the either the changes to the work or the implementation process. Following the development phase, top management empowered the participants to implement their innovations. Ward management, however, focuses on maintaining daily operations using all available resources. Thus, a conflict arose as the innovation project not only used the participants’ resources but also required resources and changes in the wards to support implementation. All in all, the Wol program and the identified work-related changes spurred creativity and good ideas, but the implementation was not aligned with the organisational and performance goals, creating frustration and conflict in the wards.

### **O65 Intraindividual dynamics of leaders during change – A weekly diary study to better understand how leaders react and act during times of transition**

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Although a growing body of research links leadership behavior to follower well-being in change situations, comparatively little is known about leaders’ experience and behavior. Until now, leadership research was mainly focused on follower outcomes. Past research on leaders’ traits and behaviors concentrates on resources that leaders need to provide to strengthen the well-being of their followers, thereby treating leaders as promoters of organizational and individual health and safety (Halbesleben et al., 2013; Kelloway & Barling, 2010). The inner dynamics of leaders are being overlooked, especially in demanding leadership situations, like during organizational change. The link between leadership and change processes is widely acknowledged, leaders’ own experiences however have not been examined. Their role is vital and complex, which is why an understanding of their inner and intraindividual dynamics and their very specific demands and challenges during change might be essential to promoting change effectively. Considering the fact that around 77 % of all change processes in Germany are still considered unsuccessful (Schmidt & Sackmann, 2018), there certainly still is a lot to learn. In order to fill the described gap this study aims to examine the role of leaders in change processes.

This weekly diary study of 57 leaders examines the personal and organizational resources and demands of leaders in change processes, their effect on the leaders' well-being. This paper is the first to examine the role of Change Self-Efficacy and Change-Commitment of leaders and their specific effects on strain and engagement during change. The Job Demands-Resources Model (Bakker & Demerouti, 2007) poses a very promising setting to explore this topic, as it allows to predict complex dynamics. Specifically, we are looking at this issue by examining how aspects of leaders' psychological well-being in terms of irritation and work engagement are affected by organizational change resources, specifically change fairness, as well as emotional dissonance as a change demand. In addition, we investigate whether individual differences in leaders' personal resources in the form of change commitment act as a mediator and whether this indirect effect is moderated by change self-efficacy for leaders during change. This study aims to contribute to empirical as well as theoretical understanding of leaders in change processes: First, by looking at leader outcomes, we add a new perspective to the leadership and change literature, which has thus far mainly focused either on outcomes on the follower level (Skakon, Nielsen, Borg, & Guzman, 2010) or on leaders' role as change agents (Oreg & Berson, 2019). This approach is supported by the specific design of the study, which is a weekly diary that allows to attain insight on intraindividual dynamics of leaders during change situations. Main theoretical implications lie in the finding that—in line with Job Demands–Resources Theory – especially for engagement intraindividual factors are of importance. For practitioners, our results offer valuable insights regarding the design of organizational change interventions as well as leadership development measures.

## **O66 An organizational design perspective on implementing organizational level intervention research in practice**

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Introduction: Stress is still one of the biggest challenges when it comes to people's mental health and workplaces opportunities to create growth and well-being and thus puts new demands on managers who play a key role in preventing and managing stress.

For several years, the Danish Association of Managers and Executives (DAME) together with the Danish Pension and Insurance Company, (PFA), have experienced an increase in the request for concrete knowledge and tools from their members as the cost of stress in the workplaces increases. Besides applying the vast in-house consultants' experience to serve their members, the two companies also wish to provide them with current and relevant knowledge on how to prevent stress. In the pursuit for new knowledge, DAME and PFA formed their first advisory table (AT) in 2015 focusing on stress and well-being, where the IGLO model formed the foundation for the idea generation. After four years of work targeting the Individual, Group and leadership levels, the AT now focuses on organizational level interventions and how to implement these in practice.

Method: In the autumn 2019, six executives and managers, eight stress prevention experts, five researchers, two representatives from the social partners and four representatives from DAME and PFA participated in two workshops. The aim was to 1) share their knowledge and experiences on dilemmas, challenges and how to prevent stress in practice from an organizational point of view, 2) combine their knowledge, and propose ways to move forward including concrete ideas for stress preventive initiatives at organizational level. The new knowledge is to support managers and workplaces in their effort to prevent and management stress at work. The Star-Model framework by Jay Galbraith (2011) for organizational design formed the basis for the workshops. The framework consists of a series of design policies that management can use to control and influence behavior. The policies fall into five categories:

strategy, structure, processes, rewards and people practice. The idea of applying a systems model is to use a tool familiar to management and facilitate a reflection among the AT members to design organisations with a combined focus on organizational performance and employee well-being, focusing on all five categories and how they connect and influence each other. Each group got the task to identify organizational causes of work related stress by applying the Star-model categories. The groups then clustered the causes from each category and voted for what they believed were the main organizational level causes of stress. Finally, DAME and PFA explored the results to identify dilemmas, experiences and concrete methods.

Results: The AT identified several organizational causes and a number of dilemmas when trying to design for both purposes and a range of methods on how to approach this challenge. Examples of themes are top-managers perspective on well-being, the span of control and organizational set up, the dilemma of agile and planned

## **O67 Outdoor office work– benefits and challenges of integrating urban outdoor spaces into everyday working life**

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Most of us spend the vast majority of our working time indoors. Even though the boundaries of the physical spaces of work are changing in an increasingly flexibilized working life, the threshold between indoors and outdoors still seems high and mainly unquestioned. However, the reasons for developing ways of increasing humans' regular exposure to natural elements are many and there is a large body of knowledge linking contact with nature to positive effects upon wellbeing and health, including cognitive functioning and recovering from stress, etcetera. The aim of this PhD-project is to explore ways of integrating urban outdoor spaces into everyday working life in order to identify benefits of these spaces for a more sustainable working life. The main knowledge-objective is developing a deeper understanding of prevailing forms and norms embracing work and its whereabouts. The study is based upon an interactive research project 'StickUt Malmö' – a collaboration between Malmö University and The City of Malmö financed by the European Social Fund. Fifty civil servants from five departments participated in a common learning process over an eighteen-month period including reflective group-discussions, co-interviews and workshops, the whole process circling around their own active experimentation of bringing various work-activities outdoors, also documented via a mobile-app. The guiding topics of the exploration were: 1) ways/forms in which work may be conducted outdoors, 2) under which circumstances (obstacles and enablers in a wide sense) and 3) how working outdoors is experienced by the participants. The analytical process was continuously developed in dialogue with the participants. Drawing upon this and a thematic analysis of large parts of the transcribed material some initial results have been articulated in a "guide to outdoor work" in order to conclude the interactive part of the research project.

These themes can be summarized as follows: 1) A number of work-activities may be brought outdoors for various purposes, individually and together with others. Some are closer at hand and more frequent, such as 'walk n' talk' and reading, while others are more dependent on the weather and other aspects in the environment, especially those performed sitting down for a substantial time, alone or for a meeting. 2) Dependent on type of work-activity, infrastructure of different sorts may be required. It is evident that proximity to green outdoor spaces is important in order for outdoor work to happen at all, and, moreover, some physical/ergonomic and/or technical support may be needed for it to function well, such as seating-arrangements, sun-/rain-/wind-shield and Wifi. Neither these practicalities nor the weather seems to be the biggest obstacle for bringing work outdoors. Rather, this is formed by norms surrounding work and place. 3) Bringing work-activities outdoors was experienced very positively by the participants. Key

aspects mentioned included that it makes the participants feel energized, calm, focused, inspired, happy, empowered and free. However, another very prominent feeling was that of guilt and illegitimacy. Doing the very same things outdoors, as they would have indoors, made them feel as if they were skipping work.

## **O68 Technology use in the workplace: Data from the U.S. on trends and associations with physical health and well-being**

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**Introduction:** As organizations in many countries continue to embrace new technologies as a means of reducing operational costs and improving productivity, there has been a growing interest in how technology use might also impact the occupational health of workers. This study presents findings from a national survey in the United States that included an item on technology use in the workplace and several occupational health items assessing physical health and well-being.

**Methods:** Data came from the General Social Survey (GSS) which is conducted as a face-to-face interview in the U.S. and provides a representative sample of the adult population. In both the 2014 and 2018 waves of the GSS, a quality of work life (QWL) module was administered to samples of 1,195 and 1,366 workers, respectively. In addition to items assessing job characteristics (e.g., work demands), physical health (e.g., workplace injury), and well-being (e.g., job stress), the following supplemental question was asked regarding technology use at work: During a typical week, about what percentage of your total time at work would you normally spend using different types of electronic technologies (such as computers, tablets, smart phones, cash registers, scanners, GPS devices, robotic devices, and so on) \_\_\_\_% (choose number between 0 and 100). Both univariate and multivariate analyses were conducted to examine the change in technology use between 2014 and 2018, and the relationship between technology use and several measures of physical health (e.g., workplace injury, general health) and well-being (e.g. burnout, work-family conflict).

**Results:** Between 2014 and 2018, the mean percent of time workers spent using technology increased from 52.3 to 55.0 ( $p < .05$ ). Industrial sectors with the greatest increase included: Construction (25%), Retail/Wholesale Trade (12%), and Healthcare (10%). Greater use of technology at work was associated with being female, attaining a higher education level, being less than 65 years old, and being either Asian or Caucasian. Multiple logistic regression, controlling for demographic variables, found that greater technology use was significantly associated with a reduced likelihood of injury at work and higher levels of general health. No significant association was found for back pain, upper arm pain or poor physical health days. In terms of well-being, greater technology use was significantly associated with higher levels of job stress and burnout, greater work-family conflict, and higher perceived levels of job demands.

**Discussion:** Between 2014 and 2018, technology use in the U.S. workplace increased slightly, with some sectors showing a greater percentage increase than others. Findings regarding the relationship between technology use and measures of physical health and well-being suggest a paradox: greater technology use was associated with improvement in some measures of physical health, but also a worsening in several measures of well-being. These findings are discussed in terms of workplace factors that may contribute to this paradox, and the implications of these findings for a future in which technology is expected to assume an even greater role in the workplace.

## **O69 How are we doing? Attachment styles, leadership training, and wellbeing**

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**Introduction:** There is compelling evidence that social relationships at work have a significant impact on worker performance and functioning (e.g., Day & Leiter, 2014). How individuals process and react to these social interactions at work may be understood using the fundamental elements of attachment theory (i.e., their anxiety about abandonment and avoidance of intimacy; Bowlby, 1969; Harms, 2011; Leiter et al., 2015). That is, the extent to which people form secure or insecure attachments may influence how they use available social support during times of distress (Mikulincer & Florian, 1995), and thus influence not only their own wellbeing, but also the wellbeing of their followers (e.g., Harms, 2011;). These types of interactions may be especially important for people in leadership positions (Mayseless 2010). Therefore, we examined attachment styles (of both leaders and subordinates), leadership behaviours, attitudes towards leaders and jobs, and wellbeing of both leaders and direct reports using data from a larger, longitudinal leadership intervention study.

**Methods:** We collected data as part of an intervention study involving Canadian leaders and their direct reports. Leaders (N = 111) participated in a workshop and a phone-based training program, and they completed surveys assessing attachment styles (SWAM; Leiter et al., 2013), attitudes, and wellbeing (stress and strain) at three times over six months (pre- and post- leadership training). Direct reports (N=705) completed surveys including attachment styles (SWAM), burnout, strain, and perceptions of leaders (e.g., supportive supervision; trust; transformational leadership behaviours) at two times over three months (pre- and post- leadership training).

**Results:** Having an anxious style of attachment was associated with reporting increased stress and strain for both leaders and direct reports. However, avoidant attachment style was not associated with stress or strain. An anxious attachment was more strongly related with leaders' active engagement and autonomy support, as well as with direct reports' perceptions of having high leader support. Although the goal was to look at these questions using the lens of a training situation, the training may have changed how leaders saw themselves (and their direct reports), and ultimately changed the types of behaviours they used when interacting with direct reports.

**Discussion:** Leaders' attachment styles can not only influence their own wellbeing, but also can impact how they are perceived by their direct reports, as well as impact their direct reports' wellbeing. These findings highlight the importance of understanding attachment styles with regard to work relationships and wellbeing. Incorporating literature on social relationships within the framework of a leadership training program can help us extend the work, and also can raise many questions about the interplay of attachment styles and leadership, as well as the stability of attachment styles.

## **O70 Work-stress treatment and a return to work programme in Chile. Experiences and preliminary results.**

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Chile has a sustained growth in medical consultations due to mental health problems. According to the 2015 report on public policies, Chile doubles the United States in depressive symptoms, and suicide rates are over the OCDE average. Chile has a Professional Illnesses Act that recognizes occupational neurosis as a professional illness.

This preliminary result and experiences represents a serious effort for upgrading clinical standards in occupational mental health with a special focus on early return to work in primary healthcare settings through a clinical protocol adapted and previously developed and implemented by this author during 2012-2016 in a mutual insurance in Chile. This renewed clinical protocol will be tested during 2019-2020 and empowered by an ad-hoc software and IT solutions.

This Protocol lasted 9 months in its re-design. Led by an occupational psychologist, ITs, GPs, clinical psychologists and a psychiatrist were involved in its review. The aim of this tool is to offer a clinical guideline to carry out syndrome approach and first line clinical management of patients who attend polyclinics for work-related stress problems, subject to professional illness or work accidents due to psychological violence. During the consultation, the GP can use a “toolkit” of a variety of first line interventions well documented by evidence, and designed according to a prescription flow, which is based on the patient’s work and symptoms functionality.

Interventions includes GP consultations and counseling, group psychoeducation, group and individual CBT psychotherapy, psychiatrist and a return-to-work coordinator. Also, relaxation guidelines and printed material is offered to the patient as “homework” until the next consultation. Training environment involves the GPs and health team, and also clericals at the frontline who welcome the patient. Regular follow-ups and clinical meetings are part of this protocol. A complete dashboard will be available to clinicians and team managers to follow-up treatments and return to work outcomes.

## **071 Psychosocial Safety Climate and its role in an intervention project to reduce psychosocial risk factors in emergency departments**

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Introduction: In organizations with a favourable Psychosocial Safety Climate (PSC) all levels of the organization recognize the importance of employees’ psychosocial safety and are committed and take initiatives to reduce psychosocial risk factors at work (Dollard and Bakker, 2010). The objective of the current study is to assess the role of PSC in an intervention project to improve well-being and health of emergency department (ED) employees. Specifically we are interested in whether a more favourable PSC is a prerequisite for higher intervention activity, a better fit of interventions to the psychosocial risks experienced by employees and a more favourable process by which interventions are implemented (Nielsen and Randall, 2012),

Methods: ED’s of 16 hospitals (N=1,050) in the Netherlands participated in the current study. PSC as well as job demands, job resources and employees’ health and well-being were measured at the employee level in 2017 (T1) and 2018 (T2) by means of an online questionnaire. Based on the T1 data each ED received a report including their psychosocial risk factors and an advice on how to reduce these. Interventions conducted by the hospitals between T1 and T2 were noted and collected by the researcher. The process by which these interventions were implemented was assessed in the questionnaire at T2. An indication of intervention activity was calculated by the number of interventions conducted and intervention fit by calculating the match between the type of interventions implemented and the psychosocial risk factors indicated at T1. PSC and each of the process variables were aggregated at the department level. To determine the relationships between PSC, intervention activity, intervention fit, and the process by which interventions were implemented Spearman’s rank correlations were calculated.

Results: PSC had an ICC(1) of 0.08 and an ICC(2) of 0.81. For the process variables the ICC(1) varied between 0.03 and 0.12 and the ICC(2) between 0.52 and 0.85. Overall these scores justified the aggregation of these variables at the department level. There was no significant

relationship between PSC (or any of its sub dimensions) at T1 and intervention activity ( $r_s = .119$ ,  $p = .661$ ) or any of the process variables (communication  $r_s = .246$ ,  $p = .376$ , participation  $r_s = .361$ ,  $p = .187$ , satisfaction  $r_s = -0.129$ ,  $p = .648$ , and reach  $r_s = -.182$ ,  $p = .516$ ). However, we found a tendency for more favourable PSC at T1 to be related to a higher intervention fit ( $r_s = .473$ ,  $p = .064$ ).

Discussion: In the current study we found limited evidence for PSC as a determinant of intervention fit, but PSC was unrelated to intervention activity and the quality of the implementation process. As far as we know this is the first study to assess PSC as a predictor for intervention activity and fit, and the implementation process. Further research of these variables measured on multiple time points is necessary to fully understand the role of PSC in (the process of) implementing interventions to reduce psychosocial risk factors within organizations.

## **O72 Predictors of treatment outcome in a multidisciplinary day clinic for police officers with PTSD**

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Police officers generally face multiple potentially traumatic events and consequently have a higher conditional probability of developing post-traumatic stress disorder (PTSD). In the Netherlands, a multidisciplinary day clinic has been developed to help police officers with PTSD who have not benefitted from first-line trauma treatments. The current study examined preliminary effectiveness and predictors of treatment outcome for a police sample ( $N = 102$ ) of a PTSD day clinic program, based on routine outcome monitoring data. PTSD symptom severity was measured by the Harvard Trauma Questionnaire and the PTSD Checklist for DSM-5. The mean PTSD symptom decrease from pre-treatment to post-treatment was 1.3 SD, with most of the patients showing significant improvement as indicated by the reliable change index. Hierarchical multiple linear regression analysis was used to assess whether demographic or clinical baseline variables predicted PTSD symptom severity at the end of treatment. The first linear regression model included baseline PTSD symptom severity as a covariate, and the full second model included baseline symptoms of depression and hostility, gender, and age as predictor variables. Only the first model significantly predicted the self-reported symptoms of PTSD at post-treatment, with higher baseline PTSD symptom severity predicting higher severity at post-treatment, but baseline PTSD accounted for only 4.1% of the variation. The results demonstrate the difficulty of identifying reliable and meaningful baseline predictors of treatment outcome. However, over half of police officers with PTSD who did not respond to previous trauma-focused treatment drew benefit from a multidisciplinary day clinic, which shows the clinical merits of this intensified form of treatment.

## **O73 The costs imputable to work stress in European countries: How much does it cost from a societal perspective? A study protocol**

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Introduction: Work-related psychosocial exposures are a major occupational hazard in European countries. They are highly prevalent in these countries, as shown in several studies based on the data from the European Working Conditions Surveys. The epidemiologic literature shows that psychosocial work exposures are associated with various health outcomes, especially



mental disorders and cardiovascular diseases (CVD). Evaluations of the economic burden of psychosocial work exposures are however very seldom in the literature. This study aims to estimate the annual costs of mental disorders and CVD attributable to work-related psychosocial exposures in the 27 EU countries.

**Methods:** This study will follow the top-down cost-of-illness (COI) approach, which estimates the economic burden of health conditions in a population from a societal perspective, starting from the total costs of diseases. We will estimate the fractions of these costs that are attributable to work-related psychosocial exposures (attributable fractions, AFs). AF estimates require data on the prevalence of exposure in the whole population (proportion of the population exposed to the risk factor), and on the relative risk (ratio between the risk of illness or death for those who were exposed to the risk factor and the risk of illness or death for those who were not). Relative risk estimates will come from a systematic literature review. Prevalence of exposure estimates will derive from an analysis of the 2015 European Working Conditions Survey data. Work-related psychosocial exposures will include the factors from the job strain model, effort-reward imbalance model, and other models/concepts depending on the availability of data for both exposure prevalence and relative risk. Our evaluation of costs will include:

- direct healthcare costs as reimbursed by public healthcare systems: outpatient visit fees to physicians, outpatient visits to health professionals other than physicians, inpatient expenses due to hospitalisations, emergency room visits and amounts reimbursed to patients for medication,
- direct healthcare costs as out-of-pocket payments paid by patients, corresponding to co-insurance fees or to the total amount of medical costs, depending on the extent of the public healthcare system in each country,
- indirect costs due to sickness absences at work, the value of production losses due to disability leave, early retirement and premature death, and the cost of presenteeism when available.

A primary analysis will be conducted based on a list of costs that are available in national statistical reports and the grey literature for all 27 EU countries, to ensure comparability between countries. A secondary analysis will be focused on a smaller group of countries for which the list of available costs is broader to ensure a more complete analysis of attributable costs for these countries.

**Discussion:** This study will provide original and relevant insights on a macro-level for policy-makers and stakeholders when defining public health priorities and preventive strategies in European countries regarding work stress prevention. Study limitations include that neither the costs of all comorbidities related to mental disorders and CVD, nor the costs of risk behaviours imputable to psychosocial work exposures (such as smoking, alcohol consumption or addictions), for lack of available data.

#### **074 The Opioid Crisis in the U.S.: The NIOSH Total Worker Health® Approach**

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Opioids (including prescription opioids, heroin, and fentanyl) killed 47,600 people in 2017, more than any year on record. Thirty-seven percent of all opioid overdose deaths involve a prescription opioid. In 2017, 95% of the 70,076 US drug overdose deaths occurred among the working age population, persons aged 15-64 years. It is unknown how many were employed at the time of their death. According to the National Survey of Drug Use and Health, an estimated 4.3% of respondents age 18 years or older reported illicit opioid use in the past year. An estimated 66.7% of these self-reported illicit opioid users were employed full- or part-time. The Bureau of Labor

Statistics reported that overdose deaths at work from non-medical use of drugs or alcohol increased by at least 25% annually between 2013 and 2017. The 272 workplace overdose deaths reported in 2017 accounted for 5.3% of occupational injury deaths that year, as compared to 1.8% in 2013. It is unknown how many of these deaths were caused by opioids specifically. Opioid use and misuse are not issues that can be confined to either the home environment or the workplace. In some workers, opioid use disorder is preceded by injuries that happened at work leading to significant consequences that can affect both life at work and away from work. Other workers may encounter risks from illicit opioids as part of their duties as first responders or law enforcement officers. NIOSH uses *Total Worker Health* principles to provide workers and employers recommendations for addressing the opioid crisis. NIOSH has proposed a framework encompassing the lifecycle of opioid use from workplace antecedents to decontamination of workplaces. There are four key components of this framework: 1) Identify workplace conditions, 2) Determine risk factors, 3) Protect workers and responders, and 4) Develop methods for detection and decontamination.

NIOSH is engaged in several ongoing activities to address the opioid crisis. These broad-ranging efforts include examining work-related factors and exposures as risk factors for opioid use, coordinating with intramural and extramural partners, creating topic pages and education materials, conducting health hazard evaluations, and developing recommendations for exposure prevention for first responders, healthcare workers, and other frontline groups. NIOSH is also advancing research to identify research gaps, examine risk factors (e.g., work-related exposures, overutilization of opioids in prescribing), and opioid use conditions that affect workers (e.g. contribution to workplace injuries, workforce education, medication-assisted treatment, and returning workers affected by opioids back to employment).

NIOSH has also developed recommendations and resources about the synthetic opioid fentanyl and has conducted Health Hazard Evaluations of emergency responders and other groups of workers. NIOSH has developed fact sheets about naloxone, which is a drug that can reverse the effects of an opioid overdose, and has suggested recommendations for employers when establishing and implementing naloxone administration programs in their workplace. NIOSH has also launched new webpages on opioids that feature information on the NIOSH framework, data collection, field investigations, research, and resources related to the opioid overdose epidemic for workers and employers.

### **075 From risk factors to risk constellations: adopting a person centered approach to psychosocial risk analysis**

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A stress risk assessment (RA) involves a stepwise approach that commonly includes five steps (Cox & Griffiths, 1995): a) Identify the hazards and those at risk; b) Evaluate and prioritize the risks, c) Decide on preventive action; d) Take action and 5) Monitor and review. Although assessing psychosocial hazards and their potential risk has rather a short tradition, Metzler and colleagues (2019) conclude after comparing four different statistical approaches that Clark and Cooper's (2000) formula to assess risks, was the most promising method to comply with the EU Directive 89/391/EEC. Clearly, at the international, national, regional and branch level, this approach to prioritize risk factors may have its merits. Yet, at the level of the organization or company, I argue that its validity is rather limited and may actually hamper setting priorities right like in the case of highly skewed stressors (f.i. bullying). Moreover, all screened methods recommended to comply with the European Directive, are variable centered approaches to obtain a stress RA. Following that stress is a process that develops over time and that employees are at different stages of such a process in a cross-section, and that stress may be explained from

different perspectives or theories meaning that there are different roads to stress and ill-health, there may be quite some unobserved heterogeneity. Hence, in contrast to the assumption of homogeneity that traditional regression based (variable centered) approaches methods for RA rely upon, I propose a person centered approach to the first steps of RA.

This study aimed to present a second order latent class for the identification of both risk factors and – groups. To show that a second order latent class procedure solves statistical validity issues that both Cooper & Clark (2000) and Biron and colleagues (2006) their methods have. Finally, to illustrate the highly informative value the analysis has for the adoption of interventions at the company level. Of the nine organizations where I used this approach, I sampled two organizations to illustrate the usefulness of this approach: a banking sample (n=1433) and a shoe retail company (n= 126). All these organizations used the SIMPH 5A (Notelaers, 2019) to comply with the Belgian regulatory framework to adopt the European Directive. To explore unobserved heterogeneity Latent Gold 5.1 (Magidson & Vermunt, 2018) was used to estimate the second order latent class approach.

The identification of the appropriate number of latent class clusters was straightforward in all of the cases. Of the 8 clusters in the bank sample there were 3 risk clusters: 5,5% were in acute problem cluster that matches the demand resources model, 9% had challenges with respect to engagement and resided in the job redesign cluster, 11% had high recovery need and resided in job demand control cluster. Of the 3 cluster in the shoe retailer sample, a cluster comprising of 12% of the respondents was characterized by lack of engagement being explained by a mismatch between effort and rewards. In conclusion, this approach is a suitable alternative for psychosocial risk analysis.

## **076 Job demands and resources: Experiences of precariously employed casual academics at an Australian regional university**

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**Introduction:** The tertiary education sector in Australia is currently experiencing a state of flux due, in part, to reduced government funding with a flow-on effect on university budgets. There are a large number of casual staff employed on hourly work contracts, called sessional academics (SA) in Australia, who are responsible for a large proportion of undergraduate teaching. It is timely to understand the factors that directly influence such workers' work engagement. The aim of this exploratory study was to understand the perspective of SA about their workplace experiences because management typically considers them to be flexible, choice-rich workers.

**Methods:** The cross-sectional sample of 15 (86.66% female) was a relatively homogeneous group of SA drawn from a range of disciplines at a regional Australian university whose casual employment ranged from 2 to 19 years. Most participants were enrolled in post-graduate study and others held doctoral qualifications. Individuals were invited to share their lived experience at this comparatively young, rapidly expanding multi-campus university. Face-to-face semi-structured, recorded interviews ranging from 45-105 minutes were conducted and thematic analysis was used to identify salient themes.

**Results:** Preliminary results indicate that SA experience high demands and limited resources at the university level. The most commonly identified resources reflected social support from SA colleagues, especially within teaching teams, and a sense of solidarity in shared circumstances. To a lesser degree, social support came from immediate supervisors (i.e., course coordinators/moderators), and external sources such as friends and partners. Most participants

felt that SA are a vital yet largely unacknowledged workforce who received little support from the broader university. Demands were taxing marking loads and deadlines, and the perceived lack of sufficient (remunerated) time to provide sufficient constructive student feedback. Consequently, most participants worked many more hours than their contracts covered, resulting in a substantial level of free labour. The stated reasons for this were twofold—to benefit students, and hopes that willingness to “get the job done” would lead to future contracts and potentially secure ongoing employment. On the whole, our participants communicated a lack of autonomy in teaching roles, and very limited support for research goals. Unsurprisingly, job insecurity and irregular income were concerning, particularly when sessional work was the sole source of income.

Discussion: Consistent with the Job Demands-Resources framework, the current study found participants expressing higher levels of resources (e.g., collegiate social support) articulated fewer workplace demands and communicated greater satisfaction with their work roles. Cognitive re-framing was common, with most participants reiterating the rewards associated with working directly with students, sharing their own love of lifelong learning, and satisfaction from awakening that love in students. Uncertain work identity and career progression, limited communication, and a compromised sense of belonging increased demands. Some participants felt exploited whilst acknowledging that tenured faculty likewise experience pressure from increased academic workloads due to reduced operating budgets. Although the small sample limits generalisability, our study adds to the literature by highlighting the lived experiences of representatives of a sizeable, but largely invisible workforce at a regional university.

### **O77 The settlement and insecurity of Spanish workers in the United Kingdom in the face of Brexit**

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The United Kingdom has been one of the main destinations for migrants, especially Europeans, due to the favourable economic and working conditions as well as to the ease of mobility and settlement for European workers as a result of their membership of the European Union. However, the result of the referendum held in 2016 and the subsequent UK’s exit process from the European Union (known as Brexit), has had a great social and labour impact, generating processes of insecurity on European workers residing in this country as well as affecting their integration and wellbeing. For this reason, we carried out a qualitative study with 38 in-depth interviews with Spanish workers residing in the United Kingdom for a period of more than two years. The interviews were conducted some months before the effective date of exit from the European Union.

From the interviews conducted, an analysis was carried out using the program ©NVivo v.12. From the results obtained, we could observe how the uncertainty process of Brexit has triggered processes of labour and social insecurity in these workers. This uncertainty and insecurity have weakened the different “anchors” that acted in the processes of psychosocial integration of these people causing a rupture with the host society, what, in occasions, has accelerated their return. These anchors were grouped into three major areas (job security, familial/social attachment, and socioeconomic status). We also observed how this insecurity and social weakening of these European residents in the United Kingdom increased their desire to return to their home countries, although this desire was confronted by various processes of cognitive and affective dissonance such as rhetorical and illusionary strategies of recontextualization or temporal separation.

In short, this study has allowed us to verify how the processes of job insecurity and psychological discomfort can be affected not only by aspects of work or career development, among others but are also affected by other political and social events.

## **O78 Return to work after acquired brain injury: What can be done at the workplace to improve work retention? A systematic review of work-, and workplace factors**

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The objective of this study was to conduct a systematic review assessing workplace factors and processes related to work retention (or return to work) in employees with acquired brain injury (ABI). A database search was performed in nine relevant electronic databases. Inclusion criteria were quantitative peer-reviewed publications empirically investigating the link between work/workplace factors and work retention in employees following ABI. The methodological quality was determined by Effective Public Health Practice Project scoring, and evidence was synthesized narratively.

The 13 included studies investigated five factors: 1) work adaptation with onsite assistance, 2) work adaptation with external assistance, 3) social support at work, 4) occupational role, and 5) workplace characteristics. One year after ABI, we found strong evidence for non-manual workers' increased likelihood of work retention, and limited evidence for no relationship between workload and work retention. For most workplace factors, there was insufficient evidence. The majority of the studies examined descriptive workplace factors such as occupational roles and enterprise size, with few high-quality studies on workplace adaptation, including those with onsite and external assistance.

Relative to individual factors, there is little evidence on workplace factors' relationship to work retention among employees with ABI. Findings lay the groundwork for understanding how workplaces may retain employees with ABI in the workforce. Future studies should include well-defined modifiable workplace factors examined with rigorous designs. Also, the lack of studies investigating in-depth workplace factors in relation to work retention indicates areas in need of future qualitative research.

## **O79 Work motivation under pressure on scientific productivity: a case form Polish technical university.**

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Introduction: Drawing on the self-determination theory (SDT) (Ryan & Deci, 2000) and AMO model (Ability-Motivation-Opportunity; Appelbaum et al., 2000) this study aimed to investigate researchers' motivation and motivation management practices during the times focus on "publish or perish" pressure. The indicators that have a positive impact on increasing scientific productivity were determined in the context of technical disciplines. Scientific productivity was recognized as a significant activity in publishing and reviewing in international journals, applying for research grants, and collaborating with scientific teams. Scholars individual behavior defined as a configuration of ability, opportunity to contribute, and motivation was compared to the motivation strategy set by the universities' authorities. Practices supporting scholar's well-being and ensuring fair work conditions were also indicated.

Method: The study was conducted among the academic community at technical public university and based on a qualitative approach method. Two levels were investigated: institutional and individual. As the qualitative component, we choose the semi-structured interviews with academic authorities (Rector and Vice-Rector, an institutional level) and academic scholars (25 interviews with researchers, an individual level). Following the thematic analysis method, common patterns were identified. Collected data were coded and analyzed using NVivo software.

Results: The study lead us to examine two views (institutional and individual) to understand the complexity of the management of work motivation. By analyzing collected data, we enhanced our knowledge of motivation in the context of scientific productivity (e.g. what kind of incentives motivate researchers to increase academic productivity) and concerning positive organizational behavior. We defined which facilitations (e.g. publications support, scholarships) have an impact on employees' well-being and motivation. On the other hand, we collected data to identify the barriers that have a significant impact on decreasing scientific productivity among scholars and have impact on creating negative work conditions.

Discussion: Work motivation is one of the most important factors that guarantee a university's success in the area of international recognition and research excellence. The findings from this study can be important for understanding the motivation strategy from the authorities' as well as the researchers' point of view. This work illuminates two perspectives (individual and institutional) of a system based on the productivity that is a measurement of academic success. Results are presented in light of the Self-Determination theory that was integrated with human resources management in the Higher Education sector. Management practices regarding motivation may have a positive impact on employee well-being and success and may limit negative consequences for health. Developing strategies or procedures that will provide academic scholars with conditions ensuring their autonomy and well-being may be an important element in increasing scientific productivity at the university.

### **O80 Eudaimonic and Hedonic motives and the Future Time Perspective: explaining employees' task perceptions, autonomous motivation, and persistence in their daily actions**

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Introduction: This study examines employees' eudaimonic and hedonic motives and their Future Time Perspectives (FTP), which explain their perceptions of the utility value and psychological meaningfulness of daily tasks, their levels of autonomous motivation, and subsequent daily engagement. FTP theory captures the extent to which individuals anticipate the future in their present actions. Utility value refers to the value attributed to a present task in achieving both present and future goals. In comparison, psychological meaningfulness is the anticipated return of investment (ROI) from investing in a task. Kahn's (1990) conceptualisation was adopted due to its employee-centred focus on what influences employees' decisions when engaging or withdrawing from a task. Daily perceptions of the utility value and psychological meaningfulness of tasks, levels of autonomous motivation, and engagement are anticipated to change over the working week. Hence, examining employees' FTP is theorised to enhance our understanding of employee motivation and their daily levels of engagement. Employees with eudaimonic motives are theorised to engage in daily tasks with higher levels of utility value for the distant future. Additionally, that they will find tasks psychologically meaningful if the ROI in the present leads to distant future goals. Employees with hedonic motives are theorised to find daily tasks as having utility value and psychological meaningfulness if they produce valued short-term outcomes. Employees' FTP is hypothesised to influence the relationships between eudaimonic and hedonic motives and daily engagement. This assessment enables the understanding of employee' management of their perceptions of both external (utility value) and internal influences (psychological meaningfulness).

Method: A daily diary method was employed with employees from UK organisations (N=91) completing the diaries over five working days. The data were analysed using multilevel analysis. Results support the theorised relationships between the two motives and their associated FTP.

FTP also acted as a moderator of the relationship between employees' motives and their task perceptions (utility value and psychological meaningfulness), levels of autonomous motivation, and engagement.

Discussion: To date, research has treated eudaimonia and hedonia as different types of well-being and fails to acknowledge that they are in fact, motives that influence daily actions, and the persistence of those actions. The way we anticipate the future, in the present, influences employees' pursuit of growth and momentary pleasure. It is essential for examining employees' daily behaviour in helping organisations with their understanding of how different tasks promote or inhibit motivation to engage. Accounting for the role of how employees anticipate the immediate and distant future, this study contributes to our theoretical understanding of the way employees make decisions in the present.

Furthermore, there are practical implications for managers when setting targets within their teams. If realistic, for both the immediate and distant future, and in alignment with their employees' FTP, they will have a motivated team and exhibit sustained levels of engagement. Finally, examining the relationships between employees' motives, the perceived psychological meaningfulness and the utility value of tasks, using FTP theory, provides novel insight currently missing from the motivation literature (Seijts, 1998).

### **O81 Enhancing communication between leaders and teachers in secondary schools to reduce perceived workplace stress and improve job satisfaction**

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Research shows that a communication gap between leaders and teachers is contributing to workplace stress (You.Gov, 2017) and is often cited as one of the leading causes for increased mental health issues amongst educational professionals (You.Gov, 2017; HSE, 2019; Stevenson-Farmer, 2017; Foster, 2019). Reports from 2017 Health Survey (You.Gov, 2017) conclude 64 % of educational professionals would not feel confident in disclosing mental health problems or unmanageable stress to their employer, with secondary schools rating at a higher percentage than the primary sector. It has been known that reporting or communicating unmanaged excessive workplace stresses in teachers too late (Klassen & Chiu, 2010) leads to a breakdown in communication between leaders and staff, where teachers who are unable to have those open, honest conversations (Dussault, Deaudelin, Royer, & Loiselle, 1999) are left feeling increasingly isolated, worthless, anxious, with little or no rapport or trust in those with higher positions (Boyle, et al., 1995; Cooper & Travis, 2012), and with an increased risk of burnout (Klassen & Chiu, 2010). Stevenson - Farmer (2017) state that communication and building rapport is important to create thriving workplaces, therefore communication is an important part of that process. In relation to healthy and sustainable work, the study aims to explore perceptions of the communication gap with the objective of devising and testing an approach to enhance communication, and by doing so, to demonstrate that an appropriate communication tool has the potential to enhance staff satisfaction, wellbeing and reduce work-related perceived stress.

### **O82 Motivation profiles and well-being among academic researchers: A latent profile analysis**

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Introduction: The current study identifies work motivation profiles among academic researchers. Additionally, differences in terms of occupational well-being, i.e. job burnout, work engagement,

and job satisfaction, were examined. Work motivation profiles are based on types of regulation as proposed by the self-determination theory (Deci et al., 2017). Employees may be motivated by a various reasons that follow a self-determination continuum, ranging from intrinsic motivation to amotivation. Moreover, autonomous forms of motivation (e.g., identified and intrinsic regulation) can be more important in promoting positive workplace outcomes than controlled forms (e.g., external and identified regulation) (Howard et al., 2016).

**Methods:** The cross-sectional study involved 414 academic researchers working at the technical university in Poland (70% under the age of 45; 35% women). Work motivation (Multidimensional Work Motivation Scale, Gagne et al., 2015;  $\alpha = .65 - .87$ ), job burnout (Burnout Assessment Tool BAT-4, Schaufeli et al., 2019;  $\alpha = .78$ ), work engagement (Utrecht Work Engagement Scale UWES-3, Schaufeli et al., 2019;  $\alpha = .73$ ) and job satisfaction (Energy Compass, Schaufeli, 2017) were measured. Latent profile analysis was applied to work motivation dimensions, then ANOVA with Bonferroni post-hoc test was used to examine differences between profiles in terms of occupational well-being.

**Results:** Latent profile analysis revealed five work motivation profiles which differ regarding the self-determination continuum, both quality and quantity motivation. The profiles representing unmotivated academic researchers (corresponding to 2% of the sample and characterized by a domination of amotivation), balanced (21%, low quantity regulation) and highly motivated academics (29%, a high quantity regulation), controlled (8% amotivation and external regulation) and autonomously motivated academics (39%, identified and intrinsic regulation). These groups differed significantly in job burnout, job satisfaction, and work engagement. Academic researchers from unmotivated and controlled profiles were less satisfied compared to the others ( $F = 21.31$   $p < .001$   $\eta^2 = .042$ , small effect). Further, researchers who belong to the controlled profile reported the highest level of burnout compared to the balanced profiles as well as autonomously and highly motivated academics ( $F = 11.48$   $p < .001$   $\eta^2 = .049$ , small effect). Autonomously motivated academic researchers reported the highest level of work engagement, while unmotivated the lowest ( $F = 30.29$   $p < .001$   $\eta^2 = .123$ , moderate effect).

**Discussion:** The results suggest that work engagement can be a more correlate of motivation based on the self-determination continuum. This statement is in line with the Job Demands – Resources theory which assumes that work engagement is a part of the motivational process. Lack of motivation combined with the absence of autonomous forms of regulation was associated with a negative indicator of well-being, i.e., job dissatisfaction and job burnout. It supports the hypothesis that high level of autonomous forms of motivation (e.g., identified and intrinsic regulation) is necessary for promoting positive workplace outcomes, even if they coexist with a similarly high level of controlled motivation.

### **O83 Protecting the health and wellbeing of older employees**

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The ageing workforce is an international social policy concern, a leading topic of interest for organisations and academics, and a priority research area for the UK Health and Safety Executive (HSE). This project builds on an existing collaboration between Alliance Manchester Business School, University of Manchester and the HSE. The research enabled the development of a network of stakeholders interested in age and health and wellbeing in the transport sector [www.ambbs.ac.uk/ahpdpn](http://www.ambbs.ac.uk/ahpdpn). The Age, Health and Professional Drivers' (AHPD) network currently has over 70 member organisations, including transport and logistic firms and representatives, unions, employers and employees.



During the research project the team explored the experiences and viewpoints of professional drivers and employers via: interviews with 10 health and safety managers and trainers; 1 focus group; a discussion forum with representatives from a transport union; interviews with 36 drivers of 7.5 to 44 tonne vehicles and 6 managers of two large national companies. Interim findings of the research were published in a HSE Research Report and presented at EAOHP 2018. Research findings and the network have now been utilised to produce industry-led guidelines for best practice regarding age and wellbeing in the transport sector. These guidelines were made freely available on the AHPD Network webpage in May 2019 and to date have been downloaded over 100 times by a range of companies in the transport sector. The guidelines detail ten areas of health and wellbeing identified through the research as relevant for older workers. These are displayed in a Wellbeing Wheel, and are detailed fully in the best practice guidelines available to download here: [www.ambs.ac.uk/ahpdn](http://www.ambs.ac.uk/ahpdn)

The Best Practice Guidelines are separated into ten 'spokes' showing the key themes relating to driver health and wellbeing, with separate emphasis on Support, Implementation and Evaluation. The broad areas covered in the guidelines are: Support (how to help and encourage); Implementation (how to do it); Evaluation (is it working? Has it worked?); Mental Health (e.g. limiting the job impact on wellbeing); Physical Health (e.g. increasing the opportunity for physical activity); Healthy Eating (e.g. encouraging healthy eating habits); Working Practices (e.g. reducing health damage); Working Patterns (e.g. considering shift patterns and flexible working); Retirement (e.g. providing advice and planning); Culture (e.g. recognising the importance of management attitudes); Communication (e.g. how best to do it); Training (e.g. helping people to perform well); Bereavement (e.g. giving support and introducing policies); Resources (where to go for more detailed information); and References.

The guidelines are designed to be accessible for everyone. We provide links to useful resources for managers and employees at all levels that are involved in promoting, protecting and addressing health and wellbeing needs of drivers. The guidelines apply to employees of all ages, with highlighted advice of particular relevance to older employees. They are focused specifically on professional drivers but can be used when considering the needs of all employees.

#### **O84 Development and validation of the Later Life Work Index for successful management of an aging workforce**

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Fed by the demographic change the share of older workers among the European workforce increases rapidly. Better health status of older workers and the political ambition to relieve pension systems drive extended working lives. Consequently, organizations have to deal with increased age diversity and specific demands by older workers. In order to summarize and describe appropriate organizational practices and working conditions for older workers nearing retirement age and beyond, we developed and operationalized the Later Life Work Index. It is based on qualitative interviews in Germany (Wöhrmann, Deller, & Pundt, 2018) and evidence from the "Age Smart Employer Award" in New York City. The index contains nine dimensions covering age-friendly organizational culture and leadership, as well as more specific age-friendly practices regarding work design, health management, individual development, knowledge management, transition to retirement, continued employment options and health and retirement coverage.

We operationalized and validated the index in multiple studies. We first developed an extensive item pool based on pre-studies with human resource representatives from 30 to 56 companies in Germany. Secondly, EFAs were conducted on responses from 600 employees of all industries to form a compact, reliable and valid scale. Third, we cross-validated results against convergent and criterion variables in a third sample of 350 older workers. Fourth, we administered the scales in 50 organizations in Germany with 900 older workers, managers and human resource representatives in total to proof a shared within-organization perception of the index and a valid measurement on the organizational level. Finally, the scales were translated and back-translated to English by two independent English-German bilinguals and are currently cross-validated among older workers in the United States.

The index can be assessed by 80 items in total, showing good to acceptable CFA model fit and reliabilities. The validation proofs sufficient independence from positive and negative affect, as well as discriminant validity among the index dimensions. Moreover, criterion validity proves effects on e.g. older workers' commitment towards the organization, stress level and perceived health status. So far, the validation of the developed LLWI scale is limited to individual level criterions. However, we continue the organizational study to validate the effects on organizational level outcomes such as performance, illness absence and turnover.

The index allows organizations to self-assess their capabilities and opportunities for improvement regarding employment of older workers in a straightforward and low-effort manner. Individual dimensions of the index may serve researchers as a standardized and validated measure to evaluate interventions in specific research areas. We will present and discuss the index and its operationalization and are eager to show a validated English version to facilitate the application of the index in different cultural settings.

### **O85 Successful aging at work: A psychometric analysis of a new scale**

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Introduction: The concept of successful aging at work has become a popular research topic and received theoretical as well as conceptual research attention (De Lange, Kooij, van der Heijden, 2015). For example, Zacher, Kooij & Beier, Wang (2018) point to a process-based definition focusing on elements of selfmanagement and adaptation of aging workers across time. More specifically, they argue that personal resources, active regulation of behavior and optimal investment of resources (Baltes & Baltes, 1990), maintenance of the (perceived) capacity to influence the environment (or self-efficacy), and focusing on positive events and experiences (Carstensen, Isaacowitz, & Charles, 1999) enable individuals to age successfully. Surprisingly, to-date no validated scale is available to tap and monitor successful aging at work. As a result, based on the aforementioned theoretical and conceptual work, we developed a new scale measuring selfmanagement as basis of successful aging at work, including proactive behavior to age successfully, self-efficacy at work, and positive perceptions about aging at work. In this presentation we present the first psychometric test of this new survey measure among bridge workers (aged 65 years and older).

Method: Using an online survey study among N=392 bridge workers, we administered a 14-item measure scale of successful aging at work (response categories varied from 1= totally disagree till 7= totally agree). Including items measuring: a) proactive behavior to age successfully at work (3 items; I actively work on keeping my body fit), b) positive perceptions of aging at work (6 items; I like to be a positive role model for others considering aging at work), c) self-efficacy at work (5 items; when faced with difficulties at work, I have enough resiliency to cope). The alpha of the overall scale was  $\alpha = .94$ .

Results: We used latent class cluster analysis, confirmatory latent class factor analysis and an exploratory latent class factor analysis in Latent Gold 5.1 (Vermunt & Magidson, 2016) to further explore the structure of the scale in the data. The latent class factor model with cross-loadings was satisfactory for the 14 included items, that distinguished 3 factors with 4 latent classes each, fitted better (i.e. lowest BIC) than the both the confirmatory and exploratory latent class factor models and better than the latent class cluster model. The fit of the model was as follows: bootstrap of the L2 was higher than .01 and entropy R2 > .90. To inspect whether the three factors that correlated above .6 can be conceived as three dimensions of an overall latent construct we tested whether a second order factor model fitted better than the three factor model. The model comparison procedure showed that L2 was significantly lower ( $p < 0.05$ ) for the second order latent class factor model; indicating that the new scale successful aging at work fitted the data better than separate subscales.

Discussion: Our first psychometric test revealed a satisfactory fit of the new scale successful aging at work among a sample of successful bridge workers, and revealed promising results for a new scale in the domain of successful aging at work.

### **O86 How does job performance vary with age? Evidence of curvilinear relationships with different types of performance and job complexity**

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Although one's capabilities and correspondingly work performance may change through the life course, the available empirical evidence on the relationship between age and performance is, at best, inconclusive and, at worst, contradictory. It is possible that the nature of the relationship between performance and age is not consistent throughout the full range of ages. We challenge the general expectation of a negative linear relationship and draw on relevant research to propose and then examine the possibility for differential and curvilinear relationships between chronological age and three types of job performance: proficiency, proactivity, and adaptivity. Furthermore, we hypothesise that each of these curvilinear relationships is intensified by job complexity so that the curvilinear relationship is buffered when cognitive demands are high. Using survey data from a public organization and 903 participants we tested the relationships between age and each aspect of performance using polynomial regression analysis. For proficiency we found no evidence of either a curvilinear relationship or a moderation by job complexity. For adaptivity there was a U-shaped relationship between age and adaptivity and a main effect for job complexity but there was no interaction between the two. For proactivity though the curvilinear relationship followed a sigmoid pattern. Specifically, proactivity reduced between the ages of 18 to 30 after which point plateaued until approximately 55 to 60 years of age. This pattern was more pronounced for jobs with low job complexity indicating that proactivity was more stable throughout the lifespan for individuals whose job required them to perform more cognitive demanding tasks. These findings are strongly indicative of the hypothesis that changes in aspects of performance are not consistent throughout the range of working ages and that the complexity of the job is a major moderator in this relationship. As such, they can be especially useful for developing ways to optimize performance for different groups of employees and for channelling resources where they are needed the most, in order to support workers through their life course.

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## **O87 Being 'good enough': Perfectionism and wellbeing in social workers**

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Social work can be challenging and emotionally demanding, and staff are at high risk of burnout. Several organisational and individual factors, such as high caseloads, low support and compassion fatigue, have been found to increase the risks to wellbeing. There is some evidence that negative public perceptions of the profession are also a source of stress for social workers, increasing the pressure on them to perform to an unrealistically high standard in a job where influence over client outcomes may be limited. Perfectionism is a personal disposition characterised by a tendency to set unrealistic high standards of performance, to evaluate one's behaviour critically, and to fear being negatively evaluated by others. It is often seen in a positive light, but perfectionism at work has been associated with a range of negative outcomes, such as burnout, depression and over-commitment to the job. Research findings suggest, however, that some aspects of perfectionism are more threatening to wellbeing than others. Socially-prescribed perfectionism (i.e. perceptions that others have unrealistically high expectations of them) may be particularly damaging, whereas having perfectionistic standards for the self and others may be less threatening for wellbeing.

This study examined the effects of three types of perfectionism on emotional exhaustion and flourishing in a sample of UK social workers: self-oriented, other oriented and socially prescribed perfectionism. It was predicted that socially prescribed perfectionism would have particularly strong negative effects on the wellbeing of social workers owing to their concerns about meeting the standards set by others. Also examined was whether the three aspects of perfectionism moderated the relationships between work-related emotional demands and the two outcome variables. Data were obtained from 306 social workers (79% female) who were mainly working with children and families. The three aspects of perfectionism were measured by scales developed by Hewitt et al. (2008) and emotional demands (Van Veenhoven, 1994), emotional exhaustion (Maslach & Jackson, 1996) and flourishing (Diener et al. 2009) were also assessed.

Significant positive relationships were found between all three aspects of perfectionism and emotional exhaustion (all  $<0.001$ ), with particularly strong associations found for other-oriented and social perfectionism. A negative relationship was found between other-oriented perfectionism and flourishing ( $r = -.15$ ,  $p < 0.01$ ), but the association with social perfectionism was considerably stronger ( $r = -.31$ ,  $p < 0.001$ ). Some evidence was found that socially prescribed perfectionism moderated the relationship between emotional demands and emotional exhaustion with models explaining between 22% and 33% of the variance. The implications of the findings for the wellbeing of social workers will be considered and potential interventions to reduce maladaptive perfectionism suggested.

## **O88 Drawing the line between work and private life: development and validation of the work-home integration questionnaire**

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Working conditions have considerably changed in recent decades. More and more employees are trying to successfully cope with the increasing work demands and are at the same time endangering their health. One example of *self-endangering work* is the involvement in work during leisure time through behaviors (e.g. answering e-mails), cognitions (e.g. worrying) or emotions (e.g. feeling anger). This so-called *work-home integration* (WHI) can hamper the necessary recovery from work and may result in burnout. Up to now, literature has primarily focused on the negative and self-endangering aspects of WHI, however, there may also be

positive aspects of WHI that may even reduce the risk of burnout. An adequate instrument which distinguishes between the integration of behaviors, cognitions, and emotions from work to home on the one hand, as well as between both negative and positive aspects on the other hand, is still missing.

In order to close this gap, we developed and validated the Work-Home Integration Questionnaire (WHIQ) in German, English and Slovenian using an online panel survey ( $N = 724$ ). While developing the scale, an interaction (1a; behaviors  $\times$  rating of behaviors) helped us to distinguish between negatively and positively perceived behaviors. Against our expectations, confirmatory factor analyses supported a three-factor structure with (1) behaviors, (2) negative emotions and cognitions as well as (3) positive emotions and cognitions. Earlier research supports these findings by distinguishing between two approaches, where emotions are either a consequence of cognitive appraisals or emotions arise before cognitions. Even though we hypothesized that we capture emotions and cognitions separately, empirical evidence has shown that these domains are rather interdependent.

Further analyses indicated that the WHIQ is associated with similar questionnaires, but also differs from concepts that are not supposed to be related, supporting convergent and discriminant validity. Moreover, the WHIQ showed an invariant measurement structure across the three samples. Using multiple regression analyses, negative emotions and cognitions (2) showed positive relationships with the two aspects of burnout (exhaustion and disengagement) after controlling for job demands such as time pressure, unfinished tasks, and work intensification. Positive emotions and cognitions (3) as well as the behavior-rating interaction (1a; high values indicate positively perceived behavior) showed negative relationships with burnout even when taking job demands into account. In addition to burnout, similar findings were also evident in relation to work-family conflict. For work-family enrichment, however, relationships in the opposite directions were found.

These results suggest that the WHIQ is a valuable instrument and may help researchers to broaden their understanding of the involvement in work during off-job time. On the one hand, the findings indicate that the negative aspects of WHI adversely affect mental health and private life. But in contrast to previous assumptions, WHI also showed positive effects, indicating that positive perceived WHI does not necessarily have to be self-endangering. In addition, the study highlights the importance of considering the varying perceptions of WHI. Future research should emphasize the complex link between WHI and (mental) health.

### **O89 The reciprocal associations between workplace incivility and healthcare professionals' burnout, psychological well-being, and job satisfaction: A longitudinal study**

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Introduction: The perceived roles of healthcare workers as care providers and the associated responsibilities and demands, lead to high expectations from colleagues and patients, which place such workers at risk of being exposed to mistreatment in their line of work. Although previous studies have provided insights on workplace mistreatment amongst healthcare workers, little is known on the reciprocal nature of subtle and mild forms of mistreatment (e.g. workplace incivility) on the well-being outcomes of healthcare professionals. Hence, the present research aims to investigate the bidirectional associations between workplace incivility and the essential aspects of employee well-being outcomes (e.g. burnout, psychological well-being, and job satisfaction) using a sample of Irish healthcare professionals.

Method: A cross-lagged panel design at three timepoints, spaced by one-week intervals, were utilised among 77 healthcare professionals from both private and public health sectors in Ireland. Participants completed self-report questionnaires that measured burnout dimensions: emotional exhaustion and cynicism; psychological well-being; and job satisfaction each working week. Exposure to incivility from co-workers, supervisors, patients, and patients' visitors during their working week were also assessed.

Results: Preliminary findings suggest that experienced incivility in the workplace negatively predicted psychological well-being and job satisfaction, and these variables affect each other reciprocally across time. However, no significant relationships were observed between experienced incivility and the two dimensions of burnout.

Discussion: The current study provides further understanding of the temporal effects of workplace incivility on the well-being of healthcare professionals by highlighting that the longitudinal associations can be bidirectional in nature. Considering that workplace mistreatment is prevalent in the healthcare sector, it is therefore recommended for governing bodies to introduce civility trainings and well-being interventions into the existing learning and development strategies as it has the potential to prevent or minimise the inconspicuous accumulation of the detrimental effects of incivility over time. Additionally, it would make a meaningful contribution in achieving a professional and harmonious working environment and eventually improve the well-being of healthcare employees. This research is distinctive because it assesses and compares the effects of incivility on burnout, psychological wellbeing, and job satisfaction of healthcare workers over a period of time. Past studies have tended to focus on one or the other and the prevalence of uncivil behaviours in the workplace.

### **O90 Forgiveness in the workplace: When and why forgiveness is associated with work outcomes**

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Good work relationships are vital to the lives of employees and the effectiveness of an organization (e.g., Aquino et al., 2003). However, imperfect interactions are inevitable in organizational life, which may evoke negative cognitions and emotions toward an offending colleague (Thompson & Simkins, 2017), influencing employees' well-functioning and lasting interpersonal relationships. In contrast to fighting back immediately, or avoiding the offending colleague, forgiveness may be a way to constructively deal with these interpersonal offenses, through transforming the negative thoughts and feelings toward a transgressor into more neutral or even prosocial ones (e.g., McCullough, Fincham, & Tsang, 2003). Although forgiveness proved to be a key factor in understanding close relationship functioning and stability (e.g., Fennell, 1993), the role of forgiveness in the work context remains understudied. In this project, we propose that forgiveness is positively associated with work outcomes through restoring and maintaining crucial work relationships.

We tested our assumptions in three studies: The results of Study 1 ( $n = 472$  Mturk participants) revealed that trait forgiveness was positively associated with a broad range of work outcomes (job satisfaction; OCB; in-role performance; work engagement; less turn-over intention); the results of Study 2 ( $n = 228$  Dutch employees) revealed that state forgiveness was negatively associated with burnout and positively associated with job satisfaction and work engagement; the results of Study 3 ( $n = 377$  Prolific participants) replicated the result of Study 1 and Study 2, with trait forgiveness, state forgiveness and work outcomes (job satisfaction, work engagement, in-role performance, turn-over intention, OCB and burnout) in one model, we found that both trait

forgiveness and state forgiveness were significantly associated with work outcomes. As we also expected that forgiveness associated with work outcomes through restoring and maintaining good social relationships. The third study also tested the mediating role of relationships quality (reflected by leader/member-member exchange quality and team-member exchange quality) on the relationship between forgiveness and work outcomes, but there was only a significant indirect effect of state forgiveness through team-member exchange on work outcomes. For now, the present findings suggest that both trait and state forgiveness are associated with better work outcomes. As such, the present research replicates previous findings on the beneficial role of forgiveness, but now translated to a work environment. However, the positive association between forgiveness and work outcomes cannot be explained by increased leader/member-member exchange (the relationship quality with leader or co-worker), thus more research is needed to explore the mechanism under the relationship between forgiveness and work outcomes.

### **O91 Dancing to two rhythms at the same time in a university setting**

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The risk assessment at a Danish university department confirmed the suspicion that both academic and administrative staff experienced time pressure and work overload. The planning process was unnecessary delayed and not transparent. Furthermore, the academics described the stressing situation of trying to fulfil their time budget with education tasks or to reduce the number of too many tasks. This hunt to balance tasks and the hour budget were clearly addressed as the local knowledge groups leader's responsibly but had yet to be fulfilled as a management task.

The Organizational Health and Safety Manager (OHSM) and the department management initiated an improvement project aiming to reduce time pressure through more efficient planning processes and to implement procedures that would secure a reduction of workload as a management responsibility.

The theoretical background for improving the Health and Safety of the employees is inspired by the works of Thomas Hylland Eriksen within time sociology and Bodil Jönsson (1999) within the philosophy of time. Eriksen's concept of fast and slow time is linked to the task and context of the work. When performing work tasks as research, preparing lectures and writing, the staff need slow and undisturbed time to focus and to concentrate. Jönsson talks about personal time, The slow, personal time is a patient time: it does not hurry us up, but allow us to wait for whatever is trying to find us - in research, new experiences, insight and understanding.

Fast time activities are many, small, and quick delivered, often coming in beyond one's own control through email, telephone calls, or people knocking at your door. It is that which Jönsson calls clock time, the Greeks Cronos: the technical, man-made measure of time; the time that we split into smaller or larger pieces, quantify and constantly aim at making more effective; the time which is not a purpose in itself, but serves a purpose of usability towards something and/or someone. Fast time tends to overrule the slow time with its ongoing incoming small and necessary questions in clock time, which disturbs the slow time and includes a 20-30-minute transition time back to focus and turning into slow time again.

This project aimed at making a TimeScape, where slow time has a natural part and all the fast time activities are organised, so that the work can be following a rhythm that ensures both the need for a slow and fast time, without trying to make people work to the two rhythms at the same time. The project developed, together with the department management and the steering groups,

a set of values regarding the planning process under three headlines: Transparency, control and strong communities. The planning process was described in an annual cycle with tasks, actors and how different organisational layers should communicate. The responsibility of the study board, knowledge group leader and semester coordinator were clarified.

## **092 Emotional labour, emotional regulation, and secondary traumatic stress among allied mental health professionals in the UK: A pilot study**

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The present study investigates relations among emotional labour, emotional regulation strategies, and secondary traumatic stress (STS) in a sample of allied mental health professionals (AMHPs) in the UK. It empirically examines the relationship between emotional labour and STS; and, explores the moderational role of emotional regulation strategies. Participants included 85 clinical psychologists, psychotherapists, counsellors, and psychiatric social workers who completed an anonymous online questionnaire consisting of items related to demographics, emotional labour (surface acting and deep acting), emotional regulation strategies (cognitive reappraisal and expressive suppression), and STS. Fifty-one percent of participants reported high levels of STS. Data analysed using hierarchical multiple regression revealed that age, surface acting, and expressive suppression significantly predicted STS. Deep acting predicted STS only for those participants who reported high levels of STS. Cognitive reappraisal and expressive suppression did not moderate the relationship between emotional labour and STS. Limitations of the study mainly relate to its small sample size. It contributes to the literature by highlighting high levels of STS among AMHPs and providing a rationale for future research on the construct. In addition, it promotes the development of AMHPs' personal capabilities and professional resources to ensure effective delivery of mental health services.

## **093 Identification and analyses of psychosocial risks in the Belgian legal framework: The Short Inventory to Monitor Psychosocial Hazards (5A)**

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Introduction: A stress RA involves the same basic principles and processes as for other occupational risks. It is a stepwise approach that commonly includes five steps (Cox & Griffiths, 1995): a) Identify the hazards and those at risk; b) Evaluate and prioritise the risks, c) Decide on preventive action; d) Take action and 5) Monitor and review. Notwithstanding that there is some consensus on what may be important (Leka et al., 2008), what specific psychosocial hazards to retain in the RA is not well defined in the law. Yet, the Belgian legislator does - when defining psychosocial risks at work - describe 5 domains of exposure that may account for possible psychological and physical damage employees may experience: "the risk that employees experience psychological damage that may or may not be associated with physical damage due to exposure to the elements of the organization of work, content of work, physical working environment, working conditions and interpersonal relationships at work, which the employer has an impact on and which objectively imply a danger". (KB2014 : Hfdst Vbis – Afdeling 1 – art 32/1). Hence, employers should form a risk perspective at least screen these 5 domains, establish their possible damage and determine on which the employer has an impact. Practitioners have relied on Biron and colleagues (2006) extended Clarke and Cooper (2004) formula to assist organizations in prioritizing risk factors. Yet, due to multiple testing, the false positive rates is the likely consequence.



**Aim:** To the present there is not a single validated measurement instrument that cover these five domains stipulated in the Belgian law. To accommodate this aim, we have developed a questionnaire that measures different 23 psychosocial factors with 78 items in these five domains. In this contribution we aim first to establish the psychometric properties of the instrument. Secondly, we estimate latent class models as valid approach to identify exposure levels to these factors. Thirdly we investigate the risk of harm of the levels of these factors.

**Method:** We collected 8440 observations across 16 Belgian organisations to test and validate the questionnaire. To test the factor structure, we modelled a confirmatory factor model in MPLUS 8 using the WLSMV estimator because the measures are ordinal / frequency measures. To identify different levels of exposure to the different factor we used latent class modelling. Finally, we modeled multinomial regressions and manova's to investigate the level of harm across the latent class clusters.

**Results:** The confirmatory factor structure fitted the data very well ((P(RMSEA) of .045 = 1) and (CFI=.92 and TLI=.91)) of which each factor was reliable (Chronbach  $\alpha > .70$ ). Both global fit (BIC) and local fit (bivariate residuals) identified 4 to 5 different latent classes that may be ordered in function of exposure to the psychosocial hazards. Finally, the multinomial regression / manova's indicated that the high exposure and very high exposure level were distinct from the no exposure level.

**Conclusion:** The Short Inventory to Monitor Psychosocial Hazards is reliable and normed instrument suitable for psychosocial risk analysis.

### **O94 Why management does (not) strive for a psychosocial safety climate? Developing an integrative model.**

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Psychosocial risks are a prominent matter in our contemporary organisations. Yet, little is known about what stimulates or prevents managers to engage in psychosocial risk prevention. Drawing from the construct of the psychosocial safety climate (PSC), this study aimed to identify the drivers and barriers that stimulate or prevent managers to aim for a high PSC. Based on the findings in the literature, a multi-level conceptual framework was developed: the model included factors related to the (national) society, the organisation, the workgroup and the individual employee. Then, this conceptual model was tested through in-depth, semi-structured interviews with prevention advisors (n=12) and human resource managers (n=12). Building on the results of this qualitative research, our conceptual model was modified and expanded.

The findings are largely consistent with the existing, yet limited, research and proposed theories. Moreover, the current study found additional factors that drive or hinder managers to strive for a high PSC, which were not yet discovered in previous studies (e.g. scientific research and literature, organisational changes, lack of an integrated policy). Another interesting finding is that certain drivers (i.e. inspectorate's pressure) and barriers (i.e. sensitivity of the issue at the societal level and the individual level, lack of awareness at the individual level, and a manager's demographics) were not considered as a driving or obstructing force, although previous literature and the proposed theories argued that it was. Additionally, existing literature and some existing theories suggested that certain factors would only be a driver if they were favourable to the organisation (e.g. favourable strategy, positive worker attitude, active leadership).

This study, however, discovered that unfavourable factors (e.g. unfavourable strategy, negative worker attitude, passive leadership) drive some managers to engage in psychosocial risk prevention as well. Notably, however, our findings were particularly detailed in terms of societal and organisational level factors. We gathered less input regarding the workgroup and individual

level, indicating that follow up research could more specifically tap these two levels by, for example, investigating the experiences of team leaders/supervisors. Nevertheless, this study enhances the understanding of what stimulates and prevents management to strive for an optimal work climate that protects and promotes employees' psychological well-being. Policy-makers should acknowledge that organisations consider the law as a guiding framework to take specific actions relevant to them. Furthermore, the final model indicates that legal obligations can be a barrier to management as well: they could deplete resources needed for other initiatives that would be more effective. Practitioners can leverage the model by taking actions (e.g. incorporating employee psychological well-being in the organisational strategy) aiding them to achieve a high PSC. Similarly, practitioners could attempt to eliminate barriers (e.g. the lack of an integrated well-being policy) that prevent them to achieve a high PSC. By collaborating with researchers, such strategies could be further developed and verified. As such, this study provides valuable insights for future research so that organisations and policy-makers may enhance managers' willingness to engage in psychosocial risk prevention.

### **O95 Mapping of employees' of workspace preferences in activity based flex-office Setting (AFO)**

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**Introduction:** This article describes an exploratory method study of key determinants of office employees' workspace use and preferences in activity based flex-office (AFO) setting, potentially influencing job satisfaction and health in an office workplace with non-personal workstations. It is based on a case study of a newly built head quarter office building of a leading retail company in Sweden. Our research focus is on what role different design features in the office environment and work activities play for employees' preference and use of different work environments zones within non-personal workstations.

**Method:** With these research issues at focus, we investigate three different floor plans in the office building: two so-called "normal" office plan and one "alternative" floor plan that offers unconventional workspaces. For example, treadmill workstations and bicycle-workstation as well as bookable teamwork zones, but also stations for physical activities like monkey bars, table tennis etc. Different approaches are applied to the research issues to retrieve knowledge from three sources: 1) spatial analysis of office environments, 2) observations of employees' use of workspace, and 3) walk-through evaluation with office employees. This combined gives a picture of office employees' use and preference of different workspaces in an AFO. The spatial analysis of the different work environments is based on both plan drawings and location analysis, while analysis of employees' use of workspace is based on observation at location during different times of the workday. Finally, our main method in this study - the walk-through evaluation (de Laval, 2014). The method holds users' experience of the place central, why it is very suitable for the purpose of our study - to identify key determinants of office employees' workspace use and preferences in AFO settings. By walking in an environment and studying it on the spot, all respondents' senses are used, which gets access to their memory and knowledge of an environment. This is done at prechosen stops in an environment, that are supposed hold specific features that support different work activities at the three office floors studied in our AFO-office building. Our sample consists of 24 office employees in total, both regular office employees and managers as various work roles may lead to dissimilar work environment needs. Something that in turn may affect both use and preference of workspaces in an AFO environment.

**Results:** Preliminary results of this exploratory study of key determinants of workspace use and preferences among office employees working in AFO setting are presented. The focus is here on: a) office design features and how these may influence psychosocial work environment, and on b) work activity-work environment fit in an office with non-personal workstations.

Discussion: The major contribution of this article is two-folded: 1) it presents a detailed survey of employees' use and preference in an AFO work environment, and does so 2) by applying various methods aiming to hereby identify different aspects influencing employees' use and preference that otherwise would not be detected.

## **O96 Accounting for effect modifiers and confounders in intervention research**

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Research in "live" working organizations allow researchers to gain insight into the actual workings of the day-to-day business and unexpected insights may be obtained as was the case in the Hawthorne studies. Organizational-level interventions are research with the intention of manipulating organizational properties and elements such as procedures, management, meeting structure etc. However, as the interventions takes place in "live", working organizations whose main purpose is to serve their clients be it in a public or private setting. While sometimes interested in learning and research, such organizations cannot not pause their development to allow a research project to do pre and post intervention measures. As such the studied organization may change significantly during the intervention period. Often seen changes are employee turnover, changes in management, implementation of new technology or cutbacks with a wide variety of consequences.

Organization level intervention research tend to disregard organizational changes even though such changes may have impact on the studied outcome. For instance: psychosocial work environment is influenced by organization and management and a reorganization is bound to have some effect. Many studies, however, employ a pre- post-intervention measurement design which only allow changes to be measured. If the changes are directly related to the intervention without accounting for the organizational changes there is a substantial risk that the measured outcomes will be misleading. Intervention research methods must take the context of the intervention into account when assessing efficacy and effectiveness of ergonomic interventions. Without taking the context into account effect modifiers or confounders may obscure results and further inference.

We present results from an organization level intervention study of lean processes and illustrate the vastly different conclusions that can be drawn from a normal versus context-sensitive analysis. The normal approach is constituted by the classic baseline, intervention, follow-up design often seen in "high-quality" RCT intervention studies. The context-sensitive approach is constituted by the Effect Modifier Assessment (EMA) method which identifies significant events during the period of the intervention and assess the impact on the measured outcome. Events are also classified as part of the intervention or context. This allows a nuanced analysis of effect and its origin in relation to the intervention outcome. The normal analysis found the intervention to be a success while the context sensitive identified significant positive effect modifiers.

The EMA method is cost-effective and data collection is performed as workshops with participants from all occupational groups. The participants are asked to write major events on large post-its without talking. The post-its are then placed on a timeline and the participants are interviewed about the details of the event and effect on the studied outcome (e.g. psychosocial work environment, ergonomics etc.). The EMA-workshop should be done just after the post measure and include employees that have not been part of intervention steering group or have a management role.

## **O97 Psychosocial factors and emotional well-being of kindergarten teachers**

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**Aim:** The aim of this study was to determine the psychosocial hazards at work and the emotional well-being of kindergarten teachers in Valga county, Estonia.

**Methodology:** In 2019, a paper-based questionnaire was carried out to collect the data in all ten kindergartens in Valga county. To get the data about which psychosocial factors are present at teachers' workplaces, Copenhagen Psychosocial Questionnaire (COPSOQ-II) was used. Emotional well-being (depression and anxiety) of kindergarten teachers was measured by using an Emotional State Questionnaire (EST-Q). The survey was voluntary and there was a guaranteed anonymity of respondents. Participants had one week (questionnaires were carried out between 26.03.2019-02.04.2019) to respond. It took about 15 minutes to respond.

**Results:** The sample consisted of 82 teachers, 44 of it completed the questionnaire, which is almost half of the study's population. Results revealed that the most common psychosocial hazards were workload, high emotional requirements, lack of trust between workers and employer and lack of employers' support. Emotional State Questionnaire showed that 68.8% of Valga county kindergarten teachers suffer equally from asthenia and sleeping disorders, 18.8% have anxiety and 12,5% have symptoms of depression and sociophobia. The high percentage of asthenia and sleeping disorder can be linked to high emotional requirements, because working with children is always responsible and communication with parents can be stressful. Otherwise, teachers consider their overall health status to be better than the average in Estonia. Results also show that teachers think that the work-related stress level is normal and that they are not thinking about leaving for another job.

**Conclusion:** Kindergarten teachers have different psychosocial factors at their workplace which lead to asthenia, sleeping disorders, anxiety and depression.

## **O98 Challenge, hindrance, and control: An analysis of primary and secondary appraisals' role in the job insecurity-outcomes relationships**

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The transactional theory of stress posits that job demands may be appraised as irrelevant to, challenging, or hindering one's personal growth and well-being (primary appraisal). Moreover, people also make a judgement regarding whether they have the resources to cope with the stressful situation (secondary appraisal). Psychological contract breach theory has been used to explain the mediating role of job control (secondary appraisal) in the job insecurity-outcomes relationship. Specifically, job insecurity is expected to lead to reduced perceptions of job control, which in turn are associated with higher burnout and less engagement. Building on this, we further propose that the job insecurity-job control relationship may be moderated by the employee's primary appraisal, resulting in a moderated-mediation model. Specifically, regarding the job insecurity-job control relationship, we expect to find that it would be weaker for employees that perceive high challenge levels compared to those perceiving lower levels of challenge appraisal. In a similar way, we expect that the same relationship would be stronger for employees perceiving high levels of hindrance appraisal compared to those perceiving lower levels of hindrance appraisal. To test these hypotheses, using a sample of 342 Italian employees in several healthcare organizations, we measured job insecurity, job control, job insecurity appraisals (challenge and hindrance), burnout, and work engagement.

Our results showed that the job control mediation role in the job insecurity-burnout relationship differs significantly across the levels of challenge appraisal. Specifically, the total indirect effect

of job insecurity on burnout via job control at low and moderate challenge appraisal was significantly different from zero ( $b = .09$ ; 95% CI [0.01, 0.25] and  $b = .06$ ; 95% CI [0.01, 0.21], respectively). However, total indirect effect of job insecurity on burnout via job control was nonsignificant at high challenge ( $b = .00$ ; 95% CI [-0.03, 0.17]). Similarly, the job control mediation role in the job insecurity-work engagement relationship also differs significantly across the levels of challenge appraisal. In particular, the total indirect effect of job insecurity on work engagement via job control was significantly different from zero at low and medium challenge levels ( $b = -.05$ ; 95% CI [-0.25, -0.01] and  $b = -.10$ ; 95% CI [-0.21, 0.00], respectively). The total indirect effect of job insecurity on work engagement via job control at high challenge was nonsignificant ( $b = .00$ ; 95% CI [-0.01, 0.03]). However, the mediation effect of job control did not vary across hindrance appraisal levels for any of the outcomes.

This contribution showed the merits of including both primary and secondary appraisals in studying the relationship between job insecurity and two outcomes. It follows that interventions aimed at increasing job control to face job insecurity may not be beneficial to employees that have a higher challenge appraisal. Moreover, challenge appraisal does not seem to lead to positive outcomes when employees experience job insecurity, rather it takes away the negative association. Future research should investigate other intervention strategies that may be more beneficial to employees that perceive high challenge appraisal.

### **099 Carrying on regardless: Sickness presenteeism in academic employees**

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Presenteeism refers to situations where people continue to attend work despite feeling sufficiently unwell to take time sick leave. In some circumstances, working while sick can be beneficial to individuals and organisations but there is evidence that presenteeism can threaten the health and job performance of workers. It is therefore crucial to gain insight into the occupational, organisational and individual factors that encourage presenteeism in order to develop interventions to encourage more 'healthy' sickness absence behaviour. This study explored the reasons why academic employees work while sick using a framework developed by Karanika-Murray and Biron (2019) that identifies four aspects of presenteeism: therapeutic, functional, overachieving, and dysfunctional.

Data were obtained from 5,209 academic staff working in UK universities (56% female). Most respondents (90%) reported working while sick at least 'sometimes' with more than half doing so either 'often' (28%) or 'always' (24%). Academics' personal accounts of presenteeism were explored via thematic content analysis of data obtained from open-ended questions. Several key themes were identified that highlighted the reasons academics work while sick:

This study found that academic employees in UK universities commonly work while sick. A range of interacting occupational, organisational and individual difference factors was found to underpin presenteeism. Evidence was found that features of academic work, such as high demand, schedule flexibility, job involvement and passion, together with a strong sense of responsibility to students and colleagues, encourage staff to continue working when they are sick. Reflecting Karanika-Murray and Biron's framework, the therapeutic and functional aspect of presenteeism as well as the dysfunctional aspects were identified. Nonetheless, it is crucial to highlight the need for recovery in the face of high demands and high involvement to ensure continued wellbeing and optimum performance.

## **O100 The effects of stress on teamwork in the NASA FOCUS lab for aerospace students** Andrea Georgiou

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Industries which inherently place heavy workload demands on employees can be stressful and have negative implications for occupational health. The present study utilized a high-fidelity simulation of an airline flight operations center to examine the impact of workload demands on team processes. The NASA FOCUS (Flight Operations Center- Unified Simulation) lab closely mirrors an airline operations center in which dispatchers, crew schedulers, aircraft mechanics, weather forecasting, and others all must work together to run the virtual airline. This study examined the effects of varying workloads on team member contributions to taskwork (behaviors directly supporting transformation of inputs to organizational outputs) and teamwork (support the coordination of team activities). The simulation involved senior-level undergraduate aerospace students placed in 10-person teams with specialized roles who collaboratively operated a simulated airline. In addition to normal airline operations, such as scheduled departures and landings, unexpected events (triggers) were introduced throughout their shift. Examples included unruly passengers, weather issues, and crew scheduling issues. Each trigger was rated in terms of difficulty and assigned a point value. Workload was manipulated by utilizing three levels of difficulty (minimal, moderate, and maximum) based on the number and nature of triggers that were introduced. Participants were assigned to roles within team based on their specialization and teams were randomly assigned to workload conditions. Team processes were measured using the Comprehensive Assessment of Team Member Effectiveness (CATME-B), a behaviorally anchored rating scale assessing the following five team processes: contributing to teamwork, interacting with the team, keeping the team on track, expecting quality, and having the necessary knowledge, skills, and abilities (KSA's). Each group received extensive training and all groups completed a standard 2.5 hour simulation. On a separate occasion, each group completed a 2.5 hour simulation consistent with the workload condition to which the group had been assigned. After completion of the simulation, the participants completed the CATME-B online survey for evaluations of their performance.

It was discovered the level of difficulty significantly affected individual and group performance in their expectation of quality and having relevant knowledge, skills, and abilities (KSA's). Display of relevant KSA's, showed significant differences,  $F(2,27) = 5.76, p = .008$ . Likewise, expecting quality differed across workload conditions,  $F(2,27) = 6.13, p = .006$ . For both of these scales, team processes were higher under higher workload conditions. Means for relevant KSA's were  $M=3.83, M= 4.28, \text{ and } M=4.21$  respectively for minimal, moderate, and maximum workload. For expecting quality, means for minimal, moderate, and maximum workload conditions were  $M= 3.83, M=4.00, \text{ and } M= 4.25$ . As simulation difficulty only affected two out of the five teamwork variables, these findings suggest that workload did not affect the teamwork behaviors, but did affect taskwork behaviors. Under high workload demands group members demonstrated higher levels of KSA's and expectations of high quality. This suggests that the increased workload resulted in greater pressure to meet task demands and group members focused more closely on taskwork as required by the high workload conditions.

## **O101 Influence of Leadership Behaviour on Employee Well-Being: A case of Higher Education Institutions in Pakistan**

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A large body of evidence suggests that different aspects of Employee Well-being (EWB) including personal well-being needs to be considered for better organisational performance (Schulte and Vainio, 2010). Research further highlights that although there are many

organisational factors that affect EWB such as workplace characteristics (Leka et al., 2017, Leka and Jain, 2010, Nielsen et al., 2017), job demands and job resources (Bakker and Demerouti, 2017), leaders play a significant role in influencing EWB (Nielsen and Daniels, 2016, Skakon et al., 2010). Since leaders yield power, they have a significant impact on the well-being of organisational members. Even when organisations incorporate different programs in their policies to increased employee well-being, implementation of those policies fairly at all levels is still at the discretion of leaders. Although research on the relationship between leadership behaviour and EWB has grown, the processes through which leader behaviour affects EWB are not clearly understood (Inceoglu et al., 2018). This study therefore examines how leadership affects well-being of faculty members working in higher education institutions.

Higher education institutions (HEIs) have become 'anxiety machines' where coping with the complex job demands on daily basis, has become increasingly stressful for faculty members. It is evident that competitiveness, accelerated work demands in form of excessive teaching and administrative workload, publication pressures, scarcity of resources, and lack of promotion opportunities are some of the concerns that strain faculty members (Kinman, 2016, Shin and Jung, 2014, Watts and Robertson, 2011, Winefield et al., 2003). Besides, opportunities to balance the negative impact of job demands are becoming limited in the HE sector (Kinman, 2016).

This study is based on 26 interviews with faculty members working as lecturers, assistant professors, associate professors, and professors in the higher education sector in Pakistan. Thematic analysis was used to analyse the interview data. The results revealed that the interplay between psychosocial factors and leader behaviour, had an impact on overall health and well-being of faculty members. Leaders in various departments of public sector universities use various tactics such as un-even distribution of workload, imposing unnecessary time boundaries, denial of required infrastructure/facilities, creating hurdles in professional development, withholding information sharing, and lack of support, to pressurise their subordinates or make them feel stressed. These unethical tactics negatively affect EWB.

This research reveals unprofessional behaviour of academic leaders in Pakistani HEIs and their implications on the academic staff. It is suggested that proper policies should be implemented using international standards to increase job satisfaction of employees (faculty) that resultantly will improve the quality of education delivered by the affected employees. This study contributes to the research by providing explanation of the process by which leader's behaviour influences EWB. Drawing on job demands resource theory this paper argues that leaders while exhibiting any kind of effective behaviours can affect EWB both ways; negatively or positively.

### **O102 Organisational justice, work-family conflict and mental health in Chilean workers: Are there any gender-related differences?**

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The aim of this study is to explore gender differences related to organisational justice and work-family conflict and their influence on mental health in Chilean workers. Both theory and empirical evidence support the existence of a relationship between organisational justice and negative health outcomes in workers (Elovainio et al., 2013; Eib, Bernhard-Oettel, Magnusson, & Leineweber, 2018; Ganzel, Morris, & Wethington, 2013). Previous research indicates that exposure to a work situation that is perceived as unfair can have a negative impact on workers' interpersonal relationships and, in particular on their family life (Eib, von Thiele Schwarz, & Blom, 2015; Judge and Colquitt, 2004; Parker & Allen, 2001). Implicit in many discussions about work-

family conflict is the idea that this issue is more challenging for women than men. Nevertheless, recent research has found evidence for similarity rather than difference in the degree of work-family conflict experienced by men and women (Shockley, Shen, DeNunzio, Arvan, & Knudsen, 2017). Based on these findings and on the allostatic load model (McEwen, 2008), we hypothesized that: 1) work-family conflict is an underlying mechanism in the relationship between organisational justice and work-related stress (H1); and, 2) there are no gender differences in the work-family conflict levels (H2). We further explore household responsibilities (breadwinner and domestic responsibilities) to help explaining gender differences (or similarities) in the proposed relationship. The sample includes 1,463 workers (589 women and 874 men), belonging to five organisations representing public administration, retail, health services, and transportation sectors. A path analysis in structural equation modelling (SEM) was carried out to explore causal mediation and test our hypothesis. The results suggest the existence of a negative and significant correlation between overall organisational justice, and work-related stress.

Moreover, this relationship is partially mediated by work-family conflict (H1 accepted). There are no differences between women and men regarding their work-family conflict levels (H2 accepted). However, when comparing women and men who fulfil the double role of main provider and main responsible for domestic tasks, significant differences emerged. Men present higher levels of work-family conflict, while women show higher levels of somatic stress. The relevance of this study lies in the contribution of empirical evidence regarding the mediator role of work-family conflict between overall organisational justice and work-related stress for women and men in the Chilean organisational context. The results underline the need of providing access to work-family policies to both men and women beyond the production and reproduction division of work and domestic responsibilities. The differences between women and men performing the double role are indicative of a complex relationship between work-family conflict and mental health. These findings complement the growing understanding of gender as a determinant of health in the workplace, and open avenues for further research on gender issues at work where not only women, but also men are impacted.

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### **O103 Men who prioritize productivity over safety: How leadership can reduce the gender-safety priority relationship**

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Despite the downward trend in the occurrences of workplace deaths and injuries over the past few decades (Hofmann, Burke, & Zohar, 2017), workplace safety still continues to be a significant concern to practitioners and researchers alike. With about 4 million workplace injuries annually, what we already know regarding occupational health and safety needs to continue to improve. To this purpose, the present study has three main goals; the primary goal of is to use social role theory to understand how gender affects safety-related outcomes at the workplace. The second goal of our paper is to examine how leadership styles, namely transformation and transactional leadership styles affect the relationship between gender and safety outcomes. The third and final goal of this paper is to draw on and expand Neal & Griffin's (2004) safety framework, by specifically including gender, in combination with leadership factors, as the antecedents of safety-related outcomes in order to integrate the findings of this paper with existing safety literature. We utilized data from a large, US-based, energy company ( $N=3144$ ) and conducted structural equations modeling to test the proposed conceptual model. Results showed that gender positively relates to safety priority ( $b = .05$ ,  $SE = .02$ ,  $p < .01$ ), indicating that women tend



to have higher levels of priority of safety. In addition, safety-specific transformational leadership moderated the relationship between gender and safety priority ( $b = -.06$ ,  $SE = .02$ ,  $p < .05$ ), which in turn was positively related to safety behavior ( $b = .35$ ,  $SE = .04$ ,  $p = .00$ ). Also, safety behavior was negatively associated with accidents ( $b = -.29$ ,  $SE = .04$ ,  $p = .00$ ) and WMSDs ( $b = -.19$ ,  $SE = .03$ ,  $p = .00$ ). However, contingent rewards, an operationalization of transactional leadership, did not moderate the relationship between gender and safety priority ( $b = .03$ ,  $SE = .02$ ,  $ns$ ).

Our findings have significant implications for practice and research. From a practical perspective, our results demonstrate that situation strength and strong safety transformational leadership can level the playing field between men and women's safety priority. Thus, we suggest further interventions geared towards improving first-line supervisors transformational leadership competencies be enhanced and accelerated. Second, we encourage organizations, particularly in the energy sector, to consider including women in all positions to leverage slight advantages in safety priority, or the likelihood to pursue safety even when production pressures rise. From a theoretical perspective, our work expands on the individual difference component of prior models, providing enhanced and more nuanced perspectives on the role of demographics in the safety literature.

#### **O104 Perceived discrimination at work and its impact on the well-being of Canadian workers**

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It is well known that immigrants, women and people who identify as visible minorities are at a disadvantage in terms of their working conditions (Ledent et al., 2017, Malambwe, 2017, Boulet, 2012). In addition, having a quality job reduces the risk of suffering psychological distress among immigrants (Boulet and Boudarbat, 2015). On the contrary, perceived discrimination at work has negative consequences for job satisfaction and job performance, but also for the well-being and psychological health of employees (Di Marco et al 2016, Triana et al., 2015; Sloan, 2012).

This study, based on data from the 2016 Canadian General Social Survey, examines the determinants and consequences of perceived discrimination at work by Canadian workers. Multivariate analyses show that women and people who identify with a visible minority are more likely to perceive that they have been discriminated against in the last 12 months than men and people with white skin. On the other hand, immigration and age do not lead to significant differences in the risks associated with perceived discrimination. Our analyses also reveal that perceived discrimination reduces satisfaction with life and the chances of being in good mental health, while increasing the risk of being stressed. These results go further to the findings that certain groups of the population have less favorable working conditions by adding that discrimination, even that which is perceived only, leads to very real consequences for the well-being and health of the workers.

#### **O105 Is it OK to be connected outside the office? The impact on well-being at work and the mediated role of the work and family relationship**

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The aim of the present study is to analyze the relationship between the Technology-Assisted Supplemental Work (TASW) and the well-being at work-burnout and engagement. Furthermore, this study intends to test the relationship between TASW and burnout mediated by work-to-family conflict (WFC) and the relationship between TASW and engagement mediated by work-to-family enrichment (WFE). A total of 338 answers were analyzed from a services company in Portugal.

The results underline the positive relationship between TASW and engagement and the relation between TASW and burnout, that only exists when WFC is present. Furthermore, the relationship between TASW and engagement is stronger when WFE is present. Using the Conservation of Resources Theory as the framework, the results contribute to the literature by allowing a better understanding of the positive effects of the TASW on the employees' well-being and to the work and family relationship. Some practical implications, limitations, and suggestions for future studies are also presented.

### **O106 The knowledge loss: How overqualification relates to employees psychological needs satisfaction and work well-being**

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**Introduction:** With the shortage of labour supply, many individuals have jobs that fall short of their qualifications, experience, and skills, which lead to a situation of being overqualified (Maynard, Joseph, & Maynard, 2006). The overqualification may have negative repercussions on the workers' psychological needs satisfaction as well as on the workers' well-being, causing concerns to HR practitioners and academics. Given these concerns, the present research has two main goals. First, we aim to analyse the relationship between overqualification and well-being at work. Second, we intend to inspect the mediating role of employees' psychological needs satisfaction to explain the relationship between overqualification and well-being at work. These relationships among the variables will be analyzed according to the self-determination theory (Deci, Olafsen, & Ryan, 2017).

**Method:** Hypotheses were tested with a sample of 286 Portuguese workers from a company that operates in the electric energy sector. Participants had on average 45 years old and were mainly male. The majority of the participants had a University degree or higher. Descriptive data were analyzed using SPSS and the theoretical model was tested using PROCESS (Hayes, 2013).

**Results:** As expected, we found a negative relationship between overqualification and the three basic psychological needs analysed (i.e., autonomy, competence and relatedness need). However, while the competence need was significantly related to all the work well-being dimensions studied (i.e., work engagement, physical fatigue, and cognitive wear), the relatedness need was only significantly related to work engagement and physical fatigue, and the autonomy need was not significantly related to any work well-being dimension analyzed. In addition, relatedness need and competence need seem to assume a mediating role in the relationship between overqualification and work well-being.

**Discussion:** The results showed that overqualification contributes significantly to lower satisfaction of workers' psychological needs, as well as the mediating role of workers' psychological needs to explain the relationship between overqualification and well-being at work. The practical implications of these results will be discussed. The cross-sectional design, the use of a self-report questionnaire and the sample composed of workers employed only in a company do not allow to generalize results.

### **O107 The Job Insecurity Integrated Model: A longitudinal moderated mediation model test**

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The aim of the present study was to re-examine and extend the Job Insecurity Integrated Model proposed by Chirumbolo et al. (2017) using a longitudinal research approach. Job insecurity was decomposed into fear of losing the job—*quantitative job insecurity*—and fear of losing job related

benefits—*qualitative job insecurity*. We tested the hypothesis that quantitative job insecurity measured (T1) was associated with qualitative job insecurity over time (T2), which in turn associated to job satisfaction and turnover intentions later on (T3). Furthermore, we examined whether the proposed mediation differed for men and woman. Data were collected from Belgian employees by means of an online survey, using non-probability sampling methods. In order to obtain a homogeneous research sample, we included only employees who remained in the same job position throughout the whole observation period, allowing us to control for contextual bias. The first wave was collected in September 2017 and the two subsequent waves were each collected six months apart.

The results from the cross-lagged longitudinal mediation analysis indicated no mediation effect of *qualitative job insecurity* between *quantitative job insecurity* and the outcomes. In addition, multiple group analyses showed no differences in the mediation effect between men and women. Although no mediation effect was found in this study, *qualitative job insecurity* was found to predict the level of job satisfaction six months later, while controlling for the prior level of job satisfaction. Moreover, we found qualitative job insecurity to predict job dissatisfaction a year later amongst men, but not women. Although this study provided evidence that increased qualitative job insecurity had predicted decreased job satisfaction six months and a year later (Hellgren, Sverke, Isaksson, 1999), a full longitudinal mediation of qualitative job insecurity on the outcomes via quantitative job insecurity, as argued by Chirumbolo, was not confirmed. This may suggest that the mediation role of qualitative job insecurity has been overestimated in previous cross-sectional research.

### **O108 Please respond ASAP: The stress related to ICT use and e-mail management among managers in the Quebec healthcare sector**

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Introduction: Working in the digital economy involves constant connectivity, immediacy and unclear work-family boundaries (Atanasoff & Venable, 2017). In the literature, researchers tend to focus on the potential downsides of ICT use (Rasgale & Hoover, 2016) rather than viewing these technologies as a resource that can facilitate employee performance and well-being. Moreover, some authors found that this context of constant connectivity is likely to make workers vulnerable to a new form of stress called *workplace telepressure* (Barber & Santuzzi, 2015). Considering that connectivity and immediacy are a growing part of organizations today, it is important to understand both the benefits and drawback of ICT use. Atanasoff and Venable (2017) indicated that the use of ICTs in organizations can enhance workplace productivity and flexibility, but it can also cause stress and harm employees' well-being. But little is known about how and why ICT use affect the daily work behaviors of leaders. Prior studies have primarily focused on ICT use for employee well-being and productivity (e.g. Brown et al., 2014; Harris et al., 2015; Russell et al., 2017). Little attention has been focused on its implications for leaders' health or its impact on their leadership behaviors. The aim of this study is to identify the aspects of information and communication technologies (ICT) that are seen as a resource and those who are perceived as a demand by managers and their impact on managers' health and leadership behaviors.

Method: Our sample is composed of executive, intermediate and first level managers from a hospital in the province of Quebec, in Canada. It is composed of 73% female managers and the average age is 45. Also, the average seniority in a management position is between 6 and 10 years. A total of 75 semi-structured interviews were conducted in 2017. A qualitative approach was chosen to give a voice to the managers and to document the different aspects of their use of ICT. Code sequences analysis were performed using the QDA Miner software.

Results: Exploratory results show that the volume of communication and the expectations of constant connectivity are two important elements of manager's work environment. But, the obsolescence of technological tools, in the public sector in Quebec, reduce the risk of constant connectivity expectations and, thereby, contribute to the decline of *workplace telepressure*. On the contrary, the large influx of e-mails affect the daily work behaviors of managers. When managers are dealing with email overload, they don't have the time and the energy for other important workplace behaviors such as providing feedback to employees or sharing their knowledge and expertise with their teams.

Discussion: Our results suggest that email demands impact not only on managers' own behaviors, but could also affect their employees since managers don't have the time and energy to perform their roles effectively. Since managers and especially transformational leadership are important for any given organizations, email demands should be minimized. Organizations should address this problem by developing workplace policies around ICT use and responsiveness.

### **O109 Psychiatry trainees' intentions to leave their training: Exploration of environmental factors and individual level well-being**

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Introduction: Attrition is a major concern within psychiatric training in the UK. A recent study found that just 65.8% of psychiatry trainees in the UK plan to stay in psychiatry (Barras & Harris, 2012). A systematic review of the recruitment and attrition crisis in UK psychiatry identified a number of work and learning related barriers associated with choosing psychiatry as a career (Choudry & Farooq, 2017) - for example, 25-50% of trainees stated they were leaving because of a lack of resources or a lack of adequate supervision. However, the vast majority of studies investigating this topic were descriptive in nature. Therefore, the aim of this study is to investigate factors that link to psychiatry trainees' intentions to leave their training.

Methods: London psychiatry trainees were invited to fill in an online questionnaire. The questionnaire included multiple choice and open-ended questions about key factors trainees find challenging and also enjoy about their training and working as psychiatrists. The questionnaire also measured:

Results: 150 trainees took part in this study (63% male, 62% from white ethnicity background). 23% of trainees were thinking a lot about leaving the profession. The analysis is in progress looking at how trainees' learning and work factors link to their individual level well-being and in turn intentions to leave training. We will also explore answers to multiple choice and open-ended questions to identify other factors important to intentions to leave training or explore what trainees enjoy about being psychiatrists.

Discussion: This study addresses the problem of high attrition rates in psychiatry training in the UK. The presentation will discuss what factors (job demands, resources, recovery strategies and individual level well-being) and how link to trainees intentions to leave their training. Attrition in the mental health workforce directly affects how patient care is delivered as it often results in understaffing. In addition, inappropriate staffing puts a strain on other staff members and may affect their health and well-being. Because of such a overstretch of mental health staff the quality of delivered care might be affected too.

## **O110 Psychosocial factors at work and their associations with safety outcomes in the context of high-risk industries: A systematic review**

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Industrial disasters occur rather occasionally. Yet, their devastating economic, social and environmental consequences tend to stretch far beyond the place and time of their inception. Whereas it is widely acknowledged that industrial catastrophes tend to be preceded by suboptimal organizational conditions and human errors, the primary objective of this systematic review is to investigate existing associations between work-induced psychosocial factors and individuals' safety violating (or supporting) behaviors followed by incidents, accidents and injuries occurring in high-risk industries. To address the above-mentioned problem, we have designed the project, identified and organized relevant peer-reviewed publications so as to interpret and consolidate collected information in line with a non-statistical systematic review 'framework synthesis' method. Four bibliographical databases (i.e., PsycINFO, Web of Science, Scopus, and EBSCO) were screened for pertinent articles. The initial literature search resulted in 1936 hits. This project offers a needed conceptual framework that derives from two streams of research (i.e., occupational stress as well as workplace safety and accident causation domains) to support a systematic classification of findings deriving from papers identified through the systematic review process. Furthermore, based on a careful review of the empirical studies gleaned from search results, we not only gave an account of investigated psychosocial factors embedded in various high-risk industries, but also articulated their linkages with safety performance outcomes. The key findings deriving from our appraisal of 51 studies (37 with quantitative design; 9 with mix-method design; and 5 with qualitative design) indicate that: A. A battery of evidence exists that supports a linkage between a worker's exposure to workplace psychosocial factors (i.e., in the form of job demands and resources) and one's ensuing safety violating (or supporting) behaviors in high-risk industries. B. Several studies suggest the existence of intermediary steps in the aforementioned relationship, where experienced psychosocial factors induce certain 'hindering' (e.g., stress) and/or 'motivating' (e.g., job engagement) mental responses among workers, which can amplify and/or buffer their subsequent safety-related behaviors. C. Empirical research pinpoints as well that human errors (or conversely, one's compliance with established safety rules) can be explained to a certain extent by work-related psychosocial forces operating with diverse potency at individual (e.g., safety motivation), micro-organizational (e.g., workgroup communication) and macro-organizational (e.g. production pressure) levels. On top of that, we recognize several promising avenues of future inquiry that can bring substantial contributions to this field of study.

## **O111 The double-edged sword of manager support for wellbeing: An investigation of the intended and unintended outcomes**

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Despite the rise of employer instituted employee wellbeing programs, there remain concerning rates of low employee wellbeing across the globe. Like other human resource (HR) practices, employee wellbeing programs are normally designed by HR and implemented by line managers. As such, this research asks: Do employee wellbeing programs place an additional burden on managers who are now responsible for ensuring positive employee wellbeing? Do employees' responses to their manager's increased workload have implications for their own wellbeing? Although research has sought to address low levels of employee wellbeing, few insights into the potential unintended effects of managers support for wellbeing have been unearthed. Therefore, this research suggests that while manager support for employee wellbeing may result in a direct positive effect on employee wellbeing, there may be some unintended outcomes for managers and employees.

In this research, we theorize that managers who frequently support the wellbeing of their employees are likely to foster increased employee wellbeing. Paradoxically, these efforts to support employee wellbeing are theorized to be detrimental to managers' own wellbeing. Given that managers' supporting behaviors require effort, we expect that this negative relationship will be particularly apparent when managers have a high workload. Moreover, emotional contagion research suggests that employees may experience negative emotions (e.g., guilt) as a result of observing their manager experience decreased wellbeing (e.g., negative affect), which may have a subsequent negative spillover effect on employee wellbeing. Furthermore, employees who receive behavioral support from their managers, and who also feel guilty because their manager supports their wellbeing, may experience decreased wellbeing. Interestingly, the guilt literature further suggests that employees who feel guilty as a result of their manager's decreased wellbeing may become motivated to alleviate this guilt, thereby facilitating prosocial behaviors.

We are currently collecting data with an automotive manufacturer in Canada that has recently launched a formal wellbeing program. This project will employ a three-wave multi-source (manager and employee rated) research design: the first wave of data was complete in July 2019 and the two waves of subsequent data collection will be collected late 2019 and early 2020. Preliminary analyses were conducted with a sample of employees (n = 482) through an online panel survey. The correlation analyses provide preliminary support for our hypotheses, such that employees who felt that their manager supported their wellbeing were more likely to report feeling guilty for how much time their manager supported their wellbeing. We will present the final results of this study at the annual meeting, if accepted. Taken together, counterintuitively, this research seeks to theoretically and empirically shed light into the unintended outcomes for both managers and their employees that may manifest from manager support for employee wellbeing. In doing so, this research aims to advance the extant HR and wellbeing literatures, which have predominately focused on the positive outcomes of manager support for wellbeing, by providing a novel lens to offer a more complete understanding of the wide-ranging implications of manager support for employee wellbeing.

### **O112 Identifying the link between psychosocial factors and their impact on employee wellbeing and organizational performance in the hospitality sector**

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Employee well-being is a significant concern in the hospitality industry, and unless psychosocial risks at work are assessed and managed in the sector, it can prove costly for employers and employees alike due to reduced organizational performance and negative impact on employee wellbeing. This study therefore aims to identify the link between the job demands and job resources and their impact on employee wellbeing and organizational performance in the hospitality sector. Guided by the Job Demands Resources model, the study examines the relationship between work demands (time constraints and task monotony), and resources (autonomy and social support), and their impact on employee wellbeing and performance within the organization. After an initial data screening of data from the 6<sup>th</sup> European Working Conditions Survey (n=43,850), responses from total of 2393 participants working in the hospitality sector was extracted. SPSS 24.0 and AMOS 26.0 were used for statistical analysis comprising descriptive analysis, analysis of means and standard deviations, subgroup analysis, and path analysis. The results of the path analysis confirmed that job demands led to increase in stress (H1) and had a negative effect on motivation & engagement (H2). The results also confirmed that job resources significantly reduced stress (H3) and had a positive effect on motivation & engagement (H4). The results also confirmed that stress was related to a decline in health & wellbeing (H5) and productivity (H6).



**EARLY CAREER  
SHOWCASE**

## **EC1 Designing inclusive work in a health-promoting way - Analysis of job demands and resources of employees in social firms**

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Background: The PhD project is embedded in the research project "BeGIn - Workplace health promotion in social firms", which aims to develop, test and evaluate measures for workplace health promotion in five cooperating social firms in Hamburg, Germany. Social firms offer people with severe disabilities the possibility of employment so that they can be integrated into the general labour market. Since 01.01.2018, social firms in Germany are obliged to provide interventions for workplace health promotion for their employees. The PhD project aims to conduct a multi-methodological analysis of working conditions and interventions for workplace health promotion in social firms, with a focus on the topic of leadership.

Method: First of all, a scoping review will be carried out in order to summarize the empirical evidence on workplace health promotion and working conditions in social firms. In addition, semi-structured interviews will be conducted to analyse the current state of workplace health promotion and working conditions with managers (n=10) of five cooperating social firms in Hamburg and other relevant actors, e.g. form integration offices (n=10). Within this context, requirements, approaches and structures for workplace health promotion in social firms will be discussed. Employees with varying impairments, different sectors (e.g. gastronomy, crafts, gardening and landscaping) and company sizes will be taken into account. Based on the results of the qualitative interview study, a quantitative study with executives from social firms will be conducted by means of a standardized, online-based questionnaire survey. Validated survey instruments (e.g. "Copenhagen Psychosocial Questionnaire" and "Perceived Stress Scale") and target group-specific scales will be used. Social firms and their managers will be randomly selected and contacted (n=about 280).

Results: Based on the results of the analysis, recommendations for workplace health promotion in social firms will be derived, tested and evaluated in the further course of the project. The focus will be on linking structural- and behavioural health interventions in order to ensure sustainability after completion of the project. Results will be disseminated in the form of a handbook with practical recommendations for actions on workplace health promotion in social firms.

Conclusions: From a scientific point of view, the generation of new findings about the work and health situation in social firms are crucial for maintaining employability. The knowledge gained within the project can be used to develop target group-specific health promotion interventions.

## **EC2 In need of leisure: Investigating the relationship between off-job crafting, satisfaction of psychological needs and subjective well-being**

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Global changes in modern working life have led to increases in task-, time- and career-based demands. As the pace of working life increases, employees often find themselves experiencing more workload, as well as less time to recover from job stress. Accordingly, it is important to study if and how employees can leave work behind and actively replenish their psychological resources during off-job time. The focus of this research project is to explore off-job crafting (OJC), conceptualized as workers' attempts at behaviorally or cognitively shaping their off-job time in order to satisfy their psychological needs. Despite the high importance off-job time has for well-being and recovery from work, OJC is notably less studied than its counterpart in the work context, job crafting. In this project, OJC is explored in a cross-cultural, longitudinal questionnaire study combining perspectives from work psychology (e.g., research on recovery



and job crafting) and leisure sciences (e.g., research on leisure activities). The DRAMMA model of psychological need satisfaction (i.e., workers' experiences of the needs for Detachment, Relaxation, Autonomy, Mastery, Meaning and Affiliation; Newman et al., 2014) is used as a general framework connecting the two research fields. OJC, the DRAMMA needs, and their relationships to subjective well-being are explored at both within- and between-persons level, as well as theoretically and cross-culturally. New conceptualizations and tools, such as a survey based on the DRAMMA model to measure OJC, are sought to better define and understand work and leisure, and their interplay. To conclude, gaining a better understanding on how OJC and psychological needs interact to aid subjective well-being over time can help to find novel ways for employees to cope with increasing demands and stress at work.

### **EC3 Cognitive load in health professionals: Reducing information overload through adapted presentation of health data**

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Working environments nowadays are characterized by increased reliance on technology and human-computer interaction aimed to improve people's working conditions and performance. One prominent example are hospital settings, where health information systems and electronic health records can support the quality of therapies and working conditions. However, electronic health records also require additional time and cognitive resources for documentation and information processing. The result is potential information overload in those health professionals, who have to deal with electronic health records during therapy settings. Information overload not only leads to poorer information processing and decision-making, but also has negative effects on mental health and well-being.

Negative effects derive from the limited capacity of the human working memory, that is only able to deal with a certain quantity of cognitive load at one point in time. According to cognitive load theory (CLT; Sweller, 1988) three components define the cognitive load: First intrinsic cognitive load, which refers to the complexity of the information that should be processed; second extraneous cognitive load, which is induced by the way information is presented; and third germane cognitive load, which means the cognitive work required to process the information presented. All three components sum up to the actual cognitive load in one given moment. While intrinsic and germane cognitive load cannot be directly influenced, the way the information is presented (i.e. extraneous load) can be altered. Especially when intrinsic cognitive load is high due to high complexity of the information, an appropriate presentation is crucial to keep extraneous load low and prevent cognitive overload. In that sense, electronic health records as highly complex information input must be presented in a way extraneous load is low.

This study seeks to identify specific information requirements of occupational therapists and physiotherapists when processing electronic health records during therapy settings. A mixed methods approach including observations, cognitive interviews and an online survey is applied. Based on the findings a system will be developed and evaluated, that is able to aggregate relevant information from large data sets of electronic health records and to visualize the aggregated information in accordance with insights of CLT to reduce extraneous cognitive load. The developed system is a step towards improving decision-making and working conditions of occupational therapists and physiotherapists. In the long run, the results could be applied to other health professionals and help provide further understanding of human-computer interaction in healthcare. The study is part of the research project Smart Aggregation and Visualisation of Health Data (SMARAGD), project number 872575, which is partly funded by the Austrian Research Promotion Agency (FFG). The SMARAGD consortium is led by the IMC University of Applied Sciences Krams and includes researchers from the Johannes Kepler University Linz, the Know-Center GmbH, the Medical University of Graz, the SYNYO GmbH, the University of Graz and the University of Vienna.

## **EC4 Teachers' recovery processes: Investigating the roles of different breaks from work for well-being and health among ageing teachers**

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The overall aim of my dissertation was to gain new knowledge on recovery processes during different types of recovery settings among teachers: breaks during the working day, off-job time in the evenings and weekends, and a one-week vacation. Special attention was paid to internal recovery occurring during within-workday breaks, which has received far less research attention than external recovery during leisure time. Another important focus was the role of ageing in recovery, which has also been studied to a very limited extent so far. The target group of the study consisted of Finnish teachers, who are highly stressed occupational group. My research is based on quantitative data collected via three sub-studies: a cross-sectional questionnaire study (N = 909), a one-week diary study (N = 107), and a five-week intervention study (N = 76).

My dissertation consists of three articles. Firstly, utilizing the questionnaire data, I focused on relationships between leisure-time recovery experiences and well-being among younger and older teachers. Experiences of detachment, relaxation, control, mastery, meaning, and affiliation time were related to higher well-being. Age moderated the relationships between control, mastery, and relaxation and vitality and life satisfaction.

Concerning the diary study, I investigated recovery experiences as mediators between daily emotional job demands and affect in the afternoon and in the evening. The results suggest that some break recovery experiences act as mediators between these demands and affect both in the afternoon and in the evening. Of recovery experiences, break detachment, meaning, and affiliation seem to play a role in within-workday recovery. The study offers new insights regarding the relationship between break recovery and well-being after the workday, which is a relatively unexplored issue in recovery research.

Regarding the intervention study, I examined whether it is possible to strengthen and prolong positive effects of a vacation on well-being with the help of an smartphone-based intervention. Results showed that most recovery experiences and well-being indicators increased during the vacation, but the effects were short-lived. Among active app users, creativity at work increased from baseline to after the vacation, whereas among non-users it decreased. The fading of beneficial vacation effects on lower negative affect was slightly slower among active app users. Results suggest that a smartphone-based recovery intervention has potential to support beneficial vacation effects, but it still needs further development.

All in all, my dissertation shed new light on ageing teachers' daily recovery both across working days and evenings after work as well as a one-week vacation. The results can be translated into practical guidelines to improve teachers' working conditions, to facilitate recovery both during the working day and during leisure, and to boost and prolong the beneficial effects of vacations. Possible practical implications include recovery trainings and interventions specifically targeted for teachers.

## **EC5 Supporting dyslexic adults in the workplace**

Anna Niemczewska

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Introduction: Dyslexia has been succinctly defined as "a life-time persistent disorder which affects the ability to read and spell" (Snowling, 2012). As this definition affirms, dyslexia is not only a condition of childhood, but affects adults through their lifetime. Such affirmation, though, has not

been followed by an equivalent amount of research. Most dyslexia research focuses on school-age children and there is a lack of research into adult dyslexics (Eden et al, 2004; Gajar, 1992; McLoughlin & Leather, 2012; Rose, 2009). Reviewing the limited research into adult dyslexia (in theory and practice) Gerber (2011) states, "it is now well established that learning disabilities persist into the adult years, yet...there is a paucity of evidence-based research to guide research and practice" and the few studies that exist are "fraught with methodological limitations and, in some cases, methodological flaws." (Gerber, 2011, p. 31-33). The absence of good evidence-based research to guide practice is particularly significant to the workplace, where adults spend most of their time. Many workplaces have reaped quantifiable, identifiable benefits from recognising, supporting and harnessing the skills of the neurodivergent, including the 5-10% of adults estimated with dyslexia (CIPD, 2018). Conversely, many, even most, workplaces have not realised these benefits, and are, indeed, environments in which much of the dyslexic working population experience stressful situations and/or feel alienated. (Hellendoorn & Ruijsseenaars, 2000; Illingworth, 2005).

**Method:** My doctoral research aims to ascertain how such stresses in the dyslexic working population is manifested, what coping mechanisms and interventions work to alleviate these, and how more successful interventions can be developed and put in place. This will be done in three phases: i) a systematic literature review examining the perceived sources of stress among dyslexic adults in the workplace and the coping mechanisms and workplace interventions that alleviate such stress; ii) a mixed-methods cross-sectional study utilising semi-structured interviews with dyslexic employees and their managers and administration of various quantitative tools, including the Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983), the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) and the COPE Inventory (Carver C.S., 2013) and, once findings from (i) and (ii) have been integrated, iii) intervention(s) will be developed, implemented and assessed.

**Discussion:** This research will culminate not only in a published doctoral thesis but also, and possibly more significantly, in the development of a toolkit allowing dyslexic employees, their managers and employers, to identify practical, evidence-based interventions that can be individually tailored to the employee, situation and workplace, support and ensure the effectiveness of their implementation; with the overall aspiration of ensuring the creation of a healthy and sustainable work environment for dyslexic adults.

## **EC6 Organizational capability driven change in Swedish health care: The use of focus team to develop change capabilities in health care staff**

Johanna Widh

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Swedish health care faces great challenges. The population grows older and requires more health care due to an increase in chronic diseases and increased mental illnesses. This is manifested in lesser access to care and an experience of lower quality care. At the same time, manpower shortage in trained health care personnel is urgent. Deficiencies in the psycho-social work environment at several hospitals results in personnel resigning or getting sick, frequently due to stress related problems, both physical and mental. Every fifth sick leave case in 2012 where among health care staff. Staff shortage also results in expensive overtime, and staff fatigue. This creates a hard to solve equation for Swedish hospitals.

At one hospital, a resource team has been but together. Its aim is to work directly with a selection of units/departments of the hospital that are especially exposed due to staff shortage, recruitment difficulties and overtime outtake. The resource team will be available as change agents and support with various change management tools and methods during the one year long

intervention period. The idea is also to elaborate organizational structures in order to transfer knowledge to the healthcare staff at the various department on how to autonomously and continuously work with organizational development during a period of two years. After two years, the idea is that the units are now self-sufficient in maintaining the continuous improvements. A core idea behind the resource team is that all chosen change initiatives that they support the process of, must be chosen by the department members themselves. Emphasis is given on the fact that the department members are responsible for carrying out the change, with assistance from the resource team. This builds on the idea that every staff member is carrying knowledge on what could be improved, how to develop a best practice, and how to carry out the change process, with a little initial help and development of change skills.

My main research purpose is to evaluate the effects of the intervention program, on work engagement, perceived stress, intention to stay or leave, and team climate. We also aim to understand what the prerequisites are that must be met in order to carry out a change initiative like the before mentioned and enhance its possibilities to succeed, and what the potential obstacles that should be addressed are. In a quasi-experimental multi method longitudinal design, surveys will be combined with observations and interviews to develop a full view of the year long intervention process.

We believe that findings and formulated models will not only be applicable in future human resources related improvements at Sahlgrenska, but in other hospitals and other contexts as well, and of real importance to make the Swedish health care system a better place for both patients and staff.

## **EC7 Step Out – Exploring work forms and norms in the urban outdoors**

Charlotte Petersson

Malmö University, Malmö, Sweden

In this age of urbanization most of us spend the vast majority of our time indoors – not the least when it comes to work and working life. Why is that? Some of us have to, but the reasons for us not going outdoors also seems to be a question of how we regard work – what is considered legitimate – and not. There is a grand body of knowledge linking contact with nature to various positive effects upon wellbeing and health, attention restoration, recovery from stress, as well as aspects of creativity, learning and more. This PhD-project is midway through exploring possible forms of bringing different work-activities outdoors as well as understanding the benefits and challenges involved. The exploration has been conducted during two years within the frame of an interactive research project - 'StickUt Malmö' - in collaboration between Malmö University and The City of Malmö, mainly financed by the European Social Fund. Hundreds of people have been involved with a core of fifty participants contributing to the active experimentation and reflective learning process. Drawing upon some initial research results this presentation will lay forward a number of different forms of bringing (traditional office-) work outdoors, but most of all highlight and problematize norms considering work and its whereabouts.



**POSTERS**

## **P1 Investigation of anxiety level, depressive symptomatology and how they affect the quality of life and satisfaction of Greek Police Officers**

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**Introduction:** The importance of the study on the relationship between stress and depressive symptoms in Greek police officers is thought to be of great interest since until these days stress remains a widely recognized factor that seriously affects the progress and personal (emotional as well as physiological) condition of police officers. However, research mainly focuses on the stress factors or its effects and still, has not been conducted a comparative study between stress and depressive disorders and their effects on satisfaction from life for police officers in this country. The current study aims to investigate stress, depressive symptoms and their effect on the satisfaction from life for Greek police officers.

**Method:** The sample of the present study was 142 Greek police officers (95 men and 47 women) with a mean of 33,1 years of age (19-55), 13,2 years of working experience (1-32), most of them doing office or administrative work and with a mean of 42,3 working hours per week (35-50) and most of them (77%) were not working in dangerous working conditions. The sample completed a long-scaled questionnaire combining several internationally assessed scales. More analytically, there have been used: a) the Satisfaction from Life (SWLS scale), b) the Psychological Resistance (CD-RISC scale), c) a scale investigating stress (STAI X-1), e) a scale examining stress as a personality trait (STAI X-2), d) the levels of depression (BDI scale), e) as well as characteristics of personal behaviour during family crises (F-COPES scale).

**Results:** Overall, a medium to high satisfaction from life has been noted within the sample and moderate levels of psychological resistance. Additionally, a quite high level of functionality has been noted concerning the physiological functionality, physical role and psychological role as health factors. Moreover, the sample of this study exhibited a relatively low to moderate level of stress while it has been quite interesting findings presenting a moderate level of depression among police officers although their level of stress has not been particularly high. In addition to the above, personality stress has been slightly higher in comparison to situational stress while overall, situational stress, personality stress and the levels of depression have been found in statistically important and negative correlations with all other variables in this study. In relation to demographic factors, sex has been reported to be a significant variable since women seemed to be more vulnerable than men.

**Discussion:** The findings of the study underline the need for the scheduling of support programs of the Greek police officers so that their depressive inclinations due to their work will be reduced bringing positive influence on their professional and personal well-being.

## **P2 Influence of shift work on job satisfaction and the emergence of burnout syndrome in nursing staff in Ferrol**

Adela Reig Botella, Gloria Andrea Salazar Reina

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**Introduction:** Since nurses work in various wards, job satisfaction evaluation and work-family conflict investigation among them regarding the ward they work in is highly crucial (Nayeri, Forooshani & Arabloo, 2018). Job satisfaction has always been a considerable issue in organizations (Parkes, 2010), considering that nursing is structured on shift work (Gholizadeh & MoradianZadeh, 2004), investigations regarding shifting staff demonstrate that, certain factor have played roles in shifting status, such as change in biological daily cycles, workplace-related issues (different work sections), and social and family factors (Mitchel, Kotrba, Mitchelson, Clark & Balets, 2011). European registered nurses working shifts of 12 h or longer were more likely to

report job dissatisfaction, dissatisfaction with schedule flexibility, intention to leave their current job and to experience burnout (Dall'Ora, Griffiths, Ball, Simon & Aiken, 2015). On the other hand, burnout syndrome is beginning to be regarded as an occupational illness of high prevalence among nursing in Spain (Cañadas-De la Fuente, Vargas, San Luis, García, Cañadas & De la Fuente, 2015).

The purpose of the current survey study was to analyse the relation between the night shift work (turnicity), labour satisfaction, and the emergence of the syndrome of burnout in professionals of the health sector, nurses of 2 hospitals, Fontela Maristany and Hospital Arquitecto Marcide, in the city of Ferrol, Spain. Based on other researches we expected: positive relations between turnicity and job satisfaction (H.1), and to find a positive effect in the relation between turnicity and burnout (H.2).

Method: For the purpose of this research data was collected of 25 participants from nurses, all of them were females who worked in two state hospitals in Ferrol, Galicia (Spain) in 2018. Data were collected using Job satisfaction questionnaire S20/23 and Maslach Burnout Inventory for nursing staff.

Results: It was proved that the association of the research variables by means of the statistical correlation methods (Student's T parametric test for independent samples, and the Spearman correlation coefficient) The results indicate that in this sample there is a significant difference between the levels of degree of job satisfaction and of the appearance of the burnout syndrome in nurses who are in a situation of turnicity and those who have normal working hours. Given that both hypotheses have been proposed for each variable, they have been verified taking into account that the bilateral correction in none of the cases is greater than alpha (0.05), in addition to this there is a moderate correlation in the study variables. We will end our presentation with discussing the conclusions and practical recommendations of our research.

### **P3 The role of exposure to violence, burnout and self-efficacy on the life satisfaction of clinical staff working in a secure mental health hospital**

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Introduction: Increased burnout and decreased psychological wellbeing, such as life-satisfaction, of clinical mental health staff in secure mental health settings, is a continuing issue. To understand the most appropriate interventions and support streams for clinical staff in such settings, there is a need for enhanced understanding of how job demands and resources affect burnout and life-satisfaction. Though the Job Demands-Resources Theory (JDRT) provides a framework for this, there is scarce research that applies this theory to staff working in secure mental health settings. The health impairment process of the JDRT postulates that the exhaustion component of burnout mediates the relationship between job demands and outcomes. A demand commonly experienced by clinical staff in secure mental health settings is exposure to patient violence, which has a substantiated effect on burnout in various healthcare staff samples. As workplace stress can adversely affect employee's life-satisfaction, it is important to understand the potential process in which exposure to violence and burnout can affect clinical staff's life-satisfaction. The motivational process of the JDRT posits that the disengagement component of burnout mediates the relationship between resources and outcomes. Self-efficacy is a personal resource that has been demonstrated to predict burnout, as well as engagement at work, and life-satisfaction. However, there is piecemeal evidence of this process in secure mental health staff. The JDRT's buffering hypothesis suggests that resources moderate the effect of demands on outcomes, though there is scarce support in secure

mental health settings. This was addressed in the current study by investigating the extent to which self-efficacy moderated the relationship between exposure to violence and life-satisfaction.

**Method:** Using a cross-sectional design, questionnaires were administered to a sample of clinical staff working in a secure mental health hospital. Using the dual process model of the JDRT as a framework, the indirect effect of exposure to violence on life satisfaction with exhaustion as a mediator, and the indirect effect of self-efficacy on life satisfaction with disengagement as a mediator were investigated. In line with the buffering hypothesis, self-efficacy was explored as a moderator of the relationship between exposure to violence and life-satisfaction.

**Results:** Exhaustion did not significantly mediate the relationship between exposure to violence and life-satisfaction. Neither exposure to violence or exhaustion significantly predicted life satisfaction. Disengagement did not significantly mediate the relationship between self-efficacy and life-satisfaction, though disengagement and general self-efficacy significantly predicted life-satisfaction. Self-efficacy did not significantly moderate the relationship between exposure to violence and life satisfaction.

**Discussion:** This study addresses the paucity of literature exploring the JDRT in secure mental health settings. The results indicate the need for further research to explore potential mediators and moderators between exposure to violence and life-satisfaction, such as resilience or desensitization. Further research is also required to explore potential predictors of disengagement in clinical staff, working in a secure mental health environment. Practical implications include promoting self-efficacy and engagement, as well as offering support to enhance these for clinical staff working in secure mental health settings.

#### **P4 "Polish" occupational burnout - determinants of the phenomenon and its dynamics based on selected professional sectors and preventive actions from the perspective of HR consultant**

Magdalena Ślęzyk-Sobol

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The main goal of the presentation is to discuss the results of empirical research concerning burnout predictors among employees of the sector: education and health care in Poland, as well as the proposal of practical preventive program implemented by the author as part of the EU project on preventing burnout in these industries. The author of the research works in HR consulting dealing with the design and implementation of development activities (as a trainer and coach). The organizational approach to the phenomenon of occupational burnout Maslach and Leiter (2008, 2010, 2011) consists the conceptualization of the presented research. According to researchers, burnout affects not only people helping others. Occurs among representatives of various professions, because it results from not sufficient fit between the employee and the workplace, which causes emotional exhaustion and subsequent symptoms. Occupational burnout can be mentioned as the opposite of work engagement. According to the revised concept of Maslach and Leiter, burnout is not only a staff problem, but especially creates a lot of negative consequences for the social environment of organizations. It is the structure and functioning of the workplace that shape interpersonal relationships in companies and affect how people do their work. The author emphasizes the special role of interaction of subjective and organizational factors in the process of development of burnout symptoms, which was reflected in the adopted research methodology. One of the adopted hypotheses concerned the relationship between personality factors (Big Five characteristics) and burnout components, as well as between organizational factors (indicators of organizational climate and organizational stress) and the studied phenomenon. The research was organised in two stages.



A total of 508 people representing different professional sectors (education, health care, trade and services, uniformed services, administration) were tested. The research was carried out in two stages. The first stage involved measuring all the variables presented. Second stage - retest after 9 months break. 116 employees took part in it, which constituted 22.84% of the general sample, covering all surveyed industries. 90 teachers and 90 health care workers (mostly nurses) were examined. The main predictors of occupational burnout among teachers are: work overload (Beta=0,492, t=5,364, p<0,01), depressiveness (Beta=0,801, t=7,343, p<0,01), assertiveness ((Beta=0,395, t=3,892, p<0,01) and anger and hostility. When it comes to health care sector, the main predictors are: work overload (Beta=0,419, t=5,357, p<0,01) and self criticism (Beta=0,229, t=2,489, p=0,015). The second part of the presentation concentrates on the prevention actions undertaken on the behalf of European project: Time2Grow. Time2Grow Project contains scientific-applicational activities in the international cooperation nr POWR.04.03.00-00-W300/16 cofinanced by the Social European Fund. The partners are: Dobre Kadry, Centrum badawczo-szkoleniowe (Poland), Trendhuis CVBA (Belgium) i South–Eastern Finland University of Applied Sciences – Xamk, (Finland). As HR consultant the author conducted training and coaching programs addressed to selected professional groups. They included a number of workshop meetings concerning developing leadership and interpersonal competences.

## **P5 Developing a scale for measuring social well-being in non-territorial offices**

Susanne Colenberg

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Aim: Social well-being is defined as ‘feeling embedded in meaningful communities and having satisfying short term interactions and long term relationships with others’ (Fisher, 2014). It is a key factor in health and well-being (Deci & Ryan, 2008; Ryff & Keyes, 1995). At work, positive relationships are associated with feelings of vitality (Carmeli, 2009) and self-rated health (Kouvonen et al., 2006; Oksanen et al., 2008). Social support is known to buffer stress (Schaufeli & Bakker, 2004). However, social well-being has not been focused on in organizational literature (Fisher, 2014; Page & Vella-Brodrick, 2009). Non-territorial offices featuring desk-sharing and open workspaces imply specific risks and benefits for social well-being (Kim & de Dear, 2013; Morrison & Macky, 2017). The purpose of this study is to develop a scale that captures the three dimensions of social well-being, that is social interactions, relationships and belonging, in the context of non-territorial offices. The method follows the suggestions of Boateng, Neilands, Frongillo, Melgar-Quiñonez, & Young (2018).

Item deduction from existing scales: Literature searches of studies addressing social well-being in the workplace provided five validated scales. From these, 74 unique items regarding social well-being were extracted. Next, additional items were extracted from other reliable scales on social well-being aspects, such as the Inventory of Socially Supportive Behaviors, the Alienation Scale, the UCLA Loneliness Scale, and several belongingness (sub)scales. These items were translated into the work environment and added to the pool.

Item induction by explorative research: To gain insight into office workers’ perception of social well-being, concept mapping was applied to data from two case studies involving large contemporary office buildings, based on the method by Jackson & Trochim (2002). 182 different statements on social well-being were extracted from group interviews and categorized by 11 independent sorters. The similarity judgements were analysed using a statistical cluster analysis (t-Stochastic Neighbor Embedding using Ward’s algorithm). The results indicated 14 concepts referring to social needs (e.g. privacy, affiliation), positive and negative social behaviours (e.g. territoriality, incivility), feelings of alienation, and hindrance by the physical work environment. All items in the pool were assigned to these concepts and additional items were phrased to cover them all.

Next steps: scale construction, evaluation and application: A selection of 40-50 items from the pool will be tested for content and face-validity based on a review by 5-7 experts and cognitive interviews with 8-10 office workers. After constructing and pretesting the online questionnaire, it will be distributed among occupants of different office buildings in The Netherlands, until a response of 200-300 is realized. Factor analyses will be used to reveal the number of discriminant factors, item difficulty and discrimination tests to reduce the number of items, and Cronbach's Alpha to measure internal consistency. To test if the resulting scale measures the latent variable of social well-being, a multiple regression analysis will be performed. The validated scale will be integrated into a survey on well-being at work and perception of the physical working environment, to study how workplace design affects social well-being.

## **P6 The Job-demands resources model: A validation with employees working in Luxembourg**

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**Purpose:** The present study aimed to validate the job demands-resources model (Bakker & Demerouti, 2017) among a representative sample of the worker population in Luxembourg. Moreover, our purpose was to identify which specific job demands and resources contribute the most to burnout and work engagement, respectively.

**Design:** Data were collected via computer assisted telephone and web interview in a large sample of 1689 employees working in Luxembourg (55.2% male,  $M_{age} = 44.1$ ,  $SD_{age} = 10.3$ ). Most participants worked in academic professions (31.4%,  $n = 531$ ), followed by technicians and associate professionals (24.0%,  $n = 406$ ), clerical support workers (11.7%,  $n = 197$ ) and others (32.86%,  $n = 555$ ). We employed the Quality of Work Index – Luxembourg (QoWIL) to measure several areas of work, including work intensity, job design, physical and social conditions (Sischka & Steffgen, 2019). Additionally, different employment conditions were measured to get an indicator of the employment quality in Luxembourg.

**Findings:** Results of latent moderated structural equation modelling (LMS) indicated a good fit of the model to the data,  $\chi^2_{(411)} = 1738.017$ , RMSEA = .04 (95% CI = 0.04 - 0.05), CFI = .92, SRMR = .06. All job resources (i.e. social support, autonomy and job security) significantly predicted work engagement, whereas all demands (i.e. workplace mobbing, work-life inference, emotional demands) significantly predicted burnout. Particularly, social support was the most important resource ( $\beta = .29$ ,  $p < .001$ ,  $R^2 = 11.4\%$ ), followed by job security ( $\beta = .17$ ,  $p < .001$ ,  $R^2 = 3.9\%$ ) and autonomy ( $\beta = .11$ ,  $p < .001$ ,  $R^2 = 1.4\%$ ). Workplace mobbing explained the largest percentage of variance in burnout ( $\beta = .47$ ,  $p < .001$ ,  $R^2 = 41.6\%$ ), followed by work home inference ( $\beta = .30$ ,  $p < .001$ ,  $R^2 = 13.0\%$ ) and emotional demands ( $\beta = .15$ ,  $p < .001$ ,  $R^2 = 2.2\%$ ). While burnout had a negative impact on job performance ( $\beta = -.18$ ,  $p < .001$ ), work engagement did not predict the latter ( $\beta = .07$ ,  $p > .05$ ). Besides, only one out of nine hypothesized interaction effects had a significant effect on work engagement (i.e. social support x mobbing,  $\beta = 0.15$ ,  $p < .001$ ) and on burnout (i.e. social support x emotional demands,  $\beta = -0.08$ ,  $p < .05$ ).

**Conclusion:** Whereas the present findings provided strong support for the motivational and health impairment processes proposed by the JDR model, we found limited support for the interaction hypotheses. The results outline the importance of social conditions in explaining employees' health, illustrating important starting points for organizational interventions that aim to promote well-being.

**Contributions:** While other studies have tested the propositions of the JDR model by focusing on different work sectors, the present study includes a more comprehensive range of occupations,

classified according to the ISCO-08. Given its large data set, it provides enough statistical support to detect interaction effects and allows for the correction of measurement errors using LMS. Furthermore, it follows the parsimony principle by specifying the most important starting points for interventions across occupations.

## **P7 The development and validation of the Work-Related Maladaptive Thinking Patterns Questionnaire**

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Cognitive theory and therapy assume that our cognitive representation of the world determines how we feel and behave. In other words, it is not the objective circumstances that determine our feelings and behavior, but the thoughts that accompany them instead. While these thoughts can vary in their valence (they can be negative, neutral or positive) and accuracy (they can be a good approximation of reality or a distorted one), previous literature has often emphasized the clinical relevance of negative automatic thoughts which are not evidence-based and thoughts which are substantiated by real events but are highly rigid and dysfunctional. In the present study, we refer to both types of thinking patterns, as they may both cause emotional distress and undesired behavior. More precisely, maladaptive thinking patterns (MTP) can be defined as inflexible, unreasonable and usually negatively valenced cognitions.

While MTP and other related constructs play a vital role in our current understanding of the development and maintenance of psychopathology, they have only rarely been translated to other areas within psychology, such as industrial and organizational psychology. This is rather surprising as MTP could help us understand the mechanisms behind several fundamental phenomena within this area, such as poor detachment from work, workaholism and burnout. For example, if one believes that terrible consequences will follow if he or she does not finish a task in time (i.e., catastrophizing), it is more likely that this person will feel obliged to continue working even during off-job time (i.e., negative cognitive-emotional and behavioral engagement in work during off-job time). Furthermore, if this continues over a longer period, this person might not be able to recover from job demands and, as a result, may be more likely to develop burnout.

In the present study, we aimed to develop and validate a new questionnaire of work-related MTP that draws from cognitive theory and comprehensively addresses a wide variety of MTP (Burns, 1980) but adapts them to the working context. First, in the item development stage, we made an overview of existing questionnaires and conducted focus groups with cognitive-behavioral therapists to capture dysfunctional thoughts that are common among employees who seek help. Items were developed in three languages: English, German and Slovene. Second, this pool of items was then subjected to content validity tests and structured cognitive interviews with psychology students and laypeople. Third, adapted versions of the questionnaire were then tested using English, German and Slovene online panels (overall: N = 854, 50.5% male, age: M = 42.45, SD = 11.33). Based on these data, we further reduced the number of items, established the factorial structure and reliability, tested for measurement invariance and explored different aspects of validity (convergent, discriminant and incremental).

Preliminary results suggest that the Work-Related Maladaptive Thinking Patterns Questionnaire is a sound, parsimonious and useful measure that explains variance of several dependent variables (e.g., exhaustion, disengagement) above and beyond the existing similar measures and other constructs. Consequently, the newly developed questionnaire could contribute to our understanding of organizational phenomena in future studies.

## **P8 Job demands, exhaustion, and sleep quality: A daily diary study**

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Exhaustion is one of the core symptoms of burnout, a syndrome that is associated with higher job demands and low professional or personal resources. Although job demands are typically seen as a predictor of burnout, longitudinal studies also revealed a reversed process in which burnout also predicts higher job demands. This finding indicates that participants with higher burnout scores report having higher job demands, presumably due to a lack of resources to deal with everyday demands of work. Moreover, higher job demands and exhaustion can also represent a risk for individual's health and well-being, for instance, indicated by poor sleep quality.

The purpose of this study was twofold: (i) to investigate the relation between daily job demands, exhaustion after work and subsequent sleep quality at night and (ii) to examine the role of general exhaustion as a potential cross-level moderator of this relationship(s). To explore these research questions, a daily diary study on a sample of healthy full-time employees from various occupational groups has been carried out. Participants took part in an online study with three measurement points (morning, after work, before sleep) each day across five consecutive workdays during a regular working week and during the weekend. In addition to self-reported sleep quality, a nocturnal heart rate variability was measured. The preliminary results point towards a positive relationship between job demands and exhaustion at the day level, measured after work as well as before sleep, and a negative relation of both job demands and exhaustion with several indicators of sleep quality. We hypothesize that this relationship(s) would be moderated by general exhaustion, i.e. stronger relationship is expected for those with higher initial exhaustion at the person level.

The findings of this study could potentially contribute to a better understanding of the stability of exhaustion symptoms over time through the loss of already scarce resources. The results can, in turn, serve as the basis for designing efficient interventions to prevent the progress of exhaustion across time.

## **P9 The moderating effect of attitudes toward overqualification**

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Overqualification represents an employment situation where an individual has excess knowledge, skills, abilities, experience, or other qualifications that are not required or applied in their current job (Erdogan et al., 2011). Erdogan et al. (2011) state some "truisms" of personnel selection are overqualified job candidates are likely a poor fit for the organization, experience low job satisfaction, have low performance, and higher turnover. To promote more sustainable work and better management of overqualified employees, it is important to understand the employee's experience with their overqualification and why and/or when it may be beneficial and/or detrimental. Research has found perceived overqualification correlates with lower job satisfaction, lower organizational commitment, increased turnover intentions, (Maynard et al., 2006) and is positively related to stress (Johnson & Johnson, 1996). A meta-analysis found perceived overqualification to correlate positively with job search behaviors and negatively with psychological well-being (Harari et al., 2017). Research assessing attitudes toward overqualification found a moderating effect among overqualified workers and their turnover intentions, such that overqualified workers reported lower turnover intentions when they perceived management to have a positive/supportive attitude toward overqualified workers (Stoffregen, 2019). Further understanding the perception of managements support of

overqualified employees is needed. This study is based on person-job fit and human capital theory. Person-job fit theory involves an array of comparison and/or analysis of discrepancy between two or more entities. Human capital theory posits there are potential benefits for hiring overqualified employees and for being an overqualified employee. Peiro et al. (2012) posit overqualified employees are potentially highly-valuable employees and may in turn experience lower levels of job insecurity due to their surplus KSAs. The primary goal of this study was to examine the moderating role of perceived management attitudes toward overqualification (PMAOQ) on perceived investment in employee development (PIED), perceived organizational support, and organizational justice. To this end, multivariate regression analyses were conducted.

Model one identified a significant relation between PMAOQ and PIED. The main effect between perceived overqualification and perceived organizational support was significant. The interaction between overqualification and PMQO in predicting perceived organizational support was significant such that those who perceived themselves to be overqualified report higher perceived organizational support when they perceive management to be highly supportive of overqualified workers (Table.1).

Model two focused on the three factors of organizational justice: distributive, procedural, and interactional justice. Perceived overqualification was negatively and significantly associated with formal procedures. The interaction of perceived overqualification and PMAOQ was significant such that those that perceived themselves to be overqualified report higher procedural justice ratings when they view management to be supportive of overqualified workers. (Table.2)

Practical implications of assessing perceived management attitudes toward overqualification provide insight into how organizations can better manage overqualified employees. In the interest of promoting more sustainable work, organizations can promote a more positive culture toward overqualified employees by implementing policies, procedures, or interventions to better engage overqualified employees and utilize their surplus KSAs. This, in turn, could benefit the employee (person-job fit) and the organization (utilizing human capital).

### **P10 Social-cognitive variables and health services consumption**

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Introduction: Health care services are those aimed at the diagnosis and treatment of diseases, as well as at the maintenance of health. The provision of the health services to the population is in itself a public health problem, as it usually involves an expense that is becoming increasingly more difficult for countries to maintain. Certain groups that consume more health services (general or specialist consultations, surgery, diagnostic tests, pharmaceutical expenditure), whereas others consume fewer. Similarly, due to their personality traits, some people are more likely to consume health services and, contrariwise, others consume less. Various studies have linked consumption of health services to variables inherent to human development, such as the person's age, their physical or mental health status destructive over-dependence (DO), or dysfunctional detachment (DD) (Veras, 2002; Porcerelli et al., 2009; Cailhol et al., 2013; Meuldijk et al., 2017). Another of the variables studied in the relationship between people's health and their use of health-care resources is the perception of self-efficacy, this variable (Bandura, 1977) is considered an excellent predictor of many behaviors (Godoy-Izquierdo et al., 2008). The relation of health-care consumption with personality variables has also been studied especially with the Zimbardo Time Paradox Inventory (ZTPI; Zimbardo & Boyd, 1999).

Method: The sample was made up of a total of 1124 people, of whom one half were men and one half were women. All were 18 years or older, with an average age of 37.53 years (SD = 17.91; range 18 to 65 years). All participants lived in the region of Galicia (Spain). All the applied questionnaires presented fully acceptable levels of reliability (between .81 and .99). In addition, all the predictor variables showed a satisfactory fit to the normal curve. The following variables of the model were significant predictors ( $p \leq .05$ ): a negative past, a fatalistic present, psychological cognitive reactance, behavioral coping, health self-efficacy, and the level of somatization.

Discussion: Data from the statistical analyses show how to create a psychological profile of high consumers of health resources and to design training programs directed at the population to achieve savings in the consumption of health services. We will end our presentation with discussing the conclusions and practical recommendations of our research.

### **P11 The limitations of manager's caring behaviors on presenteeism: An investigation of the unexpected effects of an employee's felt obligation**

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Organizations have been witnessing a concerning trend related to the increasing number of employees who are showing up for work despite not feeling fully able to be productive – a phenomenon that has been coined presenteeism. There are two primary reasons that underlie these trends: 1) sickness presenteeism (i.e., employees who show up for work despite feeling sick), and 2) non-sickness presenteeism (i.e., employees who show up for work despite not feeling fully able to be productive due to non-health reasons). While extant research suggests that managerial support plays an important role in decreasing presenteeism, limited research has explored the types of managerial behaviors that may be particularly beneficial and the potential limitations of such support.

We hypothesize that manager's caring behaviors will decrease the frequency of both sickness and non-sickness presenteeism. However, we predict that an employee's felt obligation to help their manager and team reach their respective goals serve as important moderating effects, which highlight potential limitations of manager's caring behaviors. Specifically, we hypothesize that while managers who engage in caring behaviors are likely to discourage presenteeism, this effect may be strengthened when there is a strong felt obligation to the manager and team. Because sickness physically and visibly prevents employees from fully supporting their manager and team members, these employees are most likely to avoid presenteeism in order to recover quickly to help others reach their goals. However, because non-sickness presenteeism is not readily visible to others, we hypothesize that while managers may exhibit caring behaviors that are likely to discourage presenteeism, this effect may be hampered by employees who have a strong felt obligation to help their manager and team members reach their respective goals.

These hypotheses were tested in a study using data collected from an online survey ( $n = 198$ ) of employees. The preliminary results show that employees who perceive that their manager exhibits caring behaviors, but who also feel obligated to help their manager and team reach their goals are likely to actually exhibit non-sickness presenteeism. However, the results for sickness presenteeism were unexpected. Interestingly, there was no significant interactive effect on sickness presenteeism for employees who felt that their manager genuinely cared for them, despite feeling a felt obligation to help their manager. However, there was an unexpected significant positive interaction between manager's caring behaviors and a felt obligation to the team on sickness presenteeism, such that employees who felt sick were still likely to show up for work likely due to their felt obligation to their team.

This research highlights some key limitations of a manager's role in decreasing the prevalence of presenteeism. Specifically, this research shows that while managers may engage in caring behaviors with positive intentions, the power of their efforts may be hampered by an employee's felt obligation to help their manager and team reach their respective goals. In other words, this research highlights an interesting and unexpected boundary condition of manager's caring behaviors to decrease sickness and non-sickness presenteeism.

## **P12 Vicarious customer aggression and anger**

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Workplace aggression, including from customers directed at service employees, has garnered considerable research attention. Customer verbal aggression has been linked to negative outcomes for targets such as emotional exhaustion (Choi et al., 2014) and depersonalization (Dudenhöffer & Dormann, 2015). Less attention has been given to the outcomes for witnesses of aggression, including other customers. Hershcovis and Bhatnagar (2017) found that customer witnesses of customer aggression or incivility held more negative behavioural intentions towards the perpetrator than if witnessing a neutral interaction. Similarly, customers who witness managers acting uncivilly (vs. civilly) toward employees reported more anger toward the manager and desire for revenge (Porath et al., 2011). We examine observer ratings of anger toward a manager as a function of whether or not they reprimand a customer for their aggression. As verbal aggression is overt and unambiguous, observers should want the offender punished in some way (Hershcovis & Bhatnagar, 2017). If a manager does not stand up for the employee, the manager may be further engaging in injustice (Reich & Hershcovis, 2014). We also examine whether observer reactions depend on who made the mistake that instigated the customer aggression (customer, employee, or coworker). Responsibility has been positively linked to how much a person deserved the penalty they were dealt (Feather, 1996). We expect that when the manager does not reprimand the customer, anger should be especially high if the customer themselves made the error, relative to the service employee.

In an online vignette study, 211 participants were randomly assigned to one of six conditions. They read a scenario where they witness a customer being aggressive toward an employee. Responsibility for a mistake (the party at fault: customer, employee, or coworker) and the manager's behaviour (reprimanded customer: yes or no) was manipulated between subjects. Participants completed questions assessing their reactions to the scenario including their feelings of anger toward the manager, rated on a 5-point scale (1 = to a very small extent to 5 = to a very large extent). A 3 x 2 ANOVA showed no main effect for Fault but a main effect for Reprimand. Participants reported being angrier at the manager when he did not reprimand the customer ( $M=2.95$ ;  $SD=1.27$ ) than when he did ( $M=1.45$ ;  $SD=0.94$ ). There was also a significant interaction between Reprimand and Fault. Tukey's post hoc test revealed that when the manager did not reprimand the customer, anger was higher when the customer made the mistake ( $M=3.36$ ;  $SD=1.39$ ) than when the employee made the mistake ( $M=2.63$ ;  $SD=1.22$ ).

Perceived organizational injustice (Hsu et al., 2019) and anger (Dionisi & Barling, 2018) are negatively linked to important health-related outcomes. Our study shows how managers can influence customer outcomes such as negative emotions. A manager standing up for their employee may not only be beneficial to that employee, but also to observers. Managers' conduct may also have implications for broader business outcomes such as customer loyalty. Limitations and future research directions will be discussed.

### **P13 Stress coping strategies: Implications for employee PsyCap**

Kelsey Couture

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The damaging effects of work stress on employee wellbeing is a well-documented, albeit harsh, reality organizations face. Stressed employees experience burnout and psychological distress (Healy & McKay, 2000) resulting in decreased organizational performance (Ford et al., 2011) and personal wellbeing (Ganster & Rosen, 2013). However, coping strategies act as a means to reduce the discrepancy between the desired and current state causing stress (Edwards, 1998), and coping also directly impacts stressed employees' performance (Brown et al. 2005) and personal thriving (Park, 1998). With almost two-thirds of employees reporting greater job-related stress now than five years ago (Korn Ferry, 2018), a better understanding of effective employee stress coping is needed, and job resources might be the key to improvement.

Based on job demands-resources theory (Bakker & Demerouti, 2014) and conservation of resources theory (Hobfoll, 2001), psychological capital (PsyCap) is a promising avenue to healthier workplaces. Consisting of hope, self-efficacy, resilience, and optimism, PsyCap acts as a pool of resources for employees to draw on as they pursue their goals at work (Luthans et al., 2007). It has been linked to positive organizational outcomes that benefit both the employer and the employee (Avey et al., 2011), and it is easy to enhance in employees via interventions (Luthans & Youssef-Morgan, 2017). Encouragingly, research has shown PsyCap buffers the negative effects of employee stress (Abbas et al., 2013; Roberts et al., 2011), however, results have also shown that stress may lead to depleted PsyCap resources (Epitropaki, 2013; Liu et al., 2012; Wang et al., 2012). To better understand PsyCap's role in increasing employee wellbeing, this study (n = 308) sought to gain insight into the relationship between stress coping strategies and PsyCap.

Structural equation modeling was utilized to examine the effects of five coping strategies (changing the situation, accommodation, devaluation, avoidance, symptom reduction; Guppy et al., 2004) on the four distinct PsyCap dimensions. Model fit was good (CFI = .919; RMSE = .059). Of the five strategies, two were significant predictors. Specifically, employees using accommodation to cope had much higher levels of hope, self-efficacy, optimism, and resilience. Those utilizing symptom reduction had lower levels of these four dimensions. These results provide insight into the inconsistent findings between PsyCap and stress. Accommodation, the strongest predictor, aims to bring expectations in alignment with the situation (Edwards & Baglioni, 2000), which could effectively reduce stress without depleting PsyCap. However, if an employee copes with stress in a post-hoc fashion through reducing symptoms, it is reasonable to posit a draining of resources (Hobfoll, 2001) since a more proactive coping style is not utilized. Accommodation coping might allow employees to maintain higher levels of PsyCap over time, thus improving their overall wellbeing and enhancing their performance. The advantages employees and employers gain from higher levels of PsyCap have already made these interventions a desired method of enhancing performance and wellbeing in organizations. Thus, these promising findings could be a first step in increasing the sustainability of PsyCap development interventions through the employee's use of effective stress coping strategies.

### **P14 Basic psychological needs satisfaction and intrinsic motivation as mediators between job resources and work engagement amongst outbound call centre operators in Peru**

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This poster presentation will analyse the role of the psychological needs and motivation on the relationship between job resources and work engagement. Based on the Self-Determination Theory and the Job Demands–Resources model, we hypothesized that job resources fulfil the



basic psychological needs of the employee and that the satisfaction of these needs predicts a more intrinsic motivation which, in turn, fosters their work engagement. Towards that end, we studied the impact of the job resources of feedback, supervision, comfort at work and job opportunities on the satisfaction of the basic psychological needs for autonomy, competence and relatedness. Afterwards, we associated them with intrinsic motivation and analysed their knock-on effect on work engagement. The study followed a cross-sectional design. The participants were 878 outbound call centre operators that worked in a company based in Peru. Data was collected via email by sending online questionnaires to the participants. To test the hypotheses, we practised structured equation modelling by analysing the direct and indirect effects of the study variables. The results offered support for the proposed hypotheses. However, there was still a direct and significant effect between job resources and work engagement which could not be accounted by this theory of motivation. In the poster presentation, we discuss the implications of these findings. The results suggest that small to medium-sized call centres in emerging countries could leverage their limited resources by offering an environment that stimulates the job resources of feedback, autonomy, opportunities for development and comfort at work to increase their work engagement levels.

### **P15 Mitigating the effects of work-related stress and work/family life imbalance of female lawyers by coaching**

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The legal profession as practiced by freelance lawyers, has some integral characteristics that impair both the quality of practice and life for many practitioners. Lawyers, especially females, experience high levels of stress which may undercut their effectiveness and result to family instability. During the last few years, coaching has emerged and promoted as an important construct in the context of work – life balance while previous research have reported fast, sustainable and measurable results. The objective of this study is to determine the effect of coaching on a set of career and emotional outcomes for female lawyers as they tend to face greater organizational, interpersonal, and individual barriers towards balanced personal and professional advancement.

Initially, a survey was distributed to thirty female lawyers, to screen career satisfaction, perceived promotional opportunities, perceived stress, perceived wellbeing, job demands, financial status etc. Additionally, semi-structured interviews were conducted, focusing on the sense of wellbeing, sense of life purpose, family and motherhood related demands etc. The target group included 30-55 years old female lawyers, single, married, with or without children, acting as freelance lawyers for more than 4 years. After the screening phase, 5 one-to-one coaching sessions were delivered to each one of them, during a period of two months, focusing on work-life balance. At the end of this period we reconducted the survey to target group, in order to re-measure career and emotional outcomes.

Analysis of the results revealed that female lawyers do experience high levels of perceived stress, due to excessive work demands that affect their perception of their work and personal life balance. T-test of mean values for pre and post coaching survey responses identified statistically significant differences for the perceived wellbeing ( $p=0.038$ ), perceived stress levels ( $p<0.001$ ) and perceived work/family life balance ( $p=0.023$ ). In that terms, target group appeared to significantly benefit from coaching in various aspects of their lives, by redefining their role. Additionally, they reported a feeling of relief, while being self-oriented and more confident to provide competent services appropriate for their clients' needs and at the same time take control of a balanced life.

## **P16 Fueling work engagement: The role of sleep, health, and workload**

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With the current study, we investigate mechanisms linking sleep quality to work engagement. Work engagement is a positive, affective-motivational state of feeling vigorous, absorbed, and dedicated while working. Drawing from both the Effort-Recovery model and the Job Demands-Resources (JD-R) framework, we hypothesize that sleep quality should be positively related to work engagement via the replenishment of personal resources that become apparent in mental and physical health. Because personal resources should gain salience especially in the face of job demands (Coping Hypothesis of the JD-R), we hypothesize that high workload should strengthen the positive relationship between mental and physical health and work engagement. Furthermore, we assume that workload should be positively related to work engagement, representing a challenging rather than a hindrance job demand.

We gathered data from 152 employees from diverse industries via an online questionnaire integrating items from different existing scales. We assessed sleep quality using a single item from the Pittsburgh Sleep Quality Index (PSQI), work engagement using the Utrecht Work Engagement Scale (UWES-9), mental and physical health using the Short-Form Health Survey (SF-12) and workload asking participants about the amount of hours they actually spent at work (in contrast to the hours agreed on by contract). Results showed that sleep quality was positively related to work engagement, and that mental health mediated the positive relationship between sleep quality and work engagement. However, physical health did not serve as a mediator between sleep quality and work engagement. Workload turned out to be significantly and positively related to work engagement, replicating previous findings and confirming workload's function as a challenge job demand, but did not significantly interact with mental or physical health in predicting work engagement. Overall, the study highlights the significance of sleep quality for employees' health, well-being and work engagement. Practical implications include employees' empowerment to foster their own sleep quality and health-related self-care.

## **P17 New work on old chairs? Analysis of ergonomics and implications for health-oriented design of coworking spaces**

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Introduction: During the last years, coworking spaces established themselves as flexible and community-oriented workplace alternatives which are predominantly used by freelancers and self-employed persons. Coworking spaces come in different shapes and sizes, however, their common characteristic is the working space offered to the members based on a fee schedule. There has been an increasing interest on research on coworking spaces from different scientific disciplines since this relatively new way of work offers promising characteristics concerning social interaction, life-domain balance and flexibility. However, there are still many aspects that need to be addressed by research. So far, there has been no research on ergonomics in coworking spaces. Since the coworking space is often used for several hours per day, an ergonomic design of the work space may be beneficial for coworkers' health and satisfaction. Therefore, the aim of the study was to conduct an exploratory analysis of ergonomic working conditions in German coworking spaces. Furthermore, the relation between different degrees of ergonomic working conditions and subjective health as well as satisfaction with the coworking space was examined.

**Method:** A quantitative online-questionnaire based on validated instruments as well as newly developed items was used. For the cross-sectional study design data were gathered from 07/2017 – 10/2017 resulting in 112 participants.

**Results:** Most of the coworkers participating in the present study used the coworking space like a regular office in terms of presence and duration, thus spending there about 8 hours per day for 5 days per week. With regard to the ergonomic design of office workplaces such as individually adaptable chairs and desks, results showed that many work spaces did not meet the criteria for ergonomic office design. However, participants were generally satisfied with the equipment provided. The comparison of coworkers whose equipment was fulfilling different degrees of ergonomic requirements did not show significant differences regarding subjective health or satisfaction with working in a coworking space.

**Conclusion:** Ergonomics in coworking spaces can be seen as an important factor that should be considered by coworking space providers. In the long term, health problems related to poor ergonomics of the workplace can be avoided by offering equipment that is customizable to the persons' physical dimensions. However, most coworkers described workplace design as satisfactory. Advantages such as flexibility and voluntariness with regard to the choice of working in a coworking space may be shaping the subjective perception more strongly than ergonomics. Therefore, research using more objective approaches to coworking space ergonomics is suggested in order to complement the predominantly subjective data base.

### **P18 How do corporate committees work with conflict prevention in the workplace?**

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External conflicts with customers or internal conflicts between employees or between managers and employees are influencing the psychosocial working environment. When conflicts are suppressed, ignored or casually and randomly solved; it can resolve in a negative impact upon the health and safety of the workplace members. The problems in the psychosocial working environment can lead to conflict-related stress, bullying and traumatic incidents with threats and violence as the most visible problems, and low job satisfaction and low wellbeing as a consequence of unrevolved conflicts. This paper presents an intervention project aimed to strengthen the corporate committee's competences in solving and prevent negative conflicts at workplaces. The paper presents the projects first part: Best Practice investigation in 12 workplaces. The projects second part is an intervention study of a learning program design for corporate committees in four workplaces. The learning program will be designed based on the results from the Best Practice study.

12 workplaces were interviewed using Chronicle Workshops to investigate the context and development of their handling and prevention of conflicts at the workplaces. The research project addresses a development model where workplaces over time can move through stages from suppressing conflicts to randomly engage in solving conflicts, then further on to systematically work with conflict resolution ending upon a level where strategically work with conflict is regarded as a way to evolve new organisational knowledge and methods. The 12 workplaces were selected through sectors networks and the criteria were that the workplace should have developed tools and methods on the systematically or strategic level. Selection criteria were also that the workplace had established a working environment committee in two levels, with a committee and a working environment group including a manager and an employee working environment representative, which is mandatory in Denmark when the number of employees is more than 30. The 12 workplaces should also spread out between as many different sectors and branches as possible. The Chronicle Workshops are structured through a timeline and the workplace member answers the research question in three rounds: 1) Which important changes have occurred in the workplace the last years regarding the core task, customers, organisation

and management? 2) What kind of conflicts had occurred, and 3) which tools a method were used, to move the conflicts from negative and destructive to a more developing and learning outcome.

We will first present the result from the twelve workplaces will then discuss the connection between dealing outside relational conflict with customers and conflict resolving internal in the workplace. The presented methods and tools aimed at the individual, group, management and organisational level will then be discussed in the light of how these results will be implemented in the forthcoming learning design.

### **P19 The more, the better? Work engagement on the edge to a darker side**

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Summary: Work is a significant component of our lives. Thus, it is essential to learn more about what makes us successful and satisfied at work and what impairs or promotes our health. Whereas positive outcomes of work engagement have been examined quite often, research on the potential dark sides (e.g., over-engagement) is still very scarce. Since work engagement – due to its dedicative and immersive nature – can lead to heavy work investment (e.g., over work) and engaged employees are likely to create more challenging demands, we argue that a high level of daily work engagement will relate to higher (state) exhaustion at the end of the day. Because engaged employees seek for challenging tasks (e.g., bigger or more complex projects), we expect state work engagement to relate with more unfinished tasks and higher affective rumination. In sum, we propose that both affective rumination and recovery experiences (e.g., impaired relaxation and psychological detachment) are associated with higher exhaustion at the end of the day and a lower state of being recovered next morning.

Method: A diary-study over five consecutive workdays is currently in progress. We aim for a sample of a minimum of 120 individuals from the scientific-educational sector. Participants first have to answer a general survey including demographic questions, general work engagement (UWES; 9-item trait version), general exhaustion (OLBI; exhaustion-subscale), perfectionism (MPS, short scale), need for cognitive closure (NCC; 5-item short-form), and workaholism (DUWAS). Additionally, the general questionnaire serves for employees to indicate a representative target week and set their individual times for completing the diary. In the diary study, participants have to answer three short questionnaires per day. After waking up in the morning, sleep quality (PSQI single item measure), state of being recovered (4-item measure), prospective occupational self-efficacy (GSE-derived 3-item short-form), state of exhaustion (derived from OLBI), and state affect (PANAS; 12-item short scale) are assessed. In the afternoon, questionnaires on daily state work engagement (UWES; 9-item state version), state affect (PANAS; 12-item short scale), and unfinished tasks (UTS) have to be filled. Before sleep, participants are asked to answer scales on work duration, state of exhaustion (derived from OLBI), recovery experiences (REQ), work-related rumination (WRRQ), and state affect (PANAS; 12-item short scale). At Saturday, an additional morning survey is conducted.

Results: Research is currently in progress. Therefore, no results can be presented, yet. Data collection is scheduled until the end of March 2020. Implications: Examining the potential dark side of work engagement will enhance our knowledge and understanding of the construct. Especially for constructs that are mainly seen as positive, in depth research on potential threats is highly important. Diary studies are a good instrument to shed light the daily dynamics of work engagement. This could on the one hand improve theoretical models on fluctuation over time with regard to employee health. On the other hand, our research can provide practical implications how to protect employees from potential downsides of work engagement.

## **P20 Electronically assisted employee psychosocial support model**

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From Baby Boomers to Millennials and the much-debated “Z”, we live unique times when the deep inter-generational gap in aspirations, expectations and lifestyles shape a very challenging work environment. This diverse spectrum of the workforce impacts the needs just as much as it impacts the struggles of current employees. Such matters have grown in importance over the last years as the late 2000s recession has left a considerable need of wellbeing and psychosocial support for the working population; but has also highlighted the discrepancies of such needs between generations. The matter of adequate assistance for employees has presently reached the forefront of experts trying to aid employees in dealing with their life issues - from HR specialists to government regulators and from clinicians to NGOs. A recent World Health Organization study concluded that 1 trillion dollars are lost by companies worldwide - on a yearly basis - on costs related to mental health issues and yet, the question still remains: how do you provide such a heterogenous group of people with proper and effective assistance to cope? Trying to answer such a question, a multitude of others arise: Depression and anxiety are clearly the most aggressively present of conditions, but are there others that companies should also look at? What are the proper mediums for providing such assistance, to employees that respond very differently to different channels? Where does an individual’s responsibility for one’s personal wellbeing end, and where do organizations need to step in? What is the modern-day clinician’s role in all of this, and where do new technologies come in to play? The truth is, there is no singular and one-size-fits-all answer, as companies, people and contexts differ greatly, but this presentation will aim at providing an option. Developing models that blend modern technologies such as electronic software and artificial intelligence applications with educational, training and self-help tools, on top of traditional short-term telephonic and in-person counselling have proven successful in addressing many of the issues listed above.

Efficacy studies show that, at individual levels, employees have reported a 76% improvement on their emotional wellbeing, 41% improvement in the quality of their personal relationships, 44.8% improvement in managing their work life with their personal one and a decrease with 59% of their perceived level of stress. At organizational level, such mixed models have generated 39% improvement in work performance, 49,5% increase in morale and motivation and a 36% decrease in absenteeism. On a financial level, companies have reported a 30% decrease in lost time and 40% decrease in sick pays, with an average ROI of 5-1 euros.

During the presentation, we will showcase this mixed model and its results, look at different channels involved, discuss case studies and analyze the modality in which such programs help close the inter-generational gap, in hope of providing specialists with an alternative template in assisting employees and organizations with their mental health and wellbeing improvement efforts.

## **P21 Working conditions and strains of social workers in the refugee and homelessness sector: A qualitative study**

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Background: Large parts of Europe were faced with high immigration rates of refugees and growing numbers of homeless people during the last years. Social workers provide social aid to refugees and homeless individuals. In doing so, social workers can encounter restricted financial

resources, limited control and decision latitudes and high workloads. Still, little is known about their working conditions. This qualitative study aimed to examine their job demands, job resources and their experience of job strain.

**Methods:** Semi-structured interviews were conducted from October to December 2017 with 26 professionals working directly with refugees and/or homeless individuals in Hamburg or Berlin. Participants were recruited from outpatient and residential facilities in the refugee and homelessness sector. The interview guideline addressed job demands, job resources and health strains. Interviews were recorded, transcribed verbatim and anonymised. A qualitative content analysis was applied. Categories were developed deductively from the interview guideline as well as inductively from the data material.

**Results:** The majority of respondents were female (65 %) and their age ranged from 26 to 64 years. Most of the respondents had a bachelor or diploma degree in social work (62 %) and had worked for no more than three years in the refugee or homelessness sector (58 %). The interviews took place in counselling and day care centres, initial registration centres and residential homes. Social workers mainly experienced job demands regarding their job content and work organization, such as high emotional and quantitative demands, limited possibilities for solving client problems and insufficient staffing. Important job resources comprised social workers' pleasure of working with their clients and the high appreciation they received from clients as well as social support from the team. Respondents reported high stress levels, had problems in switching off from work and sometimes felt tired and exhausted. Some respondents had already experienced long-term mental health problems in the form of depressive moods or burnout symptoms.

**Discussion:** The specific situation in the refugee sector due to the so called "refugee crisis" in Germany needs to be taken into account when interpreting the results on the working conditions. Still, the results of this study give a deep insight into the job demands and resources of this particular group of social workers and provide a basis for the development of job-specific health promotion measures.

## **P22 "I need to take care of myself" – qualitative study on coping strategies, support and health promotion for social workers serving refugees and homeless individuals**

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**Introduction:** Refugees and homeless individuals represent particularly vulnerable groups in precarious living conditions. Therefore, social workers serving these clients are likely to be confronted with extensive demands at work. The aim of our study was to investigate the coping strategies used by social workers in the homeless and refugee aid to deal with their job demands. In addition, we aimed to explore their sources of support and health promotion offers at work as well as their needs for further support.

**Methods:** 26 semi-structured qualitative interviews were conducted with staff in social work in the refugee and homeless aid in Berlin and Hamburg from October to December 2017. The interview guideline included questions regarding social workers' coping strategies, support sources at work and workplace health promotion offers. The interviews were recorded, transcribed and anonymised. Transcripts were analysed in a deductive-inductive process according to Mayring's qualitative content analysis by use of the software MAXQDA Analytics Pro.

Results: In total, 17 interviewees were female and 9 were male. They were aged between 26 and 64 years. 14 interviewees worked in the homeless sector and 12 in the refugee sector. Interviewees reported various coping strategies, involving both problem-oriented strategies (e.g. time management, setting limits to clients, seeking support in conflict situations) and emotion-oriented approaches (e.g. leisure activities, self-care, distancing oneself from work). In addition, various sources of workplace support provided by team members, supervisors and other institutions were emphasized. However, interviewees also described unmet needs, e.g. in terms of regular and individual supervision. Moreover, several interviewees were unaware of any health promotion offers at their workplaces and formulated wishes for structural and behavioural health promotion measures.

Conclusion: The results provide new insights into the coping strategies of social workers and their available support at work. The cited needs of the workers can contribute to the improvement of support systems and the development of workplace health promotion offers within the organisations.

### **P23 Analysis of mental health, working conditions, coping strategies and health promotion interventions in social firms – A scoping review**

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Introduction: Social firms offer people with severe disabilities the possibility of employment so that they can be integrated into the general labour market. The companies must employ at least 30% up to 50% of people with a severe disability in Germany. In addition, the sizes and sectors of the companies vary. Social firms are mainly located in gastronomy, gardening and landscaping, industrial production, facility management, trade and crafts. Since 01.01.2018, social firms in Germany are obligated to provide health promotion interventions for their employees. The study aims to evaluate the state of research on mental health, working conditions, coping strategies and health promotion interventions in social firms to derive recommendations for action.

Method: A scoping review was carried out examining the topics mental health, working conditions, coping strategies and interventions for workplace health promotion in social firms. The databases PubMed, MEDLINE, PsycINFO, PSYINDEX, CINAHL and Web of Science were included. The study selection was based on predefined inclusion and exclusion criteria in the period between 2000 and 2019. In addition, the quality of the included studies was evaluated in a standardized way.

Results: The review included studies with quantitative, qualitative and mixed-method designs. First results provide important information on job demands and resources in the areas of work tasks, work organisation, social relations and working environment within social firms. Moreover, coping strategies and health promotion interventions for employees in social firms are displayed. Further results will soon be available.

Conclusions: Based on the results of the analysis, recommendations for workplace health promotion in social firms will be derived. There is a need for further research concerning the work and health situation in social firms in Germany.

## **P24 Living and working in health and safety: preliminary results from a survey on migrant workers in agro-zootechnical sector in Italy**

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Introduction: Foreign workers residing in Italy as of 1<sup>st</sup> of January 2018 amount to 2.4 million, representing 10,5% of the total employment; an increase of 1.2 points (+243.000 units) compared to the previous year. Their presence in agriculture sector reaches 16.9%. Between 2008 and 2013 (in the midst of the economic crisis) Italian workforce was replaced by foreign workers which became a structural element of the agricultural sector. The present study, which shows the preliminary results of a survey on migrant workers in agro-zootechnical sector, is aimed at analysing risk perception of health and safety in the workplace in order to identify training needs which takes into consideration aspects relating to social and work integration.

Methods: The survey was carried out through the administration of a face-to-face questionnaire to 983 randomly recruited migrant workers with the involvement of agricultural companies and trade associations in three territories (Cremona and Mantua in Lombardy, Rieti and Latina in Lazio, Foggia in Puglia), geographical areas which denote different and emblematic social and working conditions of migrant workers.

Results: The majority of the sample is male (96.7%), with a similar average age - about 40 years - for the sample of Lombardy and Lazio, compared to a younger sample, around 32 years, for Foggia. While migrant workers of Lombardy and Lazio are mostly of Asian origin (76% and 52.5% respectively), with a clear prevalence of Indians (62% and 47.5%), the sample of Puglia comes from Africa, in particular from Nigeria (26%). More than 60% of the Lombardy sample is in Italy for over 10 years, while this percentage is 41% in Lazio and drops to around 3% in Foggia. Only 27% of respondents attended an Italian language course, often/always used at work by about 47% of the sample, in their free time by just over 11% and with the family by 12%. With regard to the risk perception, 68% of respondents do not believe that there are risks at work, 70.1% of respondents do not feel personally exposed to risks in the workplace and about 77% are not afraid of injury due to their own work. Over 84% of the sample are not aware of the legislative framework on occupational safety and health at work (Legislative Decree 81/08).

Discussion: The preliminary results suggest some interesting findings about the territorial realities in which the survey was conducted, in particular with regard to some aspects of integration that in any case require secondary analysis. At the same time, some results indicate a low risk perception, an area that must be more specifically analysed also with reference to linguistic knowledge, in order to identify/implement prevention policies, in consideration of the peculiarities that characterize the agricultural sector.

## **P25 Evaluation of psychosocial risks in a call centre in Galicia**

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Introduction: One of the first definitions of labour psychosocial risk factors was made by the joint committee International Labour Organization – World Health Organization (ILO – WHO) in 1984, in which they pointed out that labour psychosocial factors consist of interactions at work, the environment, labour satisfaction and the conditions of your organization, on the one hand, and



on the other, the capabilities of the worker, his culture and his personal situation outside of work. Psychosocial factors can favour or impair work activity and the quality of work life of people. In the first case they promote the personal development of individuals, as when they are unfavourable (psychosocial risks) they harm their health and well-being (Gil-Monte, 2012). In a competitive world, exposure to continuous change subjects us to demanding work processes in terms of schedules, mental effort, control of emotions in the face of daily challenges, high levels of stress of the workers to claim being at the forefront, combining personal and work life. All this gives way to the existence of "psychosocial risks". The European Agency for Safety and Health at Work (2018), indicates some examples of working conditions leading to psychosocial risks: excessive workloads, conflicting demands and lack of role clarity, lack of involvement in making decisions, job insecurity, ineffective communication, psychological and sexual harassment. The purpose of the current survey study was to analyse psychosocial risks in a call centre located in the region of Galicia (Spain), examining the psychosocial factors present, and its consequences for health.

**Method:** In this study 365 workers in a call centre in Galicia (Spain) participated, they have continuous interaction with different type of clients, by telephone. This evaluation was performed by the FPSICO 3.1 method, -computer application-, which evaluates 9 psychosocial factors: working time, autonomy, workload, psychological demands, variety and content of work, participation/supervision, workers interest/compensation, performance of the role and social relations and support; reflected in a questionnaire made available to workers so that they voluntarily and anonymously participate in this research. The participation was very high, around 95%.

**Results:** The factors autonomy and participation / supervision obtain less favourable results. For the autonomy factor, only 45 % of the workers consider an adequate situation, obtaining an average of 67.94, which means high risk; and for the participation/supervision factor only 8% consider an adequate situation, obtaining an average of 47.09 which mean very high risk. This is common in studies of psychosocial risks in the calls centres with the FPSICO method, because each campaign / service is subject to customer requirements. We will end our presentation with discussing the conclusions and practical recommendations of our research.

## **P26 The relationships of the big-five personality traits, sleeping qualities, and ages: An exploration study on civil pilots in Taiwan**

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It is important to explore the civil pilots' big-five personality traits and their well-beings in terms of aviation safety. The relationships between the big-five personality traits and their performances on the job as well as sleeping qualities were examined in this study. The differences of the big-five traits and sleeping qualities between 5 aged groups of civil pilots were also examined. A total of 759 airline pilots aged 40 to 63 participated in this study. Most of them (88.4%) are Taiwanese. They were grouped into 5 aged groups, i.e., 40-44 (25.2%), 45-49 (26.1%), 50-54 (22.6%), 55-59 (14.5%), and 60 and up (11.6%). The questionnaire consisting of 67 forced-choice items was used in this study. All of the data were analyzed by utilizing IBM SPSS 24.0. The results of the correlations among the big-five personality traits and 3 factors of job performances were all highly significant ( $P < .001$ ). The correlations among the big-five personality traits and 5 factors of sleeping qualities (except the snoring problems) were also highly significant. The current results also have shown that the aged groups of civil pilots were aging well in Taiwan. The needs of flight training were also suggested based on the current results for enhancing flight safety.

## **P27 Comparison of worklife areas and stress severity assessment in four occupation groups: Auditors, policemen, helping professionals and knowledge workers**

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**Aim:** The aim of the exploratory study was to examine the potential differences in the global assessment of areas of work-life and of the severity of work-related stress in employees working in four very different occupations. The lack of such comparisons encouraged us to fill in the existing gap.

**Methods:** The research covered 72 internal auditors, 61 emergency and rescue workers-policemen, 92 helping professionals-psychologists, therapists and social workers and 58 knowledge workers-chemical laboratory staff. A subjective assessment of areas of worklife was carried out using the Areas of Worklife Survey questionnaire by Maslach and Leiter using the Polish adaptation by Terelak and Izwantowska (Kwestionariusz Obszary Życia Zawodowego); the Perceived Stress Scale (PSS-10) by Cohen, Kamarck and Mermelstein using the Polish adaptation by Juczyński and Ogińska-Bulik (Skala Odczuwanego Stresu PSS-10), which was used to investigate stress severity at work.

**Results:** Statistically significant differences were found between the studied groups in terms of the global assessment of all areas of work-life, as well as in the assessment of particular areas: workload, rewards, fairness, and values. No significant differences were found with regard to the community and control areas. Results point to the existence of differences in the assessment of the Workload area between auditors and the three other professional groups. The auditors and the policemen differ from the helping professionals and from the knowledge workers in their assessment of the rewards area, meaning that auditors and police officers turn out to be less satisfied with this area of their work than others. Policemen are also significantly less satisfied with the values, fairness and control areas compared to helping professionals. The research demonstrated the existence of statistically significant differences between workers belonging to the four groups of occupations in their assessment of the severity of work-related stress. Police officers and helping professionals experience similarly severe stress, which is significantly stronger than that experienced by auditors and laboratory staff.

**Conclusions:** Significant differences between the surveyed workers were found in terms of the global assessment of all areas of worklife, as well as in the assessment of particular areas: workload, rewards, fairness, and values. They do not differ in their global assessment of the sense of trust, cooperation and support received from their co-workers (community) and in the global assessment of their feeling of autonomy at work (control). Policemen and helping professionals experience significantly more severe stress at work compared to the auditors and laboratory staff. Working in social service occupations, whether as emergency (police officers) or as helping professionals (psychologist, therapist, social worker), may lead to a similar level of stress. The results may be related to the fact that men prevailed in the group of police officers studied, while women prevailed in the group of helping professionals. Further research should be carried out into sources of stress, which may be linked to other factors than the areas of worklife presented here, such as stress-inducing contact with customers, existing hazards or the predispositions of workers.

## **P28 Prevalence of destructive leadership behaviors at work in Sweden**

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Leadership has a great impact on employees' health and well-being. Studies on the relationship between leadership and employee outcomes have mainly focused on constructive leadership. However, a meta-analysis (Schyns & Shilling, 2013) shows that the relationship between destructive leadership behaviors and negative employee outcomes (e.g., turn-over intention) is stronger than the relationship between constructive leadership behaviors and positive employee outcomes (e.g., well-being). Research also indicates that destructive leadership behaviors occurs quite frequently and most employees are exposed to such behaviors at some point during their work life (Aasland et al., 2010). As research on destructive leadership is scarce, we have limited knowledge about the prevalence of destructive leadership behaviors and how it should be measured.

The aim of the present study is twofold. The first aim is to examine the psychometric properties of a measure of destructive leadership, Destrudo-L (Larsson et al., 2012), in a general work context. Destrudo-L has been developed, evaluated, and has previously been used in Scandinavian military settings, but has been suggested applicable for use in a wider work context. The second aim is to study the prevalence of destructive leadership behaviors in Sweden, and compare different sectors of the labor market. The results will also be compared to previously conducted studies on the prevalence of destructive leadership behaviors in other countries (e.g., Aasland et al., 2010).

Data for the study has been collected in collaboration with Statistic Sweden (SCB) during 2019. The survey was distributed to 3.000 employees. A total of 1.132 employees (38,7 %) completed the questionnaire. Design- and calibration weights were used compensate for the non-respondents, making the sample representative for the present Swedish workforce of 3 344 673 employees between 19 and 65 years of age.

The factor structure of Destrudo-L will be examined. Confirmatory factor analysis (CFA) and exploratory structural equation modeling (ESEM), as well as bifactor CFA and bifactor ESEM models will be used to examine the proposed higher order factor structure of Destrudo-L. Reliability, convergent validity, and discriminant validity will also be examined.

Prevalence of destructive leadership behaviors will be estimated using several methods to enable comparison with previous studies. These estimates will include exposure of any kind using cut-of criteria (Operational classification method), and by examining conditional probabilities of destructive leadership behaviors in different profiles (Latent profile analysis). This study is the first of a AFA financed project that examine antecedents to destructive leadership behaviors, with the aim of developing preventive measures to reduce the prevalence of such behaviors at work.

## **P29 Age differences in off-job crafting motives, behaviors and effects on employees' well-being and job performance**

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According to self-determination theory, need satisfaction is a universal requirement for experiencing positive outcomes such as higher well-being and performance (Deci, & Ryan, 2000). Sheldon (2011) has proposed that psychological needs might also act as key motivators that lead to goal-directed behaviors and people might vary in their motives to engage in different

needs-satisfying behaviors. Research further suggests that people's motives might change with age. Therefore, people at various ages might be motivated by different psychological needs to proactively adjust their non-work time activities in order to experience positive outcomes such as enhanced well-being and job performance.

Socioemotional selectivity theory (Carstensen, Isaacowitz, & Charles, 1999) posits that older people perceive time as more limited compared to younger people, leading them to focus less on engaging in new challenges, and more on maintaining meaningful relationships. We therefore expect that competence need may not be as important for older employees as for younger employees. Meanwhile, social relationships become emotionally more meaningful and autonomy more important with time (Kooij et al., 2011). Therefore, older employees might perceive relatedness and autonomy needs more important compared to younger employees. We further expect that these age-related changes will in turn affect employees' engagement in different off-job crafting behaviors. We will investigate the role of age in off job-crafting motives and behaviors, and the effects of off-job crafting behaviors on psychological needs satisfaction, well-being and performance among 395 Finnish employees. The data regarding age, psychological needs strengths and needs satisfaction, off-job crafting behaviors, well-being, and job performance was collected via three digital self-report questionnaires covering a 6-month period in 2018.

Findings from this study will contribute to explaining the motives of employees of various ages to engage in off-job crafting and its potential benefits for well-being and job performance. Understanding these motives could contribute to designing an off-job crafting intervention that considers potential age differences. Moreover, organizations could potentially use these new insights when designing office break areas or offering their employees after-work recreational activities to ensure that they provide off-job crafting opportunities for all age groups.

### **P30 Qualitative and quantitative job insecurity. Job insecurity profiles in relation to wellbeing at work**

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Most studies on the relationship between job insecurity and its outcomes, such as wellbeing and organizational variables, have focused on employees' overall concern about being able to keep their job in the future (i.e., quantitative job insecurity – Quant-JI). Relatively little attention has been given to perceived threats to valued aspects of one's job (i.e., qualitative job insecurity – Qual-JI). This study aims at bridging both conceptualizations of job insecurity and to explore different profiles of job insecurity. At the same time, we explored how each profile affects two classical outcomes, used in Job Insecurity research, such as Work Engagement and Burnout.

Using k-means analysis cluster techniques, in a sample of 334 healthcare employees in Italy, we explored different solutions. The number of clusters was decided based on the cluster dendrogram, and on the basis of substantive interpretability. We decide to retain the three-cluster solution, showing three profiles: 1. High level of both Qual and Quant JI; 2. Low level of both Qual and Quant JI; 3. Low level of Quant and Medium level of Qual JI. The three groups are well balanced: 120 cases for the first cluster, 96 for the second one, and 112 cases for the third one. It seems not possible to perceive high level of Quant JI without perceiving a high level of Qual JI as well. Checking the effect of the profile on outcomes (Burnout and Work Engagement), we found that there is an effect on BO but non on WE. A high level of Qual JI, even if associated with a low level of Quant JI, show the same effect on BO as the group which perceive a High level of both Qual and Quant JI, whereas the group with low level of both Qual and Quant JI showed the lower level of BO.

This results seems quite in line with Callea, Urbini, & Chirumbolo 2016) model, who found a .33 regression coefficient in Quant JI predicting Qual JI: Quite high even though non very high. There is actually a range of possibilities that one can perceive high level of Qual JI independently from his/her perception of Quant JI. Losing the job also means losing all aspects of the job; however, the opposite is not needed: I can be afraid to lose values aspects of my job, but not the job as such.

### **P31 Building a coaching culture in a multicultural organization in supporting its employees to grow**

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**Introduction:** The aim of this paper is to showcase the journey embarked by a Telecommunication Company, based in the Middle East (ME), on building a coaching culture, which lead to being recognized by the International Coaching Federation (ICF) and being awarded the 3<sup>rd</sup> Middle East Prism Award. The aim was to create a coaching community which strived to improve the wellbeing of its employees, by enabling each colleague to realise their true potential, as it has been demonstrated that coaching is effective in organisations (Grover & Furnham, 2016).

**Method:** A Coaching community was created within the organization to tackle employees' development. This group benchmarked with other companies and industries to understand the achievements and challenges they faced. They benchmarked with an international school, an airline and a courier company, who all embarked in a coaching journey. As a result, HR and other champions got upskilled to use team coaching. In addition, HR supported internal employees to become qualified coaches. The coaching would cover different needs related to wellbeing, performance related issues, personal growth as well as team coaching. The effectiveness of this approach would be observed through the behaviours adopted in the organization, and the integration of coaching in HR processes, as well as set KPIs were out in place. The main aim was to introduce a shift in the culture and behaviours of the line managers. This organization used Gallup to measure the engagement of its employees.

**Results:** Coaching gradually became embedded in different parts of the organisation, such as executives wanting to become involved in the coaching community. With regards to Coaching Integration, it was observed that employees who benefited from coaching increased from 34% in 2016 to 53% in 2018, and there was an incremental growth of managers and leaders going through development programs such as learning coaching skills by 20%. Through the formed community of coaches, 100+ employees were exposed to coaching behaviours and formal coaching. Also 80% of female executives proactively requested to become trained coaches in 2018. With regards to Gallup engagement, overall employee engagement score increased from 3.92 in 2012 to 4.46 in 2018 / 78<sup>th</sup> percentile. There was an increase in satisfaction, and employees who were trained in coaching skills as part of leadership development indicated an average of 97% satisfaction towards their development. 90% of individuals who received external coaching stated they 'strongly agreed that coaching met their needs'.

**Discussion:** As a recognition for the efforts of this organisation, it was recognized by being awarded the 3<sup>rd</sup> ME Prism Awards. The author also recognizes that this is the beginning of the journey, and there are still many aspects which need to be tackled, such as how to accurately measure the Return On Impact (ROI), which the organization needs to tackle.

# NOTES

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