Resilience in a challenging world

Division of Occupational Psychology
Annual Conference 2016
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Book of Abstracts

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Timetable Summaries
Wednesday 6 January

W01 Keynote Session
Optimising the performance of the human mind
Professor Steve Peters, Sheffield Medical School
It is possible to improve the probability of being successful and to deal with setbacks on your chosen pathway, by understanding how your mind operates and gaining insight into your own unique situation. Armed with this understanding and insight you can acquire skills to improve your functioning and quality of life. This session will take delegates through a series of steps to offer some practical suggestions for implementing these skills.

W02 Panel Discussion
Increasing the impact of psychology in public policy: An international perspective. A discussion with the BPS President and the Presidents of SIOP and EAWOP International Working Group
This session will involve a debate with the BPS President and the Presidents of the Society for Industrial and Organizational Psychology (SIOP) and of the European Association of Work and Organizational Psychology (EAWOP), on how to increase the impact of psychology in public policy. Despite the knowledge, competencies and skills sets that psychologists possess, they do not contribute extensively to the development of policy. The panellists will be asked to outline their perspectives on why the competencies of psychologists, and in particular occupational psychologists, are not used to a greater extent and how this could be increased. The audience is asked to prepare questions on this topic for the panellists in order to support a wide debate and generate initial action points.

W03 Panel Session
Psychology: Is the public aware of its contribution to society? Exploring perspectives with the BPS Divisions and Special Groups Chairs and the BPS President
This session follows on from the panel session exploring the international perspective on increasing the impact of psychology in public policy. It will focus on how to increase the visibility of psychology at the national and international levels. The panellists will present their views on the perception that psychology could be seen as an invisible science; as its outputs are not as recognised perhaps as those from other disciplines. Contributions from the audience will be sought in order to ensure that a wide debate occurs to allow the generation of initial action points.

W04 Standard Paper
Zero Hour Contracts: Exploitative or Exploitable?
Thomas Evans, Gail Steptoe-Warren, Dejan Henry, Teodora Ghiur and Cameron Brown, Coventry University
Category: Wellbeing and Work
Main Theory, Models and Research: Zero-hour contracts are contracts where an organisation can employ an individual but is under no obligation to provide certain hours of work. According to the Office for National Statistics (ONS 2014), 2.3% of all UK workers are employed under a zero-hour contract, accounting for an estimated seven-hundred thousand individuals and 1.8 million contracts. One in five employers have one or more employees on a zero-hour contract (ONS 2014) and there are many organisations which use this contract to make up the majority of their workforce e.g. Sports Direct (90%), J D Wetherspoon (80%) and McDonalds (90%).

There is much research to argue that flexible working can have both positive and negative implications for individuals and their organisations (Allen et al. 2013; Baltes et al. 1999; Battisti & Vallanti, 2013; Cañibano, 2011; Galea, Houkes, & De Rijk, 2014; Prowse & Prowse, 2015). Further, much research has indicated that a lack of guaranteed employment or financial security has numerous negative consequences for individuals (Buchler, Haynes, & Baxter, 2009; Ferrie et al. 2013; Green & Leeves, 2013; McNamara, Bohle, & Quinlan, 2011). Politicians, and the
media, have pounced upon these channels of argument within discussions of zero-hour contracts to make increasingly bold and polarised claims. Many political parties pledged in the 2015 UK General Election to ban or significantly modify policies on zero-hour contracts, based upon claims that they allow exploitation of workers (Guardian 2015). Despite a significant body of work discussing flexible working arrangements, the zero-hour contract is unique in guaranteeing no financial stability for the employee, and as such, no research is available to inform policies on the use of the contract. The current study is the first to explore the real-life experience of individuals working under a zero-hour contract. The current study explores both the positives and negatives of this employment type (Pederson & Lewis, 2012), and aims to inform policy decision-making by building best-practice recommendations for its implementation.

Interviews were conducted with fifteen individuals currently employed under a zero-hour contract. A semi-structured approach was adopted where participants were asked to discuss their work, the positives and negatives of working under the contract, and to respond to common media claims. The interviews were transcribed and Thematic Analysis (Braun and Clarke 2006) was conducted to explore the key themes of the discourse.

Five superordinate themes were identified, revealing how zero-hour contracts can exploit, be exploited, provide an opportunity for valuable experience, however be inflexible, and represent a different working experience. Many interesting nuances in discourse were noted, including the contradiction between zero-hour contracts being exploitable for flexible work, and the inflexibility of the contract where individuals were scared of being fired if they turned down work. A further contradiction was identified where some individuals considered the contracts to be exploitative to desperate individuals, but that the acceptance of zero-hour contract employment was perceived to be a choice.

Results suggest that zero-hour contracts are not inherently negative, and in fact represent a positive work experience for many, but that they may allow for the exploitation of workers if misused. The results provide novel additions to the literature on flexible working and some vital insights fundamental to policy-makers and politicians with regards to whether and how zero-hour contracts can be a fair and sustainable structure for employment.

**Resilience in a Challenging World:** Zero-hour contracts have the potential to support a flexible approach to working that could be of benefit to both organisations and employees. Unfortunately, due to the extreme claims perpetuated by the media surrounding this contract type, opinions on its value are polarised and its use is the subject of emotive discussions. The current work aims to provide some empirically-derived insight into the role that 0-hour contracts could play in responding to the individual and organisational needs of a challenging world.

**Wellbeing and Work:** The current study is exploring the personal implications of working under a 0-hour contract. The themes of discourse derived from the interviews often surround work-life balance, and the emotional insecurities of insecure finances. Due to the exploratory scope of the study, the results also touch upon the related fields of stress, job satisfaction and motivation. Delegates interested in the fields of wellbeing are therefore the most likely to engage with the presentation.

**Novel and Innovative Aspects:** The current study is novel as it reflects the first empirical exploration of 0-hour contracts. Despite there being much research on various other flexible contract types, the contract is unique in many ways e.g. no guarantee of work and thus pay, and thus the current study provides novel insights to improve the theoretical understanding of flexible working, and to subsequently inform policy and subsequent practice.

**Stimulating and Useful for Delegates and Public Interest:** Zero-hour contracts were a significant field of discourse within the 2015 UK General Election, with many politicians and groups making extreme claims that they are either completely exploitative and should therefore be banned (Independent 2013), or are positive and can be used to support work-life balance (Independent 2015). The current work is the first empirical work to explore whether such claims can be substantiated. The messages produced by the work are likely to be informative, interesting, and
beneficial, to both delegates and the public. The work is likely to be of significant impact for policy-makers with regards to the proposed bans on zero-hour contracts, and informative to those interested in, undergoing, or considering working under, zero-hour contract work.

Materials: In addition to making an online copy of the presented paper available, a ‘cheat-sheet’ will be accessible in paper and online format to all delegates. This will highlight the key themes of discourse alongside implications for both academic and applied arenas. This will be a key factor in ensuring the presentation impacts future works, and will contain contact details of the current author to ensure a continued debate.

Interaction: Due to the substantial media coverage of 0-hour contracts, and the themes of research which the current research contributes to, sufficient time will be given for questions, suggestions and responses to the research. There will also be opportunities for interaction within the presentation e.g. for individuals to recall any personal experiences. To ensure individuals can engage with and relate to the research, a minimum of ten minutes of the time allocated will be dedicated to interacting with others.

References


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**W05 Discussion**

**Responding to BPS consultations: Helping to get the voice of Psychology Heard**

*Joe Lidart*, Policy Administrator (Consultations) The British Psychological Society

**Category:** Professional Affairs and Awards

The BPS responds to approximately 50-70 on a whole range of psychology-based issues consultations per year to a large range of external Government organisations and public bodies. This is a fantastic opportunity to have your voice heard and raise the profile of psychology in terms of shaping policy and strategy.

We will be running a training session at the DOP conference in early January to help guide members on the consultation process. This will include lessons on increasing or achieving impact, writing styles and the opportunity to ask any questions that you may have about the process.

**W06 Standard Paper**

**Beyond the hype: building resilience and wellbeing through mindfulness**

*Phil Wilson*, Civil Service Fast Stream and *Kish Modasia*, Lead Your Life

**Category:** Wellbeing and Work

The prevalence of mindfulness has grown hugely in recent years - in the workplace and beyond - reflected in regular (social) media references, individual/group interventions, workshops and awareness training. This paper proposes that, despite some limitations, mindfulness is more than hype or just a buzzword. An introduction to the approach is offered, along with its background and its benefits in terms of developing resilience and wellbeing.

In addition, a number of mini-sessions will be scheduled within the 2016 DOP Conference. These will encompass a sequence of practical interventions that can be experienced as individual events or together, to provide a rounded set of activities, demonstrating how mindfulness can be achieved as a route to positive benefits.

The specific sessions being offered will include:

- Mindfulness through meditation breathing.
- Mindfulness through gratitude, valuing ourselves and others
- Mindfulness through creativity and visualisation to broaden our awareness.
- Mindfulness through body movement and body scanning.
- Mindfulness through broader sensory experience.
- Mindfulness through reflective writing.

**W07 Standard Paper**

**“The police are the public”: Aligning assessments to community expectations**

*Dan Hughes* and *Mary Mescal*, a&dc; *Catherine Dodsworth* and *Esther Wride*, Avon & Somerset Constabulary

**Category:** Psychological Assessment at Work

**Purpose of Session**

The purpose of this session is to share a practical case study which involved developing online sifting assessments for police officer selection. The development process involved a high degree of external community input to ensure the assessments reflected what the public want from the police. In the session we will:
Share the organisational context and drivers for this project
Explore the process used to obtain community input
Explain how the new online sifting assessments were designed using this input
Share the evaluation results from trialling and live use of the assessments
Discuss lessons learned from the project with session attendees

There will be interactive questions at several points during the session to involve attendees. At the end of the session there will also be an opportunity for attendees to discuss the approach used, provide feedback and share their own experiences.

Background
Like the rest of the Police Service, Avon & Somerset Constabulary has faced significant financial challenges over the last 5 years as it responds to austerity measures. Following cuts in central funding by the Government, the constabulary had to find and deliver savings of £45.9 million between March 2011 and March 2015 (HMIC, 2014). At the same time, the government expected police forces to maintain the service delivered to the public. This has required the constabulary to be resilient as an organisation while undergoing major organisational change.

To respond to these challenges, Avon & Somerset have sought to implement a new operating model to enable it to deliver affordable policing to the communities it serves. To achieve this, in 2013 the constabulary embarked on an organisational change programme to ensure that its processes, people, culture and systems were in place to deliver its overarching mission and vision.

One aspect of this change programme focused on organisational culture. In 2013, new leadership at Avon & Somerset set out a vision for changing culture and attitudes, to ensure that the constabulary fully represented the communities it served and reflected what they wanted from their police force. This vision set out a need for increasing community engagement and input into how Avon & Somerset should operate, and ensuring the profile of its workforce was as representative as possible.

As part of this culture change process, an independent review of the existing process of selecting police constables was undertaken. In the recruitment process, the initial stage for police constable applicants is a pre-application sifting process. This consists of an eligibility screen, followed by a personality screening questionnaire and a Situational Judgement Test. These assessments had been designed to measure the level of match between an applicant’s judgement and personality style and that of high performing police constables. They had been developed using a traditional development methodology involving internal subject matter experts (SMEs) within the constabulary and validated on existing officers. However, there were concerns that this did not sufficiently take into account the views of the public and local communities. An external consultancy was therefore asked to redevelop these sifting assessments to ensure that they reflected community expectations.

Project Objectives
The main objectives of this project were therefore to:

- Identify the police constable attitudes and behaviours that were most important to the public, to be measured at the initial pre-application stage.
- Develop new sifting assessments to measure applicant potential in relation to these key attitudes and behaviours which reflected the culture Avon & Somerset wished to build and reinforce.
- Ensure that the new sifting assessments were as fair as possible to all groups, to encourage equality and diversity and try to ensure that new recruits were as representative as possible of the communities it serves.
Solution Design

1. Development of a Customer-Focused Competency Model
As a first step, the competencies that the existing sifting process was designed to measure were revisited, to ensure they reflected the key behaviours that the public wanted from police officers. A community event was conducted by the constabulary to gather input from members of the public about what makes an effective officer. The output from this was reviewed by the project team from the constabulary and external consultancy. It was then discussed with an independent advisory group, comprised of community representatives reflecting varied perspectives (minority groups, young people, business, voluntary sector and local government).

Based on these discussions, a competency model was created comprising four dimensions with associated behaviours:

- Communication and Empathy
- Customer-Focused Decision Making
- Openness to Change and Adaptability
- Relationship Building and Community Focus

These competencies were mapped to the personal qualities defined in the Policing Professional Framework (Skills for Justice, 2010), to ensure it was aligned to this national set of behaviours. The model was then used as the foundation for developing the new versions of the personality screening questionnaire, referred to as the ‘Behavioural Styles Questionnaire’ (BSQ), and Situational Judgement Test (SJT).

2. Stakeholder Design Workshops
To generate ideas for the content of the SJT and BSQ, psychologists from the external consultancy conducted a number of workshops with Subject Matter Experts. These workshops were held with groups of 4-8 Subject Matter Experts and 5 workshops were conducted in total. The purpose of these workshops was to collect information about the types of situations police constables may face in their roles and how they should behave in these situations. Both serving police officers and community representatives were involved in these workshops. The community representatives who participated were chosen as they had contact with the police in their role and were able to provide an additional insight into the types of behaviours which are regarded as positive by the wider community.

3. Assessment Content Design
Items were developed for the BSQ based on the four competencies in the new model. For the purposes of the BSQ, each competency was divided into either two or three scales reflecting different but related aspects of that competency. Three additional ‘distractor’ scales were created which reflected behaviours irrelevant to effective performance as a police officer. Business psychologists then wrote a large number of item statements for each competency, including both positive and negatively worded items. The information provided by the Subject Matter Experts during the design workshops was used to inform the types of work behaviours which should be reflected in the items.

For the SJT the scenarios and response items were also written by three business psychologists who had facilitated the stakeholder design workshops. More scenarios and items were written than would be required for the final test. These scenarios were based around the output from the workshops, but where transferred into an alternative context: working as an event facilitator at a fictional sporting event. This fictional context was used instead of a specific police officer context to address concerns around disadvantaging participants who did not have any knowledge of policing procedures and processes. This presented a challenge to the scenario authors, as they had to generate analogous situations in the sporting event context which still captured the desired behaviours as closely as possible.
In order to ensure the SJT was as fair as possible to all groups, it was designed in a video format. Research has found that video SJTs tend to demonstrate less adverse impact towards ethnic minorities than text-based SJTs (eg Chan & Schmitt, 1997), which is most likely due to reduced cognitive load of the video format. In order for the scenarios to be used in this format, they were written as scripts depicting settings, characters and dialogue.

The content for the BSQ and the SJT was then reviewed by a group of Subject Matter Experts, which included police officers, community representatives and diversity experts. This review was to ensure that the content reflected behaviours that a police constable should demonstrate, it was free from any confusing or misleading language or terminology, and it would not obviously disadvantage any protected minority group.

4. Trialling and Evaluation
Trialling of both the BSQ and SJT was carried out with volunteer samples. Job performance ratings were also collected during the trials alongside the assessments. The managers of the police officers in the trialling groups were asked to complete a job performance rating form for those individuals. This enabled an initial assessment of the criterion-related validity of the two assessments and was used as a criterion in selecting the final items in each case.

For the SJT, an expert group consisting of 24 police officers and 11 external community representatives was used to define how effective or ineffective different response items were to each of the SJT scenario scripts. A scoring key was established based on expert consensus which could be used to assess applicants. A second trial was also carried out for the SJT which consisted of 153 student officers and constables, internal police staff, and external volunteers. Following this trial, the best 20 scenarios (each with 4 response items) were selected for inclusion in the final assessment and the scenarios were then filmed. Two psychologists attended the filming to ensure each video was an accurate reflection of the scenario script, and the final video clips were also approved by the constabulary project team before implementation.

For the BSQ, the assessment was trialled with a group of 171 participants, consisting of student officers and constables, internal police staff, and external volunteers. External participants were included to try to give a more accurate reflection of how a candidate sample may respond to the questionnaire items. Items were selected based on standard item analysis criteria (item facility and discrimination) and correlations with job performance. The final BSQ consisted of 72 items (6 items per scale).

Both the BSQ and SJT demonstrated acceptable internal consistency (Cronbach alpha). All of the BSQ scales, with one exception, had coefficient alphas above .70 (median alpha = .75). The SJT had an overall coefficient alpha of .74, higher than the mean alpha for SJTs of .57 reported by Campion et al (2014).

Based on the job performance ratings collected on officers during the trialling phase, a construct validity analysis was also conducted. Performance ratings were available for 95 officers who completed the BSQ and 67 officers who completed the SJT. Both the BSQ and SJT were correlated significantly with managers’ job performance ratings. The correlation coefficients were .31 for the BSQ (p<0.01) and .28 for the SJT (p<0.05). This provided initial evidence of the effectiveness of the new online assessments.

5. Implementation and Monitoring Live Use
The assessments are now in live use by Avon & Somerset and other constabularies across the UK. The assessments will be evaluated based on this live use and the data from this evaluation will be reported in the conference session, including an analysis of applicant subgroup differences.

Summary
This project demonstrates a practical approach to engaging with external community stakeholders in the development of online sifting assessments. The use of external stakeholders is less common particularly in the case
of SJT development, where the focus tends to be on input from job incumbents and line managers. However for the police it is important that the public have a say in how officers should behave and that they are representative of the communities they serve. In this project, we attempted to address this requirement by using community input at multiple stages to guide the design and development of these assessments.

References


W08 Standard Paper

1. **Feelings matter – Contrasting the emotional intelligence of the public and private sector**  
   Rich Cook, JCA (Occupational Psychologists) Ltd  
   **Category:** Leadership, Engagement and Motivation  
   What are the main psychological theories, models and research underpinning your session?

   - This paper relates to the application of tools designed on the basis of attitudes driving sustainable behavior change. This links to a long history of psychological research: LaPierre, Festinger, Eagly, Huczynski and Makin

   - The EI model for the study was developed by Maddocks and Sparrow and comprises:
     - A unique six part framework
     - Personal and Interpersonal forms of intelligence
     - Three levels of EI; behavior, feeling and attitude

   - The theoretical underpinning of the EI model is eclectic and draws upon FIRO Theory, Gestalt, The Human Givens, the neuroscience of emotions, transactional analysis

   - A model of leadership climate will be presented that defines the emotionally intelligent leadership behavior used and reported during the study

2. **How do you see your proposal linking with the main conference theme of Resilience in a Changing World?**

   - Organisational engagement and sustained performance amidst the demands of 21st century working life are fundamental to the notion of resilience in a changing world

   - This study defines a potential predictor of employee engagement and as a consequence defines a clear contrast in leadership style and behaviours likely to sustain and enable engagement
The issue of resilience has to embrace how effective individuals and organisations are at managing their energy and emotions. The approach to EI discussed in this research has a clear role to play in enabling resilience.

Given the research highlights the role emotionally intelligent leadership plays in enabling employee engagement, we also present research comparing and contrasting the average EI of the Public and Private sector. This may highlight how engagement, and therefore reliance, may be best enabled in these contrasting environments.

3. Why is your submission appropriate for the particular category you have chosen?

   - The research findings are best understood and digested within a standard paper format. That said, I intend to invite participation during the paper both to gauge opinion on the differences observed in EI between the Public and Private sector and in relation to the implications of the findings.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?

5. Why do you think conference delegates will find the paper or session stimulating or useful?

6. What might the public find interesting about your paper or session?

   - There is limited current research material relating to the notion of leadership climate (i.e. how it feels to be led by you).

   - Our research suggests a link between leadership climate and employee engagement, and suggests those behaviours that appear to be particularly important to enabling employee engagement.

   - The model of EI presented in the research includes a clear focus on the impact of attitude and specifically people’s regard for themselves and their regard for others. It is our contention that solutions intended to deliver sustained changes in leadership climate and performance must have at its heart a focus on mindset and attitude. This challenges traditional approaches to leadership development focused largely on skills or raising awareness of personality and behaviour.

   - Our experience of enabling leadership effectiveness through the application of EI across the public and private sectors suggests that leaders differ markedly across these two sectors in relation to their EI and the resultant climate they are likely to create as leaders.

   - We do not know of any research that has examined these potential differences. Our research makes more concrete what these differences might be and has significant implications to how psychologists and organisations might enable both leadership and sustained employee effectiveness in these sectors.

7. If any, what materials do you intend to make available to attendees and in what format (e.g. printed handouts, electronic copies of slides)

   - PDF copy of the presentation

   - Printed hand-out of the EI outline scales definitions

   - Printed hand-out of the Leadership Climate Indicator outlining scales definitions

Overview of the paper – practitioner research
Introduction:

- Employee engagement in the 21st Century – why is it important? What are the issues?
- Today’s aim is to share practitioner research that begins to help answer the following questions
  - What is an emotionally intelligent leadership climate?
  - What is the link between leadership climate and engagement?
  - What differences in EI exist between Public and Private sector?
  - What are the implications of these findings to supporting and enabling leadership and organizational performance in the future?

- What is EI?: this section will introduce some contrasting models of EI and will explain the model of EI used in the research. The importance of attitude will be highlighted in relation to the model used in the study.

- How does EI link to leadership climate and employee engagement?: this section will define leadership climate as measured by the Leadership Climate Indicator. The link to EI will be explained and findings examining the relationship between leadership climate and engagement will be presented.

- Understanding EI across the Public and Private sectors: this section will explore why understanding these differences is important and will present findings summarising the differences in EI across the sectors and likely implications. The audience will be invited both to guess the potential differences in EI and to comment on the presented differences.

- Conclusions: the session will conclude with summary comments outlining the potential implications of the findings both for organisations and to our role as psychologists in assisting them.

W09 Standard Paper

Empowering teachers - fad, fig leaf or fundamental?
Candy Whittome, Birkbeck

Category: Leadership, Engagement and Motivation

Introduction: This session will present the initial findings of a PhD dissertation investigating the impact of head teachers’ empowering behaviours on staff, and school performance. The research is based on a large dataset exploring staff attitudes and wellbeing in schools in England from 2007-2012, in combination with data taken from the Department of Education school performance tables for the same schools over the same period.

The paper is highly relevant to this year’s DoP conference theme or ‘Resilience in a Challenging World’. Headteachers in England and Wales are being asked to find ways to maintain and improve school performance in economically challenging times. At the same time, teachers have been subject to numerous changes, additional workload, and external pressures imposed by government targets relating to test scores for many years. Fewer teachers are entering the profession, and those that start in training have a high dropout rate. Investigating ways in which to increase teacher retention by strengthening resilience is key to ensuring that the new generation of teachers is well equipped to deal with the increasing demands of the profession. Empowerment of teachers in schools has been promoted as a useful approach in this context, and this paper investigates the evidence for this claim. Empowerment climate is conceptualized here as something derived from the empowering behaviours of head teachers and other leaders within the school, and this paper is therefore most appropriate for the Leadership category.

One of the novel aspects of this paper is that it draws on all the existing research literature on empowerment, in the organizational behavior, human resources management, and organizational climate and tests it in the field of education. In addition, while most empowerment studies have been conducted in the private sector, particularly
manufacturing or service organizations (Maynard, Gilson, & Mathieu, 2012; Seibert, Wang, & Courtright, 2011) this paper focuses on a different sector, to test whether similar outcomes are found. It uses a very large dataset, gathered meticulously in hundreds of primary and secondary schools by Worklife Support, since 2002. No particular ethical issues arose in the conduct of the research; Worklife Support, to support her PhD thesis, and to further their own understanding of staff wellbeing, gave the dataset of staff attitudes to the researcher. Performance data was taken from the publicly available Department of Education website.

Part One: Empowerment – what is it, and what do we know about its outcomes?

Employers, policy-makers, shareholders, entrepreneurs and researchers of organizations alike share an interest in understanding why some organizations perform better than others. In this context empowerment has long been seen as a way to boost productivity, while simultaneously making employees more content as a result of having more say in decision-making and more authority on the job. Practitioners have touted it as a ‘win-win’ approach to workplace management and employer-employee relations, although the empirical evidence does not support consistently support this.

However, the ubiquity of the concept has not been accompanied by conceptual clarity and different understandings of empowerment have emerged. The earliest approaches viewed empowerment as something ‘structural’ in the organization where empowerment was envisaged as the transference of power, spreading responsibility more evenly across hierarchical levels, developing the knowledge and skills of employees, and delegating access to and control of resources within an organization from one level to another (Conger & Kanungo, 1988; Kanter, 1977). On this reading, empowerment is something that is done in organizations to give employees more authority and control over what they do – a so-called objective ‘top-down’ approach that relies on human resources management for its implementation (Kanter, 1977; Matthews, Diaz, & Cole, 2003).

A very different approach to understanding empowerment developed in the 1990s. Spreitzer (1995) used the term ‘psychological empowerment’ to focus not on organizational practices, but on employee perceptions about the extent to which they feel empowered at work. On this interpretation empowerment is a ‘psychological’ state, a subjective perception about the workplace and an individual’s job (Conger & Kanungo, 1988; Spreitzer, 1995; Thomas & Velthouse, 1990). It is based on a theoretical model of self-efficacy, and motivation. Most recently, a third way of understanding of empowerment has emerged, which views it as a construct to be understood not at the level of the individual employee, but at the level of the organization – empowerment climate ((Aryee, Walumbwa, Seidu, & Otaye, 2012; Wallace, Johnson, Mathe, & Paul, 2011).

Various theoretical bases for the link between empowerment and performance have been hypothesized, and this paper draws on a combination of two. The Ability-Motivation-Opportunity model (AMO) suggests that empowering practices increase individual employees’ knowledge, skills and abilities, and in doing so increases both their motivation to work harder and their opportunity to do so, resulting in improved firm performance (Applebaum, 2000). Psychological empowerment is theorized to promote performance because it represents four dimensions of intrinsic task motivation (autonomy, impact, competence and meaning) so that employees are motivated to take responsibility at work, and have a proactive approach (Conger & Kanungo, 1988; Spreitzer, 1995; Thomas & Velthouse, 1990).

Empirical research to date indicates significant positive associations between both structural and psychological empowerment and different aspects of performance. In many studies psychological empowerment is found to mediate between empowering practices and performance outcomes (Combs, Liu, Hall & Ketchen, 2000; Geralis & Terzirovski, 2003; Huselid & Becker, 1996; Martin, Liao & Campbell, 2013; Patterson, West & Wall, 2004). However the relationship is complex, and a number of other studies have presented conflicting findings (Biron & Bamberger, 2010; Cappelli & Neumark, 2001; Guerrero & Barraud-Didier, 2004). Some possible explanations for these discrepancies will be outlined (eg, inconsistency in definitions; the effect of time on empowerment interventions;
implementation issues (eg efficacy and authenticity). The picture in relation to job strain is also confused, with a
number of studies indicating that greater psychological empowerment may be associated with a higher sense of job
strain (as predicted by labour process theory) (Harley, 1999; Ramsay, Scholarios, & Harley, 2000) while others
indicate a negative association (Applebaum, 2000; Boxall & Macky, 2007).

Part Two: Methodology / Data Analysis
Two sets of secondary data were used for this project. Worklife Support gathered the first dataset, a social
enterprise affiliated to Teacher Support Network (TSN), formerly the Teachers’ Benevolent Fund, a charity set up to
support teachers in England in 1877 by the National Union of Teachers (NUT). Worklife Support devised a
questionnaire called the Organizational Self-Review Measure (OSRM) and has surveyed members of staff at
hundreds of primary and secondary schools in England and Wales since 2002. For the purposes of this research
project, a five-year period, from September 2007 – July 2012, was selected for analysis. Data from 529 primary
schools (1279 surveys, 35,485 staff responses) and 135 secondary schools (307 surveys, 25,656 staff responses) was
analysed. The second dataset consists of data taken from the ‘School Performance Tables’ published on the
Department of Education website, from September 2007 to July 2012, a period covering the five school academic
years from 2007-08 to 2011-12. Apart from demographic data, performance data for each school that had
completed the OSRM was gathered, to enable comparison across time.

Exploratory and confirmatory factor analysis have been used to construct scales to measure key dimensions of
structural and psychological empowerment, and the data is being analysed using multilevel and structural equation
modelling in combination with school performance data from the Department of Education to investigate the
following relationships:

- What is the relationship between empowerment climate and school performance?
- Is there a relationship between empowerment climate and psychological empowerment in schools?
- Does psychological empowerment predict higher or lower job strain, and is the result similar in primary and
  secondary schools?
- Is there a difference in the way empowerment climate relates to teaching and non-teaching staff?

Part Three: Findings and Discussion
Only preliminary data analysis has been completed to date, but at the conference the complete findings will be
presented. Early results from the data analysis indicate that there is a positive relationship between psychological
empowerment and job strain in school staff.

Delegates are likely to find the paper stimulating because it draws on diverse research literatures to develop and test
a new model of empowerment in the public sector setting of schools. Most research in the empowerment field has
been conducted in the business sector. In terms of the wider public, we need to know what works – and just as
importantly what does not work – in schools. The findings will also be of interest to delegates because the questions
posed are highly practical. Schools are increasingly being asked to do less with more, requiring head teachers’ to
innovate in their leadership behaviours, and understanding the impact of these behaviours is critical for successful
innovation. In addition, the methodological approach, using a multilevel approach to analyse the dataset, as well as
structural equation modelling, is rigorous and will be of interest to those wanting to use multilevel approaches in
their own work. In terms of the wider public, the findings of this paper will potentially be of considerable use to head
teachers, school governors, teaching unions, and policy makers in the education field.

A one-page summary of the findings will be given to all delegates, and an electronic version of the PowerPoint
presentation will be available on request.

Reference List:

W10 Keynote Session
The trouble with girls?: Why plastic brains aren’t breaking through glass ceilings
Professor Gina Rippon, Aston University
There is a long history of debate about biological sex differences and their part in determining gender roles, with the ‘biology is destiny’ mantra being used to legitimise imbalances in these roles. The tradition is continuing, with new brain imaging techniques being hailed as sources of evidence of the ‘essential’ differences between men and women, and the concept of ‘hardwiring’ sneaking into popular parlance as a brain-based explanation for all kinds of gender issues. This includes the failure of numerous well-meaning initiatives attempting to address the marked gender imbalances in many areas of society, including industry, business, politics and science. There are assumptions (not always unspoken) that women don’t succeed in such spheres because they can’t, with rather patronising (sic) references to ‘complementarity’, ‘vulnerability’ and ‘the natural order of things’. This talk outlines a model demonstrating how there is indeed a ‘brain problem’. Existing gender stereotypes can and do (mis) construct brain function and even structure, with negative consequences on the education, expectations and achievements of women. But it also highlights the possibilities offered by a greater understanding of how plastic
and permeable our brains are, how we can build internal and external defences against “toxic stereotypes” and how the concept of ‘hard-wiring’ can be condemned to the dustbin of neurohistory.

W11 Standard Paper

Goals, penalties & markers: The evolving nature of racism as seen in football
Binna Kandola, Pearn Kandola

Category: Work Design, Organisational Change and Development

Surveys show that people are less tolerant of racist behaviour and attitudes today than in the past. Welcome though this is it does not necessarily mean that racism will become extinct.

In many organisations for example we still see a lack of ethnic diversity at senior levels. Racism has evolved, becoming more subtle, covert and unconscious. To explore the complexity of the psychology of racism examples from the world of football will be used to illustrate the key themes, which include:

• what do we mean by race?
• in what ways do racial stereotypes influence our decision-making?
• how can psychology help organisations to come up with effective actions to tackle racism

W12 Symposium by Neuro-Diversity & Employment Working Group

The challenges of adult neuro-diversity: Evidence-based resilience building
Sarah Cleaver, Honest Psychology Ltd

Category: Work Design, Organisational Change and Development

Dyslexic thinkers make up around 10% of the adult population; how can we best support them? This three-paper symposium will firstly locate the psychology of neuro-diversity within the context of modern challenges. Then, Nancy Doyle will present her longitudinal study on the effectiveness of coaching for this group. Rachel Owens and Amanda Dainis will present their research on making online ability testing more accessible. Sarah Cleaver and Nancy Doyle will present their latest findings on the role of Organisational Support in moderating the relationship between dyslexia status and health outcomes, before Nancy Doyle chairs a plenary discussion.

W12a

Paper 1: Is coaching a reasonable adjustment for dyslexic employees?
Nancy Doyle, City University

Category: Work Design, Organisational Change and Development

1. What are the main psychological theories, models and research underpinning your session?

Dyslexia is the third most common condition referred to Access to Work, a service provided by the Department for Work and Pensions to support adults with disabilities in the workplace (Gifford, 2011). However in order to assess whether coaching can be an appropriate disability adjustment, and therefore to assess its ‘reasonable-ness’, which is defined by the Equality Act 2010 as meeting a balanced outcome for both coachee and employer, it requires longitudinal evaluation. We need to understand how and why coaching might have an impact, as well as the magnitude of the effect, so that we can balance the costs of investment and time, with the savings from increased performance and reduced turnover.

A primary intervention study investigated the impact of coaching from the perspective of both employers and employees (Doyle & McDowall, 2015) and the study presented here represents a continuation of that research using a quasi-experimental design to compare those receiving the standard coaching approach used in Access to Work, to a waiting list control group and a group-based alternative. The main purpose for this design was to explore the ‘active ingredients’ of coaching success, within a Social Cognitive Learning Theory (SCLT; Bandura, 1986) framework. In the primary study, a trend was noticed in the data that coachees rated their performance much lower than their managers in the baseline time interval, a gap that was corrected by the ratings taken following coaching. This led the researchers to propose that the difference could be attributable to an improvement in ‘Self-Efficacy’, meaning belief in one’s ability to act, a key concept in SCLT (Bandura, 1986) which occurs as the result of a holistic learning.
process involving verbal persuasion, role modelling, vicarious learning and the opportunity for mastery. While 1:1 coaching offers plenty of opportunity for verbal persuasion, and strengths based approaches encourage the reflection on mastery experiences, it was proposed that a group based coaching condition might offer more opportunity for vicarious learning and role modelling. The coaching and group coaching were designed to offer a learning experience as close to the main principles of SCLT and measures were taken before, immediately after and three months afterwards, including both coachee and line manager ratings. Self-efficacy was measured directly, as well as job performance.

Working memory (Baddeley, 2000) emerged as the most common topic requested in coaching support in the primary study. Working memory deficit is often associated with dyslexia, a common antecedent of literacy difficulties (Swanson and Siegel, 2001) which remains an issue when the child is grown, and reading and writing have improved (de Beers et al., 2014; McLoughlin & Leather, 2013). While working memory is the subject of much research into the use of computerised training, such training is currently successful only in clearly defined contexts and fails to transfer to wider performance such as reading comprehension (Dunnings et al., 2013). In the coaching intervention we included the explicit development of ‘metacognition’ (Flavell, 1989) around working memory and the impact that it has on time management, organisational skills and communication. A further element of the evaluation was to explore the impact of coaching on working memory, both in terms of standardised capacity testing (Weschler, 2008; Reynolds & Voress, 2007; Sheslow & Adams, 2003) and working memory related behaviour (Alloway et al., 2008).

Via the two potential mechanisms of working memory and self-efficacy, the purpose of the research was to understand how coaching impacts on the work performance of dyslexic adults. Through understanding the input required to produce improvements, psychologists will then be able to offer advice to employers on their duties within the Equality Act (2010) to provide reasonable adjustments. Current advice for dyslexia is based on traditional practices emerging from education paradigms and is not evidence-based (McLoughlin & Leather, 2013), though within the working population there is growing evidence of the efficacy of coaching (de Haan & Duckworth, 2012).

2. How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?
The world is rapidly becoming paradoxically more and less challenging for the proportion of the working population that are dyslexic (5-10%, de Beers et al., 2014). Whilst technology supports the literacy difficulties through widespread adoption of speech-to-text, voice recorders and visual software, many industries have become more literacy driven, such as Social Work, Electrical Engineering and even modern apprenticeships in Hairdressing now require a GCSE standard literacy module on entry. We need to understand the post-education experience of the dyslexic adult and understand how changing workplaces enable or inhibit the typical dyslexic cognitive pattern of high perceptual reasoning and verbal comprehension coupled with low working memory and processing speed (Grant, 2009). Personal resilience for the dyslexic adult will come from building a career around strengths, rather than battling against weaknesses. Psychology has a lot to offer in ensuring that interventions are well founded in theory and evidence, enabling dyslexic individuals to develop strategies for coping with the additional pressures they face in achieving their potential within an appropriately chosen field. Coaching is a potential intervention at this point, offering support in strategy development and career counselling. Coaching interventions can provide a buffer between the demands of inflationary document-based work practices and the talents of the dyslexic individual, by taking time to reflect, plan, strategise as well as mediate communication with employers.

3. Why is the submission appropriate for the particular category you have chosen?
Psychology’s role in dyslexia thus far has been to diagnose and assess. We want to encourage psychologists to think beyond the diagnostic and beyond the workplace needs assessment to the eventual adjustment – does it work? How does it work? Is it reasonable? These are questions that we, as a profession, need to be able to answer in order to do due diligence to our scientific principles when assessing, but also in supporting our clients throughout
their career. We need to see diagnosis as the beginning of a learning and development process, not the summation of a label.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?

The main innovation in this paper is to begin building an evidence base where currently none exists. It is well known in practitioner circles that dyslexia affects work performance through decreased ability to remember, manage time and organise/prioritise work flow (McLoughlin & Leather, 2013) but this has received almost no attention in research. Reviewers have identified a lack of intervention studies (de Beers et al., 2014; Gerber, 2012) and we aim to begin addressing this.

5. Why do you think conference delegates will find the paper or session stimulating and useful?

We think the conference delegates will find our paper stimulating and useful for the following reasons.

1. Assessment and coaching for adults with dyslexia is a practical application of psychology that can be a fulfilling avenue of work for occupational psychologists.
2. Occupational and Business Psychologists who are not specialists in the field of dyslexia or neurodiversity will inevitably come across people with dyslexia in their everyday practice of coaching and consultancy, and would benefit from understanding more about the impact of dyslexia on job performance.
3. 

6. What might the public find interesting about your paper or session?

As with the three papers in this symposium, we aim to appeal to the large portion of the public who is dyslexic, or who has a family member with dyslexia. Approximately 5-10% of adults living in the UK have dyslexia making this area directly relevant to them. Most people are unaware of the support offered by Access to Work, or the potential of coaching support to improve their difficulties. We need to raise awareness and inspire hope that career goals can be fulfilled with the right strategies and self-determination to succeed. We also need reassure the public that the service provided by psychologists is reliable, well-evidenced and accessible. Given that psychological assessments for dyslexia are expensive, prohibitively so for many individuals, and that dyslexia is the only disabling condition covered by the Equality Act for which you cannot acquire a diagnosis via the NHS, we feel it is important to explore the support offered following diagnosis as an important factor in determining whether or not it is worth the time and money.

7. If any, what materials do you intend to make available to attendees and in what format (e.g., printed hand-outs, electronic copies of slides)?

Electronic slides will be available.

References


**W12b**

**Paper 2: An investigation into the experience of dyslexic users of online ability tests.**

**Rachel Owens and Amanda Dainis, CEB**

**Category: Work Design, Organisational Change and Development**

1. **What are the main psychological theories, models and research underpinning your session?**

Dyslexia is thought to affect approximately 10% of the population (British Dyslexia Association). It is classed as a Specific Learning Difficulty (SpLD) and affects the way that information is processed, stored and retrieved. Memory, processing speed, and time perception may all be impacted.

While dyslexia is a condition that is independent of intelligence, the impact of dyslexia on performance in an ability assessment can be extensive. Many online tests use a written format and are timed which may increase their difficulty for someone with dyslexia. Given online ability tests are frequently used in the recruitment processes of a large number of organisations, this has ramifications for both the dyslexic candidate and the potential employer. The UK Equality Act (2010) requires employers to make ‘reasonable adjustments’ where a disabled person would be at a substantial disadvantage in undertaking an assessment. For candidates with dyslexia, this often means an increase in the time limits for an assessment. Removing time altogether can reduce differences in cognitive tests between those with and without dyslexia (Keeley & Parkes, 2014). However, this may result in concerns with test security. Furthermore, while timer adjustments are one of the more common requests for reasonable adjustments, we must try and remember that making assessments more accessible does not begin and end with extending with a time limit.

Another issue here is that to receive a time extension in an online ability assessment, the candidate must contact the recruiting organisation and explain their requirements in taking the test. Disclosing a disability is not necessary under the Equality Act, however, the conversation that the candidate has with the recruiter must be frank enough that the recruiter understands if a reasonable adjustment is necessary. In a high stakes situation such as a job application, this may impact on the willingness of a candidate to request a reasonable adjustment.

Indeed, despite the proportion of people who are estimated to have dyslexia, and the even greater proportion of those with a disability more broadly (up to 20%), various studies have found that only 2-3% of candidates or employees disclose a disability (Nishii, Bruyère, & von Schrader, 2014; O’ Connell & Rutigliano, 2014). It has been observed that having a more apparent disability may increase likelihood of disclosure (Nishii et al., 2014). Dyslexia, as a less apparent, or ‘invisible’, disability, is likely to be under-disclosed. Nishii et al. have estimated rates of disclosure in a non-apparent disability at the recruitment stage as just under 40%. Of course, when there is no disclosure or discussion about an individual’s requirements, a reasonable adjustment will not be made.
This leads us to look further than time adjustments for online tests. If a candidate is less likely to contact a recruiter and negotiate for a reasonable adjustment, we need to start looking at the way we create and build our tests to ensure we are creating the most accessible version for the large proportion of dyslexic candidates who may not be comfortable discussing their requirements yet.

2. How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?
Going through the application process for jobs can be a daunting process; when one is working with a disability, this may demand even greater reserves of strength and resiliency. Our proposal details the experience of online ability test takers with varying degrees of severity of dyslexia. Dyslexia has been investigated based on it being a relatively commonly disclosed disability, and one which we are aware can have an impact on a test that both comes in a written format and that is timed.

Tests are meant to be challenging – they would not be very useful if they were not. However, the extra difficulties faced by some individuals owing to the presence of dyslexia means that a challenging test may become a next to impossible test without a reasonable adjustment.

3. Why is the submission appropriate for the particular category you have chosen?
The category we have chosen is Psychological Assessment at Work specifically in regards to diversity and inclusion. Our submission is appropriate for this category in that we are investigating the experience of individuals with dyslexia when completing online ability tests. The BDA estimates 10% of the population has some form of dyslexia, which means anywhere up to 6.4 million people, or just over 4 million people of working age, live with dyslexia. Our research team aims to not only ensure fairer assessments, but to improve the experience of candidates with a range of disabilities. Dyslexia, being a relatively commonly disclosed disability, is the ideal starting point for us to increase the accessibility and user experience of online tests.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
There is a great deal of anecdotal evidence about how an online test is difficult or inappropriate for some individuals with dyslexia but not a lot of evidence-based best practice guidance for test developers. We have asked participants to feed back to us what they thought about two of our online ability tests, Numerical Ability and Deductive Reasoning, and provide suggestions for greater accessibility. We will also compare the performance of our dyslexic candidates with our norm group as well as comparing performance across different dyslexia severity levels. We aim to produce workable suggestions for test developers so that they can create an improved testing experience for candidates with dyslexia.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
We think the conference delegates will find our paper stimulating and useful for the following reasons.
   1. Many psychometric tests have been developed without much thought of inclusivity. Searching for ways to make online ability tests more accessible is important to the delegates at this conference. We go straight to those that matter, the candidates, to discover what they think.
   2. Our study looks at a large group of working age people in the UK. Approximately 10% of any given population has dyslexia. Our paper will hopefully stimulate some move to creating better and more accessible tests that will benefit those who are currently of working age with dyslexia, as well as all those who come of age over the next few years.

6. What might the public find interesting about your paper or session?
This paper will be of interest to a large portion of the public including anyone living with dyslexia or who has a family member with dyslexia, as well as anyone in the recruitment industry. Approximately 10% of people living in the UK have dyslexia making this area directly relevant to them. It is important that we do all we can to ensure they have a
fair and as enjoyable testing experience as possible when it comes to job seeking. People involved in the recruitment process, as well as employers, are already impacted by this and will continue to be in the future.

6. If any, what materials do you intend to make available to attendees and in what format (e.g., printed handouts, electronic copies of slides)?

We intend on making the electronic version of our slides available for conference attendees.

References

W12c
Paper 3: Dyslexia and health outcomes: the moderating role of organisational support.
Sarah Cleaver, Honest Psychology Ltd and Nancy Doyle, City University
Category: Work Design, Organisational Change and Development
The DOP’s Working Group on Neuro-diversity and Employment collaborated on an exploratory study (presented at Conference in 2015) which showed that dyslexic adults were reporting higher levels of insomnia than the national average (Doyle and Cleaver, 2015; Morphy, et al, 2007). In the present study (N = 206), we tested this emerging finding more thoroughly, asking whether dyslexia status related to wellbeing and health outcomes, and whether perceived organisational support (POS: Eisenberger, 1986) related to the outcomes.
The emerging picture is complex. Employed dyslexics reported similar levels of organisational support to employed non-dyslexics, but more insomnia, headaches, and poorer general health. The dyslexics’ wellbeing was also significantly lower. Despite these findings, the absence levels reported by both groups were similar.
POS showed a negative relationship with headaches and insomnia, but not with other aspects of health.

W12d Discussion
Themes and next steps
Nancy Doyle, City University
Category: Work Design, Organisational Change and Development
Plenary discussion

W13 Standard Paper
The Five Areas Stage 2 – update
Almuth McDowall, Birkbeck University of London
Category: Learning, Training and Development
This session will update on progress with the revision of the stage 2 standards (the principles which underpin stage 2 training for occupational psychologists), which are being revised due to the changes in the curriculum for MSc level. The Division has undertaken a consultation with trainees, assessors, supervisors and others involved in the qualification process. The outcomes and recommendations from this process will be presented and the session used as a sounding board to debate some of the differing views which remain to be aligned. The chair of the qualifications board will also be present to talk through how these changes will be reflected in a new qualification process and the next stages. This session is aimed at everyone with an interest in the stage 2 qualification, and will provide ample opportunity for audience interaction.
Developing Mindfulness in the Workplace

Jenni Nowlan, University of Westminster

Category: Wellbeing and Work

Introduction, Background and Context

The background to this case study lies firstly within my own personal values of helping others reach their optimum potential and also within my professional identity of being a Chartered Psychologist (within the specialist area of occupational and organisational psychology). I feel a strong desire to make a difference to peoples’ lives at work. Since all workplaces have a duty of care towards the wellbeing of their staff, and in the case of education also to students, I was drawn to the high reported cases of stress in the education sector. According to The Health & Safety Executive (2014) education was amongst the industries reporting highest rates of work-related stress. With my values in mind I sought ways to help staff and students to become more resilient. My research is through (an almost completed) Professional Doctorate. I believe that most places of work, not just Universities, could potentially benefit in many ways by introducing to employees ways to practice Mindfulness in their daily lives.

Chaskalson (2011) points out some of the benefits:

- Effectiveness at reducing levels of stress, increasing resilience and levels of emotional intelligence
- Raises levels of self-awareness and awareness of others
- Increases interpersonal sensitivity and communication skills
- Lowers rates of health related absenteeism
- Leads to increased concentration
- Extends the attention span
- Reduces impulsivity
- Improves capacity to hold and manipulate information
- Lowers levels of psychological distress
- Raises levels of well-being and overall work and life satisfaction.

The cultural, historical and political background to Mindfulness, was for decades slow-moving, but is now spreading internationally at an enormous rate, evidenced partly, for example by on average of forty new journal articles coming out each month (Blake 2013). Mindfulness practices are proving popular and being taken up by, for example: the NHS (as the NICE preferred treatment for depression rather than anti-depressives); the US Marines, the rise in teachers being trained in the Mindfulness Based Stress Reduction (MBSR) or Mindfulness Based Cognitive Therapy (MBCT) and also by the general public. Mindfulness is also proving popular in modern thinking organisations such as Amazon and Google.

Therefore as people become generally more aware of Mindfulness and becoming receptive to it I feel strongly that the timing was right, both externally and also I feel internally, for my Institution to adopt Mindfulness practices. A largely accepted definition of Mindfulness is: “paying attention in a particular way: on purpose, in the present moment, and non- judgmentally” (Kabat-Zin, 1994). Of course Mindfulness is much more than this, but as it is not easy to define succinctly this is a good starting point and Kabat-Zinn himself still calls it a ‘working definition’ after more than three decades (Kabat-Zinn 2013).

Specific aims of my research

The specific aims of my research sought to bring together pockets of mindfulness techniques that were being practised in isolation at my Institution by building on these and to further develop, through practice, research and teaching, deeper coherent mindfulness opportunities for staff, students and for on-going opportunities for external business. The second aim of my research was to explore my own practice as an educator-practitioner, insider-practitioner, insider-researcher and change agent.
I believe my research aims and my documented case study will be interesting to delegates of the DOP conference and to members of the public as my talk could help to enhance others’ reflections of potential ways to introduce mindfulness into other organisations as a resilience builder.

Research Approaches and Project Activity
To carry out my aims I chose to use an approach that is similar to Action Research. The term Action research was first used by Lewin (1946), as a technique to learn about organisations through the methods of change. Action research is seen as being a spiral, or a cyclical process involving planning change, acting on the change, observing what happens following the change, reflection, and then planning a further cycle of action and change.

Although my project does not use Action Research in its purest form it was necessarily an iterative process that built on planning change through collaborative discussions with colleagues, acting on the possibilities for change, observing what happened, collecting data, reflection and planning further collaborative enhanced cycles of action and change.

The action research approach that I chose is inspired by Living Theory (Whitehead, 2009). Living theory begins with the values that are important to the researcher, followed by enquiry into how those values might be more fully lived in practice. Personal reflective accounts of the researcher’s learning helps to evaluate and to validate the researcher’s actions (Walton, 2011). This helps to improve practice and to generate new knowledge. A typical question such as: ‘How do I improve what I am doing?’ is asked and iteratively worked on. It has even been claimed by some that this approach forms the basis for a new epistemology for educational research, resting in a living logic of educational inquiry and living standards of judgment (Laidlaw 1996). The importance of creativity and uniqueness in improving practice and knowledge within historical and cultural constraints or opportunities that lie in the social world of each individual are emphasised in this approach. Each person will have a unique form of living theory which is argued to be different to more traditional forms of educational theory that have historically drawn from disciplines such as history of education, psychology, sociology and philosophy, since these traditional forms draw on more conceptual terms (Pring 2000).

Rationale and Justification
My ontological views are that I see the nature of reality as being in terms of social phenomena that are created through perception and actions of social actors and therefore lie in subjectivism and I do not believe that social entities exist as a meaningful external reality as in objectivism. I also believe that reality is socially constructed and that different people will have different perspectives and different changing views of the world. I also feel that in epistemology when questioning the foundations of acceptable knowledge that this is also constructed, is subjective and is culturally interpreted, meaning that observable phenomena and law-like generalisations are not possible when studying human beings. In terms of axiology I believe that our values are not value free and that our values are bound by our historical, political and social worlds.

My personal bounded values are those of compassion, fairness and equality. In order to embed my living theory values into my own practice I asked myself questions such as: ‘what were my concerns?’; ‘why was I concerned?’; ‘what can I do about my concerns?’; ‘how can I improve my practice?’; and in collaboration with others ‘how can we improve our practice?’.

Deep reflection combined with others’ perspectives, working towards a ‘participative reality’ (Heron, 1996) then informed how I, as an educator-practitioner, insider-practitioner, insider-researcher and change agent interpreted data collected to achieve the aims and objectives of this project. I kept a reflective journal throughout asking Living Theory (Whitehead & McNiff, 2006) type questions such as: ‘where to go next? ‘; ‘how could I improve the process?’; ‘how could I resolve problems that emerged?; After acting on possible solutions to find different ways ahead, then the reflective cycle goes around again with questions such as: ‘what were my evaluations of my actions?’; What emerged from this was crucial to me, not only as a professional practitioner to see how I might go about
implementing further changes at my place of work, but also within a deepening analysis of myself as a practitioner-educator combined with my own personal mindfulness practice as they work together synergistically.

I also examined and continue to examine Organisational Development, firstly from a theoretical approach and by utilising practical tools throughout my methodology. The tools are: from the Leadership and Development Foundation in HE tools; a Continuum of OD tools, devised from a successful bid from a University to the Leadership and Development Foundation; and the online CIPD toolkit. It is feasible to use parts from one and some parts from another. They will all be reviewed. My personal reflections also integrate OD more fully into my project with regard to my being the person, the agent of change, since this project is also about me as an individual and how I am developing. One way I have accomplished this throughout has been through my journal writing with living theory considerations of ways in which I have personally developed in areas such as: influence, impact, creativity and synthesis of my work.

The main ‘data collection’ was in the form of notes of meetings, journals, diaries combined with reflections of the typical kinds of living theory questions above. The main ‘data analysis’ was in the form of interpretation of the collected information through various themes that emerged, which then further enhanced and informed the project directions and timings.

My rationale for choosing to use a living theory approach within my project is firstly because an interpretive approach fits well with my proposed aims, whereas a positivistic approach would not make sense since it would not be possible to find an absolute truth ‘out there’. A second rationale for my choice is that both mindfulness practices and living theory would seem to work well in combination, harmony and synergy with each other. Living theory has dynamic energy flows, passion and at its core has someone’s values embedded within their practice. Mindfulness has attitudinal factors that constitute its major pillars: non-judging, patience, a beginner’s mind, trust, non-striving, acceptance and letting go (Kabat-Zinn, 1990 p32).

According to results of literature searches that I carried out in 2012 I could not find any written accounts of any studies on mindfulness using the method of living theory. In 2015 this still appears to be ‘mostly’ the case, but some studies I found had combined action research and mindfulness (but not living theory). It may be that these approaches (living theory and mindfulness) have not yet been precisely put together before. This offers scope for an innovative development in combining these two approaches. This could be the most novel or innovative aspects of my ideas that I hope to present. I personally feel that they fit together well and that one helps to inform the other. Of course as my project has progressed and continues to progress to completion I have been aware of general criticisms of action research, living theory and indeed of mindfulness itself. I have sought to address these where I could.

Evaluation of my project according to the living theory approach I am taking seeks to look for ‘trustworthiness’ rather than the more traditional terms of reliability and validity. This is because reliability and validity do not seem to form part of an appropriate discussion within a project drawing on these approaches. I aim to demonstrate that any claims I make within my conclusions are as fair and accurate as reasonably as is possible. I accomplish this through a type of validity (social and ethical), legitimacy and moral authority (Whitehead & McNiff, 2006)

References


**W15 Standard Paper**

**Large scale multi-method police service job analysis**

Howard Clemence and Katie Oates, College of Policing

**Category:** Psychological Assessment at Work

**Background**

The session will draw on the findings of an applied practitioner job analysis within the police service which included over 3,000 participants during 2014. The job analysis was commissioned as a work stream on the request of the Home Secretary and in response to an independent review of police officer and staff remuneration led by Tom Winsor (2012).

The work was written in 2014 as an internal College of Policing report which was peer reviewed by three experienced Occupational Psychologists, a leading academic and a senior police officer with a strong background in police leadership.

In 2012 a work stream was setup to define and assess competence of police constables through to chief superintendents. Tom Winsor (2012) recommended introducing a foundation threshold for police constables at around the fourth year of their service and a specialist threshold for all officers of the rank of police constable through to chief superintendent that was intended to act as a gateway to the maximum pay point for those ranks.

The work links to the central conference theme of resilience in a challenging world as the work has been progressed across a workforce that has undergone a series of extraordinary demands over the past five years in terms of 20% cuts in police spending (spending review 2010), change in political landscape (introduction of Police and Crime Commissioners in 2012), increased public expectations of policing and ever changing complexity of crimes (e.g. growth of online crimes, crimes conducted across international borders etc.). Of particular note has been the challenges of implementing threshold testing where the infrastructure to support successful delivery has shrunk in recent years (e.g. reduction of supervisors, rationalisation of support functions such as L&D personnel and support mechanisms for supervisors). This has had a significant impact on the remit of the work as the end solution has been required to be delivered with minimum bureaucracy but remain sufficiently robust in a landscape of eroded support functions.

**Presentation Overview**

This presentation will focus on the work associated with defining advanced threshold criteria for the police constable rank applying a multi-method, multi-perspective job analysis approach (reterory grid technique, critical incident technique, national survey and focus groups), which involved over 3,000 participants.

It is proposed that the submission is delivered as a presentation as it is anticipated that the content will stimulate interest from practitioners who are required to design assessment criteria for threshold testing in other occupational
contexts and will go over and above accounts of characteristics of policing competence in the public domain –
highlighting characteristics that make a police constable an ‘advanced officer’.

It is proposed that 30 minutes will be allocated to a presentation and 10 minutes will be set aside to allow the
audience to ask questions and share experiences. The presentation will include the following areas: outlining
literature review; key drivers for the job analysis; how 3,000+ participants were engaged (when competing against
officer’s time for other activities in a policing culture of cut backs and savings); cross reference to relevant policing
evidence around competence; overview of multi-method job analysis approach employed to ensure data reflected
the best available evidence; briefings to job incumbents, supervisors, and job analysts; peer reviews of work; how
the methodology is different to previous policing job analysis; the findings of the job analysis; and how the work has
been implemented.

The main psychological theories, models, research that underpin the session include:

- Builds on earlier research around personal qualities of police leaders (Dobby et al, 2004) and takes into
  account more recent systematic review of the police leadership literature (Pearson-Goff & Herrington,
  2013). The research also takes into account the findings of a number of unpublished internal policing
  reports (e.g. defining competence of high performing officers);
- Practitioner job analysis guidelines such as SHL Guidelines for Best Practice in the Use of Job Analysis
  Techniques (2005) were referenced during the design stage;
- Repertory grid technique applied in the research was based on Kelly’s (1955) personal construct theory;
- Scenario interviewing was based on Flanagan’s (1954) Critical Incident Technique (CIT) and considered CIT
  recommendation within Koch et al (2012) e.g. importance of multi-method, multi-perspective approach to
  job analysis;
- Relevant practitioner work in different industries (e.g. School Teachers threshold testing, 2014) were
  reviewed during the design phase;
- Supervisors’ assessments of job performance were considered during the development of an assessment
  strategy. In particular, limitations outlined within Viswesvaran et al (1996) were noted in managing
  expectations around the likely reliability (e.g. inter-rater reliability) derived through supervisors’ ratings of
  advanced competence;
- BPS code of ethics and conduct (2009) was followed throughout engagement with job incumbents,
  supervisors and job analysts (e.g. all participants were fully informed of the rationale of the work and fully
  briefed before participation);
- Best practice in thematic analysis (e.g. Braun and Clarke, 2006) was adopted throughout qualitative analysis
  phase of the research.

Key messages:

- Multi-method approach to job analysis – the presentation will highlight the importance of triangulation of
data through the collation of four data sources across 3,000+ participants: repertory grid technique; critical
  incident technique; focus groups; and national surveys. The presentation will discuss the importance of
  using different approaches across job incumbents and supervisors in order to deliver a valid and reliable set
  of assessment criteria.
- Strategic and visionary engagement – there is a risk, with time pressure, that job analysis can be limited to
  job incumbents and supervisors which could deliver outcomes that reflect the status quo of an
  organisation’s culture as opposed to outcomes that consider the longer term strategic direction and
  demands for job incumbents. The presentation will highlight how the design team factored in longer term
  strategic direction and future operational demands in order to ensure that the output assessment criteria
  was future oriented.
- Impactful engagement with target sample – the College of Policing, at the time of the job analysis, recruited
  28 seconded officers across the police service for the role of frontline champion. This helped to make links
into forces once relationships had been established with individual frontline champions. The presentation will highlight how the design team ensured high participation from target ranks through a comprehensive communication strategy.

- Supervisors’ assessments – the challenge of developing an assessment strategy (e.g. assessor guidance and training) that yields reliability coefficients that would be acceptable to senior stakeholders.
- Challenges of implementation – challenges of delivering an assessment strategy that has minimum bureaucracy whilst remaining sufficiently robust; and having appropriate infrastructure (e.g. supervisor support) in place to implement a broad organisational advanced competence threshold that is linked to pay.
- Outline how the design team aimed at trying to reduce the confusion around a number of concepts such as competence, competency and performance.

The presentation will close by recommending further research to support practitioners specifically looking at defining baseline and advanced competence across other professions.

In terms of ethics, the following key ethical considerations applied to this piece of work:

- Ability of all police constables (including part time workers, officers with protected characteristics, officers with restricted duties, officers from different types of roles such as specialist policing functions) to be able to access areas of work that would demonstrate evidence against a set of generic advanced threshold criteria within a defined two year assessment window (from which evidence could be drawn from);
- The cultural and ethical fairness of the assessment criteria developed – with consideration as to what organisational messages were being communicated through the criteria. For example, there was consistent reference throughout the research that working longer hours was an aspect linked to participants view of what it is to be an ‘advanced officer’. This particular aspect of the assessment criteria was considered by internal and external diversity experts to be unfair to expect all officers to achieve;
- Confidentiality of data – all participants’ data were held in confidence. Data that was shared (e.g. reports to the programme board) was anonymised in order to ensure the confidentiality of the data.

The presentation will highlight how the ethical considerations were met through inviting diversity specialists and police officer associations to a senior stakeholder consultation group and to be members of a work stream programme board. Monthly meetings were set up and considerations to fairness, validity and reliability were central to monthly discussions aimed at progressing definition of assessment criteria and subsequent assessment strategy. Furthermore, views were sought through structured diversity reviews, and evidence was added to an equality impact assessment (EIA) on an ongoing basis.

It is considered that the work has a number of novel and innovative ideas as follows:
- Generic advanced threshold testing for all roles within a police officer rank has never been attempted before this piece of work (previously only specialist skills schemes have been adopted);
- This work has revealed a number of design challenges around developing criteria that is representative across variations in roles across the rank of police constable but yet still is reflective of characteristics that are uniquely advanced across all officers;
- The job analysis design was required to reflect the above design challenges and unlike traditional job analysis research did not aim to define a continuum of ineffective – very effective performance. Instead the work aimed to define the difference between competent and advanced police constables (the difference between good and very good officers).

It is considered that the general public would be interested to learn about what Police Crime Commissioners have indicated that the public would like to see more of from the police service (for example how police constables interact with the public/victims and how the police may better respond to incidents where they may not have managed activity as well as they could have.)
Electronic PowerPoint slides will be made available to the session’s attendees.

References:
Guidelines for Best Practice in the Use of Job Analysis Techniques (2005) published by SHL Group PLC.
Independent Review of Police Officer and Staff Remuneration and Conditions: Part 2, by Tom Winsor, March 2012. Published by The Stationery Office Limited. The publication is available for download at www.official-documents.gov.uk
Internal College of Policing job analysis report. Defining Advanced Threshold Criteria for Police Constable Rank. Including over 3,000 participants.
Spending Review 2010. Published by HRM Treasury.

W16 Discussion
Getting a seat at the table
Stephen Reicher, University of St Andrews; Alexander Haslam, University of Queensland and Renee Bleau, University of Glasgow
Category: Leadership, Engagement and Motivation
1. Main psychological theories, models and research underpinning the Discussion (town hall meeting format) Session.

The “book on Leadership” (Anon, et al, 2011, Anon, et al, 2007) provides a cogent theoretically informed and empirically supported framework in which to make sense of power dynamics in the workplace and in the political arena.

Three aspects are important for Occupational Psychologists 1/ how can the “X Leadership model” inform our understanding of what happened at the UK 2015 General Election, with the “fall” of Ed Milliband (see Figure 1), and the “rise” of Nicola Sturgeon and David Cameron 2/ how might occupational psychologists recognize their own roles as “political actors in the workplace” (Silvester & Wyatt, 2015) 3/ how can “X theory” help in an analysis of resilience in leadership and followership.
2. How does the proposal link with the main conference theme?
Resilience is key in the workplace and the political arena – this Discussion Session will frame its key points of debate in relation to resilience, and encourage participants to reflect on a/ what happened to the old and new leaders following the UK 2015 General Election and b/ how OPs might contribute in the future to investigating and analyzing (researchers) / participating and engaging (practitioners) in the context of political leadership (recognizing that leadership of any kind, will always be, in some sense political).

3. Why is the submission appropriate for the particular category of “Discussion Session” (type 6)?
The objective of the submission is two-fold: 1/ to offer a presentation on the part of experts in the field 2/ to allow conference delegates to engage in the discussion, and work out, whether they are researchers or practitioners, how they might achieve greater visibility and obtain a “seat at the table”. Given this two-fold objective, a Discussion Session format is ideal.

4. What do we consider to be the most innovative aspects?
The analysis of outcomes of what might be conceived of, in terms of one perspective, as effectively a leadership contest in UK 2015 General Election using Identity Leadership to make sense of the new political landscape in the UK and seeing what potential role OPs as researchers and practitioners might play in the future, so that they may obtain a “seat at the table” and engage visibly and impactfully as occupational psychologists.

5. Why do we think delegates will find the session stimulating and useful?
The leading of the Discussion Session by leading social psychologists is considered the main draw for this session. Both are well known for their charismatic presenting styles and their depth of knowledge in the fields of Social and Organisational Psychology.

6. What might the public find interesting about the session?
The Discussion Session: Getting a seat at the table, is potentially an extremely interesting event for the public, providing an insight into the current developments in OP, with the increasing activity of OPPIP (http://www.bps.org.uk/networks-and-communities/member-microsite/division-occupational-psychology/public-policy-opipp) and Jo Silvester’s recent highlighting of the link between politicians and the research and practice of occupational psychologists (Silvester & Wyatt, 2015).

7. Materials for attendees.
Attendees will receive a printed QR code of a curated bibliography relevant for the session.

2 references by Anon and Anon (anonymised references as per section 8 of the Submission Guidelines “Important points about submissions: ... References lists should also not make the authorship obvious”).

Time for questioning and discussion will be utilised by a/ short opening presentation by discussants, chaired by facilitator. b/ open discussion with participants, with substantial engagement from discussants, responding to questions and comments of delegates, facilitated by the OP.

Form of Discussion Session: as indicated above, Town Hall meeting style.
Topics to be debated / major questions to be raised / points to be argued:
• “X Leadership” as a way to make sense of outcomes of General Election
• Who failed? And why?
• Who succeeded? And why?
• How is the work of Occupational Psychologists potentially to be linked to the activity of politicians as highlighted by Silvester, 2015 – discussants to offer their thoughts and views – delegates to bring their own relevant thoughts and experiences to the discussion
• Can psychologists, and OPs in particular, play a more active role in informing public policy and practice? How does OPPIP reach and engage DOP members? (this is for delegates to discuss)

The session will be chaired and facilitated by an experienced OP academic/practitioner.
Main discussants: 2 leading social psychologists who have published extensively in the field of OP (in the area of leadership, and other areas) as well as social psychology.

W17 Short Paper
Reconceptualising career success for males in two female-dominated occupations: A case study of primary school teaching and university administration
Kazia Solowiej, Catharine Ross and Jan Francis-Smythe, University of Worcester and Catherine Steele, University of Leicetser
Category: Learning, Training and Development

Introduction:
Understanding the impact of occupational context on the career success of males and females and the availability of opportunities, is relevant to modern career research (Lawrence & Tolbert, 2007). Studies show that the structure of different industries and occupations can determine the career paths individuals take and their perceptions of career success (Dries & Pepermans, 2007; McDonald, Brown & Bradley, 2005). For example, Smith-Ruig (2008) suggested professional occupations, such as accounting and teaching, offer more distinct sequential career paths in line with traditional perspectives, whereas characteristics of non-professional occupations, that do not specify formal entry criteria (Chauvin, Miller & Eaton, 2011), make this less clear. Occupational context is therefore thought to play an important role in how males and females experience careers, which can extend to influence how they define career success (Ackah & Heaton, 2004; Segers et al, 2008; Sullivan & Baruch, 2009).

Existing models of career success categorise achievement in terms of objective and subjective criteria (e.g. Ng et al, 2006), with little acknowledgement of occupational context. Studies of gender-segregated occupations for example, indicate that women experience disadvantage and discrimination in their pursuit to achieve success in male-dominated environments (Dann, 1995; Demaier & Adams, 2009). Whereas studies of males in female-dominated occupations have focused on career choice and experience of working in this context, resulting in mixed findings including negative perceptions of masculinity and sexuality, but advantageous experiences of the glass escalator phenomenon (Lupton, 2006; Simpson, 2005; Williams, 1992). However, less is known about career success in this context, which is an important area of study given the widespread devaluation of female-dominated occupations (England, 2005; Huppatz & Goodwin, 2013) as they are not often associated with opportunities to achieve objective criteria for success that are assumed to be most important to male employees.

In light of this, it appears that research is yet to explore male career success in this occupational context. It is important to determine how males define career success in female-dominated occupations and whether or not they are able to achieve it, as this will have important implications for developing the evidence-base that currently suggests that objective success is the only criteria that is important to males.

Methodology:
The study adopted a qualitative, case study design in which a semi-structured interview method was implemented to explore how career success was defined and achieved by males in two female-dominated occupations of primary school teaching and university administration. Semi-structured interviews were conducted with a purposive sample of n=34 males in primary school teaching (n=15) and university administration (n=19). Male primary school teachers
were aged between 22-42 years (m 31.2, sd 6.2) and had been in post for an average of 3.68 years (sd 4.9). Male university administrators were aged between 22-50 years (m 35.46, sd 8.12) and had been in post for an average of 4.22 years (sd 4.09). Interview items were developed from the literature for the purpose of this exploratory study and included 16 items structured into 4 sections on the topics of career history, career success, experience of achieving success, and organisational support. Interviews were conducted in participants employing organisations and lasted between 15.35 – 57.02 minutes.

The study received ethical approval from the University of Worcester Research Ethics Committee and adhered to the BPS Code of Ethics and Conduct (2009). All participants were informed of the purpose of the study and gave consent to take part. Anonymity of participant’s and their employing organisations was protected by the use of pseudonyms in the final project report.

Findings:
This paper aims to contribute to the theme of resilience in a challenging world by presenting key findings that outline the ways in which males in two female-dominated occupations, primary school teaching and university administration, defined and achieved career success. Findings demonstrated complex ways in which male’s defined success in line with themes of personal, professional, social and life success, which were contrasting to existing models of objective and subjective categories of success criteria. For example, positive feedback and recognition from colleagues in administration, enjoyment of teaching and administrative duties, social interaction with colleagues to build friendships and achievements in other areas of life.

Males described the achievement of success as a continuous, fluid process that was dependent on the context of their occupation. For example, male primary school teachers emphasised how achievement of success was an ongoing process as a result of curriculum changes and a new class of students each academic year, as this dynamic introduced a different set of challenges on a regular basis.

In relation to organisational support, it was found that males adopted strategies in which they were able to extract aspects of career interventions in their employing organisations to aid the achievement of success as they defined it. For example, some males attended formal staff development sessions or meetings as an opportunity to socialise with other colleagues and share information. On the other hand, males in primary school teaching specifically felt pressure from their organisation to pursue promotional opportunities Head Teacher roles, which resulted in negative experiences of success for males when hierarchical progression was not their intention. The presentation will give an overview of the challenges and benefits males experienced during the process of achieving success to demonstrate their resilience to challenges in this context.

Conclusions: The findings of the study suggest that career success is a complex construct encompassing personal, professional, social and life achievements that go beyond simplistic categories of objective and subjective criteria. This has important implications for the way in which career success is defined and measured in organisations, as the qualitative approach to this study enabled complex themes to emerge that would have been constrained by traditional questionnaire tools. Moreover, themes that emerged demonstrated how definitions of success were embedded in the context of both occupations. For example, in primary school teaching males valued peer observations as a means of gaining recognition for good work, whereas males in university administration described getting on well with their colleagues as success, which would be difficult to interpret from generic quantitative measures.

A specific challenge that was apparent in the context of both female-dominated occupations was that some males felt their career intentions were contrasting to organisational assumptions about how they should develop and progress at work. For example, evidence suggests primary school teaching is associated with a linear career path, therefore individuals who enter must define success in a particular way. However males whose definitions of success
did not align to this career path had been able to extract beneficial aspects of formal career interventions to support their own personal achievement of success. Where males felt pressure to accept opportunities that were not consistent with this, breaches were identified in individual and organisational psychological contracts. Implications of the study therefore suggest that the current evidence-base would benefit from further research on success in a variety of occupational contexts, rather than focusing on gender differences, to enable organisations to adopt a supportive rather than directive role in career development. It is important that organisations take account of individual motivations as well as organisational goals, to support individuals to develop their own careers.

This study enabled a number of key recommendations to be made for developing the existing evidence base on career success and for informing practice. Most importantly, occupational context should be incorporated into research designs to fully appreciate how success is defined and achieved in real work situations. It would therefore be valuable to disseminate the findings of this study to conference delegates to prompt discussions around the topic of gender, occupational context and achievement of success.

References


W18 Short Paper

Factors influencing mothers’ employment decisions

Mellissa Wilson, University of Leicester

Category: Wellbeing and Work

There remains, still, debate about working mothers and the one size fits all policies they may have access to (Augustine, 2014; Hakim, 2006). It is only in the last ten years that the long term linear career could be giving way to a more subjective nature of success (Valcour & Large, 2008). Preference Theory (e.g. Hakim, 2003) attempts to explain the complex work-life relationship by arguing that women have a certain preference to this relationship: they can be work centred, home centred or adaptive to either. However some researchers have argued that there may be contextual and situational factors that influence the employment decisions of mothers rather than simply these inherent preferences (e.g. Houston & Marks, 2003). Considering contextual and situational factors alongside flexibility in the nature of success could affect the employment decisions made by mothers. This potentially has major implications in certain arenas such as policy, business and practice. With as little epistemological positioning as possible, the research set out to identify through exploratory qualitative analysis what these factors might be in a West of Scotland population.

Seven semi structured interviews were conducted in May 2015. The interview questions were developed from a broad reading of the current literature. The recorded interviews were transcribed and subjected to Thematic Analysis as outlined in Braun & Clarke (2006).

The analysis did imply that situational and contextual factors influence mothers’ employment decisions. The following themes were identified:

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<thead>
<tr>
<th>Code</th>
<th>Theme</th>
<th>Sub Theme</th>
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<tr>
<td>1.1.1</td>
<td>Childcare</td>
<td>Informal Care</td>
<td>Capability</td>
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<td>1.1.2</td>
<td></td>
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<td>Inconvenience</td>
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<td>Tag Team</td>
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<td>1.2.1</td>
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<td>Formal Care</td>
<td>Expense</td>
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<td>1.2.2</td>
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<td>Availability</td>
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<td>Continuity/Complexity</td>
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<td>1.2.4</td>
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<td>Quality/Reliability</td>
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<td>2.1.1</td>
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<td>Of Others</td>
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<td>2.2.1</td>
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<td>Grateful</td>
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<td>3.1.1</td>
<td>Desire to Work</td>
<td>Adult Company</td>
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<td>3.2.1</td>
<td></td>
<td>Money</td>
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<td>3.3.1</td>
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<td>Aspirations/Motivation</td>
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The research reveals the thoughts, experiences and issues of the women. Many experiences are shared such as having access to family, friend and neighbour care and their willingness to work however some experiences are specific to particular mothers such as applying for flexible working or starting a business. Many of the factors identified in this study are reflected in relevant recent research. However when comparing the availability of resources to Scotland and the UK to other European provisions, what we offer may not be enough to facilitate the needs of mothers who are or wish to work. None of the women felt particularly successful in both spheres of work-life and most of the women had future plans for at least one sphere. It could be that this is a lack of provision or it may indeed be reflective of a flexible success.

These issues have relevance to current theory as well as implications for policy and practice. Particularly they have relevance to ‘Resilience in a Challenging World’ because they demonstrate how mothers adapt to their situations and context, even when it is difficult.

This has been submitted under the category of ‘Wellbeing and Work’ as the research has direct relevance to that area: work-life balance role conflict and guilt among other things. It presents novel findings from a West of Scotland population that has implications and interest for over half of the general population, not to mention policy makers and industries looking to increase their percentage of female employees such as engineering. Delegates should find interest in the current insights this research provides.

Ethical Approval had been obtained from the University Ethics Committee prior to the commencement of the interviews. The main issues were thought to be a lack of confidentiality heightened by the fact that the interviews were being audio recorded. Participants had the right to withdraw at any time and names and identifiable details have been changed on the transcripts.

References


Hakim, C. (2003). Competing family models, competing social policies: even in modern societies, women’s views are often still overlooked. Policy-makers and social scientists concerned with family policy and social policy will in future have to take greater account of women’s values, preferences and life goals, Family Matters, Autumn 2003, 52 – 61.


**W19 Short Paper**

*Are you proud to be an OP! Write for OP Matters*

*Robert Goate*, Editor of OP Matters

**Category:** Professional Affairs and Awards

Are you passionate about our profession? Have something to celebrate - or gripe about - and want to see your views in print? This session, presented by Robert Goate, editor of the DOP’s OP Matters, will help you get your opinion out to 3,000 OPs and beyond. You’ll see examples of previous submissions from OP Matters to inspire you, and get sensible practical advice on the do's and don'ts of topics, format and content for submission to our quarterly journal. Everybody welcome from students to experienced professionals.

**W20 Panel Discussion**

*Board Effectiveness Working Group*

*Women with Power*

*Rosalind Searle*, Co-Convenor of DOP’s Board of Effectiveness Working Group

**Category:** Leadership, Engagement and Motivation

Chair Rosalind Searle co-convenor DOP’s Board effectives working group, Helen Finch, Senior Manager, Research & Technology, External Technical Affairs Jaguar Landrover, Ruth Sealy, Occupational Psychologist and Sen. Lecturer, City University London, Stephanie Sirr, Chief Executive Nottingham Playhouse Sarah Walker-Smith, Chief Operating Officer, Browne Jacobson LLP.

This DOP Board Effectiveness working group panel explores the experiences of senior women in three different contexts – manufacturing, the arts and law, and their journey to the top. We welcome three leaders - Helen Finch, Senior Manager, Research & Technology, External Technical Affairs Jaguar Landrover; Stephanie Sirr, Chief Executive Nottingham Playhouse; and Sarah Walker-Smith, Chief Operating Officer, Browne Jacobson LLP. In addition Ruth Sealy, Occupational Psychologist and Sen. Lecturer, City University London, will offer the latest insights into such journeys and whether the situation is improving. We include debate and reflections on what OPs can do to enhance and retain talent pools in organisations.

**W21 Short Paper**

*Sex, social support and secret messaging in the workplace: The buffering effect of intimacy at work*

*Lisa Matthewman*, Westminster Business School

**Category:** Wellbeing and Work

10 minute interaction


**Link to conference theme of resilience in a challenging world**

This study makes the link to the main conference theme, as the research discusses the role of social support as resulting from close intimate workplace relationships. The research draws upon contemporary intimacy research.
(Kakabadse & Kakabadse (2004) and the organisational social support literature Bennet & Beehr (2013), to offer a fresh perspective on emotional and sexual intimacy in the workplace as facilitated by instant messaging and email. The paper investigates the role that new technology plays in intimacy formation & facilitation and the impact of social support on building personal emotional resilience.

**Why is the submission appropriate for the particular strand?**

This submission is appropriate for the particular strand; well-being because the research positions social support as resulting from sexual and romantic relationships in the workplace, helping employees to build and grow personal levels of emotional resilience. Bolwby (1969) highlighted the importance of strong attachments for psychological well-being. More recent research continues to highlight the importance of close personal relationships as a fundamental factor in the resilience toolkit.

**What is most novel or innovative about this research?**

There are several reasons as to why the research is novel and innovative, firstly due to the applied nature of the research: the use of new technology in the form of instant text messaging and allied social media web sites have gained momentum in recent years and infiltrate all elements of personal life. The changing landscape of personal relationships in the workplace and the increased prevalence of IT are resulting in significant changes to how we conduct our relationships at work.

A second reason as to why the research is novel and innovative is due to the fact that whilst many studies have investigated romantic and sexual relationships at work, this research goes one step further and explores the impact of new technology on intimacy initiation, facilitation and social support outcomes in relation to resilience outcomes. An aspect of workplace behaviour virtually ignored.

**Why do I think delegates will be interested in the session?**

I think the conference delegates will find the paper and session interesting because it explains what happens in intimate workplace relationships as experienced by individuals engaged in romantic and sexual relationships against the backdrop of technological advancements. We live in a real time and virtual interconnected complex world and relationship formation is much more sophisticated. This session focuses on the resulting social support as elicited from intimate relationships and the important role that new technology plays in that process. I intend to have a printed article that can be made available to delegates on the day.

**Why do I think the public will be interested in the session?**

At the same time the public will find the session interesting, as it will give insight into how employees are conducting romantic and sexual relationships in the workplace and how they are using new technology to facilitate this process. The resulting social support has a valuable role to play in the resilience debate. I intend to have a printed information sheet/press release that can be made available to the public/press on the day.

**Psychological theories, models and research underpinning session**

Bowlby (1969) highlighted the importance of strong attachments for psychological well-being. More recent research continues to highlight the importance of close personal relationships as a fundamental factor in the resilience toolkit. One type of personal relationship that arises in the workplace is the romantic or sexual type. These relationships may take the form of emotional and physically intimate relationships as developed against a backdrop of organisational culture.

Since 1980s workplace romance has been investigated and explored. Early definitions of workplace romance defined it as ‘a relationship between two members of the same organisation that is perceived by a third party to be characterised by sexual attraction’ (Quinn 1977). Pierce and Aguinis (2001) define WPR as ‘mutually desired relationships involving sexual attraction between two members of the same organisation’. Surveys in recent years
continue to highlight the prevalence of workplace romance, in 2011 a survey by CareerBuilder.com showed that 40% of respondents had dated a co-worker and a survey in 2015 by the Institute of Leadership and Management (ILM) with more than 1,000 UK workers and managers revealed that 41 per cent of respondents admitted to having an intimate relationship with an office colleague. The survey further reveals that employees remain cautious with 21 per cent claiming colleagues would disapprove of a relationship, prompting 30 per cent to keep liaisons secret. The secrecy factor was further explored by Foster et al (2010) indicating that deliberate concealment was omnipresent in workplace romances.

However, little research exists on how the relationship is actually initiated and how it is facilitated by the individuals involved. Technological advancements in recent years have impacted upon relationship initiation and facilitation in ways that further serve to conceal romantic and sexual relationships in the workplace.

Certainly sexual and romantic relationships at work may effect worker conduct and relationships (Mainiero, 1986), reduce productivity of work (Society for Human Resource management (SHRM) 2011). However, there is research that suggests that the office romance can increase productivity, improve work climate and culture (Quinn, 1977); add excitement, enhance communication, stimulate creativity and lead to higher job satisfaction (Pierce et al, 1996). Further, the organisational social support literature Bennet & Beehr (2013) indicates the role that social support can play in the stressor-strain relationship and the buffering effect that social support can play in predicting psychological well-being.

In today’s workplace, employers need to ensure that they have a clear policy to guard against the potential impact of sexual and romantic relationships at work and to ward off sexual harassment claims. Kakabadse and Kakabadse (2004) and Riach and Wilson (2007), Wilson (2013) comment on how organisations are found wanting in not having institutional policies and practices to equitably address this emerging phenomenon.

The IRS Employment Trends Research in 2000, noted that only 20% of organisations have formal codes of behaviour concerning such matters and so perhaps organisations need to continue to think about the implications and likely impact of sexual and romantic relationships in the workplace by undertaking risk assessment which aims to identify what areas of the business might need protecting.

Research objectives
The primary objective of this research is to research the perceived antecedents, processes and outcomes of sexual and romantic relationships at work, develop a relationship typology and indicate a framework to assist practitioners manage this issue and respond effectively.

- To explore the literature on sexuality in the workplace
- To indicate the literature on workplace relationships and social support in the workplace.
- To research the perceived antecedents, processes (facilitation mechanisms) and outcomes (social support) of sexual and romantic relationships in the workplace
- To explore the relationship dynamics of relationships at work in relation to intimacy, new technology usage, power, commitment and conflicts of interest/exploitation/professional malpractice.
- To explore occupational differences.
- To develop a framework to assist employers manage this issue and respond effectively.

Design and methodology
Sampling:
Convenient, purposive, and accidental sampling methods were employed, whereby the researcher utilised the people closest at hand in relation to the phenomena under study. In addition, a snowball sampling method was employed to include those people with the experience of the phenomena being studied. It could be argued that judgemental sampling methods were additionally utilised as the researcher-was inviting participants to partake in
the research based on their experience of sexual and romantic relationships at work and was not inviting anyone else to take part in the research during the research process. Natural sampling methods were further utilized. The sample consists of employees working in various professions, including academia/education, media, retail, public sector, financial services, business consultancy and health services. The average age of men was 38.7 (n=36) and the average age of women was 34.2, (n=26).

Design/methodology:
Both a quantitative and qualitative methodological approach was employed to understand the key questions being posed. This was decided by matching the strategy to the nature of the research project and the type of research questions being asked. The aim of the research questions was to conceptualise what participants in the study perceive to be the antecedents, processes, and outcomes of sexual and romantic relationship[s at work. In response to this aim, the philosophical paradigm taken in relation to the research is the ‘phenomenological’ approach, which also, includes the interpretivist, or qualitative paradigm.

Data collection:
A mixed methodological approach was employed which utilised both a survey and semi structured taped interviews. Taped confidential semi structured Interviews were conducted with 62 men and women in varying professions, using snowballing techniques. After respondents agreed to participate in the study, they were individually interviewed by the author. All respondents were informed of the confidentiality of their responses. All were assured that what they said would be treated confidentially. The interview was divided into a number of sections including organizational and individual policies toward workplace romances, knowledge of prior or current workplace romances, and reactions to these relationships. Interviewees were asked, about their first hand experiences of workplace romances. Participants were asked explicitly about their own experiences of organizational romance– if they had they witnessed a romance at work, had they been involved in romance at work, culture, attitudes to workplace relationships, initiation, process or facilitation factors and what were the positive and negative outcomes in their view and about their knowledge of policy on the topic. The dialogue was transcribed verbatim, assigning letters to participants relating to location and sequence of interview. The analysis combined traditional qualitative coding techniques with those drawn from narrative thematic analysis to understand how particular experiences were represented and used by participants within the dialogue. Narrative analysis serves to look at the process of re-telling experience as a strategic and interpretive event (Boje, 2001). The researcher began to identify themes, which were informed by the research questions developed from the literature review. Brief notes were taken during the interviews.

Results:
Preliminary results will be presented based on the interview analysis and survey data. Data will take the form of descriptive statistics and qualitative data analysis quotations, divided into antecedents, processes and outcomes. Tentative conclusions will be presented relating to the typology of sexual and romantic relationships in the workplace.

Conclusions:
To conclude, the research illustrates how workplace relationships can result for varying reasons pertaining to individual motives, attraction, similar attitudes, physical attraction and proximity. These relationships can be positive, negative, temporary or permanent, exploitative or non exploitative and vary in form and longevity. In addition, the vast majority of workers are very unlikely to tell managers or the HR department about their relationship, or a colleague’s relationship until it leads to negative outcomes.

Often it is this secrecy which fuels the development of the relationships and acts as a catalyst for intimacy to continue. The current workplace has not been divorced from technological advancements and the use of email, instant text messaging only serve to further ignite and facilitate the development of workplace relationships.
Such relationships can lead to both positive and negative outcomes for individuals. Positive outcomes include enhanced ego/sense of self, increased productivity, Improved working climate and culture, excitement, enhanced communication and social support, the stimulation of creativity, higher job satisfaction and increased job involvement. Negative outcomes can include jealousy and gossip, an abuse of power, poor team dynamics, reductions in productivity or breaches of confidentiality.

Therefore the challenge for the organisation in today’s workplace, is to ensure that employers have a clear policy to guard against the potential impact of sexual and romantic relationships at work and to ward off sexual harassment claims. But how far are employers required to take action so to prevent claims of favouritism, sexual harassment, injury to feelings, damage to reputations and in some cases forced career changes or dismissal.

The current research goes beyond previous research by employing contemporary theoretical frameworks, enhancing methodological development and employing a qualitative longitudinal focus.

Practical application:
The findings have implications for organisational policy regarding workplace romance and conflicts of interest. This need is now even more essential in relation to the advancement of new technology that only serves to fuel intimate relationships in the workplace.

Thus the current study reinforces the argument that a workplace policy can either be formal or informal and that managerial interventions can either be positive or punitive. Therefore, policy implications can have beneficial impacts on organisational performance outcomes, behaviour change, reduced stress and increased employee engagement and productivity (Pierce and Aguinis 2003, Biggs, Matthewman & Fulz 2012).

The research adds to the field of policy development in this area by comparing policies that either condemn or condone workplace relationships. In the USA, many organisations have generally chosen to condemn such activity and have introduced ‘Love Contracts’ which are clauses that either deter inter-office relationships or prohibit them entirely. Extensive policies have also been introduced to regulate or suppress sexual and romantic relationships. In contrast, a more positive approach has been taken in the UK with the use of depending on the specific industry, condoning policy containing ‘Codes of Conduct’ which is fair and accepts that workplace relationships will happen and encourages employees to be open about them. Issues that arise as a result of a sexual and romantic relationships can be dealt with professionally and legally, perhaps by allocating the individuals engaged in such relationships to different teams or departments. Often open and well communicated ‘Conflicts of Interests’ policies are often employed by many organisations.

It is questionable as to whether expressions of sexuality in the workplace can be regulated and suppressed through moral legislation and such policies may be counter-productive as individuals are forced into a secrecy culture. It might be viewed that sexual and romantic relationships at work are the norm and so we should not discriminate against staff in such relationships just because they (the relationships) might create difficulties. But as employees may be secretive about their behaviour or work in a culture of secrecy, it is difficult for such policies to be implemented effectively. Research from the SHRM (1998) demonstrated that only 13% had policies, by 2006, fewer than a third had policies and in 2000 the IRS Employment Trends Research, noted that only 20% of organisations had formal codes of behaviour concerning such matters. Thus, organisations need to continue to think about the implications and likely impact of sexual and romantic relationships in the workplace by undertaking risk assessment which aims to identify what areas of the business might need protecting.

Therefore further research is recommended investigating: how policy developers know when to switch between positive or punitive intervention in the workplace and what areas of business or types of relationship might be problematic in relation to romantic and sexual relationships.
The impact of occupational downgrading on maternal wellbeing
Sarah Moore, University of Worcester
Category: Wellbeing and Work

In the UK, workforce demographics have changed over the past 40 years (ONS, 2013a), an increase in part time work has been identified and currently there are 8 million part-time workers in the UK (ONS, 2014). There are many reasons why people work flexibly, the most common being to combine working with caring responsibilities (primarily child-rearing) (Timewise Foundation, 2013).

Research has identified that working flexibly or on a part-time basis results in an increase in general wellbeing (Eek & Axman, 2013), better health and fewer depressive symptoms (Buehler and O’Brien’s, 2011), lower levels of work-home interference (Jansen, Kant, Nijhuis, Swaen & Kristensen, 2004), lower levels of job-home spillover (Grice, McGovern & Alexander, 2008) and an enhanced work life balance (Johnson, Lero & Rooney 2001). However there is an increasing body of evidence which conflicts with these positive findings. Rose, Hewitt and Baxter (2013) found that part-time work doesn’t alleviate time pressure and Hosking and Western (2008) found that some types of part-time work worsened work-family conflict. Part-time workers have been found to have a lack of occupational benefits, fewer opportunities for advancement (Wenger, 2001), receive lower wages (Hirsch, 2005, Warren, 2004, Wenger, 2001) and that part time females earn less than their full-time counterparts (Lanning, Bradley, Darlington & Godfried, 2013).

Part-time jobs are heavily concentrated in lower level positions and women are frequently required to occupationally downgrade if they wish to work on a part-time basis (Darton & Hurrell, 2005, Grant, Yeandle & Buckner, 2005, Gregory & Connolly, 2008 and The Timewise Foundation, 2013). The Equal Opportunities Commission (2005) termed this the “Hidden Brain Drain”; seemingly competent women with career potential choosing to, or having to, opt out of a job commensurate with their skills and experience. For the purpose of this study occupational downgrading is to be regarded as an acceptance of a job that results in a reduction in any, or all, of the following three areas: work responsibilities, salary or work status. The downgrade may have been voluntary or forced and is in comparison to the job role the individual held prior to having a child.

Three widely referenced theoretical frameworks regarding stress/wellbeing at work have been considered in relation to the likely impact of occupational downgrading: the Job Demand-Control (JDC) (Karasek, 1979), the conservation of resources model (Hobfoll, 1989) and Siegrist’s (1996) Effort Reward Imbalance theory at work (ERI). Karasek (1979) proposed that a combination of high job demands and low job control produced job strain. Hobfoll (1989) proposed that psychological stress occurs when there is a “net loss of resources” (p516). Resources are considered to include “objects, conditions, personal characteristics, and energies” (p516.). If by taking a reduced hours role with the intention of reducing work demands (Karasek, 1979) or to free up energies (e.g. resources of time) (Hobfoll, 1989) and the reduced hours role means an occupational downgrade the likely outcome is also an accompanying reduction in the control the employee has over her job (Karasek, 1979) as well as the loss of other resources, such as self-esteem, status and economic stability (Hobfoll, 1989). Any benefit experienced in reducing the demands / increasing the resources of time could be offset by the loss of control / loss of other resources not providing the reduction in stress that is being sought. Siegrist (1996) states that emotional distress is created when there is a “lack of reciprocity between costs and gains” at work and will occur in situations such as “forced occupational change, downward mobility, lack of promotion prospects, or jobs held inconsistent with educational background.” (p30). In the case of electing to occupationally downgrade in order to achieve part-time hours the individual may be subject to some of these conditions and be faced with a high-cost-low-gains condition eliciting overall negative emotions and a sustained stress response.

Part time work isn’t simply about creating more time; consideration needs to be given to the trade-offs that may have been made in order to achieve a part time status. The purpose of this study is to explore the levels of stress and wellbeing reported by working mothers who have the opportunity to integrate work and family without
detriment to their career trajectory in comparison to working mothers who have had to occupationally downgrade in order to achieve their desired employment terms.

Specifically two hypotheses were examined in the analysis:

- $H_1$: Working mothers who have not had to occupationally downgrade will have higher levels of wellbeing and lower stress levels than mothers who have occupationally downgraded.

- $H_2$: Mothers who have not had to occupationally downgrade and work on a part time basis will have the highest level of wellbeing and lowest levels of stress than any other group in the study.

The study employed unrelated samples with two independent variables, each with two levels: employment status (full time/part time) and whether they have occupationally downgraded (or not) since returning to work. There are two dependent variables; wellbeing and perceived stress of the individual, measured using Warwick Edinburgh Mental Health Wellbeing survey (WEMWBS) (NHS Health Scotland, 2006) and Perceived Stress Scale (PSS-10) (Cohen et al., 1983; Cohen & Williamson, 1988), respectively.

A thorough risk assessment was carried out to ensure the design and delivery of the study complied with the British Psychological Society’s (BPS) Code of Human Research Ethics (2010), BPS Guidelines for Internet-mediated Research (2013) and the University Ethics Policy (2013) [university name removed for anonymity]. The research did not involve vulnerable groups, deception, or access any confidential or sensitive personal data. No personally identifiable information was recorded and all data collected remained anonymous. As the study focused on mental wellbeing there was the potential that for participants who may have a low level of wellbeing the study may act as a catalyst that could lead an individual to question their wellbeing. Advice to contact their GP or a counselling organisation (http://www.counselling-directory.org.uk/) was provided in case any participants had concerns.

Permission to proceed with the study was provided by the University’s Institute of Health & Society ethical committee.

Participants were a convenience sample recruited using direct email, website posts (Mumsnet.com) and social media links and completed an online questionnaire. Full information was provided to participants including data storage, timescales, sources of support and objectives, although no indication of the experimental hypothesis was eluded. Participants had to be a working mother in the UK with at least 1 child under twelve. It was ascertained if they worked full or part time, if they had occupationally downgraded and completed the answers to WEMWBS and PSS-10. The survey remained open for one month and 221 complete responses were entered into IBM SPSS for statistical analysis.

Following completion of satisfactory assumption checks a two-way between-groups multivariate analysis of variance (MANOVA) was performed. A statistically significant difference was identified between those who had occupationally downgraded and those who hadn’t in relation to their wellbeing and stress levels (Pillai’s Trace = .043, F(2,216=4.89), p<0.05, $\eta^2=.04$). No statistically significant difference was identified between employment status and wellbeing and stress levels or as an interaction effect between independent and dependent variables. To identify where the statistically significant difference occurred between those who had occupationally downgraded and those who hadn’t in relation to the two dependent variables, univariate analysis of variance were examined. To control for the inflation of type 1 error the Bonferroni correction was applied, resulting in a new alpha level of .025. Significant differences were identified for both wellbeing (F(1,217)=9.36, p<.025, $\eta^2=.04$) and stress levels (F(1, 217) = 8.29, p<.025, $\eta^2=.04$).

The analysis provided support for $H_1$; working mothers who had not occupationally downgraded reported statistically significant higher levels of wellbeing and lower stress levels than those mothers who had occupationally downgraded. $H_2$ proposed that the overall optimum result would be seen in those who hadn’t occupationally downgraded and were working part time. Whilst the mean scores concurred with this hypothesis the analysis did not provide a level of significance and further research would need to be undertaken in order to confidently accept this hypothesis.
The results of this study are consistent with the theoretical frameworks regarding work stress or strain proposed by Karasek (1979), Hobfoll (1989) and Siegrist (1996). Those workers who had not occupationally downgraded (and therefore had maintained the control in their jobs, a balance of resources and reciprocity between costs and gains) reported significantly lower stress levels than those who had occupationally downgraded. Regardless of whether they work full time or part time, people felt better about their lives and felt less stressed if they were in a role that was commensurate with their pre-child career. Previous research has expounded the positive benefits experienced when working part time and whilst this study does partially support these findings; the lowest stress levels and highest levels of wellbeing were seen in a group that worked part time (part time – no occupational downgrade), this study has shown that the significant factor influencing positive wellbeing isn’t about the hours that are worked the critical factor is whether you have occupationally downgraded or not. This study suggests that women, in terms of wellbeing and stress levels, may be better working full time in a career that is commensurate with their pre-child career than working part time if they need to make an occupational downgrade to achieve part time status.

1. **What are the main psychological theories, models and research underpinning your session?**
   Three widely referenced theoretical frameworks regarding stress/wellbeing at work have been considered: the Job Demand-Control (JDC) (Karasek, 1979), the conservation of resources model (Hobfoll, 1989) and Siegrist’s (1996) Effort Reward Imbalance theory at work (ERI). In addition research is reported detailing current workforce demographics and the part-time employment market in the UK.

2. **How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?**
   There has been a substantial increase in the number of women returning to work after having children and in a challenging recruitment market, where there are limited opportunities for women looking to work flexibly or on a part time level, especially in mid-high grade positions women have been having to adapt and show resilience to the market conditions. Unfortunately this has manifested itself in women frequently being required to occupationally downgrade if they wish to work on a part-time basis. This study investigates the impact of occupational downgrading on maternal wellbeing.

3. **Why is the submission appropriate for the particular category you have chosen?**
   The study draws on the themes of work-life balance, workplace stress and employee wellbeing, well positioning it to provide wide appeal in the selected category of well-being and work.

4. **What do you consider to be the most novel or innovative aspects of the ideas being presented?**
   The previous literature has tended to concentrate on work-family conflict or work-life balance. The focus has been primarily on the insufficiency/sufficiency of time. This study focuses on the choices that may need to be made in order to secure the desired working time arrangements and the impact this has on maternal wellbeing. An individual may report a reduced work-family conflict as they have more time at home but there is no indication of whether they are content with this decision.

5. **Why do you think conference delegates will find the paper or session stimulating and useful?**
   There are now as many mothers participating in the labour market as women without dependent children (ONS, 2014) making up a significant demographic of the UK workforce. Understanding the impact of occupational downgrading and considering initiatives to improve the wellbeing for this group of workers could have substantial impact in the workplace and be of interest to employers, professionals and practitioners.

6. **What might the public find interesting about your paper or session?**
   With the explosion of parenting websites such as mumsnet.com, babycentre.co.uk, mummypages.co.uk to name a few, women, mothers and babies are hot topics. There is a substantial proportion of website content and forum chat dedicated to the ins and outs of combining motherhood and careers in response to the increasing number of women returning to work. Whilst it will probably not come as much of a surprise to the public that women are occupationally downgrading when returning to work, I think they will find the results of the impact that this decision is having on their wellbeing and stress levels insightful.
7. If any, what materials do you intend to make available to attendees and in what format (e.g., printed hand-outs, electronic copies of slides)?

I am happy to distribute electronic copies of the slides, or the full copy of the study, to interested parties.

W23 Workshop by Going green Working Group

Resilience and Sustainability

Dr Jan Maskell, Independent Practice

Category: Wellbeing and Work

The term ‘resilience’ can be applied both to organisations and individuals. In relation to environmental sustainability (as well as social and economic sustainability) resilience has been defined as:

‘Resilience is the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change’ (IPCC, 2007, p880)

At work resilience can be described as the capability to maintain high performance and positive well-being. Individuals who are resilient are able to sustain successful performance and positive wellbeing in the face of adverse conditions, and to recover from or adjust easily to misfortune or change. Resilience is not just the ability of systems to absorb but also the ability to recover – this applies both to the organisation and the individual as a ‘system’

The i-resilience model (http://www.robertsoncooper.com/iresilience/) considers four components of personal resilience: purposefulness, confidence, adaptability and social support. Through a series of workshops and questionnaires the appropriateness and applicability of this model was considered in relation to organisations. Further ideas were developed around the role that Occupational Psychologists could take in enabling organisations to develop their resilience through these four areas.

Missing from many of the definitions of resilience is the capacity to learn and develop from difficult events and situations. Resilience is not just about ‘bounce back’ it is about ‘bounce forward’. The process of becoming resilient and being able to deal effectively with adversity can in itself develop resilience. This aspect is proposed as an addition to the current model through processes of evaluation and reflection to gain from the lessons learned.

W24 Short Paper

Teacher Wellbeing and Social Support: The Role of Psychological Capital

Karen Salter and Sue Harrington, University of Leicester

Category: Wellbeing and Work

Introduction

This conference session will consider teacher wellbeing. Substantial workload and poor work-life balance of UK teachers has been extensively documented, with research suggesting teachers are particularly vulnerable to work-related stress. This has been linked to teaching specific challenges, such as large class sizes and pupil misbehaviour, alongside high emotional demands. In addition to negative consequences for teachers, a relationship with negative school-level factors has been demonstrated, such as intention to leave teaching and high turnover.

Therefore, as with other professions, there is a current need to support teacher wellbeing. Furthermore, cross-sectional designs and self-report methods dominate teacher stress research, making causal conclusions difficult to draw. Consequently, research into factors that may enhance teacher wellbeing, including the psychological processes involved is needed to examine potential causal mechanisms. This conference session will outline an MSc dissertation research project which investigated the role of social support and psychological capital in teacher wellbeing thus supporting resilience in the current challenging work climate.
The session will outline previous research and theory into the role of workplace social support on wellbeing, focusing particularly on teachers. For example, research has suggested workplace support may protect teachers from the consequences of teaching challenges, reducing negative impact\(^5\), thus supporting teacher resilience.

However, research suggests the relationship between social support and wellbeing may be complex, affected by the strategies used\(^6\), teachers’ perceptions of support quality\(^7\) and the role of the person providing support\(^6\). Relevant findings will be outlined, including demonstrated effects of co-teacher\(^8\) and leader\(^5\) support on wellbeing. Debate regarding the nature of the social support and wellbeing relationship will be considered, with theory and research proposing either a direct, mediated or moderated association\(^6\).

In addition to external social support, the importance of internal psychological factors for wellbeing will be considered. Stress theories which emphasise individuals’ evaluation of environmental challenges and their coping ability in determining stress levels will be briefly outlined\(^9\), followed by an overview of theory and research into psychological capital (PsyCap). This positive, and developable, psychological construct includes resilience alongside self-efficacy, optimism and hope\(^10\), which appear highly relevant to supporting teacher wellbeing in the current challenging workplace environment. Indeed, high PsyCap levels have been claimed to enable positive interpretations of one’s experiences and psychological resources\(^10\), which would lower stress and support wellbeing according to the stress theories outlined\(^9\).

Research which associates higher employee PsyCap levels with better wellbeing in other professions will be considered\(^11\), including one study showing PsyCap to mediate the relationship between social support and wellbeing\(^12\). This suggests that social support increases individuals’ PsyCap, subsequently improving wellbeing. However, this research took place in a Chinese non-work context, making generalisability to UK teacher wellbeing questionable. Although theory suggests that social support may create positive emotions which increase PsyCap, subsequently aiding positive interpretation of work situations and coping abilities, therefore increasing wellbeing\(^13\). This MSc research aimed to investigate if this was the case for teachers, potentially of interest to all those who wish to enhance workplace wellbeing.

**Research objectives**

The research which will be outlined investigated the following questions:

- Are perceived social support and PsyCap levels positively related?
- Are higher levels of PsyCap associated with higher wellbeing levels?
- Are perceived social support and wellbeing positively related? Is this association direct, or does PsyCap mediate the relationship?
- Are higher levels of teacher social support, wellbeing and PsyCap related to lower quitting intentions?
- What particular support strategies, and delivered by whom, do teachers perceive to be of sufficient quality to positively impact on their wellbeing?

Investigation into the role of social support in the relationship between PsyCap and wellbeing, and the hypothesised mediated relationship, provides a novel perspective on teacher wellbeing which has been suggested as an important area for further research\(^11\).

**Research Design**

A cross-sectional design, using pre-existing scales compiled into one online self-report survey, measured perceived teacher wellbeing, PsyCap, social support and intention to quit (ITQ). This was complemented by two semi-structured group interviews exploring teachers’ perceptions of support strategy effectiveness. Research design and the measures used will be briefly outlined.
The survey was completed by 104 UK primary and secondary school teachers. Three teachers’ surveys were removed due to incomplete answers, leaving 101 responses. Characteristics of those who took part were compared with national teacher statistics, showing substantial similarity. Nine primary school teachers took part in two group interviews; one with three teachers and the other with six. Another teacher who was unable to attend submitted written responses.

University ethic board approval was obtained prior to data collection. Since wellbeing, PsyCap, ITQ and social support are potentially sensitive topics, contact details for relevant support organisations were provided following survey and interview completion. Anonymous, confidential survey responses and anonymised interview transcriptions ensured privacy was maintained. Headteachers of participating schools provided written organisational approval and informed consent was obtained from all participants before taking part. Participants were reminded of their right to withdraw.

Results
Survey findings were analysed using multiple regression and mediation analysis. Interviews were recorded, transcribed and thematically analysed. The session will consider the following key findings.

**Survey results:**
- Significant, positive relationships between teachers’ social support and PsyCap, and between PsyCap and wellbeing, were shown.
- Social support, wellbeing and PsyCap were significantly negatively related to teachers’ quitting intentions.
- PsyCap was shown to mediate the relationship between social support and wellbeing. This suggests social support increases teachers’ PsyCap, which subsequently enhances their wellbeing.
- Greater variability was shown in leader support, compared to colleague support, although average scores were similar.

**Interview findings:**
- Examples of support strategies viewed by teachers as beneficial to their wellbeing were shared - particularly co-worker support, coaching and mentoring.
- Teachers’ views of the influence of support strategies on their wellbeing varied. Explanations of these differences emerged which related to the impact on teacher confidence/self-efficacy and perceived fairness in how strategies were delivered, particularly by leaders.

Discussion
Findings suggest social support increases teachers’ PsyCap, which subsequently improves wellbeing. This mediated relationship provides innovative new evidence, extending our current understanding of wellbeing, which is potentially interesting and useful to all those who wish to support employee wellbeing. Higher levels of support, PsyCap and wellbeing were also related to lower quitting intentions. Certain strategies were viewed as particularly helpful, although the perceived benefits varied, especially for leader support. The impact on teachers’ confidence/self-efficacy, and the perceived fairness with which strategies are implemented, appear to partially explain these differences. Findings will be discussed in relation to previous research and theory (stress theory\textsuperscript{9}, PsyCap\textsuperscript{10}, broaden-and-build theory\textsuperscript{14} and organisational justice\textsuperscript{15}).

In conclusion, the research outcomes suggest workplace social support could make a substantial difference to teacher wellbeing and associated organisational school-level outcomes, such as quitting intentions. These findings are timely given the high stress levels currently documented in the profession, providing strategies to support teacher resilience in the current challenging world of work. Practical implications for schools will be outlined which will provide interesting, and potentially useful, approaches to support wellbeing for those attending the session.

However, the small-scale MSc research project had a number of shortcomings which limit the potential generalisability of findings and will be outlined, along with ideas for further research. For example, whether such
findings may apply to other professions would benefit from further investigation, and so will be considered in the session. Therefore, the practical implications outlined may provide useful approaches to support wellbeing for those attending across numerous occupational groups.

Electronic copies of PowerPoint slides will be available to delegates.

References

W25 Short Paper
What’s the problem? Risk assessment using HSE’s stress management standards
John Hudson, University of Salford
Category: Wellbeing and Work
Introduction:
Psychosocial work stressors, such as excessive demands or insufficient manager support, have been consistently linked with a range of negative psychological and physical outcomes. However, to tackle stress-related issues employers need to know which are most problematic in their workplace; the Health & Safety Executive (HSE) designed the Stress Management Standards Indicator (SMSI) questionnaire specifically to help them with this vital step. It is over a decade since it was developed and forms a cornerstone of the HSE’s stress management standards,
but it is still unclear what employers should actually do with the SMSI results to help them identify where the priority stress-risk factors really are. The HSE also acknowledge the limitations of a brief survey for such a complex issue and emphasise the importance of supplementing it with qualitative data from focus groups. However, many employers lack the resources or confidence to implement these (Mellor et al, 2011), so could the inclusion of open-text questions alongside the SMSI be an expedient compromise?

This case study has an applied focus and uses findings from a 2014 stress-risk assessment using the SMSI in a public sector organisation; its main aims are:

1. Compare the stress risks identified by four different approaches to interpreting the SMSI data; two using the descriptive statistics provided by the HSE’s analysis tool, and two that use additional analyses;
2. Compare the conclusions drawn by these approaches with the findings from open-text questions collected alongside the SMSI.

**Stress-risk assessments**

The hierarchy of controls principle prescribes the order in which actions to address stressors in the workplace should be prioritised (Briner, Amati, & Lardner, 2003) and the top priority from a risk-management perspective should be prevention (Taris et al., 2003). However, no two organisations are the same, so any stress-management process must begin with a diagnostic phase to understand exactly where the issues are and which preventative measures are most appropriate.

**The Stress Management Standards Indicator questionnaire**

The SMSI comprises 35-items covering seven key psychosocial stress-risk factors (Table 1) and is the result of an extensive development process, in response to an apparent lack of reliable and valid measures (Rick, Briner, Daniels, Perryman, & Guppy, 2001). Although research has supported the SMSI’s psychometric properties (e.g. Edwards & Webster, 2012), it was conceived as a practical tool rather than a research instrument. However, there is still a lack of evidence for its ability to help employers to identify the priority stress-risks in the workplace.

**Table 1: HSE Stress Management Standards Indicator subscales and example items**

<table>
<thead>
<tr>
<th>HSE SMSI subscale (# of items)</th>
<th>Example item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demands (8 items)</td>
<td><em>I have to neglect some tasks because I have too much to do</em></td>
</tr>
<tr>
<td>Control (6)</td>
<td><em>I can decide when to take a break</em></td>
</tr>
<tr>
<td>Manager support (5)</td>
<td><em>I am given supportive feedback on the work I do</em></td>
</tr>
<tr>
<td>Peer support (4)</td>
<td><em>If work gets difficult, my colleagues will help me</em></td>
</tr>
<tr>
<td>Relationships (4)</td>
<td><em>Relationships at work are strained</em></td>
</tr>
<tr>
<td>Role (5)</td>
<td><em>I am clear what is expected of me at work</em></td>
</tr>
<tr>
<td>Change (3)</td>
<td><em>Staff are always consulted about change at work</em></td>
</tr>
</tbody>
</table>

**Interpreting data from the SMSI**

The SMSI has been well received by employers who previously lacked the tools or resources to conduct stress-risk assessments, but there is also uncertainty regarding how they should translate this data into actionable information (Gaskell, Hickling, & Stephens, 2007). The SMSI and the accompanying spreadsheet-based analysis tool allow employers to get descriptive summaries of their SMSI data (means and frequencies). Nonetheless, while these indicate perceived frequency of exposure to these stressors, it does not consider the potential severity of exposure; and all stressors are not necessarily equivalent.

If relevant outcome measures are included with the SMSI (e.g. job-related well-being, or psychological health) then further analyses are possible. Various methods of analysing quantitative data to calculate relative stress-risks have been used in the literature, and this looks at two of these: multiple-regression and a method proposed by Clarke and Cooper (2004).
Multiple-regression should, theoretically, allow us to assess the relative importance of each of the seven stress-risk factors in relation to our chosen outcome(s) and several previous studies have used this with SMSI data (albeit not in a risk assessment context; e.g. Houdmont, Randall, Kerr, & Addley, 2013). However, given the strong correlations between some of the SMSI subscales (e.g. manager support and change; r = .68 in the present study) collinearity between predictor variables is likely to affect the results, and thus the conclusions. Clarke and Cooper (2004) propose an alternative approach that accounts for both the frequency of exposure to the stressor and the probability of harm. It calculates a risk-score using a combination of the frequency of exposure (mean score on each subscale) and the correlation between each stressor and the relevant outcome measure. Surveys are popular with employers due to their convenience (e.g. Gaskell et al., 2007) but regardless of how they are analysed surveys have many pitfalls. The HSE therefore emphasise the importance of supplementing SMSI data with information from other sources, such as qualitative data from focus groups. However, such steps are frequently omitted due to lack of time, expertise or resources (Mellor et al., 2011); indeed, this was the case in this study despite initial plans to hold them. What can employers who are unable to run focus groups do? The present study supplemented the SMSI with open-text questions, and although these are not intended to be a replacement for focus groups, they may offer a practical compromise for employers who are unable to run them.

Context and sample
In common with other UK public sector organisations, the organisation featured in this case study have been heavily affected by budget cuts, with the loss of over 1,000 posts since 2011/12. Further cuts were anticipated at the time the research was undertaken so it was an especially challenging period; employees had already been through several rounds of austerity-related reorganisation and senior managers were particularly concerned how this was affecting the psychological well-being of staff. Resilience is about more than just ‘carrying on’, but about adapting and the organisation was keen to use the initial stress-risk assessment to identify the main issues in order to develop and implement a long-term preventative stress-management strategy.

The data discussed here was collected via a cross-sectional online survey; all employees were invited to participate, of which 1,425 employees (30.5% response rate) completed the survey. Anonymity and confidentiality of individual survey responses was emphasised, as was the fact it was being administered by the researchers, rather than their employer; ethical approval for the project was granted by the university’s ethics committee. The SMSI formed the core of the survey and was supplemented with other measures, such as the 12-item General Health Questionnaire (GHQ-12; Goldberg, 1972) to enable additional analyses. Qualitative data was obtained from open-text questions, asking for comments about positive and negative stress-related aspects of work, and analysed using thematic analysis (only data from the ‘What is the most stressful aspect of your job?’ question is discussed here).

Results
There was actually a degree of concordance between the four methods, in that demands and change subscales were both ranked prominently in all four (Table 2). There were, however, major inconsistencies; for example, the relationships subscale was ranked as top stress-risk by one method (multiple-regression) and sixth (out of seven) by another (means). These results are presented in more detail during the session, but suggest that the risk-assessors choice of statistic/method of analysis itself could have major implications for where an employer directs their resources, and thus how effective they are. Furthermore, how do we know which - if any - is most accurate?

Table 2: HSE stress-risk factors rank by method (higher rank = greater stress-risk)

| SMSI subscale | Frequencies (based on % sample endorsing two most ‘negative’ options) | Mean SMSI subscale score | Multiple regression Clarke & Cooper (2000) approach | Qualitative data (ranking based on number of comments relating to) |
There is no simple answer but, encouragingly, the stressors identified by qualitative data were also broadly reflective of those identified in the quantitative analyses with *demands* the most frequently mentioned. The comments also identified issues not covered by the SMSI, such as senior management support. Perhaps most importantly, it provided additional insights into the stressors identified by the SMSI and pointed to potential solutions that would not have been apparent from the quantitative data (to be discussed during the session).

**Conclusions**

This case-study example suggests that employers should be careful not to over-interpret SMSI results, as well as the importance of supplementing it with data from other sources – as the HSE recommend. The SMSI is not intended to be used alone, tempting as it may be for time-pressed employers. However, even if used as one part of the risk assessment process, there needs to be a greater understanding of exactly how it fits in and how to understand and use the data. This study is novel in that it examined different methods of interpreting SMSI results and compared these to findings from qualitative data; although it cannot be considered a validation of the SMSI, it is reassuring there was some similarity between their findings.

Ideally, employers would take note of the HSE’s advice and ensure they collect a wide range of data to inform their risk assessment, but this does not always happen. So, if it is not possible to conduct focus groups, the inclusion of open text comments boxes may also offer an alternative method of obtaining further insight into the SMSI results. Indeed, where focus groups are possible, the qualitative data obtained from these comments could provide a stronger basis for focus group discussions than the numerical SMSI results.

Both quantitative and qualitative data implicated similar psychosocial factors in this study; employees emphasised workloads as the most stressful aspect of their jobs, but this was more complex than simply the amount of work they had to do. Such distinctions are crucial when developing interventions to target relevant issues and highlights the need to go beyond the statistics.

The HSE have put considerable work and resources into the development of the SMSI and to promote its use, so it is important to ensure employers can get the most out of it. There are no simple answers in stress-risk assessment, but it is such a crucial aspect of the stress-management process and it is hoped that the session will stimulate some useful questions – and further research.

**Note:** hand-outs of presentation slides will be provided at the session and electronic copies will be available from the author on request.

**Selected references**

Opt-in or Opt-out: A qualitative study of women’s ambition at early career stages

Charlotte Harman, City University

Category: Leadership, Engagement and Motivation

Background summary

Organisations are currently under significant pressure to increase gender diversity at senior levels. Such gender diversity affords numerous benefits, including increased accountancy returns, collective intelligence and collaboration (Post & Byron, 2014; Woolley & Malone, 2011; Konrad, Kramer & Erkut, 2008). In 2011 the Lord Davies Report demonstrated that women accounted for only 12.5% of FTSE 100 directors and subsequently set the target of reaching 25% by 2015. The 2015 report revealed great progress, an increase to 23.5%; yet, this percentage ranges from 7.7-45.5% and a large number of FTSE 250 companies still have no female board members (Davies, 2015).

The ‘glass ceiling’ and the ‘opt-out revolution’ are two phenomena that have been cited as reasons behind this lack of diversity (Peters, Ryan & Haslam, 2013; van Vianen & Fischer, 2002). The former refers to a barrier women face, preventing progress from middle management to senior management positions. Belkin (2003) introduced the latter, claiming that many women choose to leave full-time roles to stay at home, before reaching the glass ceiling. This term has perpetuated the view that women have inherently lower levels of career motivation, or ambition, than men, which refers to a willingness to make sacrifices and prioritise career goals in their lives, and a desire for promotion and recognition (Peters, Ryan & Haslam, 2013).

However, recent research and the identity-fit model of career motivation have challenged this assertion, advocating that women’s ambition is not inherently lower than men’s but erodes over time (Peters, Ryan & Haslam, 2013). Many women often do not leave work to stay at home, but instead choose roles in which they can achieve better work-life balance or start their own companies (Anderson, Vinnicombe & Singh, 2010; McDowell, 2006). Therefore, it is of great importance to increase depth of understanding of the nature of, and influences on, women’s ambition in order to facilitate organisations in both retaining women at lower levels and increasing diversity at senior levels.

Literature review

In support of Belkin’s (2003) claims, Van Vianen and Fischer (2002) examined 350 Dutch employees from a government organisation to find, overall, women had lower levels of ambition to reach managerial levels than men. However, Peters, Ryan and Haslam (2013, 2014) have argued that such results may not be due to inherent ambition differences, but due to differing workplace experiences and the social context. Specifically, employees will be more ambitious if they believe promotion is both realistic and possible. In doing so, they draw on self-categorisation theory to propose the identity-fit model of career motivation. Self-categorisation theory suggests that social identities are an important component of the self-concept, within which individuals view themselves as prototypical of a certain social group and therefore embody the norms, expectations and interests of that group, which drive their behaviour (Turner, 1985). Subsequently, Peters, Ryan and Haslam suggest that when employees perceive themselves to be similar to prototypical members of their occupation, such as their leaders, they are more likely to perceive they fit within that occupation and envisage success for themselves. Therefore, they will have higher career motivation and organisational commitment (Van Dick et al., 2004).

If van Vianen and Fischer’s (2002) results are further examined, they support this model. Despite finding lower ambition in women, they found that women who had a preference for masculine culture, perceived better fit with the masculine leadership profile and subsequently had higher levels of career motivation/ambition. These findings have great implications, as many organisations could be labelled as masculine due to the predominance of male
leaders, the tendency of leadership to be associated with masculine traits, and hidden assumptions that success and forms of communication are stereotypically masculine (Peters, Ryan & Haslam, 2013; van Vianen & Fischer, 2002; Schein, 1973). Moreover, Kanter (1987) claims that when less than 15% of leaders are women, they take on ‘token’ status and suffer from the effects of being different, which exacerbates the masculine culture. These effects include being barred from important inner circles, having heightened visibility and pressure to be perfect. Indeed, Ely (1994, 1995) found that female employees are less likely to identify positively with female leaders if there is a strong gender imbalance, as it signals a lower probability of success and many women take on masculine traits to reduce such visibility.

Peters and colleagues (2011, 2012, 2013) have also conducted research to support the identity-fit model. Peters, Ryan and Haslam (2012) conducted two studies, one with 250 policewomen and one with 40 psychology students. Both studies showed that when participants were manipulated to believe they had a different leadership style to prototypical leaders in their occupation, they had lower career motivation than those who believed they had the same leadership style. Furthermore, Peters, Ryan, Haslam and Fernandes (2012) observed that female surgeons perceived a lower level of similarity with hyper-masculine successful surgeons, and reported higher occupational disidentification and desire for career exit than males. Thus, these results support that women’s lower career motivation may not be the result of inherent differences, but instead due to perceptions they do not fit with, or are not similar to, the prototypical typically masculine members of their current occupation, offering an alternative explanation for the opt-out revolution.

However, there are several limitations of Peters et al.’s (2011, 2012, 2013) studies and to current knowledge of women’s ambition. Firstly, Peters et al. (2012) found that perceptions of fit with hyper-masculine senior surgeons were also related to males’ desire for career exit, albeit to a lesser extent than females’. These results question the sufficiency of gender-based similarity with organisational prototypes and whether other levels similarity, or fit, may be more important, such as a deeper values-based fit (Elfenbein & O’Reilly, 2007).

Secondly, Peters, Ryan and Haslam’s studies are correlational; therefore confounding variables may alternatively be responsible for the results shown. They highlight that an unsupportive workplace environment or self-determination could equally affect career motivation and such factors have been implicated in additional research (Peters & Ryan, 2010). Pas et al. (2011), for example, discovered that a supportive organisational culture significantly affected Dutch female doctors’ career motivation, whereas having children did not. In addition, the social cognitive career theory (Lent et al., 1993, 2003) may provide an alternative suggestion to women’s tendency to opt out of organisations. Van Vianen (1999) used this model to suggest that managerial self-efficacy, outcome expectancies, or what individuals expect as outcomes from reaching manager status, and work-role salience also affect ambition to reach managerial levels. Yeagley et al. (2010) support this proposition, finding that female university students’ self-efficacy for, and expected outcomes relating to, leadership positions predicted their interest and goals to reach such positions. Furthermore, Singh et al. (2013) supported this theory longitudinally with female engineers, finding their outcome expectations and self-efficacy predicted their job satisfaction and organisational commitment, which predicted turnover intentions. Such research suggests the importance of a variety of factors influencing ambition/career motivation through correlational research.

Finally, Peters and colleagues’ research has solely been conducted in extreme masculine cultures and non-business settings. Much of additional research into gender diversity or ambition has examined women at senior or middle management (e.g. Sealy & Singh, 2009; Sools, van Engen & Baervedlt, 2007), or with students (Yeagley et al., 2010), and therefore not those who may be considering opting-out.

Subsequently this study aimed to examine younger women’s ambition and at a richer level of detail in the form of a qualitative study, within a business setting. Specifically the importance of prototype similarity for women’s ambition; whether there are any differences between women and whether there are any other influences on ambition that are yet to be identified. In summary, this study aims to extend understanding of women’s ambition during the critical
Research Question

“How do women construe their career motivation/ambition at early career stages in a professional services organisation?”

Methodology

This qualitative study was conducted using a sample from a professional services organisation. This industry has a traditionally masculine culture, but has demonstrated a recent increase in feminisation and sustained efforts to increase diversity (Peters, Ryan & Haslam, 2014; England & Browne, 1992). The sample was obtained through opportunity sampling, comprising 20 women between the ages of 25 and 33, who have a minimum of 2 years’ experience and have not yet reached manager level. As the prime age for opting-out is 24-44 years (Antecol, 2010), these criteria enabled the investigation of women’s views at the start of this period and ensured they have been sufficiently immersed in organisational culture to allow leader similarity to affect their motivation (Peters et al., 2012). Semi-structured interviews were conducted, lasting approximately one hour fifteen minutes, and involved questions around what the word ambition means to them; how ambitious they feel; what they feel influences their ambition and the importance of leader similarity, organisational support and their life outside of work. The interviews were audio recorded and transcribed verbatim and analysed through thematic analysis (this stage is yet to be completed).

In order to account for ethical issues, any information that could identify individuals or the organisation has been anonymised or removed, and permission sought, before inclusion in the report. Data is being stored in accordance with the Data Protection Act (1998).

The data is still being gathered; therefore, at this stage, a results and discussion section is not available.

Answers to specific DOP questions:

1. The identity fit model of career motivation and social cognitive career theory and their associated research are the main theories and research linked to the study; these are outlined above.

2. The literature and surveys suggest that currently women require a large amount of resilience in order to achieve senior positions in organisations (Konrad, Kramer & Erkut, 2008; Accenture, 2010; Mitchell, 2012). This is reflected in the large number of women who ‘opt-out’ in critical early stages of their career to pursue other careers (Anderson, Vinnicombe & Singh, 2010) or leave the workplace altogether. This study aims to understand more about how women construe their ambition in order to understand the influences that may be impacting on their resilience in male dominated environments and encouraging them to ‘Opt-out’.

3. The submission is appropriate for leadership, engagement and motivation as it examines women’s motivation to remain in a large professional services organisation and aspirations to reach leadership positions.

4. There is very little research currently in the area addressing women’s career motivation and ambition at early career stages, and of that there is even less examining it at a qualitative, rich level of data. Therefore, currently there is little understanding of why women are ‘Opting out’ and therefore what organisations can do, if anything, to help increase diversity at senior levels.

5. This particular area is very topical; most large organisations currently are aiming to increase their diversity at senior levels and having difficulty doing so (Sealy, Doldor & Vinnicombe, 2009; Devillard, Sancier-Sultan & Werner, 2014). The Lord Davies’ report and government initiatives are placing increasing pressure on organisations to
increase such levels. Therefore increased knowledge of why women may or may not be considering reaching senior levels is of great value to organisations and psychologists alike in order to help them increase the number of women.

6. Women in leadership and supporting women in the workplace has gained increased attention in popular media from leading advocates. Sheryl Sandberg and the ‘Lean In’ revolution is one such example that has attracted much media and public attention. The number of girls leaving both school and university with outstanding results and then the challenge of pursuing that same level of success in the workplace seems to be one with which many females identify.

8. Electronic copies of the slides and potentially printed hand-outs of slides (dependent on the number of attendees).

W27 Short Paper

Can mindfulness training enhance emotional resilience in social workers?

Gail Kinman and Louise Grant, University of Bedfordshire and Susan Kelly, Independent

Category: Wellbeing and Work

Introduction

Mindfulness refers to the ability to focus one’s awareness on the present moment, while acknowledging and accepting feelings, thoughts and bodily sensations (Kabat-Zinn 2004). Evidence is accumulating for the wide-ranging benefits of mindfulness. It has been associated with improved psychological and physical health, more effective stress management and coping skills, increased psychological flexibility, enhanced concentration and mental clarity, and more satisfying interpersonal relationships (e.g. Hûlsheger et. al. 2013; Keng et al. 2011). Mindfulness has also been linked with improved personal and professional functioning in organisational settings (see Chaskalson, 2011). Of particular relevance to the present study is the growing evidence that it can help people adapt positively to unfavourable and challenging working conditions (McCann et. al. 2013). The potential for mindfulness to build resilience in complex and emotionally demanding and potentially stressful professions such as social work is therefore clear (Parkes & Kelly, 2014).

Employers have a legal and moral duty of care to safeguard the wellbeing of their staff, but the need for social workers to demonstrate emotional resilience has been widely emphasised (Munro, 2011). As yet, little is known about how resilience can be enhanced in social care contexts, but an evidence-based approach to identifying and evaluating potential strategies is crucial. An important first step is to consider the personal resources that underpin resilience (Grant & Kinman, 2014). Research findings indicate that social workers are more resilient if they are more emotionally literate, psychologically flexible and reflective, and if they are able to demonstrate ‘bounded empathy’ in their interactions with service users: i.e. if they can take other people’s perspective and show concern without becoming over-involved emotionally (Kinman & Grant, 2011; 2015). The programme of research has informed a “toolbox” of interventions to foster resilience and wellbeing which have been positively evaluated (Grant & Kinman, 2014). Previous research has also found benefits for several strategies including peer coaching, cognitive behavioural skills and emotional writing interventions (Grant et al. 2014; Kinman & Grant, 2015).

Research findings suggest that mindfulness can develop many of the qualities associated with resilience and wellbeing in previous studies of social workers, as well as others likely to be beneficial such as improved emotional regulation skills, greater tolerance towards others, and enhanced feelings of personal competence (Davis & Hayes, 2011; Thomas & Otis, 2010). It has been suggested that mindfulness also has the potential to help practitioners increase the capacity for non-critical self-awareness which can engender compassion towards the self and others (e.g. Gerdes & Segal 2011).

Aims

Mindfulness-based training programmes are increasingly being offered in the workplace as part of staff development
and wellbeing initiatives (Hulsheger et al. 2013). The research reviewed above suggests that mindfulness has potential to enhance the personal resources that are linked with emotional resilience and wellbeing in social workers. This study evaluated whether an eight-week training course in mindfulness practice impacted on several aspects of wellbeing linked to emotional resilience in social workers: emotional self efficacy; reflective ability; aspects of compassion (self compassion, compassion fatigue and satisfaction) as well as psychological distress. It also explored participants’ experiences of the training and its effectiveness.

Method
The study utilised a repeated measures design. An online survey obtained data from 26 social workers (85% female) two weeks before the first training session, with follow-up data obtained one week and eight weeks after completion of the eight-week course. The study was conducted in accordance with the BPS ethical guidelines and received formal approval from the Department of Psychology’s ethics committee. The intervention was led by an experienced mindfulness practitioner who was also a qualified social worker. It was experiential in nature, covering a range of meditation practices and reflective exercises designed to help participants learn ways to reduce the impact of worry and rumination and increase wellbeing.

A series of well-validated scales was utilised to assess the study variables: emotional self efficacy (Choi et al. 2013); reflective ability (Aukes et al. 2007); self compassion (Raes et al. 2011); compassion fatigue and satisfaction (Hudnall-Stamm, 2009) and psychological distress (Cohen et al. 1988). At times 2 and 3, participants were also asked: a) how frequently they were practicing mindfulness and b) to evaluate the extent to which they considered the training to be useful.

Findings
Mean scores for each of the study variables were calculated for the three time points. Emotional self efficacy (p<.001) and compassion satisfaction (p<.01) increased between Times 1 and 2. Levels of compassion fatigue and psychological distress decreased over this period (p<.01 and p<.001 respectively). Benefits tended to decrease slightly over time; mean scores for emotional self efficacy and compassion satisfaction diminished between Times 2 and 3 (p<.01 and p<.05 respectively), but some improvement was maintained post intervention. The improvement in psychological distress generally remained stable between Times 2 and 3. No changes were found in levels of reflective ability and self compassion between the three time points.

One week after the 8-week training course finished, most participants reported that they were using the techniques either a few times a week (50%) or every day (17%). Mindfulness practice generally reduced over time, with one-third of the sample using it frequently (33%) and more than half (58%) rarely eight weeks after the end of the training. In general, participants evaluated all of the training sessions positively at both time periods. One week after the course finished, 92% of participants reported that they found it extremely (67%) or moderately (25%) beneficial. Eight weeks post-training, the overall level of satisfaction had tailed off slightly, but 83% of participants continued to find it extremely (58%) or moderately (25%) useful.

Discussion and implications
Although based on a small sample, the findings of this study suggest that a mindfulness intervention can enhance competencies associated with resilience and psychological wellbeing in social workers. Particular benefits were found for emotional self efficacy and compassion fatigue, although some of the initial improvements diminished over time as the use of the mindfulness techniques tailed off. The overall level of psychological distress improved and this was maintained eight weeks after the end of the formal training, which emphasises the potential for mindfulness techniques to have sustainable benefits for wellbeing.

No changes were found in respondents’ self-reported reflective abilities following the intervention. It should be noted, however, that the mean score for reflection was high (3.92 on a 5-point scale). As reflective skills are strongly
emphasised in the selection and training of social care practitioners, it is likely that such abilities are already well developed. Moreover, it could be argued that mindfulness training is more appealing to people who are more reflective and value the opportunity to practice their skills. This should be examined in future studies.

Some evidence was found that the intervention has benefits for compassion satisfaction and may reduce compassion fatigue, which has clear implications for the quality of the relationships with service users as well as the wellbeing of social workers themselves. Nonetheless, although it has been suggested that mindfulness has the potential to increase self compassion which may, in turn, build resilience and improve wellbeing, compassion towards the self did not improve over time. There is evidence that social workers are typically reluctant to prioritise their own needs over those of service users, which is likely to have serious consequences for wellbeing over the longer term (Grant & Kinman, 2014).

In conclusion, the findings of this study suggest that a short mindfulness training programme has benefits for protecting the wellbeing of social workers. Nonetheless, some of these gains are likely to reduce over time as the techniques are used less frequently – possibly due to the pressure of work combined with demands from other life domains. Future research should examine the effectiveness of brief, tailored ‘top up’ sessions which could possibly be delivered electronically via mindfulness apps.

**Audience participation**

The session will conclude with a brief discussion of the importance of ‘putting on your own oxygen mask before trying to help others’ – in other words, how to help social workers prioritise self care and self compassion in a profession where personal needs may be considered less important than the needs of those who they seek to help.

**References**


As a subset of Performance Management, Performance Appraisal is applied to individual employees and involves a feedback session while organisations aim to gather information on employees’ performance, and their strengths and weaknesses through the appraisal process (Varma, Budhwar & DeNisi, 2008). With an accurate identification of employee development needs, managers can establish personal development plan and appropriate job objectives (Fletcher, 2004).

Due to its importance, Performance Appraisal has been extensively regarded as a chief responsibility of Human Resources Management (Arvey & Murphy, 1998; Lawler, 2003; Redman, 2006), and should therefore be evaluated extensively to assure its alignment with the expected outcomes.

**Research Objectives**

A food manufacturing company is planning to expand its Performance Appraisal system to a wider range of employees, which includes the team leaders and operatives. Over the past two years – 2014 and 2015, managers at the company have been assigned to appraise the supervisors and provide feedback to them. With an understanding of the investment involved in the process, the Human Resources manager acknowledges that an evaluation towards the Performance Appraisal system is a prerequisite prior to the expansion, and thus, aims to evaluate the success of the company’s Performance Appraisal.

As the supervisors in the company have been the appraisees over the past two years and will be the appraisers later this year, this research project aims to explore the supervisors’ attitudes and perceived value in relation to the Performance Appraisal, and thoughts and feelings toward the transition (i.e. from being the appraisees to appraisers) and provision of feedback within the current Performance Appraisal system. Meanwhile, the progress of supervisors’ performance is monitored through the two Performance Appraisals they have experienced over the past two years.

This project aims to obtain the subjective, first-person views from the supervisors and objective data, which is expected to provide the company with an opportunity to modify the structure, process and content of their performance appraisal system before expanding it to the team leaders and operative staff.

**Context of the Study**

Success of the performance appraisal in the food manufacturing company is examined through the perspectives of the company and literature. According to the Human Resources department at the food manufacturing company, success of Performance Appraisal is defined by the employees’ receptiveness towards the system, performance improvement, alignment between organisational goals and personal objectives, identification of skill development, effectiveness of training, and usefulness of feedback.

**Methodology**

With an understanding of the underlying assumption of this research project, different research methods have been given extensive consideration, and a mixed methods study has been chosen for the evaluation of the Performance Appraisal for the food manufacturing company.

In terms of the qualitative aspect of the project, a combination of focus group discussions and individual interviews are used for data collection in order to obtain a great depth of information from a range of participants over a short period of time (Morgan, 1996). All 19 supervisors in the company will be invited to take part in the research study, and will be randomly assigned to attend either a focus group or an individual interview. Two focus groups which include 5-7 supervisors each will be formed and the entire duration will be scheduled to 30 minutes whilst 4-6 supervisors will be invited to undertake an individual interview which will last for 30 minutes.

With regards to the context, the focus groups and interviews will be semi-structured in which supervisors will be enquired about their attitudes and perceived value toward the structure, process, success, foreseeable transition
(i.e. from being the appraisee who has been rated by managers to being the appraiser who will rate the performance of team leaders and operatives) and provision of feedback of Performance Appraisal.

Due to the subjective nature of qualitative research resulting from the researcher’s data interpretation (Willig, 2008), quantitative method will be used to complement the findings of this research project. The standards that supervisors have attained in each criterion on their performance appraisals over the past two years – 2014 and 2015, will be analysed quantitatively to assess the progress of their performance and success of the company’s performance appraisal. Tests of difference will be utilised to analyse the collected data and assess the progress of supervisors’ performance over the year, and thereby the success of the performance appraisal at the food manufacturing company.

Results
Feedback receptivity and affections are referred as the belief in the value of feedback and degree of openness toward feedback and evaluation apprehension (Bandura, 1982). Openness to feedback is found to be associated with feedback orientation, which influences individuals’ willingness to ponder new cogitations (Barrick & Mount, 1991; Costa & McCrae, 1992).

London and Smither (2002) advocated that feedback orientation is a construct that consists of the aspects of feedback receptivity and affections, likelihood of behavioural change and tendency of cognitive processing. Meanwhile, feedback culture is referred as organisation’s support provided to employees for feedback. It is suggested that individual’s feedback orientation may develop followed by the perceived meaningfulness and value of feedback, which affects how feedback is received, interpreted and applied while the organisation’s feedback culture is another influential factor in employee’s receptiveness towards feedback (London & Smither, 2002).

Although this MSc Occupational Psychology project is still in progress and no results can be drawn yet, with the support of the above mentioned literatures, it is expected that participants who value the appraisal system and the given feedback would show high receptivity, process feedback mindfully, proceed behaviour change based on the given feedback, provide positive viewpoints toward meaningfulness of the Performance Appraisal system (i.e. assessing the relevant competencies) and agree with the identification of skill development. Furthermore, with a section named as ‘Personal Objectives’ on the Performance Appraisal which lists the agreed objectives between the company and employee, and actions required to implement, it is expected that skill development can be identified, which is one of the factors that determines the success of the Performance Appraisal at the food manufacturing company. In addition, an extensive level of training is provided to the supervisors to prepare them for being the appraisers for line leaders and operative staff, therefore, satisfaction is expected to be shown towards the effectiveness of training.

The above section consists of the rationale behind the predicted results, yet, none of the above can be confirmed at the current stage. Conclusive results will be ready by the date of the conference.

Expected Insights
The fundamental step of developing Performance Appraisal is to understand the aims and objectives. It needs to be realistic and achievable, otherwise Performance Appraisal would cause an adverse impact on employee job satisfaction and performance (Fletcher, 2004).

Chisp and Jarvenpaa (2000) found a positive relationship between trust and team process control in which trust increased when control over actions, goal setting and expectations among colleagues was provided to employees. The above strategy is regarded as participatory approach and can be a key drive of initiative development in designing a mutually satisfying Performance Appraisal under a sense of joint responsibility (Nielsen, Randall, Holten & González, 2010). Also, it enhances the acceptability towards Performance Appraisal from managers, supervisors
and subordinates. By gathering information from all parties, the highest priory in terms of the aims of Performance Appraisal can be identified, which can increase the success of Performance Appraisal (Fletcher, 2004).

As a result, the insights that I would like to convey are that organisations should heighten their awareness towards the frequency of Performance Appraisal, feedback process, feedback culture, culture differences among employees, and content of training in order to achieve a successful Performance Appraisal. Meanwhile, a steering group should be established to ensure that representatives of managers and staff are involved in setting aims and objectives, which can help identify the essential purposes of Performance Appraisal. Furthermore, advantages and disadvantages of the utilisation of multi-source feedback will be introduced.

**Ethical Considerations**
Informed Consent and Participant Information Sheet have been given to participants before they take part in any process of the project (e.g. focus groups and individual interviews). Participant Information Sheet has been sent and attached in the invitation email to the invited participants. From these two documents, participants should understand the aims and objectives of the study. Participants have been asked to sign and return the Participant Consent Form to the researcher before any part of the study commences.

Conversations in the focus groups and individual interviews will only be recorded by consent of the participants. Personal information of individuals who are involved in the research study will not be revealed to anyone inside or outside the company. In order to avoid data storage from being exposed to anyone, participants’ names will not be recorded and will be converted into identification numbers. Only the researcher and supervisor of the researcher can have access to the data. Also, participants’ personal information and data of the project will be destroyed after any data has been analysed and written up in the academic and business-oriented reports.

**Association with ‘Resilience in a Challenging World’**
According to Varma, Budhwar and DeNisi (2008), employees’ tendency to accept the ratings of their performance can be influenced by their acceptance towards the legitimacy of the Performance Appraisal system.

As employees are the most important asset in the organisation (Kalliath et al., 2010), their voices should be listened and valued. By obtaining thoughts and attitude from supervisors who share first-person views, the food manufacturing company can develop an in-depth understanding towards how their Performance Appraisal has been viewed, and be resilient by making appropriate adjustments based on the obtained data. This resilience provides the food manufacturing company with an advantage to be successful.

With an enhanced level of challenges within the workplace, it is essential for the food manufacturing company to explore alternative methods to undergo their Performance Appraisal. As a result, the food manufacturing company can analyse the suitability of multi-source feedback.

Overall, this research project provides an insight into how the food manufacturing can become resilient in the current challenging world by examining and valuing supervisors’ perspectives, considering various internal and external factors, and utilising multi-source feedback.

**Category Classification**
As the purpose of Performance Appraisal is to provide a platform where organisations can assess employees’ job performance, it contributes to performance analysis and evaluation, which is regarded as an aspect of Psychological Assessment at Work.

**Novelty & Usefulness**
With regards to the literature in the area of Performance Appraisal, there is a lack of research investigating the transition from being the appraisee to appraiser. By conducting focus group discussions and interviews, this research
project can provide insights into supervisors’ thoughts and feelings towards the transition, which is a novel aspect of idea that has rarely been focused on.

Due to a heightened awareness towards the importance of Performance Appraisal, more and more organisations are trying to include all of their staff in the Performance Appraisal system. By obtaining an advanced understanding towards the participants’ attitude, perceived value of Performance Appraisal, thoughts on transition and provision of feedback from this research project, it is expected that attendees such as Occupational Psychologists, consultants, and Human Resources managers would be interested in analysing the relevant findings of this research and applying them to the Performance Appraisal systems for their clients or organisations.

**Interesting point**
Due to time constraints and heavy workload, many organisations undergo Performance Appraisal as an annual routine. Without sufficient understanding towards its effectiveness, time and money could be wasted if the Performance Appraisal system does not attain the expected outcomes. Through this organisation-based research project, the audience can obtain academic and practical information while the views from the participants (i.e. the supervisors) could offer interesting viewpoints to the areas that have been found as the success factors of Performance Appraisal.

**W29 Short Paper**
**The importance of social capital for breaking the glass ceiling**
Natasha Abajian, City University London
**Category: Leadership, Engagement and Motivation**

**Background:**
In recent years there has been much attention and press coverage on the status of women on boards; despite this, the reasons as to why women remain underrepresented at senior levels continues to be debated. Recent statistics have shown that huge progress has been made in the United Kingdom in regard to gender diversity since the publication of the Davies Report in 2011. For example, women’s representation on boards in the FTSE 100 has almost doubled and now stands at 23.5%. Despite such improvement, women remain underrepresented in the upper echelons of the workplace. This underrepresentation has been found most prominently at senior or directorship levels. Much research has investigated the barriers that women face for reaching the highest levels of workplace seniority; comparatively less has explored factors that contribute to their success.

Early research identified the importance of human capital for career progression; this form of capital can be understood in terms of the resources owned by, and that reside within, an individual (e.g. experience, knowledge, skills, education, etc.). However, the opportunity to demonstrate human capital is often determined by the social context. The importance of situating human capital within a social context is increasingly being recognised by theorists. With regard to senior level promotion, attention is increasingly being drawn to the relevance of social capital; theorists are increasingly recognising the ways in which social capital can confer advantage to those pursuing positions of leadership. Social capital is a multi-faceted construct which can be conceptualised as the resources embedded within relational ties and the ability to access these resources. Compared to human capital, however, relatively little is known about the role of social capital in career progression.

In western organisations the promotion process is often based on both meritocracy and a stereotypically male model of career success. Although women have been found to express commitment to the notion of meritocracy, research has demonstrated that they are less likely to demonstrate the required behaviours for promotion and are subsequently at a disadvantage when compared to men. The promotion process typically requires individuals to self-promote, to have a presence in informal networks and to be “visible”. Research suggests that reputation has a greater impact than objective criteria the higher one progresses within an organisation; the criterion for promotion becomes more ambiguous and subjective the higher up an organisation one advances. Additionally, the assumption
and construction of a leadership identity is essentially a relational endeavour and the promotion decision itself is intrinsically a social process. The implication, therefore, is that social capital is likely to have a significant contribution to senior-level promotion. Furthermore, despite the strong discourse of meritocracy, research has demonstrated that those with more effective support networks are more likely to demonstrate success in career progression. In line with these findings, networking has been found to positively relate to organisational outcomes associated with career progression (e.g. promotion, salary and career satisfaction). Research suggests that exposure (in terms of who you know, or who knows you) accounts for 60% of career success; the impression created to others is understood to account for 30%, whilst actual performance only accounts for 10%. These findings insinuate that social capital is important, if not essential, for career progression. However, little research has investigated the links between subjective criteria for promotion, the promotion process and the impact of social capital.

With regard to gender, however, social capital is “imbued with gender inequalities and gendered hierarchies” (Staveren, 2002, p.22). Access to networks and the quality of network ties differ for men and for women; women are considered to be restricted in their access to networks typically associated with career progression. The acquisition and the utility of social capital for career progression can therefore be understood to differ for men and for women. Differential access to social networks can thus be considered a barrier to women’s career progression, as it is often these networks that are associated with key decisions. However, relatively little research has explored the ways in which gender impacts the access, accumulation and development of social capital.

The construct of social capital is multi-dimensional, making it extremely difficult to define or operationalise. There is general consensus on three factors that define social capital: the existence of a network; the quality of the relationships within the network; and an individual’s ability to extract resources as a result of network membership. For the purpose of this research social capital is being defined as “...the sum of actual and potential resources embedded within, available through and derived from the network of relationships possessed by that individual. Social capital thus comprises both the network and the assets that may be mobilised through that network” (Nahapiet and Ghoshal, 1998, p.243). Nahapiet and Ghoshal proposed one of the most prominent theories of social capital. They identified three interdependent dimensions of social capital: structural social capital, in terms of the physical network structure; relational social capital, referring to the quality of the relationships; and cognitive social capital, which can be understood in terms of shared systems of meaning. A literature review of social capital theory confirmed the presence of these three specific dimensions, suggesting the relevance and applicability of this framework for understanding the holistic nature of social capital. Furthermore, these dimensions have been reflected in a recent exploration of how individuals accrue, develop and utilise social capital in the context of senior-level progression, extending Nahapiet and Ghoshal’s (1998) theory. The three dimensions can therefore be used as a theoretical lens to explore experiences of career progression and to identify the contribution made by social capital. Pryce developed a model to operationalise social capital from her findings on the promotion process to Managing Director within an investment bank; i.e. how to build structural, relational and cognitive social capital. Her model suggests that social capital can be operationalised in terms of these three dimensions; however, the model has not been tested in subsequent research to date.

Much of the existing social capital research has had a structural focus, through the use of network analysis. By maintaining a focus on the structural dimension, an understanding of the importance of an individual’s position within a network is developed. However, such research does not acknowledge the multi-dimensionality of the concept and fails to address the relative contribution of the cognitive or relational dimensions of social capital. A more nuanced understanding of social capital is required in order to understand the importance and the interdependence of each dimension, to develop a collective understanding of the construct. Additionally, a lot of the social capital research to date has been quantitative in nature; a quantitative approach fails to generate a detailed understanding of the agentic perspective of how social capital is both accrued and utilised.
The majority of the existing research investigating the associations between gender, career advancement and social capital theory focuses on the structural dimension of social capital, by exploring differences in networks for men and for women, in terms of their access, quality and benefits. Pryce identified gendered differences in the use of social capital for senior-level promotion, with men appearing to be more effective in utilising social capital resources for career progression. The differential success between men and women in the promotion process was therefore postulated to result from the differences in their social capital. Pryce concluded that where there is a male model of success promotion opportunities are compromised by reluctance to network (i.e. structural social capital), restriction to formal networks (i.e. relational social capital) and distance from organisational norms (i.e. cognitive social capital). That being said, women were found to show reluctance to network, have more formal relationships with colleagues and show more dissonance from organisational norms, resulting in diminished opportunities for promotion. However, this operationalisation of social capital has not been used in further research to date.

This study will link the concepts of women in leadership, career progression and social capital theory in the context of the communications industry. Having reviewed these literatures, it is apparent that there is a need for further research to understand how social capital impacts senior-level promotion and the extent to which it is gendered. This study aims to analyse individual experiences of the promotion process to Chief Executive Officer (CEO) or Managing Director (MD) within the communications industry to identify the contribution made by social capital. This study will use Pryce’s model to operationalise social capital and will explore women’s perceptions of social capital and the extent to which they believe that it has been instrumental in being appointed to their positions of leadership. The purpose of this study is to improve our understanding of how social capital contributes to career progression. More specifically, it is hoped that this research will contribute to an improved understanding of the gendered nature of senior-level career progression and the perceptions and experiences of the role that social capital plays in the promotion process.

Research Question
How do women, who have been appointed to the position of MD or CEO, perceive social capital to have played a role in attaining this position?

Methodology
This is a qualitative study exploring women’s experiences of social capital in attaining senior positions within a specific industry. The research aims to improve our understanding of the importance women place on social capital and how women perceive social capital to have played a role in the promotion process. My sample consists of twelve women who are currently employed within the communications industry at MD or CEO level. MD and CEO represent the two most senior levels within the communications industry. Access to the sample was gained via opportunity sampling.

Participants were subject to individual in-depth semi-structured interviews which were held face-to-face in pre-arranged meeting rooms. The interviews were audio-recorded, with the permission of the interviewees, and transcribed verbatim. Anonymity was guaranteed and all participants were advised of their right to withdraw from the study at any time. The data from the interviews will be analysed thematically allowing for the identification of any themes or patterns that arise; Pryce’s model will be used to operationalise social capital (i.e. structural, relational and cognitive dimensions). This research aims to establish whether there are any common themes in the underlying experiences, beliefs and attitudes that these women have in regard to the role that social capital has played in their career progression. This study will add to what is already known about the importance of social capital for career progression and gendered differences in terms of how social capital is perceived and utilised by women for career progression.

References available upon request
Job crafting and job performance: The role of self-efficacy
Mariella Miraglia, University of East Anglia and Guido Alessandri, Laura Borgogni and Roberto Cenciotti, Sapienza University of Rome

Category: Leadership, Engagement and Motivation

Introduction

The innovative perspectives on job design, the on-going organizational restructuring due to the instable economic situation, the higher flexibility in work procedures have drastically raised job discretion, complexity and challenges. More than in the past, individuals are required to actively design their own job, and successful performances rely on the agentic and proactive characteristics which enable people to handle competition and shape organizational change. In this scenario, the relative new concept of job crafting offers a promising approach to study employee’s behaviors and their consequence for individual wellbeing and productivity.

Job crafting captures “the physical and cognitive changes individuals make in the task or relational boundaries of their work” (Wrzesniewski & Dutton, 2001, p. 179) to creatively adapt the job to their needs, preferences and goals. Crafting behaviors have been operationalized within the theoretical framework of the Job Demands-Resources (JD-R) model (Bakker, Demerouti, & Sanz-Vergel, 2014) and defined as self-started proactive behaviors to modify the level of job demands and job resources, balancing it with one’s needs and skills (Tims, Bakker, & Derks, 2012). Therefore, job crafters are those who change their tasks, activities and interactions at work expanding the level of job resources, either structural (e.g., job autonomy, knowledge) or social (e.g., supervisory and collegial support and advice), and of challenging job demands (Bakker, Tims, & Derks, 2012).

Regarding job crafting predictors, self-efficacy can constitutes a key antecedent, due to its prominent link to human agency, designating the self-regulatory mechanism that allows individuals to actively influence their environment (Bandura, 1986). A core construct of the social-cognitive theory (Bandura, 1986), self-efficacy denotes the employee’s perceived capability to successfully perform a given job task and, more generically, to exercise a control over one’s life (Bandura, 1986). As efficacy beliefs induce proactive behaviors (Speier & Frese, 1997), they can also stimulate crafting tendency, because if people believe that they can successfully master the diverse aspects of their job and work environment, they are more likely to redefine and remold work tasks, activities and social relationships. Some preliminary empirical support has been provided for the positive impact of efficacy beliefs on crafting behaviors, using cross-sectional design (Kanten, 2014) and experience sampling methodology (Tims, Bakker, & Derks, 2014). However, to our knowledge, no studies have investigated the effect of self-efficacy on job crafting over time. Thus, the first aim of the study is to test the relationship between self-efficacy and future crafting behaviors.

With regard to the consequences of job crafting for organizations, crafting behaviors seems to increase employees’ job performance, since they foster a more resourceful and challenging work environment (Hobfoll, 2001), supporting in turn motivation and engagement (Tims, Bakker, & Derks, 2013). However, the majority of the studies exploring the relationship between job crafting and performance have employed self-report operationalizations of performance (Tims et al., 2014; 2015; Petrrou et al., 2015) or peer-rating performance (Tims et al., 2012), while the longitudinal evidences of the link between crafting behaviors and performance ratings are yet limited. Hence, the present study uses supervisory appraisal of employees’ performance to investigate the relationship between job crafting and productivity.

Finally, linking together the social-cognitive theory (Bandura, 1986) and the JD-R model (Bakker et al., 2014), job crafting may represent an agentic behavioral mechanism responsible for translating the individual’s beliefs in his or her capabilities into successful outcomes, via the increase of one’s job resources and challenging demands. Therefore, the last goal of the study is to explore the role of job crafting in fully mediating the relationship between self-efficacy and supervisory performance ratings.
Design

Sample and procedure. A two-wave study on 465 white-collars from an Italian service organization was conducted. Self-report data (i.e., self-efficacy, job crafting) were gathered through an online questionnaire in two succeeding years while supervisors’ performance ratings were provided by the Human Resource (HR) department at the end of each year. Participation in the study was voluntary and a code was used to match self-report data with performance evaluations and to guarantee participants’ confidentiality.

Measures. Self-efficacy. Perceived work self-efficacy was measured by a tailored scale specifically related to the work domains of the sample of the study. Seven statements were framed as beliefs of being able to handle job responsibilities, challenging situations and coordination with colleagues. A 7-point response scale from 1 = “Cannot do” to 7 = “Highly certain can do” was employed.

Job crafting. As in Tims and colleagues (Tims et al., 2013), job crafting was measured by three sub-dimensions of the Tims et al. (2012) job crafting scale: “increasing structural job resources”, “increasing social job resources”, and “increasing challenging job demands”. Each dimensions included five items, answered using a 7-point frequency scale (1 = “Never” to 7 = “Always”).

Job performance. Supervisors rated their employees’ performance through the company’s performance appraisal system. This instrument had been developed by the HR Department as an overall, one-dimensional measure of job performance, measured on a 10-point scale (1 = “Inadequate” to 10 = “Beyond expectations”).

Analyses and results. To test the posited relationships among the variables, a two-wave mediational design was employed within the framework of structural equation modeling (SEM), using Mplus 7.01 software (Muthén & Muthén, 2012). Age, organizational tenure, and gender were entered in the model as covariates.

The model (see Figure 1) fitted the data well: $\chi^2(52) = 192.016$, $p = .000$, $CFI = .943$, $TLI = .918$, $RMSEA = .076$ (.065 -.088). As hypothesized, self-efficacy at T1 positively predicted job crafting at T2, and job crafting at T1 was positively associated to job performance at T2. Likewise, job crafting at T1 positively predicted self-efficacy at T2. The mediating role of job crafting between self-efficacy (T1) and job performance (T2) was confirmed. Indeed, the estimated unstandardized longitudinal indirect effect of self-efficacy to job performance trough job crafting was significant ($B = .03$; CI95% = .003, .006). Moreover, we found evidence for a reciprocal effect of job crafting on self-efficacy. Finally, among covariates, age significantly related only to job performance both at T1 ($\beta = -.28$) and T2 ($\beta = -.19$). Gender and tenure were not associated with self-efficacy, job crafting, and job performance at T1 nor at T2.

Figure 1. Results from the SEM
Conclusions
The study confirmed the positive influence of work efficacy beliefs on job crafting over time. Thus, more self-efficacious employees are more likely to alter the task boundaries of their work, they engage more frequently in behaviors pointing at increasing activities, skills, learning, and challenges, as well as increase social resources, because they continuously look for opportunities to prove and strengthen their abilities and they establish challenging goals for themselves to achieve personal and professional development.

We also found that enlarging the amount of resources and challenging demands may result in higher self-efficacy. The result suggests that the relationship between efficacy beliefs and job crafting might be dynamic, meaning that, in addition to the causal positive association of efficacy beliefs with crafting behaviors, a reversed causal relation is equally probable. Indeed, increasing structural and social job resources, as well as challenging job demands, may fuel the main sources of self-efficacy, like mastery experience, vicarious experience, and social persuasion (Bandura, 1986). More numerous resources and challenges on the job result in skill development, greater resilience in the face of difficulties, larger social support, and work successes, boosting subsequent individuals’ confidence in their capabilities.

Furthermore, individuals who craft their job receive higher performance evaluations. To our knowledge, this is the first study to use supervisory appraisal of employees’ performance to show the positive effect of crafting behaviors on productivity. This should exclude that the positive association might be inflated by self-report biases or common method variance (Podsakoff, MacKenzie, & Podsakoff, 2012). The use of an external and organizational-recognized operationalization of performance should rule out the possibility that the benefits of job crafting are only in the eye of the beholder. Organizational performance ratings should provide an external guarantee of the positive influence of crafting behaviors on performance, as the supervisor may be not aware of the employee’s crafting actions in the everyday job, which are, by definition, self-initiated and bottom-up adjustments to work design.

Finally, the observed pattern of longitudinal predictions assigns a pivotal role to job crafting as the mediator between self-efficacy and job performance. Those employees seeing themselves in control of the job and the work environment are more likely to proactively and spontaneously act on them, engaging in crafting behaviors, which in turn results in higher performances. In other words, self-efficacious employees may use job crafting as a mean to exert their human agency, in order to align the job with their skills, preferences and needs, establishing more adequate conditions to perform better (Bakker et al., 2012; Tims et al., 2014) and supporting their job attitudes and work motivation. This leads to enhanced performance.

Regarding practical implications, efficacy beliefs are susceptible to development through specific strategies (Bandura, 1986). Consequently, organizations may benefit from training aimed at improving employees’ self-efficacy. Setting up interventions to support individuals’ beliefs in their own capabilities to control the work context and effectively manage job assignments may enhance job crafting behaviors that, in turn, would align the job with their own needs, values, and goals and have positive effects on performance. Training may be focused on the main sources of self-efficacy as mastery and vicarious experiences and social persuasion.

References
Further questions

1. **What are the main psychological theories, models and research underpinning your session?**
   As described in the Introduction section, our study draws on social-cognitive theory (Bandura, 1986), the Job Demands-Resources (JD-R) model (Bakker et al., 2014), the conservation of resources theory (Hobfoll, 2001), and the innovative research field of job crafting (e.g., Bakker et al., 2012; Tims et al., 2012, 2013, 2014).

2. **How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?**
   As stated in the Introduction section, crafting behaviors on the job may enable individuals to face the new challenges of the changing work context. Indeed, it allows the employee to adjust the level of job demands and resources, according with one’s needs, skills and goals (Tims et al., 2012). Moreover, self-efficacy and job crafting represents agentic and proactive characteristics, which are required to proactively act on the work environment, enabling people to handle competition and shape organizational change.

3. **Why is the submission appropriate for the particular category you have chosen?**
   The study focuses on job crafting (listed among the examples of topics for the category “Leadership, Engagement and Motivation”), which fosters the alignment of the job with one’s needs, preferences and goals, positively affecting engagement, motivation and performance.

4. **What do you consider to be the most novel or innovative aspects of the ideas being presented?**
   The mediating role of job crafting in the relationship between self-efficacy and job performance over time, measured through the performance appraisal tool of the organization, represent an innovative finding. Also, to our knowledge, a longitudinal mediational design has never been employed to explore the relationships among self-efficacy, job crafting, and job performance. Finally, our results uncover the possibility of a reciprocal causation between self-efficacy and crafting behaviors.
5. Why do you think conference delegates will find the paper or session stimulating and useful?

The full mediation of job crafting in the relationship between self-efficacy and job performance may help in better clarify how efficacy beliefs cause successful performance over time (Bandura, 2015; Vancouver, 2012). Furthermore, the finding of a dynamic relationship between self-efficacy and job crafting might be particularly stimulating, opening the way to further research.

6. What might the public find interesting about your paper or session?

First, the public might find interesting the concept of job crafting per se, as self-initiated, bottom-up adjustments to job design. Moreover, the public might be interested in the mechanism linking efficacy beliefs to enhanced job performance (i.e., mediating role of job crafting). Indeed, the study shows how efficacy beliefs work their way through crafting behaviors to support high performances. From a more practical perspective, people might want to better know which kinds of interventions organizations may set up to support individual’s efficacy beliefs and, in turn, to foster job crafting tendency and individual productivity.

7. If any, what materials do you intend to make available to attendees and in what format (e.g., printed hand-outs, electronic copies of slides)?

Electronic copies of slides

Fringe Event

Networking event - Making professional friends that last

Ryan Offutt, Leeds University Business School

Nobody likes networking, but everyone loves making authentic connections with great people. Ryan Offutt, occupational psychologist, trainer and improvisational comedy teacher, will lead a quick-fire, on-your-feet session to will help you make the most of the best part of the conference – the people. This event is the ideal opportunity to mix, get connected and laugh together. Plus, for those of you who find networking daunting, this event is the perfect start.

You will learn tips to help you overcome your butterflies and transform your conference experience, so you can get the most from all of the other brilliant social events on offer throughout the week.

Make the most of this year’s conference – put people first. Join us, meet great new friends and start making authentic connections that last.

Fringe Event

Delusion: the secret science of mind reading

Rob Bailey

Rob Bailey is an Occupational Psychologist, member of the Magic Circle and a veteran of the Edinburgh Festival Fringe, where, for 4 years he performed a one-man show as a ‘mind reader’.

For this DOP fringe event, Rob will perform selections from his new show, which, unusually for a magician, contains no conjuring: only genuine psychological principles. He will share explanations of the psychology behind the routines, including quirks of bias, memory and perception. Rob will demonstrate how magicians learnt many tricks of the mind long before psychologists caught up!

Experiencing the fallibility of our senses makes us more open-minded, more aware of our own biases, and better able to think critically. For psychologists the advantage is that we can become better practitioners by understanding this in ourselves and in others: helping us and our clients to become more flexible in thought and more mindful in the face of difficulties.
Thursday 7 January

T01 Keynote Session
Is wellbeing what we think it is and what should we be doing about it?
Professor Kevin Daniels, University of East Anglia

There is growing recognition amongst politicians nationally and internationally that economic growth is not, and should not be, the sole indicator of a society’s progress. There is a shift in focus onto indicators of societal happiness and how institutions can foster citizens to have happy, fulfilling and meaningful lives.

In 2015, the What Works Wellbeing Centre was set-up to provide evidence and guidance to enable decision makers to take decisions that incorporated considerations of how to improve wellbeing. The Centre currently has four evidence programmes, including a programme focused on Work, Learning and Wellbeing. In the context of the programme on Work, Learning and Wellbeing, decision makers include policy makers at national, regional and local levels, managers, trades unions officials, individual workers and influencers of policy and practice – including occupational psychologists.

In this keynote presentation, Kevin Daniels will outline some of the challenges and issues faced by occupational psychologists and others motivated to improve wellbeing at work. These include challenges to the way psychologists conventionally think about wellbeing, challenges to our notions of how to improve wellbeing, challenges to our views on who is best placed to improve wellbeing and challenges to deciding on whose wellbeing should be improved and how. The presentation will be informed by Kevin’s experience in the first six months of working with the What Works Wellbeing Centre, working with colleagues from different research traditions, our conversations and consultations with the public and other stakeholders, as well as our research on the psychometrics of wellbeing for different groups and at different levels of analysis.

T02 Poster snapshot session

Category: Research Design, Analytical Techniques and Practical Applications

Poster presenters will be given 60 seconds each to provide a brief overview of their poster to showcase their work. This will take place on Thursday 10:15-10:55 in the Conference Theatre. Posters will be displayed throughout the conference and the traditional poster session will take place during the lunch break on Thursday 13:05-14:00. All posters will also be entered into the poster competition and will be judged by 2 Keynotes. Winners will be announced at the Gala Dinner, Thursday evening.

T03 Standard Paper

Supporting women’s well-being during the menopause: Developing a workplace scale
Roxane Gervais, Independent Practitioner and Prudence Millear, University of the Sunshine Coast, Australia

Category: Psychological Assessment at Work

Introduction

While women have chosen traditionally the most effective work patterns to allow them to address family or other responsibilities; in today’s work environment of an ageing population and economic challenges, more women are required to work for a longer time. This could mean that women could spend most, or all, of their life course experiences, while at work. These would include for example, pregnancy and the menopause. While there are a variety of coping mechanisms in place for women during their pregnancy, some of which have been legislated, the same cannot be said for women when going through the menopause. And although menopause is not a debilitating condition, it could prove uncomfortable for many women during the course of a working day, due to for example, hot flushes, fatigue, or heavy and painful periods. Of course, these conditions are not universal and for some women, the menopause would not affect their ability to function more effectively at the workplace.
There is limited research on the menopause, especially in respect of its effects on women during the course of a working day. Griffiths, Maclennan and Wong (2010) support this assertion after their review of the literature in this area. This limitation extents especially to the physical conditions of the workplace and how women respond to these when experiencing the menopause. These is some research that identifies poor ventilation as contributing to women’s ability to cope well with hot flushes (Griffiths et al., 2006; Griffiths et al., 2013). In general, there is research that has examined the impact of the physical work environment on workers and found that it could increase their stress levels (Klitzman & Stellman, 1989). Other research has found that it affected job performance (McCoy & Evans, 2005; Vischer, 2007), as well as job satisfaction (Vischer, 2007), in addition to motivation, social interaction, and productivity (McCoy & Evans, 2005). Overall, Vischer (2007) proposed that the time and attention that workers invest in coping with their particular physical environment, represents a loss of time and attention from the performance of their work. Therefore, as the work environment could add to those positive and negative influences on the psychological well-being of employees (Briner, 2000), which it could be hypothesised might increase when individuals undergo physiological changes, such as the menopause, it was deemed feasible to develop a tool that could assist women when in this phase of their lives.

This paper supports the conference theme of ‘Resilience in a challenging world’ as it addresses one of the expected changes that women have to go through over their life course. As women go through ‘the change’ and are employed still, they will require a variety of resources to assist them in developing resilience to maintain their well-being while functioning within the work environment. This instrument could function as a resource for women during this change in their lives in knowing how to respond to the work environment.

Method

Developing the tool

The items were generated by reviewing the literature on women’s experience of menopause in the workplace (e.g., Griffiths et al., 2013) and from examining a number of menopause symptom scales (e.g., Climacteric Scale, Greene, 2008; Menopause Rating Scale (MRS), Schneider, Geinemann, & Thiele, 2002). These reviews allowed the developed items to reflect what the women could be expected to feel and experience about their workplace and their colleagues when having menopausal symptoms. Twelve items were developed to assess the amount of influence women had over their workplace environment to facilitate a more manageable experience of menopause, including ‘I am able to alter my work environment if I have a hot flush’ (e.g. open a window). The items were rated on a five-point Likert scale ranging from 1 (not at all) to 5 (nearly always). The twelve items are shown in Table 1.

Participants and Procedure

The survey was administered online, and targeted employed women who deemed themselves to be experiencing the menopause, whether peri-menopausal-post. The women (N = 652) were asked to complete the following scales: the newly developed menopause work environment scale, the menopause rating scale (MRS; Schneider, Geinemann, & Thiele, 2002; Heinemann et al., 2004), the work climate questionnaire (WCQ; Baard, Deci, & Ryan, 2004), job autonomy (Voydanoff, 2004), social support (Van Yperen & Hagedoorn, 2003), work locus of control scale (Spector, 1988), general self-efficacy (Schwarzer & Jerusalem, 1995) and demographic information. The women were slightly older on average (M = 51.47, SD = 6.74), had around two children each (M = 1.87, SD = 1.39), were more likely to be married/living with a partner than single or divorced (M = 2.06, SD = .55), and worked an average week (M = 35.56, SD = 11.65).

Data Analysis

The data were subjected to a reliability, factor (principal components), correlation and confirmatory analyses to explore further the structure of the newly developed questionnaire and its relationships with the other scales. Due to missing data the numbers within each of the analyses were reduced, but the sample was fairly large to adjust for these data.
Results

The principal components analysis (PCA) followed by varimax rotation of the 12-item scale indicated three factors. The scree test showed that the cut-off point was after the third factor. The first factor accounted for 28% of the variance, the second for 27% and the third for 16%, explaining in total 71% of the variance. Table 1 provides a listing of the items with their loadings on the three principal components. As shown in Table 1, four of 12 items loaded cleanly on the first component, with loadings from .818 to .911; five items loaded on the second component, with loadings from .473 to .942; and three items loaded on the third component, with loadings from .622 to .848. The four items that loaded on the first component were deemed to represent Support from colleagues. The five items that loaded on the second component were reasoned as Constraints within the work environment. The three items that loaded on the third component were deemed to focus on Control of the work environment.

<table>
<thead>
<tr>
<th>Items</th>
<th>Components 1</th>
<th>Components 2</th>
<th>Components 3</th>
</tr>
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<tbody>
<tr>
<td>I am able to alter my work environment (e.g. open a window) if I have</td>
<td>.279</td>
<td>-.117</td>
<td>.622</td>
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<tr>
<td>a hot flush.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>I can change where I work if I am feeling uncomfortable due to the</td>
<td>.223</td>
<td>.848</td>
<td></td>
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<tr>
<td>heat, cold, lighting or noise (e.g. move to another room).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can change my work schedule if I am feeling unwell or off colour.</td>
<td>.264</td>
<td>.784</td>
<td></td>
</tr>
<tr>
<td>My colleagues are considerate if I have a hot flush.</td>
<td>.818</td>
<td>.290</td>
<td></td>
</tr>
<tr>
<td>My colleagues are considerate if I am a bit vague or lack concentration.</td>
<td>.896</td>
<td>.210</td>
<td></td>
</tr>
<tr>
<td>My colleagues are supportive if I am feeling a bit blue.</td>
<td>.911</td>
<td>.233</td>
<td></td>
</tr>
<tr>
<td>My colleagues are supportive if I am feeling more anxious than usual.</td>
<td>.911</td>
<td>.210</td>
<td></td>
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<tr>
<td>I feel irritated by my work environment.</td>
<td></td>
<td>.612</td>
<td>-.181</td>
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<tr>
<td>I am more aware of the odours in my work environment.</td>
<td></td>
<td>.473</td>
<td>-1.00</td>
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<tr>
<td>If I cannot change my present work environment, it reduces how I can</td>
<td></td>
<td></td>
<td>.933</td>
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<tr>
<td>perform my work.</td>
<td></td>
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<tr>
<td>If I cannot change my present work environment, it reduces my work</td>
<td></td>
<td></td>
<td>.942</td>
</tr>
<tr>
<td>productivity.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>If I cannot change my work environment, I become less satisfied with</td>
<td></td>
<td></td>
<td>.912</td>
</tr>
<tr>
<td>my work.</td>
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</tbody>
</table>

The reliability analyses showed that all of the scales had high internal consistency: menopause work environment scale (α = .79), menopause rating scale (MRS; α = .89), work climate questionnaire (WCQ, α = .96), job autonomy (α = .88), social support (α = .86), work locus of control scale (α = .89), general self-efficacy (α = .93). The results for the construct validity and confirmatory factor analyses supported the structure of the tool and will be shown in full during the presentation.

Discussion

This study has outlined the first steps in validating a menopause scale with respect to perceptions of the work environment during this period of change for women, i.e., the menopause. As noted earlier, women would be required to retire at a later age than in previous years, and may experience the menopause while at work before retiring. In this respect, it is useful to develop a psychological assessment tool that would allow women to assess their experience of the menopause within the context of the resources that are available to them within their work environment. The relevance of the resources and control that are available in the physical work environment (Klitzman, & Stellman, 1989; McCoy, & Evans, 2005; Vischer, 2007), as well as the overall work environment (Briner, 2000) on the well-being of workers has been noted. Per se, any additional resource that is made available to workers would be beneficial. This newly developed scale has been administered to a fairly large sample and analysed. The present paper provides evidence for the scale’s factor structure in terms of its validity and reliability, illustrating that
it has acceptable psychometric properties. The PCA showed that the scale had three clear factors, with the reliability assessment showing its high internal consistency and the CFA supporting its overall structure.

As this sample was a fairly homogenous sample of women working within professional roles for the most part, the next steps are to administer the scale among more heterogeneous populations to assess its usefulness for different groups. This additional research would serve to gather more data to further validate the tool and improve on its structure.

References


T04 Workshop

Talking the talk and walking the walk: How Emotionally Intelligent are we as Occupational Psychologists?
What are the main psychological theories, models and research underpinning your session?

- The EI model used by the Emotional Intelligence Profile (EIP), forming the basis of this workshop, was developed by Maddocks and Sparrow and comprises:
  - A unique six part framework
  - Personal and Interpersonal forms of intelligence
  - Three levels of EI; behavior, feeling and attitude
- The workshop will draw upon research comprising of over 13,000 people, across different occupational sectors and discipline completing the EIP questionnaire
- The theoretical underpinning of the EI model is eclectic and draws upon FIRO Theory, Gestalt, The Human Givens, the neuroscience of emotions, transactional analysis

8. How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?

- One of the key challenges facing Occupational Psychologist’s in the current world is how they can have a greater impact, and the difference ‘we’ make. A large element of Emotional Intelligence, being personally and interpersonally effective, draws on resilience, flexibility and the ‘ability’ to be authentic in a forever changing environment
- The issue of resilience has to embrace how effective individuals and organisations are at managing their energy and emotions. The approach to EI discussed in this research has a clear role to play in enabling resilience
- As with many professions, Occupational Psychologists are being asked to do ‘more with less’, be that less time, less budget and at times less ‘client contact’ Resilience plays a large part in how people manage their energies and emotions under such circumstances
- We sometimes see the differences and challenges between the ‘practitioners world’ and that of the academic. This workshop will look to identify and explore some of the differences and similarities between the two disciplines as a way of understanding how each group performs effectively

9. Why is your submission appropriate for the particular category you have chosen?

- The research findings will be best discussed through a variety of different formats or forums so that people are able to input and explore the findings with other people. There will be elements of presentation and research facts, but we want the research to provoke facilitated discussion and debate amongst participants
- We believe the submission is relevant to both as the intention of the research and workshop is to challenge and inform our role as occupational psychology consultants and how we are best informed to enable org change, leadership development.

10. What do you consider to be the most novel or innovative aspects of the ideas being presented?

- How often do we as occupational psychologists reflect on our own levels of effectiveness, resilience and emotional intelligence? This will give participants time, space and research findings to look at ourselves as a profession, with potential areas for consideration and development

11. Why do you think conference delegates will find the paper or session stimulating or useful?

- This workshop will allow participants to reflect of the profession of occupational psychology, and how we ‘perform’ on key elements and challenges such as resilience, flexibility and authenticity (all vital for being effective in a changing world)
- The workshop will also explore differences and implications in the levels of Emotional Intelligence between the practitioner and academic disciplines

12. What might the public find interesting about your paper or session?
There is limited current research material relating to the levels of Emotional Intelligence of occupational psychologists.

Our research has examined the levels of emotional intelligence across a multitude of occupational professions and sectors (including the HR sector). It would be highly interesting to see how Occupational Psychologists compare and contrast to these groups, and the implications that this may suggest.

The model of EI presented in the research includes a clear focus on the impact of attitude and specifically people’s regard for themselves and their regard for others. It is our contention that solutions intended to deliver sustained changes in leadership climate and performance must have at its heart a focus on mindset and attitude. This challenges traditional approaches to leadership development focused largely on skills or raising awareness of personality and behaviour.

13. If any, what materials do you intend to make available to attendees and in what format (e.g. printed hand-outs, electronic copies of slides)

- Online completion of the Emotional Intelligence Profile (prior to workshop)
- Individual participant EIP Development Summary Report
- PDF copy of the research report
- PDF copy of presentation

T05 Short Paper

Psychological capital as a mediator of burnout in foundation doctors

Anna Rosselli and Fiona Patterson, Work Psychology Group/University of Nottingham and Iain Coyne, University of Loughborough

Category: Wellbeing and Work

INTRODUCTION

Burnout is a syndrome comprised of: exhaustion, a consequence of intense strain; and disengagement, the experience of negative attitudes and of distancing oneself from work (Demerouti et al. 2003). Burnout is more common in doctors than the general population (Shanafelt et al. 2012), and is a growing concern internationally. For example, a UK survey of GPs found increasingly higher levels of reported stress over time since the survey began in 2001 (Hann et al. 2013). Burnout in doctors can negatively affect patient care, for example, self-reported errors are higher in doctors with burnout (Shanafelt et al. 2002), in addition to having serious implications for health and well-being (Schaufeli & Taris 2014). Therefore, examining burnout in doctors is important, not just for doctors’ well-being, but also for the safety of the public who they care for. This area is topical given recent discussions surrounding a move towards seven-day services in the NHS, which could further increase the pressures faced by doctors (BMA 2015).

The Job Demands-Resources (JD-R) model posits that burnout can result from individuals having inadequate job resources to cope with high job demands (Schaufeli & Taris 2014). High job demands require additional effort to be utilised to maintain performance, and over time, psychological and physical costs accumulate, until the individual becomes exhausted (compensatory control theory; Hockey 1997). Whereas resources help employees to meet goals, reduce demands and their costs, and aid development (Demerouti et al. 2001). Resources are also motivational, encouraging employees to expend effort meeting demands (effort-recovery theory; Meijman & Mulder 1998).

Medical practice is inherently demanding; for example, diagnosis involves complex cognitive processes (Jarodzka et al. 2012). Therefore identifying how demands and resources interact in doctors is important to understand how resources can be utilised to reduce the risk of burnout, especially as the presence of resources can facilitate the acquisition of further resources, as outlined by Conservation of Resources (COR) theory (Hobfoll 2002).

Recent research also suggests that personal resources, the psychological characteristics associated with resilience (Schaufeli & Taris 2014), are important within the JD-R model, mediating the relationship between job resources and
engagement/exhaustion (Xanthopoulou et al. 2007). Psychological Capital (PsyCap) is a potentially important personal resource, comprising a higher-order state-like construct composed of resilience, self-efficacy, optimism and hope (Luthans et al. 2007). Research has shown that PsyCap is associated with employee attitudes, behaviour and performance (Avey et al. 2011), in addition to being developable through intervention (Luthans et al. 2010).

Currently there is limited research regarding doctors’ PsyCap. Research has examined the role of PsyCap in stress and burnout in Chinese doctors (e.g. Liu et al. 2012), but research has not yet directly tested the mediation effects of PsyCap within the JD-R model. Following COR theory’s suggestion that resources assist the development of additional resources (Hobfoll 2002), further research examining the role of PsyCap in the JD-R model in doctors in the UK could provide useful insight into how the risk of burnout can be reduced.

This study therefore aimed to examine whether PsyCap mediates the relationship between job demands and resources and burnout within doctors in the UK for the first time. Workload, relating to the perception of the amount and intensity of work (Spector & Jex 1998), was included as a job demand in the study, given that workload is commonly identified as a source of stress for doctors (Hann et al. 2013). Social support is well-supported as an important job resource (Schaufeli & Taris 2014), and perceived organisational support (POS) and perceived supervisor support (PSS) were included in the study because they are important resources that are under an organisation’s control.

METHOD
Foundation Year Two doctors (F2s) attending training sessions were approached to participate in the study; 130 agreed to participate (71% response rate). Ethical approval was obtained from the University of Nottingham Medical School Ethics Committee, and participants provided written consent and were free to withdraw from the study at any point.

Workload was measured using the Quantitative Workload Inventory (Spector & Jex 1998); POS and PSS with three-item scales (Eisenberger et al. 2002); PsyCap with the Psychological Capital Questionnaire (Luthans et al. 2007); and burnout using the Oldenburg Burnout Inventory (Demerouti et al. 2003). A recently developed macro for SPSS, ‘PROCESS’, was utilised for the mediation analysis to overcome criticisms of the Baron and Kenny (1986) approach to mediation (Hayes 2013).

RESULTS
PsyCap significantly mediated the relationships between both job demands (workload) and resources (POS, PSS) with burnout (both exhaustion and disengagement; $\kappa^2=.10–.15$). Workload significantly positively predicted exhaustion ($R^2=.35$, $p<.001$), but not disengagement. POS and PSS both significantly negatively predicted exhaustion and disengagement ($R^2=.11–.17$, $p<.001$).

DISCUSSION
The results, depicted in Figure 1, indicate that PsyCap mediates the relationships between job demands and resources and burnout in F2s in the UK. Theoretically, the findings provide further support for the JD-R model. The results indicate that workload is a prevalent job demand for F2s, with higher workload associated with higher exhaustion. These findings provide support for compensatory control theory, which states that working at an intense pace for extended periods of time requires individuals to expend additional effort to maintain their performance; if workload remains high in the long-term then resources are depleted and the individual becomes exhausted (Hockey 1997).
Figure 1. Supported relationships between variables.

Higher perceptions of support, both at the organisational and supervisor level, were associated with lower levels of exhaustion and disengagement. Support provides doctors with a job resource that can help them to accomplish their work goals and develop strategies for successfully managing work demands (Demerouti et al. 2001). These findings support compensatory control theory and effort-reward theory (Hockey 1997, Meijman & Mulder 1998); doctors who feel well supported will feel more motivated to dedicate effort to meet the demands, and also will have more resources to meet the demands, thus reducing the likelihood of becoming exhausted and disengaged.

PsyCap mediated all of the relationships between workload, POS, and PSS with exhaustion and disengagement. This develops the current research by demonstrating that personal resources mediate not only job resources, but also job demands, supporting COR theory (Hobfoll 2002). COR theory suggests resources act in gain spirals, so having good POS and PSS helps doctors to develop their PsyCap, providing increased personal resources to cope with demands, reducing the likelihood of burnout. For example, a supervisor might support learning from setbacks and challenges, giving doctors the skills to improve their resilience.

Conversely, high workload serves to diminish PsyCap, increasing the likelihood of exhaustion and disengagement. Prolonged exposure to high workloads will require doctors to continually invest their personal resources to maintain performance, depleting their PsyCap (Hobfoll 2002). This depletion eventually results in burnout (Hockey 1997). Therefore, doctors with high workload and low POS and PSS are likely to have low PsyCap, increasing the risk of burnout.

As medicine is known to be a highly demanding profession, doctors and the NHS need to act to reduce the risk of burnout. It is unlikely that the demands of medicine can easily be reduced, given the inherently challenging nature of the role of a doctor. Indeed it is possible that the demands might even increase, given the current discussion surrounding seven-day services (BMA 2015). Doctors, supervisors and their employing organisations should work proactively to accumulate resources to protect against demands. Both supervisor and organisational support positively impacted PsyCap, so improving the support available to doctors is likely to increase doctors’ PsyCap, giving them increased personal resources to apply in demanding situations.

There has also been early evidence to suggest that PsyCap can be improved through intervention, and this has been shown to positively impact job performance (Luthans et al. 2010). Therefore, additional research investigating the application of PsyCap interventions with doctors would be useful to determine the effectiveness of directly working to improve doctors’ personal resources, and the impact this has on their ability to manage, and be resilient in the face of, challenging work demands. Further research is warranted, especially given the important implications of burnout in doctors; reducing the risks of burnout is in the interest of the doctors themselves, their employing organisations, and importantly the general public, whose safety is at risk if burnout is not managed.
The study employed a cross-sectional design and self-report measures, so it would be beneficial for future research to longitudinally examine the causal relationships between demands, resources, PsyCap, and burnout, and to employ alternative measures. Additionally, it would be helpful to explore other demands and resources, alongside positive work outcomes for doctors, such as work engagement.

Overall, the results show initial support for PsyCap as a mediator in the JD-R model for doctors. The findings have useful theoretical and practical implications, which could be expanded by future research, in addition to being potentially beneficial in supporting a wider range of professions to manage the challenges of work.

T06 Standard paper
Weathering Frights – An empirical investigation into the outcomes and boundary conditions of organisational resilience
Rebecca Pieniazek, Leeds University Business School
Category: Psychological Assessment at Work

Sullivan-Taylor and Wilson (2009) defined organisational resilience as ‘a solution to organizations facing high levels of threats in all aspects of their operating environment’. Some conceptualise resilience as a means of bouncing back from down-time following disruptions (Nemeth et al., 2008; Linnenluecke & Griffiths, 2010). Resilience is undoubtedly an important quality for organisations to demonstrate as service/business disruption needs to be kept to a minimum, see Mamouni et al. (2014) for further definitions. Furthermore, some hypothesise the mere process of demonstrating resilience not only helps organisations recover from disruptions and get back to ‘normal’, but actually leads to improved performance (Dervitsiotis, 2003; Lengnick-Hall et al., 2011). However until the resilience construct is better understood, conceptualised and measured, such claims (whilst plausible), lack empirical support. In fact, the resilience literature lacks quality empirical investigation in general (Furniss et al., 2014). Hence the following research objectives for this paper:

1. To create a psychometric construct in order to better define, understand and measure organisational resilience.
2. To conceptualise and empirically investigate the relationships between organisational resilience and various performance outcomes, in addition to the boundary conditions (i.e., moderator effects) of these relationships.

This research marks the first literature review of theories regarding how organisations demonstrate resilience capability. The full paper displays these findings, alongside critiquing the existing ideas in terms of continuity, workability, and a lack of discriminant validity, and empirical investigation. Most of these ‘theories’ actually comprised lists of factors deemed to be important for resilience without specification of proper psychometric items, or even adequate definitions of key terms. This paper innovatively conceptualises resilience as comprising a proactive and reactive element, with both necessary across time to demonstrate resilience. Proactive resilience offers a means of dealing with threats, risks and uncertainty (i.e. potential disruptions), and reactive resilience a mechanism for minimising down-time during times of actual disruptions. Sullivan-Taylor and Wilson’s definition above would fall into the former distinction of resilience, and Nemeth et al.’s into the latter.

Following a detailed justification (in the full paper), this research (based on Hollnagel’s Resilience Analysis Grid, 2008) states that in order to be resilient organisations must:
Anticipate risks and potential disruptions; considering future events and their impact;
Plan what to do, when to do it, and how to do it in order to deal with these risks;
Implement these planned changes;
Monitor internal system performance and the external situation in real time to identify any deviations or immediate disruptions;
Respond to disturbances and emergencies by mobilizing resources; and finally,
Learn from their experiences of routine and non-routine events in order to improve. In addition, organisations need to communicate both internally and externally to the organisation.

Following the conceptualisation of resilience, Figure 1 demonstrates how this research has placed resilience within a nomological net. Hypothesis 2 depicts Environmental Turbulence (ET) as a moderator variable: the positive relationship between resilience and performance will be increased when ET is high. Hence, the greater the ET, the greater the need for resilience.

Figure 1: Socio-Technical Organisational Resilience Model ‘STORM’

Hypothesis 3 depicts Socio-Technical Resources (STSR) as a moderator variable: the positive relationship between resilience and performance will be increased when STSR is high. After all, an organisation needs to use all of its resources to enable itself to be resilient and protect itself.

Figure 1 represents the constructs at an aggregate (global) level, however by means of a novel contribution, ET is conceptualised as having five components, i.e. five different categories of environment. More details on the sub-aggregate levels of the constructs is given in the methods section. The STSR construct comprises a social and a technical element – with the sub-elements of those two based on the Hexagonal Socio-Technical Framework (Davis, Challenger, Jayewardene & Clegg, 2014). Given this research focussed on the social (behavioural) and technical elements important for organisational resilience, it presents a basis for multi-disciplinary work – something of great interest to the field of Occupational Psychology.

METHODOLOGY

Tools
A 15 minute, online questionnaire, was designed and administered through Qualtrics.*Conference delegates can complete some of the questionnaire (about their work, or their organisation) as part of an interactive exercise.

Measures
Performance comprised five sub-constructs: operational performance, financial efficiency, financial effectiveness, HR performance/wellbeing, and competitive advantage. Resilience comprised three reflective indicators (i.e. all three are needed to for resilience. 1. Proactive resilience comprised ‘Anticipate’, ‘Plan’, ‘Implement’ and ‘Learn’. 2. Reactive resilience contained ‘Monitor’ and ‘Respond’. 3. Communication was split into internal and external. ET comprised five novel sub-constructs: Operational, Economic, Regulatory, Customer, and Competitor. STSR comprised two sub-constructs - social and technical. The former existed of ‘People’, ‘Goals’, ‘Culture’, and the latter ‘Technology’, ‘Infrastructure’ and Processes and practices’. The items were based on extant items across the management and psychological literature (not referenced here due to space). The psychometric scales were measured using a 7 point Likert scale response – the most common one being (1 = Never, 7 = Always). To increase face validity, the items were based on inductive pilot research and were adapted from existing literature, which was selected under the following strict criteria: published in a 4* journal, and their convergent validity and reliability was high as evident by strong factor loadings and high Cronbach’s alpha or composite reliability scores. Furthermore, the questionnaire measured control variables – i.e. size (in terms of revenue and in terms of number of employees), role and level of person completing the questionnaire, industry and sector for example.

Procedure
The questionnaire was mailed out to senior contacts within public, private and third sector organisations across the UK, alongside a communication piece detailing the organisational benefits of looking at organisational resilience. A reminder was also sent out. The Qualtrics software offered an opt-out to those not wanting to participate. Data was stored under password protected files, and separately to any data which linked responses to particular companies, in order to ensure anonymity.

**RESULTS**

**OBJECTIVE 1**
240 responses were obtained. Missing values were not an issue in the psychometric scales as the online survey used forced responses, which was still ethical as participants could withdraw at any time. Reverse coded items were dealt with accordingly. The following stages of analysis is consistent with research in Organization Science, Academy of Management Journal and JOOP (there is not space to reference set criteria).

**Item Selection**
All items for ‘ET’, ‘Resilience’ and ‘STSR’ were entered into an Exploratory Factor Analysis (EFA) on SPSS, using Principal axis factoring extraction and Oblim rotation. Out of the expected 19 factors, 19 were uncovered (although plan and implement clustered onto one factor and culture split into two factors), explaining 73% of the variance. Furthermore, the EFA for ‘Performance’ revealed 6 out of the 5 constructs (competitive advantage split into two constructs), explaining 66% of the variance. Only 6 of the 118 items (across ET, Resilience, STSR and Performance) were removed as a result of poor loadings (<0.4).

**Item Analysis**
Only 7 out of the 112 items were removed due to inter-item correlations of less than 0.4 (after all, all items within a factor need to correlate with each other enough to demonstrate they represent the same factor) and inter-scale correlations of less than 0.5 (as an item needs to demonstrate it correlates with the overall construct it is intended to represent). After this item purification, all 24 constructs (5 for ET, 8 for resilience, 6 for STSR, and 5 for performance) had very good measures of internal consistency of \( \alpha = .717 - .956 \), with most above .8.

**Confirmatory Factor Analysis**
CFAs were conducted on LISREL, for the following four sub-sets of factors: ET, resilience, STSR and performance with the remaining 105 items. Grounds for item deletion were high standard errors for the items versus factor loadings and cross correlation with other items as indicative of issues for construct discriminant validity. Only an additional 17 from the 105 items were deleted. Table 1 demonstrates model fit after item purification (although the resilience sub-set did not need any items deleting). Table 1 shows the fit indices are well within the acceptable criteria. The full paper statistically compares the unmodified to modified models.

**Table 1: Assessment of Dimensionality of the Final Models**

<table>
<thead>
<tr>
<th>Latent Variables</th>
<th>ET</th>
<th>Resilience</th>
<th>STSR</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model Fit indices</strong></td>
<td>143.41(48)</td>
<td>1180.25(566)</td>
<td>629.7(260)</td>
<td>190.49(94)</td>
</tr>
<tr>
<td>Chi square (df)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>( p )</td>
<td>0.091</td>
<td>0.067</td>
<td>0.077</td>
<td>0.066</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.95</td>
</tr>
<tr>
<td>NNFI</td>
<td>0.94</td>
<td>0.93</td>
<td>0.93</td>
<td>0.96</td>
</tr>
<tr>
<td>CFI</td>
<td>0.052</td>
<td>0.044</td>
<td>0.052</td>
<td>0.052</td>
</tr>
<tr>
<td>SRMR</td>
<td></td>
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</tr>
</tbody>
</table>
It is unusual in social sciences to obtain good model fit without purification of items. However this was the case for the resilience latent variable, even with that sub-set model testing as many as 36 observed variables/items (originally 40 before the purification processes on SPSS above), and 8 first-order latent variables (Proactive: 1. Anticipate, 2. Plan, 3. Implement, 4. Learn; Reactive: 5. Monitor, 6. Respond; and communication: 7. Internal and 8. External).

Furthermore, the full paper reviews calculations of composite reliability, Average Variance Extracted and the Discriminant Validity for each first-order latent variable (for example ‘anticipate’. All latent variables are concluded to be reliable and valid.

**OBJECTIVE 2**
Further analyses, modelling the following relationships between the different constructs using structural equation modelling is in progress (see figure 1):

- Resilience as a positive, linear predictor of performance (as measured by each of the different facets of performance in turn – operational performance, financial efficiency, financial effectiveness, wellbeing/HR performance and competitor advantage).
- STSR and ET as separate, positive, linear moderators of the relationship between resilience and performance.

Additionally, these models will be tested at the sub-aggregate level, for example proactive resilience as a predictor of performance, and potentially at a level lower again, for example anticipate as a predictor of performance. The control variables will also play an important part in this structural equation modelling process.

(Note submission guidelines state POP submissions can be incomplete and results will be finished before November 2015).

**DISCUSSION**

**Objective 1**
The research has created reliable and valid measures of resilience, ET, STSR and performance. It is not surprising that ‘Plan’ and ‘Implement’ merged onto one factor – as collectively these items could represent innovation. Mamouni et al. (2014) reviewed a set of authors who conceptualise resilience as: being adaptive and changing into multiple states to better align with environmental changes - and after all, change demands innovation.

This research helps articulate to organisations what they need to do in order to be resilient. It depicts that organisations need to engineer capabilities, over and above work on other areas traditionally linked to dealing with risks, or improving performance, such as sustainability, business continuity and risk management, and lean engineering respectively. Future research should measure resilience alongside these other functions in order to demonstrate its discriminant validity – thus evidencing the role of resilience over and above these other practices. Furthermore, the tools from this research will be used for consultancy purposes to help organisations improve their resilience.

**Objective 2**
Hopefully a business case for resilience will be revealed in the remainder of the research (i.e. a positive relationship between resilience and improved performance), which in turn will help organisations strategically decide how much to invest in developing their resilience capability. Furthermore, the research will help us understand whether STSR or ET factors moderate the relationship between resilience and performance.

In addition, this research is also comparing subjective and objective performance data and using both in the modelling of the relationships. Furthermore, in the future, the relationship between resilience and performance is to be measured using a longitudinal design.
Emotional Labour: Machiavellians and Emotion Management Strategies within cultural context
Ludmila Musalova and Christeen George, University of Hertfordshire

Category: Wellbeing and Work

Introduction:

Emotions and their regulation are aspects, which one has to learn in order to acquire the appropriate techniques and consequently express the desired state of emotions. The emotions employees express at work will significantly deviate from those they genuinely feel. Organizations impose certain rules with regards to how to display certain emotion during interactions with customers (Wharton & Erickson, 1993), which leads to a conflict between actually felt and displayed emotions. Yet, one has little choice not to conform, as salary and actual jobs are at stakes.

As management of emotions in the workplace continue to increase in importance (MacDonald & Sirianni, 1996; Morris & Feldman, 1996; Pugliesi, 1999), so does the necessity of emotional labour and conflict of felt versus expressed emotions. Yet, not every individual will thrive in this context. Therefore, the question of interest is - what makes some succeed within emotional labour facet, while others are struggling to cope with the aftermath of effects.

The purpose of this study is to investigate the elements, which have shown to have impact upon the results of emotional labour, and consequently examine possible correlation between these elements. The aim of this study is to examine emotion management strategies (Deep and Surface acting) within intra-organizational setting while taking into account the influence of personality traits (High vs. Low Machiavellians) and cultural context (Individualistic vs. Collectivistic orientation). The focus rests upon ego-centric triad consisting of Individualistic Culture, Machiavellians and Surface Acting, and the impact of this triad upon employees’ well-being, career progress, job satisfaction and intention to resign. Furthermore, this study will investigate individual’s ability to adapt their cultural orientation linked to origin, to the orientation of their organizational culture. Therefore the focus is on the extent to which organizational values over-ride employees’ demographic cultural orientation and consequently their culture associated emotion management strategies and Machiavellian predispositions. In addition to which, individual’s need for social approval when reporting upon their use of Individualistic Orientation and Machiavellian
tendencies will be examined.

Consequently the following research questions are of interest:

RQ1- Do Individualistic Cultures encourage the raise of ego-centric tendencies - Machiavellian traits and the use of Surface Acting? Is there a positive relationship between the triadic elements?

RQ2- How does the triad impact upon employees’ well-being, job satisfaction, turnover intentions and career success?

RQ3 - Can organizational culture over-ride individual’s demographic culture values?

RQ4 – Does social attractiveness effect take place in anonymous self-reports when ego-centric qualities are of concern?

RQ5- Where do Emotion Management Strategies and Machiavellian tendencies stem from? Are upbringing practices or organizational cultures responsible for employees’ behaviour within intra-organizational setting?

The above mentioned research consists of 2 Phases:

Phase 1
Methodology
Sample and Procedures:
Participants in this study will be selected via the professional social site: “Linkedin”, using membership with professional bodies. The final sample will consists of 400 participants (including 106 participant from the pilot study), proportionately distributed within individualistic and collectivistic cultures (origin and upbringing), gender (50 males and 56 females) and position within the job hierarchy pyramid.

Participants will be asked to complete an online questionnaire, consisting of 45 items (including 4 items related to bio-data), divided into 8 sections, measuring their cultural orientation (Individualistic vs. Collectivistic Culture), emotion management strategy (Deep vs. Surface Acting), Machiavellians’ predisposition (High vs. Low Machiavellians), well-being, job satisfaction, intention to leave their current work place and career success (work position and salary). Additional bio-data, such as current employment status, cultural background, gender and age were also recorded.

Furthermore, small fraction of the original sample (15 participants) will be asked to provide their workplace e-mail/correspondence (2 samples per participant), for further analyses.

Measures:
There will be 2 measures within the main study, result of which will be compared. First measure will consist of an online questionnaire, which will obtain individual indices of individualistic culture orientation (Triandis et al.,1988,-Individualism Collectivism Instrument), surface acting tendencies (Brotheridge & Lee, 1998, Emotion Labour Scale), Machiavellian traits (Christie & Geist’s, 1970 MACH IV), well-being (Occupational Stress Indicator), job satisfaction (Cross,1973, Worker Opinion Survey), intention to leave (Jenkins,1993, Two Item Intention/Likelihood Scale) and career success (objective and subjective measures).

The second measure will be in the form of employee’s e-mail correspondence, which will have removed recipients’ names and replaced them with the individual’s job status. Consequently indices of Machiavellian tendencies and Individualistic Cultural Orientation will be measured, by focusing on self-centric expressions of Machiavellians and power distance dimension of cultural orientation.
Data Analyses:
The quantitative data obtained from the questionnaire will be analysed via AMOS, focusing on Structural Equation Modelling and SPSS looking at Pearson correlation, Hierarchical regression and Independent Sample T-Test. The qualitative data analyses, obtained from employees’ correspondence will be executed via linguistic inquiry. Consequently, comparative analyses of both sets of data, (self-report data vs. workplace correspondence) will be conducted.

Phase 2: Interviews –
Methodology
Sample & Procedures
The sample in this phase will consist of 15 participants, recruited via social site - Linkedin. The selection criteria will be identical to the previous 2 phases. Prior to proceeding to the audio recorded interview, participants will be asked to take a pen and paper Machiavellian test, which will assess their level of Machiavellian tendencies.

Measures:
There are two measures of this process. First measure is the pen and paper Machiavellian test, originating from Christie & Geist’s (1970) Mach-IV test, which was modified to fit the current work environment and reflect the intra-organizational relationship of co-workers. The second measure will consist of a semi-structured interview, composed of 10 items, lasting approximately 30 minutes.

Data Analyses:
The data obtained from the questionnaire will provide a level of Machiavellian tendencies, and therefore label individual as High or Low Machiavellian. The interview will be analysed via interpretative phenomenological analyses, assessing sources of Machiavellian tendencies and emotion management strategies.

Results & Discussion (Pilot study only)
Based upon Pearson’s correlation, Hierarchical Regression and Independent Sample T-Test, the following results were obtained.
Pearson’s correlations have resulted in three strong positive relationship: between individualistic cultures and surface acting (r = .746, n = 106, p < .0001); between individualistic cultures and High Machiavellians (r = .827, n = 106, p < .0005) and between High Machiavellians and surface acting (r = .846, n = 106, p < .0001), which ultimately demonstrates strong relationship between our ego-centric triadic elements. Consequently the results have supported our initial hypotheses and concluded that the triad will have negative effect upon employee’s well-being (r = -.803, n = 106, p < .0001), job related satisfaction (r = -.861, n = 106, p < .0001) and turnover intentions (r = .647, n = 106, p < .0001). Yet, the effect of this triad upon career success is positive (r = .399, n = 106, p < .0001).

The findings have demonstrated that there are significant cross cultural differences associated with the use of emotion management strategies. Furthermore, as demonstrated by our model, there is a triangular correlation between Individualistic Cultures, Machiavellian Tendencies and Surface Acting. Therefore, individualistic cultures seem to encourage ego-centric tendencies of individuals which lead to greater number of High Machiavellians, whom consequently tend to use surface acting as an emotion management strategy. Furthermore, surface acting leads to mostly negative effects within the workplace environment, in the emotional labour context. The negative effects are demonstrated with negative impact upon individual’s well-being, low job satisfaction and high turnover intentions. The only positive effect is that surface acting will lead to greater career success, as it requires less effort, and enables individuals to focus upon organizational politics leading to desired outcomes, and guarantees the top spot in the job hierarchy.

The research will address the following questions indicated within submission guideline as follows;
1. Main Psychological theories are structured around Emotional Labour/Emotion Management Theory, Emotional Dissonance and Need for Social Approval.

2. The proposal is linked with the conference theme, as it concerned with emotion management strategies, which serve as an adjusting tool to cope with the negative effects of emotional labour, impacting employee’s well-being and stakes at work.

3. Chosen Category is “Well-being and Work”, the paper fit for this category as it investigates the impact of emotions within intra-organizational setting in the facet of emotional labour. It also looks at the impact of specific emotion management strategies upon employees’ well-being at work.

4. The novel aspect of this research is the focus upon the ego-centric triad (Individualistic cultural orientation, Machiavellians and Surface acting), the correlation between these elements and their joint impact upon employee’s stakes.

5. Usefulness of this paper is associated with contribution to the knowledge, which ultimately could lead to development of intervention.

6. Public interest in this paper will be linked to the intriguing topic of Machiavellians and consequently the source of our Machiavellian tendencies and emotion management strategies.

7. Electronic copies of slides.

**T08 Standard Paper**

**Face validity and perceived fairness of a profiling mobile game**

Lara Montefiori and Maria Panagiotidi, Arctic Shores

**Category:** Psychological Assessment at Work

**Questions**

What are the main psychological theories, models and research underpinning your session?

A wide selection of models in cognitive and neuropsychology are replicated in the game levels and/or used to analyse the data. We are currently testing the overall viability of a new method of assessing personality, and this session focuses on face validity and the perception of fairness. The presentation will provide a brief overview of the reasons why ensuring that those two parameters are met is a crucial step that needs to be taken when pioneering a new approach, touching on a number of theories and paradigms to illustrate the argument.

How do you see your proposal linking with the main conference theme of Resilience in a challenging world?

The main aim of developing science-driven mobile games is to overcome the biases that affect traditional personality tests, which are predominantly found in the form of social desirability and lack of self-insight. Our games are crafted to buffer against both sources of error as they capture minute differences in game play that are beyond players’ deliberate control. The results of our study have clearly shown that players are conscious of the fact that games are less amenable to faking than personality surveys, and that are more likely to capture facets of their personality of which they may not be fully aware. These points, along with other interesting results, suggest that the new assessment method that we are proposing is a more resilient approach to the measurement of personality, in that it may overcome many of the weakness of more traditional tools. Resilience is increased from the perspective of the employer with less susceptibility to bias, but also from the candidate’s perspective, as the more objective, implicit and language-free nature of games provides a fairer opportunity to demonstrate one’s disposition.
Why is the submission appropriate for the particular category you have chosen?
The submission describes a new approach to personality assessment that was ideated with the aim of increasing resilience in its field.

What do you consider to be the most novel or innovative aspects of the ideas being presented?
The whole concept about measuring personality and cognitive abilities by means of a mobile game is thoroughly innovative. The issue that was brought to our attention from our clients the most was whether candidates would feel that being assessed through a mobile game was fair or not. We are demonstrating that, contrary to belief, players feel that mobile games are fair and accurate measures. This is important for the assessment industry as it shows that the candidate audience is ready for innovation, and that we can take a leap toward more engaging and sophisticated methods despite losing on fidelity.

Why do you think conference delegates will find the paper or session stimulating and useful?
We are planning to make the presentation as interactive as possible, and we will take advantage of interactivity of the session to convey a strong message to our audience. As soon as the session will start we will ask the audience to download our app (a teaser version will be developed just for the conference) and to answer a short series of two or three questions in which they rate themselves for some psychological characteristics with a voting mechanism. We will then proceed to the presentation – this will also allow for the app to be downloaded even on the slowest devices. The presentation will include some brief video clips of game play and of people playing the game. Once the presentation is finished, we will ask the audience to play the game – the teaser version will only include one level that can be played in two minutes, the level tests the same characteristics that were covered in the questions, that is cognitive control. We will then ask the same questions again, and will show people that their own self-ratings have changed after playing the level. We will then show a leader board with the game scores, and also a comparison of the two self-reported scores (averaged for the whole audience) and the scores obtained from the game. The idea is to show people that their self-reported assessment of their own cognitive abilities is higher than the objective measure, and that their assessment is improved by increasing their awareness on that specific characteristic.

What might the public find interesting about your paper or session?
We are showing that scientific rigor and fun can be increased in parallel, and we are backing our claims with objective data. We are merging two previously unrelated fields – namely mobile gaming and personality assessment – and we are pioneering a new approach that can hopefully improve the assessment of personality from the perspective of the employer and the candidate. Also, we hope to spark some new research and to show our colleagues that experimenting with new ideas is the basis of progress.

If any, what materials do you intend to make available to attendees and in what format (e.g., printed hand-outs, electronic copies of slides)?
We will make printed hand-outs and electronic copies of slides available, furthermore we will print cards with QR codes that our audience can take to download our games and to learn more about the science behind them. We will also have a couple of tablets for people to play.

T09 Short Paper
Can Psychological Capital development alleviate the impact of workplace bullying?
Melvyn Grimwood, University of Leicester
Category: Wellbeing and Work
Introduction and rationale for the research
Whilst workplace bullying has been in the spotlight of academic research over the last 20 years¹, findings highlight continued prevalence across organizations, countries and cultures², indicating that it is difficult to tackle the problem. However, the negative consequences of bullying on the psychological health of employee victims are well established³. In turn, poorer psychological health of employees is related to negative organizational outcomes, including lower employee job performance, commitment, job satisfaction, productivity, lower customer satisfaction and increased personnel costs⁴,⁵,⁶,⁷. In 2008 bullying was estimated to cost UK organizations £13.75bn annually⁸. Therefore, the cost of bullying to the employee in terms of psychological health has costs at the organizational level too. In the current challenging economic environment these costs may have grown, providing an additional incentive for organizations to look for ways to reduce them and become more competitive.

We performed a study investigating whether Psychological Capital (PsyCap), a developable psychological capacity or resource that provides employees with the propensity, readiness and motivation to tackle and overcome problems, reduces the impact of workplace bullying on both psychological health and self-perceptions of being bullied. An individual’s PsyCap is composed of four facets; Hope, Efficacy, Resilience and Optimism, often dubbed as an individual’s HERO. Hope relates to an individual’s drive to pursue goals and generate options to achieve them. Efficacy is confidence to commit to a goal. Resilience is the ability to bounce back from problems or cope with harder challenges after earlier successes. Optimism is about flexibly and realistically attributing success or failure to personal or other causes⁹.

Our expectation was that employees with higher levels of PsyCap would be able to work around and overcome exposure to bullying behaviour in the workplace, and consequently have improved psychological health and be less likely to describe themselves as bullied. The reason for investigating the role of PsyCap, and indeed why this research is valuable to employers and unions, is that PsyCap is developable and trainable, using short and relatively cheap interventions of 1 to 3 hours¹⁰,¹¹,¹². Both the psychological health and PsyCap of employees are positively related to positive organizational outcomes (e.g. performance, job satisfaction)¹³,¹⁴,¹⁵. If developing employee PsyCap reduces the negative impacts of bullying, particularly on psychological health, this could positively benefit the employee and subsequent organization outcomes.

Design & Methodology - How the research was performed and who participated

An online survey was created to record demographic information and use well-established questionnaires to measure employee PsyCap, psychological health, exposure to bullying behaviours and self-perceptions of being bullied. All measures used have been shown to be reliable and valid, and have significant previous use in organizations. The survey was distributed by e-mail and social media to contacts of the researcher. Contacts were encouraged to forward on the research to other friends, family and colleagues, with a sample of 200 participants targeted in the research. The survey took approximately 10-15 minutes to complete. At the end of the questionnaire, there was a debriefing sheet providing more information on the explicit aims of the research. Additionally, if the bullying content of the survey had caused participants distress, contact information for a bullying
charity and emotional support charity was provided. Participating employees totalled 197 over 3.5 months. Their average age was 39.62 (SD = 7.88 years), ranging from age 22 to 67. Table 1 shows the demographic characteristics of the participants.

Table 1: Characteristics of the study sample

<table>
<thead>
<tr>
<th>Gender</th>
<th>No of correspondents</th>
<th>% of sample</th>
</tr>
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<tbody>
<tr>
<td>Male</td>
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<td>50.3%</td>
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<tr>
<td>Female</td>
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<table>
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<tr>
<td>White</td>
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<td>86.8%</td>
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<tr>
<td>Asian or Asian British</td>
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<td>5.1%</td>
</tr>
<tr>
<td>Black or Black British</td>
<td>2</td>
<td>1.0%</td>
</tr>
<tr>
<td>Chinese</td>
<td>5</td>
<td>2.5%</td>
</tr>
<tr>
<td>Mixed</td>
<td>6</td>
<td>3.0%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1.5%</td>
</tr>
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</table>

<table>
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<tr>
<th>Sector</th>
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<td>Public</td>
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<tr>
<td>Voluntary or third sector</td>
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<td>7.1%</td>
</tr>
</tbody>
</table>

<table>
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<tr>
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<th>No of correspondents</th>
<th>% of sample</th>
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<td>Full time</td>
<td>165</td>
<td>83.8%</td>
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<tr>
<td>Part time</td>
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<td>16.2%</td>
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</table>

<table>
<thead>
<tr>
<th>Seniority</th>
<th>No of correspondents</th>
<th>% of sample</th>
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<tbody>
<tr>
<td>Employee</td>
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<td>30.5%</td>
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<tr>
<td>Junior Management</td>
<td>26</td>
<td>13.2%</td>
</tr>
<tr>
<td>Middle Management</td>
<td>68</td>
<td>34.5%</td>
</tr>
<tr>
<td>Senior Management</td>
<td>43</td>
<td>21.8%</td>
</tr>
</tbody>
</table>

Data Analysis

Correlation and regression analysis were used to analyse the relationships between measures of exposure to bullying behaviours, PsyCap, psychological health and self-perceptions of being bullied.

Results - The relationship between exposure to bullying and self-perceptions of being bullied and the role of PsyCap

The research showed 31% of participants experienced at least one bullying behaviour weekly during the last 6 months, and 17% experienced at least two bullying behaviours weekly during the same period. However, only 1% described themselves as bullied at least weekly and only 8% described themselves as bullied with any frequency. Therefore, more employees experience bullying behaviour than consider themselves bullied, which is a common finding in bullying research\(^\text{16}\). The analysis showed that employee PsyCap did not affect whether individuals that had experienced bullying behaviour subsequently perceived themselves as bullied. Therefore, an employee’s propensity, motivation and capacity to tackle and overcome problems did not appear to be a factor that influenced whether an employee said they were bullied.

Results - The relationship between exposure to bullying and psychological health and the role of PsyCap

The research found that employee exposure to bullying behaviour was related to poorer employee psychological health. Therefore, despite individuals saying they were not bullied, we found that exposure to bullying behaviour was still related to poorer psychological health. Additionally, an individual’s PsyCap was found to be negatively related to their exposure to bullying and to poorer psychological health. These findings were consistent with prior research\(^\text{17,18,19}\), and implied that those with a higher capacity to tackle and overcome difficulties, in other words those with higher PsyCap, experienced less bullying behaviours and had better psychological health.

\(^{16}\) Nielsen, Matthiesen & Einarsen (2010)
\(^{17}\) Nielsen & Einarsen (2012)
\(^{18}\) Laschinger & Grau (2012)
\(^{19}\) Avey, Luthans, Smith & Palmer (2010)
Figure 1 shows the relationship between exposure to bullying and poorer psychological health for different levels of an individual’s PsyCap. It shows that higher exposure to bullying behaviours predicts poorer employee psychological health, and that higher levels of employee PsyCap, whilst not changing the strength of the relationship between bullying and health, predict better psychological health at each level of bullying exposure.

![Figure 1: Psychological health scores at different levels of exposure to bullying behaviour and PsyCap](image)

The findings indicated that PsyCap mediates the relationship between exposure to bullying and psychological health. Because PsyCap is developable, the findings also indicate that if individuals are trained to improve their PsyCap, this can develop their capacities and motivation to overcome or work around bullying behaviour. This in turn could protect their psychological health and maintain or improve job performance and other organizational outcomes.

**Discussion - The implications of the findings for employees and organization**

The findings show that whilst employees may not say they are bullied, their psychological health is impacted by exposure to bullying behaviour. Prior research indicates that poorer employee psychological health is related to negative organizational outcomes, including lower employee job performance, commitment, job satisfaction, productivity, lower customer satisfaction and increased personnel costs. Organizational implementation of short, and therefore relatively cheap, PsyCap development interventions have been shown to yield significant PsyCap improvements. This in turn may help reduce the impact of bullying behaviour on psychological health, with knock on benefits for the organizational factors highlighted. PsyCap development in its own right has been shown to be related to positive organizational outcomes and yield a return on investment greater than 200%\(^{20}\), with higher returns potentially possible where the effects of bullying are also being overcome. Further research will be required to gather more evidence to support the proposal that PsyCap development is a protective intervention for bullied employees over time and yields broader organizational benefits. Participation of organizations in these investigations is encouraged. In the current challenging economic environment these potential benefits and increases in competitiveness may be more valuable than ever, with the opportunity for employers to recoup their share of the estimated £13.75bn UK annual costs of bullying\(^{21}\).

**Appendix – specific questions to address for submission**

1. What are the main psychological theories, models and research underpinning my session?
   
   Existing research highlighting the continued prevalence of workplace bullying as an issue, supporting the findings that bullying is related to psychological health and, in turn, organisational outcomes. Also, existing research examining relationships between PsyCap and psychological health and research supporting PsyCap as a developable capacity.

\(^{20}\) Luthans, Youssef & Avolio (2007)

\(^{21}\) Giga, Hoel & Lewis (2008)
2. **How do I see the proposal linking with the main conference theme of Resilience in a Challenging World?**
   The research provides some initial evidence that PsyCap development may assist in managing the impact of exposure to workplace bullying, arguably increasing resilience under challenging circumstances.

3. **Why is the submission appropriate for the particular session I have chosen?**
   It is suitable for a short session as it is a summary of my MSc Occupational Psychology research.

4. **What do you consider the most novel or innovative aspects of the ideas being presented?**
   I did not find much, if any, existing research that had explicitly examined the role of PsyCap in the relationships between bullying exposure and outcomes.

5. **Why do you think conference delegates will find the paper or session stimulating and useful?**
   That it may be possible to equip individuals with a developable capacity to help deal with bullying behaviour in the workplace. In addition to dealing with the issue at source, it provides a potential avenue to equip organisations to provide helpful interventions for victims and increase resilience.

6. **What might the public find interesting about your paper or session?** – see 5 above.

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**T10 Short Paper**

**Firefighters’ working shifts: Is it time to focus on wellbeing?**

**Rebecca Milner**, City University

**Category: Wellbeing and Work**

‘Shift-working’ involves a work-schedule designed to extend an organisation’s operational time from 8-hours, to up to 24-hours per day. Shift-work is carried out by between 15 and 20% of workers in industrialised countries across the world (Eurofound, 2012). Such shift schedules are utilised across a range of occupations and industries, including in protective service, health care, manufacturing and leisure (WHO, 2010). Fire fighters are required to work shifts to ensure that a best practice operational response is available 24-hours a day, with prevalence of shift-work being greatest among workers in the protective service industry (US Bureau of Labor Statistics, 2005). However, three key problems are commonly experienced by those working shifts, including disturbance of circadian rhythm and the sleep-wake cycle, physical and psychological ill-health, and social and domestic disruption (Barton, 1994).

Much research exists around the challenges faced by employees working shifts, and epidemiological studies have clearly demonstrated the detrimental effects of shift-work on health and wellbeing (Kantermann, Juda, Vetter & Roenneberg, 2010). However, Sallinen and Kecklund (2010) recently concluded that there is a lack of reliable evidence to suggest alternatives to those shift characteristics that disturb sleep and alertness, as there have been few published controlled intervention studies. How can we optimise shift-work schedules in order to minimise the detrimental effects? Kantermann et al. (2010) propose that tolerance and successful coping strategies at an individual-level are vital moving forwards.

However, it is concerning that practitioners conclude that the majority of employers see health and wellbeing as a private concern and responsibility of employees (Bevan, 2010). It is therefore important to demonstrate the associations between employee wellbeing and direct and indirect business outcomes. Presenteeism has been found to account for three times as much lost productivity as absenteeism has from work (Tscharnezki, 2008), businesses need to be convinced of the importance of employee wellbeing.

The potential benefits of introducing positive wellbeing initiatives in the workplace to prevent the negative consequences of shift-work are threefold, including not only healthier employees, but more productive businesses, and reduced health costs for the community. Given these potential outcomes it is vital for academic research to contribute to clarifying the association between employee wellbeing and business outcomes in shift-workers. To the author’s best knowledge, research has yet to take an in-depth look at such a relationship.

Further, while the importance of chronotype (being ones sleep-related habits and preferences) is receiving increased attention in chronobiology, shift-work studies are slow to demonstrate the benefits of the practical application of
such research (Kantermann et al., 2010). It is important to consider whether chronotype might moderate the relationship between shift-pattern and wellbeing and performance outcomes.

The Present Study
This study will seek to extend research into the impact of shift changeover time on shift-workers, to specifically focus on its influence on wellbeing outcomes. This is in order to update and extend the current literature, to work to understand the impact of this specific shift characteristic on sleep quality, which has been associated with both wellbeing and business outcomes (Tucker & Folkard, 2012).

This study also aims to address the above gaps in the literature, focusing on understanding the impact of one’s individual wellbeing on business outcomes, while incorporating a measure of chronotype. Should shift workers’ wellbeing significantly predict such business outcomes, this would suggest that it is appropriate for future research to focus on developing and assessing the effectiveness of wellbeing interventions, as opposed to continuing to search for an ‘optimal’ shift-working schedule, which has at present failed to be identified.

Design and Methodology
A day-level methodology is utilised in this study, with fire fighters’ completing surveys when working both morning-shifts and night-shifts. This was designed to capture short-term effects of shift-working. Participants are shift-working fire fighters, who are employees of Dubai Airports Fire Service (UAE), and Derbyshire Fire Service (UK). The rotating shift patterns employed between services are consistent, with the exception of shift change-over time, which varies by one hour. The following variables are being measured within this day-level design. Well-established instruments are being utilised throughout, which have been empirically proven to demonstrate high reliability and validity.

Sleep Quality
The circadian rhythm is a challenge for employees working shifts, with 70% of shiftworkers suffering from sleep disturbances (Purnell, Feyer & Herbison, 2002). Shift changeover time has been found to play a key role in such sleep disturbances, with even a one-hour difference being significantly detrimental to sleep duration and quality of those working shifts (Tucker, Smith, MacDonald & Folkard). This study will explore the impact of shift changeover times on such sleep disruption of firefighters, when working both morning- and night-shifts.

Burnout
Burnout, characterised by emotional exhaustion, depersonalisation and cynicism, and a perceived lack of personal accomplishment (Maslach, Jackson & Leiter, 1996) has been found to be significantly more likely to be experienced by those working shifts (Wisteborisut et al., 2014). This study will explore the moderating impact of sleep quality on the relationship between shift (morning vs. night) and experience of burnout symptoms at the individual, day-level.

Engagement
Contrastingly to burnout, work engagement refers to a positive state of involvement with ones work (Poulsen, Poulsen, Khan, Poulsen & Khan, 2011). Work engagement is defined as an affective-motivational state to overcome challenges and pursue important goals, characterised by feelings of vigour, enthusiasm, vitality and absorption (Schaufeli & Bakker, 2003).

A relationship has been established between sleep quality and job engagement. Barber, Grawitch and Munz (2012), for instance, found that those who manage their sleep duration and quality, ensuring consistency of rise and retire times, were more engaged in work. The authors attributed this relationship to poor sleep quality impairing the after-work recovery process, which was associated with the loss of self-regulatory resources required to be engaged in work tasks.
This study will explore the moderating impact of sleep quality on the relationship between shift-worked, and levels of work engagement, at the individual, day-level.

**Performance**
A breadth of empirical research concludes that productivity is compromised when working shifts, with performance being impaired most significantly between midnight and 7am (Brachet, David & Drechsler, 2012) and the lowest dip in efficiency occurring at approximately 3am (Folkard & Tucker, 2003).

When exploring the reasoning behind such decrease in performance and increase in risk when working shifts, a number of studies conclude that sleep deprivation and poor sleep quality are a substantial cause (VanDongen, Maislin, Mullington & Dinges, 2003).

Furthermore, research concludes that a high level of stress associated with symptoms of burnout leads to decreased performance across industries including healthcare, banking, manufacturing and wholesale distribution (Hamaguchi, Ida, Kato, Komoda, Mano et al., 2009).

This study will investigate whether sleep quality and burnout moderate the relationship between shift-worked, and in-role and extra-role performance, at the day level.

**Individual Differences**
It is proposed that one’s circadian type influences tolerance and adjustment to shift-working. Milia, Smith and Folkard (2005) find evidence to suggest that ‘vigorous’ and ‘flexible’ types show better circadian adjustment to rotating shift-work schedules, and experience less tiredness on waking.

This research looks to confirm such a relationship, and extend past findings to explore the moderating impact of circadian type on burnout, engagement and performance.

**Next Steps**
The results are in the process of being collated at present. The discussion will explore the relationships highlighted above, and seek to understand whether it might be beneficial to target future interventions at the individual wellbeing level, in order to support those working shifts, and to reduce the negative impacts experienced.

**Ethical Considerations**
It will not be possible to trace back individual responses to specific participants. This may be concerning should certain respondents report experiencing low sleep quality and burnout symptoms. Having considered this from an ethical standpoint, the researcher will produce an informative feedback report following the data analysis, to be returned to the rest rooms of the fire-stations involved in the study. This will advise employees to contact their human resource department should they be concerned about their wellbeing. The reports will also offer generic advice and recommendations around how to minimise the negative impacts of working shifts.

**Conference Related Considerations**
I feel this paper strongly resonates with the conference’s theme of Resilience in Challenging World. The consequences of shift-working are well researched, and it is important to consider what interventions and approaches might increase employee’s resilience to this, in a world where services are increasingly available 24-hours a day. This is vital both from the perspective of employee wellbeing, and business productivity outcomes.

I feel this submission resonates with the well-being and work category at a number of levels. It focuses on optimising employee wellbeing, taking a positive psychology perspective though considering the benefits such wellbeing can
bring not only to an individual, but also to an organisation. The submission also lightly touches on occupational health and the importance of work-life balance.

I believe that this topic will be accessible to all conference delegates, through the interest of those who might have relationships with those working shifts, or whom have simply enjoyed the benefits of the 24-hour society we now find ourselves in. Furthermore, I feel that key takeaway messages in relation to what we as business psychologists can do to prevent the negative impacts of shift-working will be well received.

The Job Demand-Resources Model (Demerouti et al., 2001), and Conservation of Resources theory (Hobfoll & Freedy, 1993) will be referred to throughout the session.

The materials I intend to make available to attendees will be confirmed following data analysis and drawing of conclusions.

References


T11 Award Session 1 - Academic Contribution to Practice Award

How can we put the ‘human’ back into human resource management?

David Guest, Kings College

David Guest is Professor of Organizational Psychology and Human Resource Management at King’s College, London. Prior to that he was professor and Head of the Department of Organizational Psychology as well as Pro-Vice Master at Birkbeck. He has researched and published extensively in human resource management, organizational performance and employee well-being; the role of the psychological contract; flexibility and employment contracts; partnership at work; and the changing nature of careers. He was director of the NIHR Patient Safety and Service Quality Research Centre. He is a past editor of JOOP and the BJIR and sits on several editorial boards. Over the years he has worked closely with a number of companies and public sector organisations including Shell, IBM, HSBC, the Hong Kong MTRC, the Cabinet Office, the police and a number of government departments. He has recently been voted by managers as one of the leading academic thinkers of the past decade.

T12 Petcha Kutchka

Leadership... On Fire: Effective leadership in a VUCA World (Sessions A & B)

Gene Johnson, Working Matters Ltd

Category: Research Design, Analytical Techniques and Practical Applications

This session introduces to the DOP the vibrant presentation format of Pecha Kucha, where each presenter covers 20 slides in 20 seconds each. The format is ON FIRE (as in, ‘firing on all cylinders’). The common theme of this session is resilient leadership in the face of a VUCA (volatile, uncertain, complex, and ambiguous) world. As the workplace becomes more complex and unpredictable, effective leadership is more resilient and flexible. A total of 10 presenters across two sessions (A & B) will offer their practitioner experiences on helping organisations and leaders cope in this new world.

T12a

Developing a leadership behavioural framework for public service organisations in changing times

Carla Holden, Penna

Category: Research Design, Analytical Techniques and Practical Applications

General Submission Questions Addressed (see bold text)

This session is offered as an ‘other session’ as it introduces a new presentation format to the DOP. A few years ago, our American equivalent, the Society for Industrial-Organisational Psychology (SIOP), created a presentation format IGNITE, using the Pecha Kucha presentation format; here a presenter covers 20 slides in 20 seconds each. ‘IGNITE’ reflects the fast-pace, meaning presenters must cover essential points in briefly and compellingly. This makes the session a much more enjoyable, entertaining audience experience.

Our intention is to introduce the format here, for it to become a regular presentation format. Our take on it is called ON FIRE, as in ‘firing on all cylinders.’ The specific theme of this inaugural session is Leadership Development in a VUCA World. This connects it to the main conference theme of ‘Resilience in a Challenging World.’ As the world of work becomes more VUCA-ish (volatile, uncertain, complex, and ambiguous), leaders must in turn adapt and become more flexible and resilient.

Our submission category is Leadership, Engagement, and Motivation. The leadership connection should be obvious.

Ten practitioners will each present on leadership-relevant work. Delegates will find the ideas presented interesting due to the diversity of leadership aspects presented succinctly. Audience or client groups include profit and not-for-profit executives and volunteer leaders. Contexts include the NHS, public sector, inter-governmental organisations, a global manufacturing firm, a Low Carbon Community workspace, and emergency sectors. Applications include development or identification of competency frameworks, assessment, individual and team development, and
coaching and mentoring. Based on the diversity of application, the relevant theories, models, and research also vary, such as distributed leadership, appreciative enquiry, strengths-based development, gender-based differences in leadership effectiveness, Kolb’s experiential learning, and employee empowerment. Revealing this diversity to a public audience reflects the wide practice arena and skill set of occupational psychologists. This diverse panoply of leadership work presented in this energetic, pithy manner is sure to stimulate our delegates.

The Presentations

The presentations will be organised into two sessions:

Session A: What Makes a Resilient Leader?

- Developing a leadership behavioural framework for public service organisations in changing times
- Leadership assessment for inter-governmental organisations in developing countries
- Building employee empowerment – One manager’s perspective
- Building positive leadership for resilience
- Are older women’s leadership skills ideal for today’s world?

Session B: Developing & Coaching Resilient Leaders

- Start with the end in mind: A practitioner’s perspective on demonstrating the positive impact of leadership development and coaching
- How to teach a salty old sea-dog some new tricks
- Developing SME Leadership – resilience and sustainable development
- Coaching resilience, situational awareness, leadership judgement and decision making
- NHS post-merger leadership team development

‘Other’ Session Questions Addressed

Novelty of this session format. As noted above, Pecha Kucha is an unknown format at DOP. Our aim is to create an energetic buzz in the room, something delegates talk about and want to see more of.

Learning Objectives. Our intention is to provide our occupational psychology audience with a sense of the diverse array of rigorous, theory-based practitioner work conducted. We hope our good practices will act as role models and inspirations for others wanting to work in the leadership arena.

Structure & Agenda. Each presenter delivers in succession. Common elements include organisational context, client group, problem or situation, application or intervention (including relevant theory), and lessons learned. Afterwards, each session’s panel interactively answer questions.

Preferred Duration/Time of Day. We would like one hour per session. This allows 6 minutes 40 seconds per presentation, some turnover time, and questions. We would prefer an a.m. Session A and a p.m. Session B, on the same day.

Minimum, optimum, and maximum audience size. SIOP’s experience is that these sessions are extremely popular, so are scheduled for the largest rooms.

Room Layout. Theatre-style seating is most suitable.
Hand-out materials. We are happy for presentations to be available electronically.
This presentation is about assessing leaders who will be effective in inter-governmental roles in complex and challenging developing countries. The expectations of leaders from the donor countries is to deliver sustainable programmes with evidence base of outcomes and impact. Host countries are generally politically unstable, often governed by military/dictatorial regimes and are debilitated by poor capacity and corruption. Leaders need to navigate the complexities, build and sustain partnerships, deal with multiple risks in any given time, and make decisions that can ultimately save human lives all - of which requires the capacity to be resilient.

Resilience is generally thought of as one’s ability to bounce back from a negative experience. Studies show resilience is positively correlated with a number of factors such as positive self-concept, communication and problem-solving skills, positive emotions, grit, self-esteem, hardness and self-efficacy. In addition to individual levels factors it is equally important to consider the leader’s capacity to create a culture where staff can develop resilience thereby enhancing the organisation’s capacity to make a difference at the sharp end.

I will cover the design of leadership assessment programmes to identify and evaluate competence suited to operate in this context. In implementing these programmes, a robust competency framework needs to be in place. Furthermore, psychometric tools are useful only as supportive data, as no one instrument is likely to provide the depth and breadth of evidence required.


T12c

Empowering employees - One manager’s perspective
Roxane Gervais, Independent Practitioner
Category: Research Design, Analytical Techniques and Practical Applications

The empowerment of employees is seen as a considerable benefit to organisations as it could improve on motivation, commitment and performance. Although leadership is not the only factor in empowering employees, it is an essential component in the process. However, there is no ‘one way’ to empower employees and this of course will depend on an individual’s approach and style of leadership. This presentation will focus on the competencies and characteristics of one manager in empowering staff within their work roles. It will outline the methods used to engage with staff; and the acknowledgement of those factors outside of the leader’s control, but focusing on what can be accomplished. It will finish by outlining other useful techniques to support employees’ empowerment.

The empowerment of employees is seen as a considerable benefit to organisations as it could improve on motivation, commitment and performance (Coleman, 1996). Although leadership is not the only factor in empowering employees (Boudrias, Gaudreau, Savoie & Morin, 2009), it is an essential component in the process (Boudrias et al., 2009). However, there is no ‘one way’ to empower employees and this of course will depend on an individual’s approach and style of leadership. This presentation will focus on the competencies and characteristics of one manager in empowering staff within their work roles. It will outline the methods used to engage with staff; and the acknowledgement of those factors outside of the leader’s control, but focusing on what can be accomplished. It will finish by outlining other useful techniques to support employees’ empowerment.


T12d

Building positive leadership for resilience
Eszt Molnar-Mills, Formium Development
Category: Research Design, Analytical Techniques and Practical Applications

Positively deviant organisations exhibit a range of virtuous behaviours, including a strength-focus. Identifying and applying individual and organisational strengths build psychological and social capital (Cameron, 2003). Virtuous behaviours positively correlate with organisational performance, including innovation, turnover and customer retention. Strength-based approaches promote resourcefulness and creativity, which leads to enhanced capability (Dutton & Glynn, 2007).

Far from ignoring negative events or crises, positively deviant organisations develop the resilience to effectively manage or mitigate negative circumstances and lead change.
Drawing on a range of research from the disciplines of positive psychology and positive organizational scholarship, this paper outlines the potential for enhanced performance and sustainable growth in challenging times through improved leadership.

A case study of leadership development will illustrate the opportunity for organisational leaders to build resilience by drawing a parallel between the Rocky Flats nuclear facility and a UK organisation.

**T12e**

Are older women’s leadership skills ideal for today’s world?

*Sarah Dale, Sarah Dale Consulting Ltd*

**Category:** Research Design, Analytical Techniques and Practical Applications

Ageing brings us face to face with the reality of VUCA alongside whatever might be happening in the wider world. Approaching fifty myself, I explored this by interviewing twenty women aged 60-85. I asked them ‘what matters?’ and ‘what doesn’t?’ as they look back. The women were from a wide range of backgrounds and professions. Subsequent to this work¹, a report from the CIPD on research carried out by PwC indicates that women in their fifties and beyond could be best placed to lead organisations through VUCA conditions². Many of the themes I found raised leadership issues which reflect the key strategist skills that PwC identified³. These skills are a re-framing mind; acting on the big and small picture; passionate detachment; creative use of power; positive use of language; and leading with vulnerability and courage. In my sample of women, they were applying these skills in both personal and professional contexts, often unconsciously.

I learned many lessons from these conversations, applicable in occupational and personal contexts, which resonate with other women (and men) who have read my findings. In this session, I would like to share those most relevant to building resilient leadership in our organisational roles.

¹ Published in *Bolder and Wiser* (2013) by Sarah Dale  
² *Women over 55 best suited to lead transformational change, finds PwC* Grace Lewis, CIPD, 18 May 2015  
³ *The hidden talent: 10 ways to identify and retain transformational leaders* PwC, Insights, May 2015

**T13** Careers Surgery Live

*David Carew, Chief Psychologist, Department for Work & Pensions*

CSL returns again this year after a successful run at recent conferences. Unlike other career events CSL is a fully participative and interactive experience hosted by David Carew, Registered Occupational Psychologist and Chief Psychologist at the UK’s largest central government department. Getting started in an occupational career can be a bewildering experience so this session gives you an opportunity to explore the issues that will influence your career decision making and the choices available. David will be joined by experienced and some less experienced occupational psychologists who are willing to share their insights and advice with the audience. In these challenging and changing times getting advice and support is a must for any aspiring occupational psychologist so a session not to be missed. For those already established in occupational careers this is an opportunity to consider your next move. So come along and bring your questions, friends and fellow colleagues for a session that will inspire you and help you make plans!

**T14** Short Paper

A qualitative evaluation of an intervention to reduce workplace bullying, undermining and build employee resilience

*Ethan Shapiro, Richard Owen and Neill Thompson, Northumbria University*

**Category:** Wellbeing and Work

The use of resilience tools has been increasingly recognised as beneficial in supporting employees during adversity (Kinman et al, 2014; Sherlock-Storey, Moss and Timson, 2013). Specific to workplace bullying, Illing et al (2013)
concluded that an important aspect in individual level interventions was empowering the individual employees through developing traits of resilience. Van Heugten (2013) also recommended incorporating resilience-based standpoints in intervention design as this might provide information to assist the development of improved interventions into workplace bullying. Resilience measures are likely to be most effective when directed at those with line management responsibilities. Mathison et al (2011) found leadership stress more strongly related to reported subordinate bullying than personality traits. Introducing interventions to increase resilience with a focus on those with management responsibilities could lead to a reduction in bullying behaviours that are generated from the perpetrators stress and frustration.

While resilience interventions are being increasingly adopted in practice, based on a strong conceptual foundation, there have not been rigorous evaluations as to their efficacy as a workplace bullying intervention or how they are experienced by participants.

Bullying is a complex problem that requires a broad-ranging, strategic approach that addresses issues at the organisational, team and individual levels. Perhaps due to this complexity, there are few published interventions that adopted a strategic, integrated approach to reducing workplace bullying and included a robust evaluation. Some recent reviews have measured the extent of existing evidence and provided recommendations (See Illing et al, 2013; Rayner & McIvor, 2008). However, there remains a need for studies focused on the evaluation of adopted interventions that have conceptually rigorous designs.

Approaches to evaluation
Evaluating interventions is challenging for organisations as the “varied scope and complexity of interventions and the complicated, changing, real-world conditions potentially affecting interventions and their outcomes” (Goldenhar et al, 2001, p.616). The recommendation that bullying interventions should be at the level of the organisations, rather than individual perpetrators (Vartia and Leka, 2011; Fevre et al., 2012), further challenges the process to address the problem.

Traditionally, quantitative approaches have been adopted and evaluations have focused on the outcome or effect of the intervention. Qualitative approaches allow further scope of understanding. The analysis of participants’ experiences of interventions offers insight into the constituent parts of the intervention processes, subjective evaluations of the intervention itself, important contextual factors and the possible impact of these on outcomes (Briner 1999). Randall, Cox and Griffiths (2007) in evaluating workplace stress interventions demonstrated that qualitative methodologies can offer insight

Method
The study examines the perceived efficacy and transferability of a resilience training based workplace bullying intervention. This involves the interviewing ‘stakeholders’ involved in the commissioning and delivery of the training and ‘trainees’ who have had direct experience of the training. The focus of data collection for these two groups offers the opportunity to consider process and contextual factors in the analysis, and some triangulation across the different groups of interviews.

A qualitative method design has been employed. ‘Trainees’ and ‘Stakeholders’ participate in semi-structured telephone interviews to understand the experiences of the training and factors that might contribute to the impact it has as an intervention.

Findings
The resilience strategy and intervention will be described and results from the semi-structured interviews and the process evaluation will be presented. In the evaluation findings a focus will be provided on the process and context factors that may influence the efficacy of the intervention.
Conclusions
This is an ongoing project. The findings will offer some explanation as to the limited impact of many existing approaches and consideration for practitioners who are considering the adoption of resilience interventions into challenging areas such as workplace bullying. The qualitative evaluation approach provides a greater insight into the underpinning dynamics of the intervention, which are beneficial for practitioners. Further implications for future research and practice development will be discussed.

Links to the conference theme
Linking to the conference theme ‘Resilience in a challenging world’ this paper is aims to offer insight into both the adoption of a novel intervention approach and employing in-depth analysis. Increasingly, Occupational Psychologists are faced with introducing evidence based interventions into organizations in turbulent conditions; not least the presence of workplace bullying and conflict. This paper offer insight into the challenges of adopting interventions in these challenging circumstances, and will be relevant to practitioners facing similar settings. It is hoped that this paper reflects the current challenges of Occupational Psychology, and in doing so will broaden perspectives of intervention evaluation, use of resilience interventions in addressing workplace bullying, highlighting some of skills required to be resilience in the current organizational landscape.

T15 Short Paper
The role of personality and motivation in entrepreneurial resilience
Catherine Groves, Liverpool John Moores University
Category: Psychological Assessment at Work

Introduction
This study is focused on the personality and motivation of entrepreneurs. It is concerned with their individual psychological make-up, the impact that this has on their resilience and the consequent success or otherwise of their businesses. While value of the average entrepreneur to the UK business economy is around £130,000 annually (CEBR, 2012), rates of new business failure are extremely high (News, 2013), a phenomenon that is damaging to both individuals and the economy. Reasons for business failure are myriad and include the human capital factors of individual entrepreneurs (Wenneberg et al., 2010). With its focus on the individual psychological factors associated with resilience in entrepreneurs, the paper links into the conference theme of “Resilience in a Challenging World”.

The term entrepreneur is open to multiple interpretations, with the development of a single agreed definition remaining elusive. A definition is important to provide a basis of understanding for the current study. A recent meta-analysis embraced a definition of the entrepreneur that was ‘consistent with previous literature’ (Zhao et al., 2010:390), that is, an entrepreneur as ‘the founder, owner and manager of a small business’ (ibid, 2010:383). While this could be seen as quite a narrow definition and one relating only to their role, it should be acknowledged that the current study is about the person themselves and not only about the role that they perform.

The role of the individual in entrepreneurship is well established in the psychological literature although conventions for the measurement of personality and motivation are fragmented. The research on personality in entrepreneurs is dominated by the Big Five which forms an overarching theoretical model of personality. The lack of a similar overarching model for motivation has led to a more fragmented body of literature for motivation and the entrepreneur. This body of work is further hampered by the range of instruments used, their often poor psychometric properties, and their lack of situational validity. The construct of motivation in entrepreneurs is a particularly difficult one as the literature is principally focussed on the setting of broad motivational goals (Bipp et al., 2008), rather than exploring motivation within a wider framework which may better illuminate the differences between entrepreneurs and other occupational groups.
In addition to studies on the personality and motivation of entrepreneurs is the construct of Person-Environment (PE) fit which posits that individuals exhibit greater satisfaction and adjust most easily to jobs when there is congruence between their career and their personality. Empirical evidence generally supports a relationship between personality and fit and the construct has been taken forward into the field of entrepreneurial research through Holland’s (1987) typology and the Attraction-Selection-Attrition (ASA) theory (Schneider, 1987). Even greater homogeneity of individual traits has been found within occupations than within organisations, a finding that is pertinent to the current study. The emerging literature on resilience in entrepreneurs has yet to explore the construct of fit in this occupational group, and its contribution to the resilience of individual entrepreneurs.

Much of the literature on entrepreneurs is concerned with the intention of the individual to establish a business (EI) rather than their entrepreneurial resilience. This focus, combined with the inherent challenges associated with attracting a sufficiently large sample of practicing entrepreneurs, has resulted in a predominance of studies on nascent entrepreneurs, often on a student population. Thus, the recruitment for the current study, of a participant group comprising only entrepreneurs allows the traits of this elusive group to be explored in the context of measures of entrepreneurial resilience.

Indications of resilience of the entrepreneur can be inferred from measures of business success such as turnover and number of employees and, indeed, these are measured and considered as proxies of entrepreneurial success. However, the most concrete measure of entrepreneurial success, and therefore entrepreneurial resilience, arguably relates to whether a business is still trading after five years and it is this measure that is adopted in the current study (Storey and Wynarczyk, 1996).

While this study is primarily concerned with personality and motivation in entrepreneurs, the premise is that these differences are implicated in their move into entrepreneurship and their relative resilience. The study tests out the ASA model through the role of personality and motivation in individual entrepreneurs, and the resilience of the businesses that they establish and run. Thus, the primary research question concerns: how the inter- and intra-group differences for the study entrepreneurs can be explained through the attraction-selection-attrition model.

In seeking to identify the personality and motivation traits associated with resilient individuals identifying themselves as entrepreneurs, the research objectives formulated were:

1) To explore and analyse the relevant personality traits of a variety of self-identified entrepreneurs developing and running their own businesses
2) To explore and analyse the relevant motivational traits of a variety of self-identified entrepreneurs developing and running their own businesses
3) To determine the relationships between personality, motivation and resilience in work, as defined by length of time trading

In its focus on the use of psychometric tools to measure individual differences, the paper meets the requirements for inclusion in the Psychological Assessment at Work category.

**Design including methodology, data analysis and results**

The philosophical stance of the study was congruent with the conventions of psychological research into entrepreneurship and determined by the purpose of the study. In its approach of hypothesis testing, the study adopted a positivist paradigm. Two commercially available psychometric tools were used to explore the personality and motivation differences apparent in resilient entrepreneurs.

Inter- and intra-group variations between the study entrepreneurs and the existing norm groups were examined using a between-group design. In keeping with the epistemological framework, quantitative methods were used to gather data through commercially available psychometric questionnaires with strong psychometric properties.
One hundred and one entrepreneurs were recruited for through a process of presentations and networking. This pragmatic approach represented criterion sampling where individuals were targeted through membership bodies such as the Chamber of Commerce where it was felt that the population of entrepreneurs might be more ‘dense’ than elsewhere. This approach has precedence in the literature.

In order to answer the research objectives, psychometric data for both personality and motivation were used to test a number of null hypotheses. T tests were primarily used to test both for differences within the entrepreneurs by individual and company variables. One-way ANOVAs were combined with post-hoc tests to test for within-group differences and correlations to identify patterns within the profiles. All tests were used to determine significance at the 0.05 level.

The study found significant differences in personality and motivation associated with resilient entrepreneurs as defined by length of time trading. Those who had been trading for five years or more were significantly more influencing and communicative in their personality than were those trading for less than five years. In their motivation traits, the resilient entrepreneurs were more motivated by authority and supporting others and less by acquisition and security, than were those who had been trading for less than five years.

**Discussion with conclusions**

The findings of the study broadly support the consensus in the literature that ‘entrepreneurs’ are different in both their personality and motivation characteristics to the UK business population, in support of ASA theory. At a business level, considering turnover and number of employees in the businesses set up and run by the entrepreneurs, while there was some support for the existing literature, findings on conscientiousness were in direct opposition to the literature of the Big Five and entrepreneurship. This provides support for the discussion on the need to consider the composite sub-traits in addition to the primary one when exploring individual differences in this group. Findings on business factors and motivation were supportive of earlier literature. The study addressed a gap in the literature that theorised motivation as a mediator of the personality-entrepreneurial behaviour relationship. The findings of the study provided some support for trends in the literature with some clear findings about the personality and motivation of individuals who are resilient entrepreneurs as defined by length of time trading. Difficulties again arose in the consideration of the Big Five trait of conscientiousness where there was a lack of any contribution at the primary trait level. The previous discussions on this factor are also applicable here. In addition, the signifier of entrepreneurial resilience chosen in the current study is likely to have been influential.

Entrepreneurship is a UK government priority with support, training and funding provided for start-ups (HM Government, 2015). Entrepreneurship is viewed as an inherently and increasingly risky venture compared with employment and business failure rates are predicted to rise by 10% in the years 2013-15 (News, 2013). Better equipping and supporting of those who set up in business is likely to have a positive effect on individual resilience and venture survival rates, and a consequently positive effect on the UK economy. The current study makes a number of contributions to knowledge in the fields of psychology and business, specifically entrepreneurship. The author is unaware of any other studies that use commercially available psychometric tools to measure the individual characteristics of entrepreneurs in this way before. The combination of the personality and motivation psychometrics are particularly innovative as they have not been combined previously in a study of entrepreneurs.

The sample size of the study also represents a significant contribution. The sample size was larger than all but one of the studies considered in a recent meta-analysis (Zhao et al., 2010). In every case, the number of managers represented by the UK norm group for the study tools was much larger in the current study than in those represented in the meta-analysis.
In its departure from convention in its data collection instruments, the study has been able to point to the utility of some commercially available psychometric tools as an indicator of attraction to, and selection of, entrepreneurship as a career choice, as well as an indicator of likely resilience in this occupation. The conference delegates may be interested in the use of these tools to not only identify those individuals more likely to want to become entrepreneurs, but also those who are more likely to be able to withstand attrition and succeed in business. These findings are also of clear value to educators, careers advisors and business support organisations. Benefits to this include the ability to identify areas where individuals with a good business idea and a strong desire to be an entrepreneur, might need additional support, for example with communication or techniques for influencing others. This could either be provided directly to the individual through the allocation of a suitable business mentor or perhaps may guide the selection of business partners which together are more likely to succeed where individually they may not have. The adoption of this method could result in the ability to provide tailored support to the individual and avoid the costly and wasteful ‘one-size-fits-all’ approach often adopted.


NEWS, I. 2013. Business failure rates to rise 10% over next 2 years. *Insolvency News*.


**T16 Short Paper**

**Juggling work and non-work: Introducing a competency-based diary intervention**

Caroline Fortunski, IBM and Almuth McDowall, Birkbeck University

**Category: Wellbeing and Work**

With increasingly demanding working conditions, it is within the interest of individuals to develop skills to establish a satisfactory work-life balance and handle obstacles in their day-to-day lives successfully. While the evidence for the effectiveness of work-life interventions on the organisational level is mixed, a novel approach to improve work-life balance is to foster learning and change on the individual level. Recent research emphasizes that person-centred approaches are more effective in enhancing an improved work-life balance (Kossek, Ruderman, Braddy & Hannum, 2012), that is, the perceived consistency between individuals’ values and their satisfaction and effectiveness in the work and non-work domains (Greenhaus & Allen, 2011).

Our approach is highly tailored to the individual, and others may be inspired to try improving their work-life balance with it due to its practical and simple implementation. Our study contributes novel aspects to the work-non-work research in several ways. We investigate whether our person-centred intervention, based on supporting individuals in developing relevant work-life balance management competencies, is effective in improving individuals’ work-life balance. We chose a diary intervention to facilitate reflective learning in individuals (Plowman, 2010) and explore experiences of improving work-life balance. To our best knowledge, qualitative diaries have not yet been used as an
intervention tool in the work-family research. We further explore individual difference variables on balance. Finally, we use a sample of young professionals, a group associated with experiences of higher work-family conflict (Sturges, 2008) less studied in the work-family interface.

Theoretical constructs underpinning our research are relevant for evaluating our intervention. Past research has demonstrated that higher job involvement and stress enhance work-family conflict (e.g. Hill, 2005) demands in the work (non-work) domain interfere with the non-work domain, inhibiting effectiveness in both domains (Greenhaus & Beutell, 1985). The negative consequences of increased work-family conflict impact organisations, e.g. with increased turnover rates (Kossek & Ozeki, 1999), and individuals, e.g. with decreased physical and mental health (Carlson & Kacmar, 2000). Additionally, individuals benefit from positive experiences and involvement in multiple roles as they gain resources allowing for higher individual effectiveness and personal growth. The highest level of mutually beneficial influences of the work and non-work domains is facilitation and occurs when experiences of positive spillover (e.g. positive moods) and enrichment (higher performance due to successful skills transfer) lead to improved overall functioning in the other domain (Frone, 2003). Outcomes of enhanced facilitation for individuals can be higher job and life satisfaction and higher performance in the work and non-work domains (Choi & Kim, 2012).

Developing work-life balance management competencies is thus essential for individuals to handle day-to-day challenges effectively. Our intervention is based on McDowall and Lindsay's (2013) competency framework, illustrated in Figure 1. We believe these competencies will support individuals in achieving higher effectiveness by reducing conflict and enhancing facilitation. Our hypotheses are that individuals who develop their work-life balance self-management competencies experience reduced levels of work-family conflict and higher levels of work-family facilitation after the intervention period, with work-family conflict levels decreasing consistently during the intervention.

Recent research proposes that the work-family interface is only fully understood considering individual differences in states and dispositions (Eby, Casper, Lockwood, Bordeaux & Brinley, 2005). Work-family conflict and facilitation are associated with an individual's self-efficacy to manage work-family conflict (Cinamon, 2006), boundary control and work (family) identity centrality (Kossek et al., 2012), and positive or negative affect (Allen et al., 2012). We aim to explore the roles of individual differences variables in the work-family interface.

Method
We used a mixed-method approach to evaluate the intervention. The design of the study, including a risk assessment for participants, was fully reviewed and approved by the University of Surrey's Faculty of Arts and Human Science's Ethics Committee. We recruited 41 full-time working young professionals, aged between 22 and 32 years ($M = 27.56, SD = 2.43$), employed as teachers, consultants, or engineers, for a diary or control group condition. Receiving an online-based introduction to the competency framework, the intervention group volunteered to employ competencies they considered suitable to improve their individual work-life balance and write a weekly diary entry answering guiding questions about their work-life management and learning over four weeks. This was to...
encourage reflective learning on individuals’ employment of the competencies and encourage positive change in individuals (Plowman, 2010). Further, the intervention group completed a daily measure of work-family conflict (Carlson, Kacmar & Williams, 2000) in the second and third intervention week, and three fifteen-minute questionnaires including measures directly related with work-life balance or which can affect it, to evaluate the intervention’s effectiveness: work-family conflict (Carlson et al., 2000), work-family facilitation (Grzywacz & Marks, 2000), self-efficacy to reduce work-family conflict (Cinamon, 2006), perceived boundary management and work and family identity centrality (Kossek et al., 2012), and positive and negative affect (Watson, Clark & Tellegen, 1988), as well as demographic control variables in the first questionnaire. To adapt to our sample, references to “family” were substituted by “non-work” in all scales. The control group completed the three fifteen-minute questionnaires.

Results

Results of the daily work-family conflict measure exposed a weekly pattern of “balance” in work-family conflict with higher levels of conflict on working days and lower levels of conflict during non-working days, as illustrated in Figure 2. These results also show an overall descending trend in work-family conflict. Using separate MANCOVAs, we found no changes in work-life balance related measures of work-family conflict, work-family facilitation and perceived boundary management compared with the control group. However, the intervention group was significantly lower in self-efficacy before the intervention, and this difference was non-significant at the end of the intervention. The intervention group also increased significantly in their work identity centrality over the intervention period compared to the control group as depicted in Figure 3, indicating a change in a trait-based measure.

Template analysis of the qualitative diary data revealed that participants in the diary group successfully improved their work-life balance through employing personally relevant competencies and that this elicited work-family facilitation with outcomes such as feeling successful and balanced. Participants also reported experiences of work-family conflict when they were unable to employ work-life management competencies, which made them feel stressed, exhausted and dissatisfied. Reflections about work-life management stressed the importance of actively managing work-life balance and recognising how personal priorities and attitudes, such as young professionals’ high investment into work to establish themselves in their professions, affect work-life balance. Novel aspects relating to work-life balance are cognitive reappraisals of anticipated times of high conflict and stress as less demanding when work-life management competencies are employed, leading to feelings of satisfaction, effectiveness, and pride. Further, psychological acceptance of unchanging difficulties in one’s profession or personal situation was reported to link to reduced experiences of conflict.

Discussion

The evidence for the success of our intervention is mixed. There were no changes in work-life balance related measures. This may be due to the short intervention period, the job-unspecific competency framework to be
generally suitable to the different job roles of participants, or because individual learning was not supervised or supported further, e.g. through coaching which competencies would be most relevant for an individual to develop. However, the initial difference in self-efficacy between the intervention and control groups became non-significant, showing that the intervention group increased in self-efficacy. This change links to findings from the diaries that individuals effectively employed relevant competencies and achieved higher effectiveness in their work and non-work roles. The decrease in work-family conflict levels is another indicator of the intervention’s effectiveness.

Surprisingly, the intervention group increased in work identity centrality during the intervention. This may be linked to reflections leading to increased self-awareness about personal priorities of work and non-work activities. Further, becoming aware of positive experiences at work through reflection may have affected the increase in work identity centrality. While this finding demonstrates the relevance of individual differences in the work-life interface, it shows that an improved work-life balance may be achieved through personal reflection on and adjustments aligned to individual priorities on work and non-work activities.

The findings of this study underline that our current understanding of work-life balance is limited as the effects of individual differences such as work identity centrality or coping through acceptance and cognitive reappraisals are yet to be explored. Further, the weekly pattern of “balance” in work-family conflict emphasizes the dynamics in the work-life interface and questions whether current psychological constructs relating to work-life balance need to be redefined or measured in a way that accounts for fluctuations.

This study yields practical implications for successful work-life balance intervention by showing partial evidence for the success of the presented person-centred intervention based on reflective learning. Thus, individual-level interventions may be effective in enhancing a more satisfactory work-life balance through encouraging changes in attitudes towards work and personal priorities compared to interventions on the organisational level. Ideally, interventions on the organisational level could complement person-centred interventions to help lower experiences of conflict on working days.

References


**T17 Standard Paper**

**Competency validation: getting the right data**

**Rob Bailey and John Hackston**, OPP Ltd

**Category: Psychological Assessment at Work**

**Introduction**

Evidence based practice is at the forefront of occupational psychology; but gathering the right evidence can be challenging. This paper looks at a variety of issues encountered by the authors when attempting to demonstrate the validity of competency assessment: specifically assessing competencies via personality and aptitude measures. It explores several stages of research and development, including:

1. The creation of a competency model, with 20 competencies designed for general-purpose use across a range of different jobs.
2. Creating links from the 16PF personality questionnaire and different types of aptitude to the competency model, based on pre-existing research studies.
3. Collecting self-reported demographic data, to serve as criteria (such as occupational role, number of promotions, hobbies).
4. Collecting self-reported personality competency data and personality data, then collecting manager ratings of competency.

The aim of these various research projects, which spanned several years, has been to create equations that use personality and aptitude data to calculate a score showing the likely fit between a candidate’s traits and the demands of each competency. Additional aims have then been to test these equations and refine them on the basis of evidence. Refinements have included:

1. increasing the validity
2. decreasing gender bias
3. establishing the right balance of cognitive aptitude vs. personality data in each equation.

The aim of this presentation is to share experience with practitioners and test publishers, to help inform their own practice. We will examine the following issues, which are elaborated in more detail:
Stage 1: Creation of a competency model
The session will start with a brief explanation of how the authors created a generic competency model that was designed to be used for a variety of different roles.

The selection of the competencies was guided by qualitative analysis by looking at client models we have created, our company’s own competencies, models in literature and published competitor models. We also consulted research, such as Bristow (2001) cited in Testing People at Work, (Smith and Smith, 2005) who listed the competencies most commonly used by UK companies. The model comprises 20 competencies, written in plain English to make the model as generalisable as possible over different roles and companies.

Stage 2: Linking the competency model to psychometric assessments
The aim was to use personality assessments (the 16PF questionnaire) and aptitude tests (at that time unconfirmed) to assess an individual’s likely fit between their natural style and the demands of each competency.

For each competency, a scoring equation was created on the basis of:

- Previous research – we used 7 different studies linking the 16PF to competency assessments
- Expert judgement – we checked for conflicting results in the 7 studies and checked for over use of particular traits across the model.

As an example, the competency of Cooperative Teamwork was created from an equal measure of the following traits: not being Self-reliant, Warmth, being trusting rather than Vigilant, being Socially Bold, and not showing a lot of Tension. No aptitude tests were deemed to be relevant for this competency.

Stage 3: Collecting self-reported demographic information
When restandardising the UK English 16PF in 2011, we asked the 1,212 individuals who completed the questionnaire to also report their hobbies, job types, working preferences, use of the telephone, internet, comfort with public speaking, and many more demographic characteristics. The aim was to gather information that could easily be reported, but was open to very little interpretation or personal bias in reporting. In this study (and those that follow), cognitive ability was estimated by 16PF’s Reasoning scale.

Stage 4: Collecting validity study data
We collected competency-based validity data from 3 UK and 2 US clients of ours. In the UK, we were able to ask the clients to compete behaviourally anchored rating scales designed for the competencies. The UK ratings included: manager ratings of competencies, self-ratings of competencies, self-completion of the 16PF personality questionnaire. The US data additionally contained some performance data relating to measureable output (not just subjective manager ratings).

Stage 5: Iterative improvements and refinements of the equations
Early analysis of the competency data from Stage 4 (the validity studies) gave us cause for caution. Some the 16PF competency equations and manager ratings of competencies could be seen to correlate significantly; however, there were frequent implications of a ‘halo effect’ with positive ratings on all competencies, or, alternatively only a restricted number of traits predicting all competencies.

Although we had previously hoped that manager ratings were to be the most ‘objective’ of all our data, this appeared to have been an incorrect assumption.

As a result, we turned to the self-reported demographic data. The first step was to make a prediction of which of the demographic categories would correlate with which competencies.

For example, for Analytical Problem Solving, we predicted that the following demographic categories would be relevant:

- highest level of educational achievement
• interest in scientific or technical hobbies
• a higher preference for the Scientific category in the Holland’s theme model of career interests
• a job in scientific roles/industries.

Each demographic category was assigned a number of points; then correlations, regressions and alpha coefficients were calculated to check for the cohesiveness of the different categories. Once outlying categories were excluded, a total criterion score for each competency was created. These were then correlated with the personality and cognitive ability data for our standardisation sample.

Through an iterative use of regression analyses, the equations were modified to produce refined equations. As an example, the competency of Cooperative Teamwork was refined from the above configuration by deleting the trait of Tension, as it did not appear to be supported by the data.

The resulting equations all produced stronger correlations between the competencies and the criteria. As well as the increase in validity, the new equations also reduced the gender bias (the earlier equations had shown greater bias towards male applicants).

For a representative example, the new Resilience equation showed a .21 correlation on average across the validity studies (between manager ratings and the equations), whereas the old one only a .13 correlation. The correlation with the demographic data was .265. The correlations from the validity study data were far more variable, going from -.34 to +.41; however, the demographic data were more impressive, ranging from .236 to .562. Inspection of the patterns in the data suggests that manager ratings were problematic, largely due to the halo effect.

To test these refined equations, the old competency equations and the refined equations were run for the first time against the data from our UK client validation samples. The majority of competencies showed increased validity with the new equations.

The competencies showing a decrease in validity were adjusted until a compromise could be struck between the validity shown for the self-reported demographic data and the UK client samples. Then, to test the newest refinements, the new and old equations were tested for the first time against the US samples, confirming that the newer equations were superior. This iterative approach ensured that the equations were objectively tested afresh each time, rather than simply following a self-reinforcing and less scientific approach.

Finally, the new equations were tested on applicant data to assess the gender bias – the bias dropped from the previously practically small, but significant bias against women, to an overall non-significant difference.

Conclusion
The refinement and improvement of the competency equations was dependent on having a complementary use of several different methods: any one method would have had a less satisfactory outcome.

Although hard metrics (e.g. sales performance, call handling efficiency, etc) are one of the most objective measures of performance for a validity study, these are often hard to obtain from clients. In the past, we would have considered manager ratings to be the next best thing; this work suggests that this may not always be the case and that more imaginative sources of data might be easier to obtain and more useful.

Interactive elements of this presentation
We would like to invite interaction through two structured and unstructured periods: 1. to invite hypothesis generation about which demographic characteristics would correlate with which competencies (from a selection – not all of them), 2. to invite debate about successful/unsuccessful methods of validation that audience members have tried.

How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?
The link is tangential – Resilience is one of our competencies, which is now better assessed.

What do you consider to be the most novel or innovative aspects of the ideas being presented?
The innovative aspects for us were to challenge our assumptions about the superiority of manager ratings. We found that using self-reported demographics gave us reliable data because it is less open to distortion than other forms of self-report that might require more interpretation or result in more bias.

Why do you think conference delegates will find the paper or session stimulating and useful?
The work is relevant to many consultants who wish to show the effectiveness of their work.

What might the public find interesting about your paper or session?
The public would (hopefully) welcome the message that as workplace measures are made less biased against women, they also become more effective assessments.

Ethical considerations
All data has been sourced from individuals who have consented to their information being used for research purposes; analysis has been done at a group level once data has been made anonymous, meaning that individuals cannot be identified in the dataset or the final results.

Conflict of interest
The authors work for the owner of the 16PF questionnaire; however, the data to be presented has not been knowingly distorted in order to paint a positive view of the questionnaire – results are presented openly, so that others may view the data and question any interpretation of them.

T18 Short Paper
A qualitative study of workplace bullying in Ghana’s oil and gas industry
Stephen Kodjo Kumako and Stavroula Leka, Division of Psychiatry and Applied Psychology, School of Medicine, University of Nottingham and Aditya Jain, Nottingham University Business School

Category: Wellbeing and Work
International Labour Organization (ILO) statistics show that occupational disease is the most prevalent danger faced by employees accounting for over 2 million deaths yearly (ILO, 2011). The World Health Organization definition of health as not only the absence of disease but a state of complete physical, mental and social well-being (WHO, 1986) has been largely ignored in developing countries such as Ghana. The focus of Occupational Health and Safety initiatives has traditionally been on physical, biological and chemical hazards, and injuries at work while work organisation and management, or the ‘psychosocial work environment’, are still largely neglected and their causes and consequences still insufficiently understood and researched in developing economies like Ghana (Kortum and Leka, 2014).

Developing countries including Ghana have done very little in terms of occupational health and safety (OHS) in general and the psychosocial work environment in particular owing to lack of resources, political will and monitoring and enforcement of existing laws respectively (Kortum & Leka, 2014). According to Amponsah-Tawiah (2010), lack of a comprehensive OHS policy, poor infrastructure and funding, insufficient number of qualified OHS practitioners and the general lack of adequate information hinder the provision of effective enforcement and inspection services in most African countries. For example, of over 70 OHS-related ILO Conventions, Ghana is a signatory to only 10 which do not include Conventions 155, 161, 170 and 174 that are core recommendations for OHS, while key legislation in the country is inadequate in addressing PR faced by employees and lacks a preventive approach.

Since the discovery of oil and gas in commercial quantities in Ghana in 2007, there has been an influx of companies in this sector into the country. The growing number of multi-national companies in the oil and gas sector has
changed the nature of work for the Ghanaian worker consistent with how off-shore work operates. Teleworking and increased use of information and communication technology (ICT) in the workplace, outsourcing, subcontracting, shift working, self-regulated work and teamwork are among some of the changes brought about by globalization in off-shore upstream operations.

The past 20 years has seen an increase in research into bullying and harassment at work. This interest in the subject area has focussed on behaviours not of a sexual and racial orientation but rather of a non-physical nature.

In a comprehensive review of workplace bullying and harassment, Einarsen, Hoel, Zapf and Cooper (2011) offer a definition of workplace bullying.

‘Bullying at work means harassing, offending, or socially excluding someone or negatively affecting someone’s’ work. In order for bullying to be applied to a particular, activity, interaction or process, the bullying behaviour has to occur repeatedly and regularly (eg. weekly) and over a period of time (eg. about six months). Bullying is an escalating process in the course of which the person confronted ends up in an inferior position and becomes the target of systematic social acts. A conflict cannot be called bullying if the incident is an isolated event or if two parties of approximately equal strength are in conflict’ (Einarsen et al, 2011, p.22).

A key commonality across the various definitions of negative acts at work is that these behaviours are unwanted by the victim and as such distressing. The acts are not single events but occur repeatedly over a period of time. There is also a noticeable power disparity between the bully (perpetrator) and target (victim). Whilst some conceptualizations are silent on this power differential, others consider it to be downward only where the bully is a superior, or ranging from downward (supervisor as bully), upward (subordinate as bully) or horizontal (a colleague as the bully).

Workplace bullying has been considered as a psychosocial risk and a stressor in the work environment. However, workplace bullying differs from other stressors experienced by employees in the organization as the negative, persistent and unwanted aggressive acts inherent in workplace bullying tend to frustrate the needs for belonging and psychological safety in the organization. The inability to satisfy these basic psychological and human needs may be very distressing to the target of workplace bullying. Furthermore, as Leymann (1990) asserts, the continuous frustration of basic needs coupled with the pervasive exposure to negative acts towards targets may result in a depletion of the targets employee’s coping resources. This may lead to an employee being overwhelmed with core job requirements and tasks. Following from the transaction model of stress, a target of workplace bullying experience may be affected by a conglomeration of factors. These include the characteristics of the bullying experience, the target’s appraisal of the event and the ability to cope with the demands of the event (Folkman and Lazarus, 1991). Every individual has a need for some predictability and control of future events. Events such as bullying at work puts the target employee in a situation characterized by uncertainty, unpredictability and lack of control with regards the negative acts from perpetrators (superior, colleague or subordinate). This makes the target employee feel helpless and a victim of persistent negative acts (Hogh, Mikkelsen & Hansen, 2011).

The consequences of workplace bullying may be conceptualized to affect the individual target of workplace bullying, the passive onlookers or witnesses as well as the organizations in which the negative behaviour occurs. Research shows that the affected employees or victims of workplace bullying show moderate to severe symptoms of physiological, emotional, psychological, psychosomatic and physical distress (Aquino & Thau, 2009; Baillien, Neyens, De Witte, & De Cuyper, 2009; Baumeister & Leary, 1995 ; Ruscigno, Lopez, & Hodson, 2009). According to Lewis, Sheehan & Davies (2008) symptoms of psychological distress include posttraumatic stress disorder (PTSD), irritability, anxiety and depression whilst physiological symptoms include reduced self-esteem and self-worth, burnout, shame, guilt, and emotional exhaustion. Physical symptoms like pain and fatigue and psychosomatic problems including sleep disorders and victimization may also occur. These various symptoms may result in self-hatred, suicidal ideation and suicide (Leymann, 1992; Thylefors, 1987).
Current Study: The nature and meaning of workplace bullying in Ghana’s oil and gas industry

Following from Hofstede’s cultural dimensions, it is possible that workplace bullying is conceptualized, perceived and experienced differently across different countries and cultures. For example, whilst ‘bullying’ is the preferred term used in countries like the United Kingdom, Scandinavian countries use the term ‘mobbing’. These 2 terms though similar have differences in the behaviours they represent. Furthermore, whilst in Scandinavian countries, mobbing is perpetrated by colleagues (Vartia, 1999, Einarsen & Skogstad, 1996, Leymann, 1996; Vartia & Hyyti, 2002), workplace bullying in countries like the United Kingdom is mostly perpetrated by employees in superior positions (Hoel et al., 2001; Rayner, 1997; UNISON, 1997). Thus even within European countries, there seems to exist differences in the experience of negative acts at work.

Hofstede’s cultural dimensions (1980) indicate that based on differences in cultural orientation, similar negative behaviours experienced by people in different cultures could be perceived differently. This can result from the prevailing standings on the various cultural dimensions as well as culturally specific patterns of cognition. As such, certain behaviours that may not be tolerated in a particular culture or country may be seen as normal and acceptable in another country or culture. Owing to a paucity of research into the meaning and conceptualization of workplace bullying in Sub-Saharan African countries such as Ghana, the current study will aim at using a qualitative methodology to explore the nature and meaning of workplace bullying to employees in the Ghana oil and gas industry.

Aim of the study

To explore the nature and meaning of workplace bullying in the oil and gas industry in Ghana as experienced by employees. Furthermore, the study seeks to examine the nature of the psychosocial work environment in the oil and gas sector in Ghana.

Research questions

1. What is the nature of the psychosocial work environment in the Ghanaian oil and gas industry?
2. How is workplace bullying experienced in the Ghanaian oil and gas industry?
3. Do companies have comprehensive health and safety policies that take into account the psychosocial work environment and workplace bullying?

Methodology

Acknowledging the paucity of research in Ghana in general and the Ghanaian oil and gas sector in particular with regards workplace bullying, a method that was suited to explore the nature of workplace bullying in the Ghanaian oil and gas sector was the Qualitative method. Adopting an exploratory approach, the qualitative design helped in understanding the ‘what’, ‘why’, ‘who’, ‘when’ and ‘how’ of workplace bullying in Ghana.

Thus, qualitative research in this study was deemed the most appropriate approach to understanding the experience of bullying in Ghana’s oil and gas sectors. The utility and appropriateness of the qualitative approach is further reiterated by Smith (1999) who asserts that:

“Qualitative approaches are generally concerned with exploring, understanding and describing the personal and social experiences of participants and trying to capture the meanings particular phenomenon hold for them….Qualitative approaches are particularly useful when the topic under investigation is complex, dilemmatic, novel or under researched and when there is a concern with understanding process not measuring outcomes” (p. 417).

Population and Sample

The population for this study comprised of all workers in the Oil and Gas Industry in Ghana. A sample of 15 employees was conveniently sampled for the study. These employees were drawn from offshore installations as well as corporate offices in the oil and gas sector in Ghana. The sample consisted of fourteen (14) males and one (1) female. Four (4) employees were sampled from offices in Accra and Tema whilst the remaining eleven (11) were workers on offshore platforms. Three (3) of the offshore workers were working on oil rigs in the

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exploration of oil and gas in the Jubilee field. The remaining eight (8) offshore workers were staff on the Floating Production Storage and offloading facility (FPSO) named the ‘FPSO Kwame Nkrumah’. The sample had an average age range between 30 and 56 years. The sample consisted of black Ghanaian workers who had varied years of experience in the industry ranging from 2 years to 25 years in their respective professions.

**Method**

Data was collected using interviews. Kvale (1996) has stated that “Interviews attempt to understand the world from the subject’s point of view, to unfold the meaning of peoples’ experiences to uncover their lived world prior to scientific explanations” (p.1). More specifically, the semi-structured interview was utilised. This involved the use of a structured question guide which was prepared using previous studies and theories related to bullying as a guide. There was also the added advantage of in-depth questioning to delve deeper into issues arising from the interview. The researcher was careful not to deviate from the interview guide unless when doing so added value and deeper understanding of interviewees’ responses.

**Ethics**

The current study was guided by ethical principles as outlined by the British Psychological Society’s Code of Ethics and Conduct (2009), Code of Human Research Ethics (2010), Ethics Guidelines for Internet-mediated Research (2013), as well as the Data Protection Act (1998). Ethical approval was granted by the Faculty of Medicine & Health Sciences Research Ethics Committee of the University of Nottingham, UK.

**Data Analysis**

Data was transcribed and coded. Analysis of transcripts was done using thematic analysis (Braun and Clarke, 2006).

**Summary of thematic analysis of Qualitative data**

1. **How is workplace bullying perceived, conceptualized and experienced in the Ghanaian oil and gas industry?**

   **Ghanaian’s conception and nature of bullying**
   1. Denial of accomplishments
   2. Constant criticism
   3. Unreasonable deadlines/demeaning work
   4. Lack of voice
   5. Verbal attacks
   6. Intimidation and Coercion

   **Attribution**
   1. Victim vulnerability and personality
   2. Job threat
   3. Racial stereotype
   4. Lack of power
   5. Cultural orientation

   **Individual effects**

   **Job effects**
   2. **What is the nature of the psychosocial work environment in the Ghanaian oil and gas industry?**

   **Work demand**
   1. Work schedule
   2. Work pace
   3. Work overload

   **Nature of offshore environment**
   1. Isolation from significant others
   2. Risk unpredictability

   **Stress coping**
1. Religious coping
2. Social support
3. Recreational activities
4. Sick leave

3. Do companies have comprehensive health and safety policies that take into account the psychosocial work environment and workplace bullying?

Bullying policy
Organizational tolerance for bullying

Further analysis is ongoing.

T19 Short Paper
The Effect of Personality on Occupational Stress in Veterinary Surgeons

Briony Dawson, Northumbria University

Category: Wellbeing and Work

The Research

Occupational stress (OS) will affect the majority of employees at some point within their careers (Bickford, 2005), and naturally some career paths are more stressful than others. OS can be defined as the adverse reaction experienced by employees in response to excessive pressures or demands of the workplace (HSE, 2014). However, when these stressful feelings are prolonged and unrelieved, they can cause not only extreme levels of stress, but also burnout and depression (Hildebrandt, 2012; PubMed Health, 2013). In advanced cases, it is concerning that some individuals feel so helpless that they commit suicide. Amongst the top ranking professions with the highest suicide rates are Veterinary surgeons (vets), in addition to doctors and other medical professions (Petersen and Burnett, 2008; NOMS, 2013). This indicates that the veterinary sector is highly stressful and pressurised, which poses the question as to how the well-being of these employees is managed.

Previous research has identified some of the influencing factors involved. Gardner and Hini (2006) found hours worked, client expectations, and unexpected outcomes to be major factors, other influential factors included; the need for vets to keep up their knowledge and technical skills, personal relationships, finances, and expectations of themselves. Platt, Hawton, Simkin, Dean and Mellanby (2012a) found workplace relationships, career concerns, responsibility, and for many vets – difficult life circumstances, to be prevalent issues. The increased incidence of suicide in vets has been previously attributed to ease of access to many drugs, often in the group of ‘barbiturates’ (National Counselling Society, 2014). Unlike doctors, vets have to perform euthanasia often daily which is recognised to have a huge emotional strain on the practitioners (Avery, 2013). Halliwell (2005) suggests that the routine practice of euthanasia may create an apathetic relationship towards suicide, and when a vet is suffering it may seem an appealing and all too easy option.

Some researchers have highlighted the fact that personality should be considered in relation to OS. Certain traits have been found to be correlate with stress, in particular neuroticism and conscientiousness. For example, high levels of neuroticism and low conscientiousness are known to be associated with depression, and it is suggested that conscientiousness affects and influences depression, through increased exposure to negative life events (Klein, Kotov and Buffer, 2011). Low levels of neuroticism combined with high levels of extraversion and conscientiousness have been shown to predict low stress exposure. In comparison, high levels of neuroticism and low levels of conscientiousness predicted high stress and dysfunctional coping (Grant and Langan-Fox, 2006). Vollrath and Torgersen (2000) proposed typologies of eight personality combinations (around degrees of neuroticism, conscientiousness, and extraversion) relating to stress and effective coping. In similar professions, such as medicine and dentistry, several studies assessing personality traits, stress and burnout (leading to suicide) have found relationships between neuroticism, job demands and stress/depression (Cooper, Watts, Baglioni and Kelly, 1988; McManus, Keeling and Paice, 2004). Platt, Hawton, Simkin, Dean and Mellanby (2012a) recognise that these personality traits are associated with other medical practitioners, although these are yet to be researched in vets.
Given the strong evidence base that OS is such a prevalent issue within the veterinary profession, and considering the severe impact it has on the employees’ well-being, it is concerning that literature within these realms is sparse. There is sufficient focus and weighting towards research within the dentistry, and particularly, medical professions, which assesses a broad range of causes and effects of OS. Unfortunately, this has not been translated to the veterinary sector. Research within this profession, with regards to OS, constitutes a significant focus on workplace (environmental) factors, with little consideration or real application of biological facets, such as personality.

Overall, the literature presents a complex contribution of factors resulting in the high suicide rate amongst veterinary surgeons, however the effect of personality on occupational stress is distinctively under-researched in vets. The proposed study aims to establish: if personality is a better predictor than environment on occupational stress, the underpinnings of the factors within neuroticism and conscientiousness that attribute the most to stress and finally, whether emotional (perceived) stress has a greater influence on overall stress perceived than environment. The hypotheses and aims are as follows:

H1: Personality is a better predictor of occupational stress than environment.
H2: Vets who score highly on neuroticism and conscientiousness experience the greatest levels of stress.
H3: Emotional stress contributes more to overall stress than environmental stress.
A1: To establish the key components of the personality constructs ‘neuroticism’ and ‘conscientiousness’ that attribute the most to stress.

Methodology and Materials
This study utilises a within groups correlational design, predominantly assessing the relationship(s) between personality and occupational stress. Personality is composed of the ‘Big Five’ personality traits: openness, conscientiousness, extraversion, agreeableness and neuroticism (Azoulay and Kapferer, 2003), and occupational stress is composed of both environmental and emotional stress.

UK veterinary surgeons (N=363, data used from 311) took part in the study (139 males, 220 females). This study has received full ethical approval and all considerations were addressed during the approval process, including; informed consent, right to withdraw and confidentiality. Additionally, if results exposed that certain individuals were suffering from high levels of stress details for appropriate services they could contact were available.

Participants were required to complete three questionnaires online through ‘Qualtrics’. Participants were required to complete: the NEO Five Factor Model (NEO-FFI, Costa and McCrae, 1992), the Maslach Burnout Inventory (MBI - human services version, Maslach, Jackson and Leiter, 1996), and the Job Stress Survey (JSS, Spielberger and Vagg, 1999).

Conclusions
As the project is still in progress, the results will be analysed (in due course) using multiple regression. In the event that the rationale and hypotheses are supported by the data, several valid implications are presented. These will have an affect not only on theory and research, but major practical implications too - benefiting individuals, the workplace and society. Managers, HR advisors and occupational psychologists would have a greater awareness of the need to focus on vets who are particularly susceptible to stress, and have interventions and tools in place to alleviate this. Additionally, the well-being of vets and factors that affect this could be better managed. By implementing the above, stress would be controlled to some extent, however if due largely to personality then implications may require more extensive objectives. Veterinary schools could filter applicants in selection processes, identifying those who possess the key components of neuroticism and conscientiousness that attribute the most to stress. This would then remove individuals who are at greater risk of stress, before they actually enter their studies and subsequently careers. On a societal level, by implementing both well-being interventions and better selection processes, hopefully the suicide rate would decrease and be less of an issue for this occupational group. Nonetheless, even if the hypotheses prove non-significant, the research will still contribute to an under-researched area of occupational veterinary literature.
The Wider Picture
This research incorporates well-established theories of personality and stress interactions and combines this with the prevalence of extreme OS in the veterinary sector. This is an under-researched profession within the field of occupational psychology, particularly in comparison to similar occupations, such as medicine. This study offers valuable insights for the profession and suggestions for further study. It also highlights and considers the importance of employee well-being within a changing world, and how the management of stress is more key than ever before. Currently, occupational psychology has little application to the veterinary profession; therefore a wider aim of this study would be to promote further opportunities for occupational psychology informed insight into this sector. This study has been recognised as offering important indications and has potential to inform future practice and policy. Furthermore, through gaining a wider understanding of personality types, it can aid the development of interventions specific to occupational groups—this can be translated to many other occupations. Feedback from participants and stakeholder institutions during the course of the research has been very positive, suggesting the study was overdue. Delegates will be provided with a printed summary of the slides for their own records and annotation purposes should they wish.

References


T20 Symposium

The contribution of occupational psychology to the blue light services

Thomas Evans, Coventry University

Category: Work Design, Organisational Change and Development

The current symposium is a forum for discussion around the contribution of Occupational Psychology to the Blue Light Services; three diverse research projects are discussed. First, the development of a Situational Judgement Test to assess Operational Preparedness in Bronze Fire Commanders is examined, alongside details of how the project has led to long-term changes within West Midlands Fire Service. Second, the development of a new understanding of adult resilience, and validation of a subsequent measure with the Fire Service, is discussed. Third, the organisational implications for the diversity in responses to fires are explored, with considerations for the lessons that can be learnt for other organisations, even those outside the blue-light services. It is concluded that Occupational Psychology can be of huge value to the Blue Light Services, and that Occupational Psychologists should be striving to contribute expertise when possible, including the application of principles or practices developed in other organisational contexts.

T20a

Paper 1: Assessing and changing operational preparedness in the fire service

Gail Steptoe-Warren and Thomas Evans, Coventry University

Category: Work Design, Organisational Change and Development

Main Theories, Models and Research: In November 2007, a fire at a vegetable packing plant took 24 hours to control, and during this incident four fire personnel died. Claims surrounding the negligence of Incident Commanders were raised due to heuristic-assisted decision-making, and despite these claims being eventually dropped, concerns remained that the threat of prosecutions may make personnel more risk-averse in the future. In July 2008, a woman fell down a disused mine shaft and subsequently died. Due to the unique nature of this incident, further concerns were raised about the lack of knowledge, communication, co-ordination and pre-planning for such an event.

These two major incidents, where members of the general public and fire personnel lost their lives, led West Midlands Fire Service to contract work to measure and evaluate Operational Preparedness (OP), a key component of the aforementioned incidents. As no model of OP existed, the first project undertaken was to evaluate OP at an organisational level (presented DOP 2014). Using job analyses and critical incident techniques, a model of OP was developed alongside an organisation-level Situational Judgement Test (SJT). Five key facets of OP were prominent: Trust, Information Gathering, Incident Learning, Skills, and Experience. Findings from this work suggested that West Midlands Fire Service were mostly prepared to deal with demanding incidents. Those who were more prone to risky heuristic use typically had 21-25 years’ service and currently held a Crew, Watch or Station Commander position. Such work was key to highlight potential areas of growth for certain types of individuals and raised awareness around the more general need for more consideration for the decision making process. As a direct result, ‘talk aloud’ exercises were introduced to limit the use of heuristics and to encourage more information gathering, and further work was requested in order to facilitate a greater level of OP.
Testament to the perceived value of Occupational Psychology, and the impact of this previous works, West Midlands Fire Service commissioned the development of an individual-level measurement tool for bronze commanders that would produce individual reports which could identify areas for training and development in OP. The current research is focussed upon the validation and use of this tool.

To maximise the outcomes from a measure of Operational Preparedness (OP) to provide development-related feedback, a Situational Judgement Test (SJT) approach was adopted. SJTs are powerful predictors of job performance (Phillips 1993, Weekly and Jones 1997, Smith and McDaniel 1998), potentially because they measure actual job knowledge (Motowidlo, Borman and Schmit 1997). How an individual answers a question on an SJT is predictive of how they would act in a similar real work situation. SJTs are also ideal for capturing heterogenous behaviours (Chan and Schmitt 2002) a fitting solution for the complex work completed by fire personnel, and thus OP. McDaniel et al’s (2001) meta-analysis suggest SJTs based upon job analyses yielded stronger correlations to subsequent performance, therefore the aforementioned conceptualisation of OP developed through job analyses was adopted to maximise the value of the SJT for facilitating positive development. Further, the use of a critical incident technique to develop the items facilitated a more realistic measure that would be able to competently differentiate between successful and less successful behaviours (Koch et al. 2009). Best practice procedures for the development of the SJT were adopted (Bledow and Frese 2009; Lievens, Sackett and Buyse 2009; Steptoe-Warren 2010).

In order to develop a SJT to assess OP in bronze-commanders, the project had many phases, all of which demanded close collaboration with West Midlands Fire Service and their stakeholders. First, days were spent shadowing Fire Fighters on duty to ask questions and gain a sense of the roles and responsibilities of different levels and in different environments. Second, sessions were held where personnel recalled critical incidents and their actions, which were then sculpted into SJT questions and answers. Subsequent sessions facilitated the clarification of question content and production of appropriate alternative responses. Items were piloted by twenty-eight personnel with a cronbach’s alpha greater than .6 when one problematic item was deleted. Finally, using feedback from the pilot, and by collaborating with senior members of West Midlands Fire Service, items were refined to ensure relevant roles, responsibilities and terminology. The scale is now undergoing more extensive validation, including experimental trials to explore the realism and consistency of performance on the test under stress or exhaustion, compared to normal test conditions, to better understand high-pressure decision-making on duty.

A functional tool with supporting IT framework was produced so that all those who complete the measure can automatically receive a personal feedback report. The tool produced an acceptable internal reliability and is soon to be integrated into the continuous professional development programme of all bronze-level commanders in West Midlands Fire Service. The way in which West Midlands Fire Service think and act upon development, especially with OP, has changed significantly and findings will identify many areas to facilitate personal development for many personnel at this level. The current project has facilitated long-term changes towards improvements in practice of OP by improving awareness, understanding, and measurement. Testament to the results produced, a tool appropriate for silver-level commanders was subsequently commissioned and is currently under development. In addition, experimental research using body-worn cameras during training events to create a behavioural framework for incident response was commissioned to further explore the factors of importance highlighted by the current research e.g. use of heuristics.

The known importance of decision-making, trust, and information gathering for fire personnel indicate that the project is likely to be of significant consequence. Whilst we cannot specifically attribute any saved lives to the development and use of the tool from the current work discussed, the direction and focus of these development themes are likely to lead to the betterment of fire personnel performance. This claim can be more confidently asserted as the existing training schemes are often policy, process or rule-based, and often lack the more nuanced and human elements of decision-making e.g. use of heuristics. Given that OP was fundamental to the mismanagement of the aforementioned Atherstone Plant and Galston Mine events, West Midlands Fire Service and
those working on the project are confident the changes in understanding gained, and practical use of OP, will be key to reducing the possibility of similar events in the future.

**Resilience in a Changing World:** Organisations, especially blue-light services, are under increasing pressure to do more with less. Saving a greater number of lives and properties with less resources, staff, and constantly-changing obstacles e.g. less fires, but greater diversity in situations faced, is a fierce challenge. The current research shows how Occupational Psychology can help support the Fire-Service to negotiate this challenging and changing environment, towards making sustainable and evidence-based changes to benefit the organisation, the individuals within it, and those whom it serves and protects.

**Work Design, Organisational Change and Development:** The current research clearly demonstrates how Occupational Psychology can be applied to support positive long-term changes within an organisation to minimise risk and benefit personnel. The current research is changing established assumptions within the Fire Service (that use of heuristics is always positive as it saves time) and thus is helping to alter the organisational culture to one where practices are questioned and evidence-based.

**Novel and Innovative Aspects:** The research provides a novel insight into the requirements of personnel within the Fire Service, including their developmental requirements, and how their practices are changing. The current research took an innovative approach to the development of the test, which is likely to be of interest to delegates, as is the different ways in which the research has had a real impact upon the Fire Service.

**Stimulating and Useful for Delegates and Public Interest:** The research is likely to be of great interest to delegates and the public due to the insights gained about the Fire Service. The work will be of special interest to those working in blue-light services, those interested in the development of measures (especially situational judgement tests), and those working/interest in the fields surrounding Operational Preparedness e.g. decision-making.

**Materials:** A copy of the presentation will be made available for all to access online, and printed hand-outs will also be available on the day for all delegates. Contact details will be provided to encourage questions, debates, and collaborations post-conference.

**Interaction:** Sufficient time will be given for questions, suggestions and responses to the research. There will also be opportunities for interaction within the presentation e.g. for individuals to attempt to answer an example question. To ensure individuals can engage with and relate to the research, a minimum of ten minutes of the time allocated will be dedicated to interacting with others.

**References:**
T20b

Paper 2: When the going gets tough: The resilience in adults scale – Development of a scale to measure adult resilience in occupational settings

Alana Blincoe and Christine Grant, Coventry University

Category: Work Design, Organisational Change and Development

Main Theory, Models and Research: Resilience research has gained pace over the past thirty years, led mainly by empirical studies from developmental and clinical psychology. The former, through child and adolescent resilience research, emphasises resilience as a multidimensional construct, affected by personality variables, temperament and skills (Luthar, Cicchetti, Becker 2000). The latter has become concerned with the relationship between resilience, and mental health promotion and maintenance (Connor and Davidson 2003). Consequently, the possible links between resilience and health, well-being and life quality has prompted interest from policy makers.

Despite such activity, to date research regarding resilience functioning in adults is scarce, there is no operational definition for it, and there are very few scales which measure it. This study is therefore unique as it deploys both qualitative and quantitative methods to address this paucity in adult resilience research (Palinkas 2011). In so doing it will provide an operational definition, and develop a reliable and valid measure of adult resilience, to enable greater understanding of its function.

The research is focussed on workers in the emergency services, specifically fire-fighters. Such roles are suggested by empirical research to be ‘high risk’ occupations, as they are multifaceted regarding sources of job-related stress. For instance, such workers may have to deal with ongoing, highly-stressful, even traumatic events or situations, in addition to organisational stressors. Resilience may be the key to understanding the differentiations in how individuals respond to such adverse situations.

Of the five existing adult resilience surveys, four are clinically-based, while only one is deployable in an occupational setting. That one scale measures ‘hardiness’, a possible aspect of resilience (Bartone 1991, 1995, 2008; Connor and Davidson 2003). Currently, there are no ‘gold standard’ adult resilience scales, none are widely generalisable, and all need further validity and reliability testing (Windle, Bennett and Noyes 2011).

The situation is not helped by the continued debate of resilience as a trait or a learned strategy (Reich, Zautra and Hall 2010; Howe, Smajdor, Stöckl 2012; Papazoglou and Anderson 2014). This is further complicated by the finding that individual resilience emerges only when challenged by significant or traumatic events (Connor and Davidson 2003). However, research has identified key trait characteristics which may determine resilience – positive adaptation, flexibility, conscientiousness, perseverance and optimism. This is also supported by the ‘conscientiousness’ and ‘neuroticism’ factors from the widely-used psychological model of personality – The ‘Big Five Model’ by Costa and McCrae (1995; cited in Maltby, Day and Macaskill 2010).

Developing an operational definition for adult resilience is key to constructing its measurement (Windle 2010). Drawing on empirical research, a preliminary definition of adult resilience is offered here as the ability to - positively recover or bounce back from adverse events quickly, enabling an increased capacity to positively adapt to such events (Campbell-Sills, Cohan and Stein 2006, Bonnano et al 2004, Luthar, Cicchetti and Becker 2000, Connor and...
Davidson 2003, Reich, Zautra and Hall 2010, Windle 2010, Maltby, Day and Macaskill 2010). This definition will be informed further by qualitative data gathered with this research.

Semi-structured interviews have been conducted with twelve participants currently employed by the West Midlands Fire Service. To keep the interviews ‘on track’, open-ended questions were underpinned by research within the areas of mindfulness, resilience and well-being. The interviews will be analysed using Thematic Analysis (Braun and Clarke 2006). Superordinate themes which emerge from the qualitative data, will then be used to inform items of the RIAScale. The scale, of up to 50 items, will be administered to West Midlands Fire Service staff in the form of an online survey. The aim is to gain a sample of up to 200 responses (Coolican 2013). The survey will then be analysed to ensure the validity and internal reliability of the data collected by the RIAScale. Both the qualitative and quantitative data derived from this study will provide novel insights into adult resilience, which will aim to further our understanding of the concept, and add to the construct of adult resilience, and resilience generally.

Resilience in a Challenging World: The current study is developing a scale which will produce a reliable assessment of the resilience of adults, and their capacity to deal with challenges in the world of work. It will measure how some individuals are able to cope with emotionally difficult and demanding work situations and events, while they still maintain the ability to effectively and efficiently carry out duties, some of which can be vital to the survival of others. Identifying traits which indicate individual resilience capacity, could potentially enable employers to predict those employees at risk of succumbing to adverse experiences, and/or identify and support employees who show the potential to persevere, if improvement is shown following an intervention, such as counselling.

Work Design, Organisational Change and Development: Resilience may play an important part in the well-being of many emergency workers. It may be the key to understanding how some individuals are able to carry out such work roles, despite being faced with adverse situations, while others may buckle under the strain of such jobs. The scale, and the interviews which inform its items, will cover fields surrounding stress, coping and emotional intelligence. As the findings are likely to contribute to a greater understanding of the requirements of the job role and inform interventions to improve resilience, subsequently producing a multitude of changes within the Fire Service, the research is likely to be of greatest relevance to those interested in well-being and organisational change and development.

Novel and Innovative Aspects: This study is novel as it attempts to provide a mixed methods approach to develop a valid and reliable measure of adult resilience in the workplace. Currently, there no such scale available. It also proposes an operational definition of adult resilience, in the absence of there being one. Despite research of the resilience concept in developmental and clinical psychology, there is a scarcity of empirical study regarding adult resilience, and very little knowledge regarding it in relation to occupational psychology. This study will therefore provide innovative insights into adult resilience, to help inform policy and practice in a variety of work settings.

Stimulating and Useful for Delegates and Public Interest: Understanding how and why some adults are able to carry out particular work duties, under certain levels of stress, is key in today’s demanding world of work. This study is likely to be of significance to public interest, as many organisations and individuals alike, are forced to deal more with a variety of issues linked to occupational stress and stressors. This scale could help identify how well some individuals may be able to cope with stressful work events/situations and/or work-loads. It will be useful and stimulating for delegates, as this study brings attention to the somewhat neglected research area of adult resilience, and attempts to analyse its importance in relation to individual well-being in the workplace.

Materials: All delegates will have access to a print-out or online version of the key interview themes. It will also feature an operational definition of adult resilience, and a sample of the RIAScale. It will also contain contact details
of the author to encourage and widen the examination of adult resilience beyond the fields of clinical and developmental psychology.

**Interaction:** Given the subject of this study this research can be seen as relevant and pertinent to all individuals in various work roles. Therefore time will be allowed for delegates after the presentation, to ask questions, and to respond and make suggestions to the current research. They will also be invited to interact during the presentation, as they will be asked, for example, to think about how they are resilient within their work roles. A minimum of ten minutes within the time allotted for the presentation, will be used to encourage interaction with conference delegates.

**References**


Bartone, P.T. *Paper Presented at the American Psychological Society Annual Convention*, 'Development and Validation of a Short Hardiness Measure' held (1991) at Washington DC


**T20c**

**Paper3: The organisational consequences of the diversity in responses to fires**

Thomas Evans and Gail Steptoe-Warren, Coventry University

Category: **Work Design, Organisational Change and Development**

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Main Theories, Models and Research: At present West Midlands Fire Service (WMFS) provide a risk based five minute attendance time for the first firefighting appliance to incidents where life and property are at risk. However, a 10% reduction forecast for 2015-16 and further forecasted cuts of the Government formula grants of 14% for 2016-18 (WMFS, 2014) will provide a challenge to WMFS in terms of resources and response. Currently West Midlands’ response time to incidents is above the national average of 7.4 minutes (2013-2014) where there is a report in a yearly increase in time to respond to fires (Department for Communities and Local Government, 2014). The issues of response time is a key one with The Fire Brigade’s Union (2009) reporting the impact of increased response time of 13 additional fatalities in dwelling and other fire buildings each year, a possible 65 additional deaths in road traffic collisions and an £85m increase in other buildings fire damage.

In a report by Department for Communities and Local Government (2013) fatality rates were calculated for all dwelling fires by response time. Response times were banded together in five minute bands started at 0-5 minutes, 6-10 minutes etc. Results from 2012 Incident Recording System Analysis show the following response times and fatalities:-

<table>
<thead>
<tr>
<th>Response Time</th>
<th>Fatality Rate</th>
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<tr>
<td>0-5 minutes</td>
<td>2.5%</td>
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<tr>
<td>6-10 minutes</td>
<td>3.0%</td>
</tr>
<tr>
<td>11-15 minutes</td>
<td>4.4%</td>
</tr>
<tr>
<td>16-20 minutes</td>
<td>5.5%</td>
</tr>
<tr>
<td>&gt;20 minutes</td>
<td>17.1%</td>
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</table>

As can be seen from the percentages above, an increase in response time equals an increase in fatalities. It is important to assess victim response to fire as it is assumed that when victims are first alerted to the fire they will remove themselves from danger (the property) and phone the fire service. As can be seen above, minutes remaining in a property can increase risk to life so an understanding of the actions of individuals is important in developing promotions of what to do in the event of a fire to educate the general public.

The first part of this research is to find out whether the assumed pattern of behaviour (leave and call 999) is reflected in the experience of those who have experienced a fire. As such, eight victims of fires were interviewed using a semi-structured interview. The below concept map outlines the diversity in discourse surrounding the three main stages identified: alerted to fine, responding to the fire and emotional response.
Reflected by the data, and echoed by research from University of Salford and Greater Manchester Fire and Rescue Service (2012), there is no clear typical pattern of response to fires. The second, and main, part of this research therefore explores the organisational implications of diversity in response to fires for the WMFS from an Occupational Psychology perspective. Firstly, the consequences for the Fire Service with respect to response times are discussed, alongside additional data on fire timelines, Governmental and organisational pressures, and resource management. Secondly, as the results suggest clearer education is needed, the implications for public education are explored, including a discussion on how simple safety messages e.g. close doors to slow smoke diffusion, can be communicated most efficiently. Future research plans are discussed, including a collaboration with LIFEBID to explore a wider range of experiences from fire victims and the incorporation of live (trial) burn data to plot the chemical developments of the fire alongside behavioural patterns to assess greatest periods of risk. To end, the implications of this diversity in ‘customer’ response are considered and debated for other blue-light services, and other e.g. commercial, organisations.

Resilience in a Changing World: Organisations, especially blue-light services, are under increasing pressure to do more with less. Saving a greater number of lives and properties with less resources, staff, and constantly-changing obstacles e.g. the increasing rate of e-cigarette fires, is a fierce challenge. The current research shows how Occupational Psychology can help support the Fire-Service through this challenging and changing environment, towards making sustainable and evidence-based changes to benefit the organisation, the individuals within it, and those whom it serves and protects.

Work Design, Organisational Change and Development: The current research clearly demonstrates how Occupational Psychology can be applied to support positive long-term changes within an organisation to minimise risk and optimise resource use. The current research is changing established assumptions within the Fire Service (that we recognise a fire, close doors behind us when leaving, and immediately call 999) and thus is helping to alter the organisational culture to one where practices are questioned and evidence-based.

Novel and Innovative Aspects: The current research presents novel findings that challenge assumptions on the automatic self-preservation response to fires. Further, the current research goes further in exploring in detail the organisational consequences of this, reflecting upon the implications for many aspects of the organisation: from public engagement to resource management. This innovative analysis will include consideration for what lessons can be learnt for other organisations, even outside the blue-light services.

Stimulating and Useful for Delegates and Public Interest: The first part of the research regarding diversity in victim responses to fire is likely to be of significant interest to the public, and thus the delegates also. Those engaging with the research will be able to gain information and advice that is useful if faced with a fire scenario, in addition to an appreciation for the high level of service provided by the Fire Service, despite constraints. The second part of the research regarding the organisational consequences is likely to be of greatest interest to delegates. Insights will be given into the fire service, and related blue-light services, and the considerations for this diversity in customer response for other organisation types will also be considered.

Materials: A copy of the presentation will be made available for all to access online, and printed hand-outs will also be available on the day for all delegates. Contact details will be provided to encourage questions, debates, and collaborations post-conference.
Interaction: Sufficient time will be given for questions, suggestions and responses to the research. There will also be opportunities for interaction within the presentation e.g. for individuals to suggest methods to support clear public information messages. To ensure individuals can engage with and relate to the research, a minimum of ten minutes of the time allocated will be dedicated to interacting with others.

References:


T21 Award session 2 - Practitioner of the Year Award
Hannah Markson, MOD
The Armed Forces present a unique culture where Service personnel work, live and socialise together, sometimes in challenging and diverse environments. The opportunity for sexual harassment to occur may therefore be higher than other workplaces and the negative consequences more severe, with operational effectiveness and capability at risk. This study provides an understanding of sexual harassment within the Army and the issues that the organisation may face as a consequence, in order to provide a way forward to promote equality within a diverse workforce. Quantitative and qualitative data were gathered from over 25,000 Regular and Reserve personnel. As a result the Army has made a significant step forward in its understanding of sexual harassment; the findings were used by the Chief of the General Staff to launch the new Army Leadership code this year, and a team has been set up in Army HQ to evaluate and implement the recommendations from the research.

T22 Careers Forum
Listen to experts in our field give a 3-5 minute presentation about their organisation, current and future opportunities and their own personal career experience.

T23 Workshop
How to use positive psychology at work, everyday
Sarah Lewis, Appreciating Change
Category: Wellbeing and Work

1. Nature and purpose of session
The purpose is to co-create awareness with the group of the many opportunities for applying positive psychology theory, research and practice in on-going organisational life and to enhance their ability to do so
It will be highly interactive including working with a set of positive organisational development cards to stimulate discussion and idea generation.

People will be able to work on their own specific concerns, opportunities or areas of interest in the workshop.

2. **Outline of the agenda**
   - The workshop will identify possible points of intervention at work that could be an opportunity for using positive psychology, such as coaching.
   - It will introduce 20 key positive psychology ideas that are relevant to the work and organisation context.
   - It will introduce the ‘cue’ cards and suggest ways they can be used to introduce positive psychology concepts into workplace discussions.
   - People will be invited to work in groups on their own particular aspirations about introducing positive psychology interventions into work, using the ‘cue’ cards to support and stimulate their discussions.
   - The groups will share their outcomes.

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T24 Short Paper

**Developing self-awareness and building resilience in doctors: An evaluation study**

Analise La-Band, Máire Kerrin, Fiona Patterson and Amy Aitkenhead, Work Psychology Group

**Category:** Learning, Training and Development

**Introduction**

Research demonstrates that an array of non-technical professional attributes (e.g. integrity, empathy) are critically important predictors of future job performance and training outcomes in healthcare settings (e.g. Lievens & Patterson 2011; Patterson et al 2013). The importance of self-awareness for doctors' job performance, in particular, has been widely acknowledged in the literature (e.g. Bembassat & Baumal, 2005) and a lack of self-insight and awareness of one's impact on others have been identified as important factors in poorly performing doctors (e.g. Cox et al, 2006). Self-awareness includes recognition of how individual differences and personality influence behaviours at work, e.g. patient care. Through the development of their own self-awareness, doctors can apply an understanding of their own strengths, development needs, and personality preferences. Thus, their ability to respond to challenging situations with patients and colleagues effectively and make informed decisions will be enhanced, potentially impacting on their treatment of the public. Reflection upon performance and discussions with colleagues and respected peers are also key for professional development and self-directed learning (e.g. Phillips, 2008). It's particularly important for doctors to develop through identifying the approach that they take in situations where self-awareness is required (e.g. when resolving conflict or making difficult decisions). The introduction of training for situations where individuals can feel out of their comfort zone could help to prepare doctors to be resilient when working in the challenging and fast-paced healthcare environment.

Situational judgment tests are often used in selection to assess non-technical skills across many high-stakes settings, and more recently in medical education and training (e.g. Patterson et al 2012). Importantly, situational judgment scenarios (SJSs) can also be designed for use in a training and development context. SJSs that are used for development aim to enhance participants' understanding of effective behaviours, attitudes and values at work and provide an opportunity to develop personal insight. This paper explores the development and evaluation of a two-phase training initiative using SJSs and a series of workshops to develop non-technical skills in Foundation doctors.
To the authors’ knowledge, this is the first time that a blended learning approach utilising a video based SJS tool has been used for the development of Foundation doctors, and it is hoped that this will provide useful insight for conference delegates in the area of development.

Method
A literature review and a series of stakeholder interviews identified a need for a training initiative to enhance three important non-technical skills (self-awareness, decision-making and conflict management) in Foundation doctors. A blended, two-phase learning approach was developed in collaboration with local medical educators and delivered in one area of the UK. The first phase of the training initiative consisted of an online module, and the second phase was a half day face-to-face facilitated workshop. Both phases aimed to develop all three of the non-technical skills.

This training initiative has taken place over two years. Longitudinal evaluation has been undertaken across both years to enable the effectiveness of the initiative to be robustly evaluated.

The online module presented participants with SJSs in a text- or video-based format. Once the scenario was presented, participants were asked to outline in their own words how they thought that the character at the centre of the scenario should respond. This allowed them to engage with the dilemma and reflect on the considerations that were important to take into account in the management of the situation. Participants were then presented with a series of pre-defined actions for the character in the scenario to take in response to the situation, and were asked to rate how appropriate each of these actions were, using a four point scale. Once all responses had been rated, participants could compare their responses to those of an expert panel of clinicians. This approach allowed participants to reflect on any discrepancies between their own responses and those of the experts, as well as obtain feedback on how appropriate each pre-defined action was, and the rationale for this, with the aim of enhancing their knowledge of effective behaviours in the workplace.

The impact of different modes of presentation were also investigated. All participants viewed four scenarios in a text-based format and four scenarios in a video-based format. The order in which the scenarios were viewed was also controlled, with half viewing the videos in one sequence and the other half in the reverse order. Through utilising video-based scenarios, the professional dilemmas can be brought to life, enhancing their fidelity.

A series of half day workshops were designed as part of the training initiative, which built on the initial development phase to further enhance self-awareness, decision making and conflict management. Participants were required to reflect on the situations presented in the Phase 1 SJSs, and their own behaviour in similar situations. They were encouraged to reflect, explore and discuss their approach/behaviour with their peers in order to share learning, develop self-awareness and enhance knowledge of effective behaviour in a clinical context. They were also encouraged to discuss alternative approaches and strategies for improvement.

Success of a training programme can be measured by gaining an understanding of the extent to which individuals have successfully transferred knowledge and skills learnt on the training programme back into their workplace. The degree to which participants of a training initiative successfully apply the skills gained during the training in their jobs, is considered “positive” transfer of training (Baldwin & Ford, 1988) and is indicative of an effective training programme. A multi-level evaluation strategy was employed, which followed theoretical best practice (Kraiger et al 1993), collecting data before and after completing the online module, upon completion of the workshop and again six weeks after the workshop took place.

Measures were completed at each of the four time points for the three non-technical skills, relating to knowledge gain, and belief in their ability to apply learning back into the workplace and were on a scale of 0 to 10. Training satisfaction measures (content, technology, engagement) were also taken upon completion of the online module.
and workshop. All participants provided consent to have their data used for evaluation purposes prior to completing the online module. Participants were also briefed about the evaluation strategy verbally at the workshops.

**Figure 1: Design and Evaluation of Training Initiative**

### Results

A total of \(N=1,029\) Foundation doctors in the UK have completed the online module, in 2014 (\(N=446\)) and 2015 (\(N=583\)). Doctors reported high levels of satisfaction with the online module, with approximately 80% of participants in 2014 and 2015 agreeing that they would use an online module of that type again, that the content was relevant to their role, that the use of videos as a delivery method was an engaging method of viewing the training materials and that the delivery methods used were suited to the content.

A total of \(N=919\) Foundation doctors attended the workshops in 2014 (\(N=452\)) and in 2015 (\(N=467\)). Participants also reported a high level of satisfaction with the workshops, with over 80% agreeing that the methods used enabled them to take an active part in the workshop, it enabled them to share professional experiences with colleagues, the issues were dealt with in a sufficient amount of depth, the length of the course was suitable and that it merits a good rating.

Figure 1 shows the differences in the average ratings for the measures relating to self-awareness, decision making and conflict management taken before and after completing the online module. There was a significant increase in average ratings for all 15 baseline statements (with the exception of one in 2014) relating to self-awareness, decision-making and conflict management, after completing the online module.

**Figure 1. Differences in average ratings for baseline measures between Pre-Training and Post Online Module**
For research purposes, hypothetical scores were assigned to participants, and it was found that the format in which the scenario was presented did not impact upon their ability to answer correctly. Participants’ hypothetical scores correlated more highly with the total score for three of the scenarios when presented in video format, in comparison to text. Upon examination, these three scenarios involved the main character in the scenario interacting with someone who is behaving inappropriately (e.g. acting aggressively, making inappropriate requests), suggesting that presenting scenarios such as this in a video format may allow participants to pick up on interpersonal cues that contribute to their interpretation of the scenario. Participants reported that the combination of video- and text-based scenarios worked well.

For the measures collected after the workshop and in the six week follow up, participants reported higher levels of skill, knowledge and belief in the areas of self-awareness, decision making and conflict management, in comparison to the pre-training questionnaire. This indicates that participants were able to transfer their learning form the workshop into the workplace, thus providing an indication of the effectiveness of the training programme.

Discussion

The findings from this evaluation study demonstrate that a two-phase approach consisting of an SJS and a face-to-face workshop can be an effective method of developing three important non-technical skills (self-awareness, decision-making and conflict management) in Foundation doctors in the UK. Analysis of self-report data indicated that participants had increased their skills and knowledge in these areas and that they were able to apply their learning to clinical practice following training.

The findings suggest that SJSs can be used in combination with high fidelity training delivery methods to help to develop the skills that doctors require to cope with the challenges that they are likely to encounter in their practice. SJSs can be used to develop doctors’ non-technical skills through developing their self-awareness, helping to train them to manage conflict and to identify appropriate steps to take when making difficult and high-stakes decisions. This is particularly important for Foundation doctors for whom the nature of the role (e.g. regularly changing work environment and teams) can often cause them to feel out of their comfort zone and for whom the training could help to develop resilience for working in the UK National Health Service.

The findings also suggest that there could be considerable potential advantages to using SJSs for training and development in terms of cost and faculty resources and that these can be complimentary to ‘high fidelity’ simulation approaches for training non-technical skills (e.g. simulation centres, in situ simulation).

References


T25 Discussion
The Perils of Personality Profiling
Geoff Trickey, PCL and Lauren Reeves, Sova Assessment
Category: Psychological Assessment at Work
Submission:
The purpose of the session is to explore the challenging and complex arena of personality. Personality assessments are so prevalent that questions are raised about their presumed efficacy, especially since they have been so widely adopted by both psychologists and non-psychologist practitioners. The discussion will seek to address the question: ‘have we become too casual about the perils of personality profiling?’

This session will explore potential pitfalls – including drawing conclusions that are inconsistent, becoming swamped with information and distracted by irrelevant findings. The aim will be to increase awareness of the benefits of focused or targeted assessments and the importance of addressing the ‘what are we looking for?’ questions before planning the assessment process, rather than after the assessments.

What are the main psychological theories, models and research underpinning your session?
The discussion will acknowledge the considerable progress in psychological theories, models and research over recent years. A range of references have been utilised in order to structure and build this discussion topic, including but not limited to:

How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?
There has been a dramatic internet fuelled increase in the use of personality assessments and the proliferation of questionnaires, meaning there is a challenge ahead for Occupational Psychologists to ensure the BPS practice standards that have been painstakingly developed remain effective and used by all practitioners.

Why is the submission appropriate for the particular category you have chosen? Personality assessments are psychometrics, which is an example topic provided by the BPS under the ‘Psychological Assessment at Work’ category.

What do you consider to be the most novel or innovative aspects of the ideas being presented? Many of the delegates will have experience of, and perhaps used, personality assessments. As such, this discussion is an excellent way to encourage interactive discussion about the perils of personality profiling and to gain insight from a range of delegates.

Rather than championing one particular tool or model of personality assessment above others, the discussion will be a great opportunity to consider a wide range of different tools and approaches, as well as encourage healthy debate among practitioners.
It will also provide an opportunity to examine the BPS practice standards and increase understanding as to how the vast array of internet based assessment solutions may or may not adhere to these guidelines. This will help the delegates in attendance better understand who they can help protect clients from choosing poorly designed solutions.

Why do you think conference delegates will find the session stimulating and useful? What might the public find interesting about your paper or session? A significant proportion of conference delegates and members of the public will possess an understanding of, and experience of using, personality assessments/psychometrics. As such there will be an interest to attend and discuss what the perils of personality profiling might be and how they can ensure they follow the correct BPS standards. Delegates will also enjoy listening to and sharing their experiences of working in the Occupational Psychology field, and would find it useful and stimulating to hear peers’ concerns and challenges they have faced when using personality profiling psychometrics.

Personality profiling can be a minefield and some particularly poorly designed internet solutions proclaiming to be psychometrics may in fact have little validation or reliability data informing their application. This session will therefore represent an opportunity for delegates to share their experiences, anecdotes and knowledge for this topic.

What materials will you provide? We will provide a PDF copy of the slides (print out and electronic copy).

What is your preferred duration for the session (this must be within the range specified for the session type)? 60 minutes.

How will the session be structured (provide an agenda or outline timetable where appropriate): There will be an initial introduction into the purpose of the session (10 minutes), a small group discussion where questions are asked about the potential pitfalls of personality profiling and how we might utilise more realistic and effective approaches (30 minutes), and a question and answer session followed by final closing comments (10 minutes).

What is the minimum, optimum and maximum number of attendees? Maximum would be 12 people, minimum 4 people, optimal would be 8-9 people.

What form will the discussion take – e.g., town hall meeting, panel discussion, debate, roundtable? Roundtable. The speaker/facilitators will introduce the session and present their thoughts and findings on the topic area. The group will then take part in an open discussion about the perils of personality profiling, and the future challenges that are facing Occupational Psychologists and organisations. The purpose of the session is for delegates to consider and question current practices and suggest approaches that may be more realistic and effective. There will also be an opportunity for a question and answer session with the speakers/facilitators about their approach to these challenges.

How will the time for questioning and discussion be utilised? As above, approximately a 10 minute period at the end of the 60 minute discussion.

What are the physical requirements for the session – e.g., preferred room layout, equipment required? We would require a round table to the group discussion, a projector so we can use our slides to present information and to encourage debate and discussion.

What topics are to be debate and what do you see as the major questions to be raised and points to be argued?
- Does using ‘panoramic’ assessments create new problems?
- Have we become too numbers and prediction oriented that we have undervalued understanding?
- Should there be more regulations to ensure tools posing as psychometrics are actually measuring what they purport to measure?
- How can we protect clients from being distracted with an attractive report and a flashy website when the assessment underpinning the report is lacking in substance?

How and by whom will the discussion be facilitated?
There will be 2 speakers/ facilitators who will introduce the discussion and will outline their thoughts on the perils of personality profiling. There will then be an open discussion with members of the group, in which speakers will draw upon the group’s thoughts and experiences and encourage delegates to share and challenge. The speakers will ensure that all delegates have a fair opportunity to voice their thoughts on the topic of the session.

Who will be the main discussants and what is their experience and general perspective on the topic? The speakers/ facilitators are experienced Occupational Psychologists who work with a variety of clients and organisations. The speakers have a wealth of psychometric experience and are passionate advocates of applied psychology over an unusually varied professional life, spanning and linking divisions between educational, clinical and occupational psychology. This includes professional training, management consultancy, research, clinical and educational casework, psychometric research and design, and test publishing. The speakers are passionate about psychometrics and keen to share their experience and listen to and learn from the experience and ideas of others.

T26 Panel Discussion
Industry changes and the need for resilience
Shelley Winter and Emily Amdurer, YSC; Philip Gibbs, GSK; Kate Seljeflot, Diageo and Sarah Dunn, Coach

Category: Leadership, Engagement and Motivation

Purpose of the session is for the audience to hear the impact of rapid industry or market fluctuations, globalisation and internal organisational changes on different businesses. This ongoing change and the new challenges that emerge requires a new level of resilience amongst their people. We have HR representatives from different industries including Pharma, FMCG and Luxury Brands to share their industry challenges and the related demands on their people.

The Panel will be chaired by a consultant who works with these clients asking the panel these key questions to draw out their respective experiences and facilitate discussion.

1. What external challenges does your business currently face?
2. What does resilience mean in your organization? (Because everyone speaks about it in a different way)
3. How have conversations around resilience in your organization changed over the last few years?
4. What specifically do resilient leaders and/or teams look like in your organization?
5. Where have you tried to introduce resilience interventions in the past? Did they work or not work?
6. Given the changing context, how will upcoming challenges call for a different or new type of resilience?
7. Looking across your industry and network which organizations and/or leaders are standing out as being particularly resilient?

The Panel:
Global Human Resources Officer for a Luxury retail brand (Fortune 500) based in New York. She is responsible for her organisation’s human capital; 16,000 employees in over 20 countries and its HR function. She holds a Bachelor of Science degree in Human Sciences from University College, London, U.K., and a Masters degree in Information Science from City University, London

Global Head of Talent for a FMCG Drinks company (FTSE 100) based in London. She is responsible for Talent Management and Leadership development for 28,000 people globally. The business has a guiding purpose, to
celebrate life every day and every where. She leads a culture which supports their people to thrive and realize their Purpose and Possibility.

**Director of Product Development, Quality Assurance and Insights**, for a Global Pharmacology company (FTSE 100), based in London. He runs their Global Energy and Resilience Centre of Excellence and currently leads a globally dispersed team whose key purpose is to help everyone in the business do more, feel better and live longer. During his career he has developed and delivered a wide range of research projects and transformational interventions aimed at improving and sustaining healthy, high performance. He is a Chartered BPS Psychologist who specialises in evidence-based health, well-being and performance strategies and analytics to help individuals and organisations flourish and thrive. He has also contributed to a number of publications including the International Review of Industrial & Organizational Psychology (2010), Handbook of Organizational Culture & Climate 2nd Edition (2010), New Directions in Organisational Psychology & Behavioural Medicine (2011), Innovations in Stress & Health (2011) and Flourishing in Life, Work and Careers (2015).

**Global Head of Coaching** for a leadership consultancy. She oversees Executive Coaching services and organisational coaching programs provided to large multinational clients. She has also created a model of Resilience and a Resilience Diagnostic based on her client experiences. The model captures leadership opportunities to build resilience in self and others. She has a Masters in Applied Science (Coaching Psychology) from the University of Sydney and a Master of Arts (Psychology from University of Auckland.

**Global Head of Organisational Development** for Global Financial Services company (to be confirmed).

**T27 Standard Paper**

**The doctor’s dilemma: clinical performativity and medical director identity**

Kate Mackenzie Davey, Birkbeck and Megan Joffe, Edgecombe Health

Category: Learning, Training and Development

**The doctor’s dilemma: clinical performativity and medical director identity**

Medical directors, senior doctors at board level, identify as doctors and rely on clinical credibility for their authority. However, there are tensions in combining clinical practice with senior management responsibilities. Interviews with 20 medical directors, explored their hybrid role and produced accounts of the dilemmas of combining senior management and medical practice. Performative discourses emphasised the importance of recognition and revealed both the power and insecurity of doctor identity. Medical directors must be doctors. Doctors are recognised through practice. However, medical and management practice compete for time priority. Bending citations of practice could ease this dichotomy between management and medicine.

Medical management has proved frustrating for policy makers and stimulating to research (Cascon-Pereira & Hallier, 2012; Ainsworth, Grant & Iedema, 2009; Iedema et al 2003,). While the problems are global perhaps nowhere is this split more obvious than in the National Health Service where successive governments have sought both to curb spending and to maintain the principal of free healthcare by introducing greater management control. Professional resistance to threats to autonomy has been addressed by recruiting doctors and nurses into senior management roles.

Doctor identity is high status, morally, socially and often economically. The role of Physician or medical doctor is rated at the top in occupational status rankings and the most highly trusted (Mackinnon & Langford 1994). There is an argument that doctors are no longer regarded as god like and put on pedestals as they once were (Lupton, 1997). However, doctors in her study reported that in spite of changes attributed to education, media coverage and greater emphasis on consumer power “few had noticed that their own patients were displaying less respect or even reverence towards them” (Lupton, 1997 p.483). Doctors voice nostalgia for the old role of doctors (professional...
The role of doctor is a familiar one, reinforced through play and representation in the media.

The elite position of doctors is reinforced through competitive selection and lengthy socialization. The training is long, arduous and structured (Pratt, Rockman & Kaufmann, 2008). Hospital practice marks clear hierarchies and in-groups and out groups through uniforms, use of titles and the possession and practice of unique and highly prized skills and knowledge.

Medical directors are doctors at board level. Research on the difficulties for doctors in management has focussed on the failure of doctors to fully identify with organization and management. The underlying issue is of continuing professional identification. Their identity has been studied as hybrid, conflicted and multiple (Cascon-Pereira et al; Joffe & Davey, 2012; Iedema et al 2003). Witman et al, (2010) described the role of clinical directors as “janus-faced”, a doctor facing one way and a manager facing the other. The power of the medical is such that authority for clinical directors is from their recognition as “wise men” rather than any position power. This implies that giving up clinical practice might cost the credibility by which they influenced their peers as well as their own work satisfaction.

Giving an account
The focus on clinical practice by medical directors provides a basis for a performative examination of doctor identity to explore both the routines that maintain doctor identity and the pressures that undermine them.

Butler theory of performative identity argues that the way we behave links us to shared categories or discourses, such as doctor, which will be recognised by those with whom we interact. Their responses will reinforce our own positioning. These scripts are powerful, however, they cannot fully determine what we do. Even direct mimicry will not be identical. The clarity and prestige of doctor identity and the recognised performances associated with this suggest that it is an effective performative (Butler, 1997). It gives an identity which is easily recognised and likely to influential. Clinical practice is a core routine that reinforces the performative nature of doctor identity. However, for medical directors, this practice is threatened by the demands of management. This research focuses on the role of clinical practice in the performative identity of medical directors. In doing so it raises wider questions about the nature of doctor identity, the possibilities for change and the future management of health services.

The research drew first on document analysis and observation to clarify organizational role of medical director. Interviews lasting 60-90 minutes were carried out with 20 medical directors to explore their experiences of the role. This paper draws on micro analysis of discourses of clinical practice by medical directors to explore the performative nature of doctor identity and inform our understanding of the future role for medical directors. First we look at the common elements across interviews to identify shared discourses. Secondly, we examine the ways that individuals draw on these materials to explore the ways they are used and the inconsistencies, anxieties and contradictions that emerge.

First, we argue, “clinical credibility” is used as a discursive resource to maintain doctor norms around practice. That is a medical director is recognised through clinical practice. There are practices that are allowed or suspect for doctors and that failing to conform to these practices threatens the claims to doctor identity. Secondly, we examine the ways that this claim is challenged or troubled in relation to ongoing practice. This raises questions about 1) the amount of clinical practice necessary for credible performance 2) the competence of this performance if carried out with credible managerial performance, 3) the relevance of clinical performance for Medical Directors 4) the motives for ongoing performance. Finally we examine the implications of this for change in the bending of citations of what it means to be a doctor.

Clinical practice and clinical credibility: a position from which to speak
The discourse around clinical credibility for medical directors was universally acknowledged. The focus of discussion that emerged was on the ongoing importance of clinical practice. The congealed discourse was that a medical director must be a doctor and a doctor is recognised by the practice of medicine. While, to some extent this was caught up in maintaining the advantages (especially security) in the consultant contract, these accounts reveal deeper concerns about identity. The primary argument for continuing clinical practice was in order to maintain credibility with medical peers. This was itself interrogated to reveal a number of underlying tensions about maintaining doctor identity.

I’m still too much of a clinician to give it up, and that’s why I do too much clinical work. In some ways I think that makes me a more effective medical director in some of the things I do, because the consultants in the trust know that I’m still very much engaged in the front line. It makes it, on the other hand, however, this thing that I feel that, most of the time, juggling lots and lots of balls, and I don’t always keep them in the air. (18 pt)

The argument here concerns both peer recognition and the shared experience of the core business of the hospital. While the speaker claims to do “too much clinical work”, he also acknowledges the claims on his time.

A further challenge was the amount of clinical practice that was necessary to maintain competence and the quality necessary for credibility. At the extreme was an argument that Medical Directors had to be better clinicians than their peers to maintain credibility. However, the most fundamental challenge was to question whether or not continuing practice did influence peer credibility. Many medical directors who claimed maintaining credibility as a motive also mused that while they felt it was important they didn’t know, some suggested that credibility based on past practice could be maintained, at least for a while. A further concern was about credibility to the wider public. One Medical Director argued that at public meetings people were not as rude to him as a jobbing doctor. Another described his father asking him how he could give up practice that was core of his medical training.

The most challenging comment from a full time Medical Director argued that it was not possible to maintain both, that they were contradictory and that Medical Directors could only play at clinical work.

they’re kidding themselves, because what you’ll hear their colleagues say, as well, is they think they’re still doing the work, but they never turn up at the right time. So if you hear colleagues talk about people who are medical directors, [...] it’s that they think they’re just playing at being a consultant. [...] (Full time MD 13)

Related to this was the argument that clinical practice still allowed the Medical Director to be “one of the boys”. They could be a Medical Director in the office but a doctor on the ward/in theatre. This enforced a clear division between the two roles with lines of authority differing between management and clinical structures. While many of these discourses stress the dichotomous relation between management and medicine, a shifting discourse explored the similarities between management and medical practice. The core argument was that all doctors manage, but not all managers are doctors.

Discussion
The concern about clinical practice is at the core of insecurity about credibility as a doctor on the board. The question they interrogated was whether or not they could still speak from the position of doctor if they were no longer practicing clinical medicine. This shows two aspects of performativity. First, is the power of the doctor role as an effective performative. It is a clearly established, well recognised position from which to speak. While it may be under threat it still allows a position from which to speak and be acknowledged. Secondly, however, and especially interesting in considering change and identity, is the insecurity of this position. To be able to speak as a doctor it is important to maintain practice. Being a doctor involves identity work through repeated performances of doctoring. This sense of repetition, recognition and identity work was especially vivid in accounts of their feelings of clinical work.
The transition from professional to manager has been especially critical in medicine where the high professional and social status of doctors has been contrasted to the uncertain status of managers. Doctors have a clearly recognised position from which to speak, that of knowledge, experience and practice in the skills of medicine. Medical management in comparison is newer, less easily represented and its practice is not so easily identified. The role of the Medical Director was formed to ally clinical and managerial interests.

While the explicit arguments concern peer recognition, knowledge of current practice, the underlying concerns are with identity and identification. MDs have limited time and there are questions of how much time they allocate to each role. There are also concerns about the conflict in underlying values between the professional prioritisation of the patient and the organizational focus on resource efficiency. Thus apparently practical concerns about time allocation are grounded in fundamental and emotional concerns around identity. This presents doctors with a dilemma in identification where their clinical practice provides reassurance that they can maintain their doctor identity. This research supports Witman et al (2010) argument that the medical hierarchy should be respected and brought into the organizational structure without challenging medical director practice.

References

T28 Award Session 3 - Student Prize in Excellence - 1st Prize
**Sickness Presenteeism – Work over Health**
**Julie Jebsen**, University of Wolverhampton
Sickness presenteeism, when people feel too ill to go to work but do so anyway, can impair employee health and increase organisational costs, sometimes more than sickness absenteeism. Julie’s study aimed to examine predictors of presenteeism, and use research to unite both approaches to presenteeism within one model (antecedents and outcomes).

T29 Short Paper
**Psychological contract fulfilment and officers’ attitudes towards alternative pay systems**
**Fran Boag-Munroe**, Police Federation of England and Wales
Category: **Work Design, Organisational Change and Development**

**Introduction**
The Police Service of England and Wales has been subject to considerable and challenging organisational change since 2010. In addition to ongoing austerity, an independent review in 2012 also brought about sweeping changes to police pay and conditions (Winsor, 2012). Such organisational change can lead to psychological contract breach (Conway, Keifer, Hartley and Briner, 2014). But what are the consequences of such psychological contract breach or fulfilment on workers’ attitudes towards possible future changes within the organisation? Linking to the conference theme of “resilience in a challenging world”, an understanding of the conditions under which employees may be responsive rather than resistant to future changes within an organisation is of considerable benefit within the
challenging context of ongoing change and uncertainty faced by much of the UK public sector. This focus moreover is particularly pertinent for the police service in light of a further, recently completed review which proposes additional wide-reaching changes for recruitment, development and reward within the police (College of Policing, 2015).

To address our stated research objective, in this paper we test the proposition that psychological contract breach/fulfilment will predict police officers’ attitudes towards possible future changes within the police service. To do this we concentrate specifically on the perceived fairness of one mooted change within the police, namely that reward should be linked to criteria other than tenure and rank, which for brevity we refer to here as “alternative pay systems”. We ask whether the perceived fairness of alternative pay systems is related to the current state of an officer’s current psychological contract with the police. However we also investigate whether this relationship might vary depending on the attributions an officer makes about the police service’s intentions towards them. In particular, we propose that when the organisation is generally seen to act out of goodwill and show benevolence towards its officers, current psychological contract breach/fulfilment may have less impact upon attitudes towards future possible changes. We develop this argument further below.

The Psychological Contract and Attitudes towards Alternative Pay Systems
Psychological contracts can reduce uncertainty and increase predictability within the employment relationship (Shore and Tetrick, 1994). Psychological contract breach and fulfilment can similarly act as a signal to an employee regarding the treatment they may expect to receive from their employer at a later point in time; insofar as future fair treatment is more likely when the psychological contract is presently fulfilled, and less likely when there is a current or previous breach of the psychological contract (e.g. Robinson, 1996). This anticipation of future treatment can have implications for employees’ cynicism towards the organisation (Johnson and O’Leary-Kelly, 2003) and resistance to organisational change (Van den Heuvel and Schalk, 2009). Within the context of the perceived fairness of alternative pay systems, this could be taken to indicate that the extent to which current obligations regarding pay and benefits have been met will inform an individual’s belief that they will be treated fairly under any new pay system that is implemented.

**Hypothesis 1(a): Psychological contract fulfilment will be a positive predictor of perceived fairness of alternative pay systems.**

Although a linear relationship between psychological contract fulfilment and the perceived fairness of alternative pay systems may be plausible, several studies also point to a non-linear relationship between psychological contract breach/fulfilment and work outcomes (e.g. Lambert, Edwards and Cable, 2003; Rigotti, 2009). Whilst we might not expect a positive attitude towards alternative pay systems amongst employees whose psychological contract has been breached in the past, employees who feel satisfied in their current circumstances would arguably also have little to gain from an alternative pay system (e.g. Brown 2001), and thus are less likely to believe that it is fair. In light of this, an inverted u-shaped relationship between psychological contract fulfilment and the perceived fairness of alternative pay systems could be hypothesised, with lower perceptions of fairness expressed by employees with low levels and also with high levels of psychological contract fulfilment.

**Hypothesis 1(b): There will be a curvilinear relationship between psychological contract fulfilment and perceived fairness of alternative pay systems**

The Moderating Effect of Perceived Organisational Benevolence
Whilst an employee might attribute a lack of psychological contract fulfilment to the employer wilfully reneging on its promises, they could also attribute this to external challenges such as environmental or economic changes or a misunderstanding between the employer and employee about mutual obligations (Lester, Turnley, Bloodgood and Bolino, 2002). These latter attributions can, under certain conditions, attenuate the damaging consequences of psychological contract breach (Robinson and Morrison, 2000). It additionally could be advanced that psychological
contract breach attributed to non-deliberate reasons is less likely to be a useful signal regarding likely future treatment, in contrast to a deliberate strategy by the employer to go back on its promised obligations.

The “benevolence” of an organisation has similarly been shown to limit the impact of psychological contract breach (Chen, Tsui and Zhong, 2008) and could be seen as an important factor in explaining when an employee sees psychological contract breach as deliberate or non-deliberate, and therefore when current psychological breach/fulfilment is a useful indicator of future behaviour. Benevolence in an organisational context refers to the extent to which an organisation wishes to do good to and help an employee, as a result of an attachment to the employee rather than for egocentric profit or reward (Mayer, Davis and Shoorman, 1995). It may be argued that when an employer acts in a benevolent manner, an employee will be less likely to see any failure to fulfil the psychological contract as a deliberate and wilful act. This would therefore be a weaker predictor of future treatment, and consequently attitudes towards alternative pay systems.

Hypothesis 2: Organisational benevolence will moderate the relationship between psychological contract fulfilment and perceived fairness of alternative pay systems

Methodology
Participants were 21,300 police constables from the 43 police forces in England and Wales. Participants received a link to an online survey containing scales to measure the variables described below, all of which were measured using five-point Likert-type scales.

Fairness of Alternative Pay Systems (“APS Fairness”; α = .81) was measured using three items, which loaded onto a single factor and were therefore treated as one variable for the purposes of this analysis. Participants were provided with a short description of three alternative pay systems (competence-based pay, performance-related pay and workload-related pay) and were asked to rate the fairness of these systems.

Psychological Contract Fulfilment (“PC Fulfilment”; α = .83) was measured using items which related to transaction psychological contract fulfilment taken from Coyle-Shapiro and Kessler (2000), for example “Fair pay for the responsibilities I have in my job”.

Organisational Benevolence (“OB”; α = .93) was measured using three items taken from Mayer and Davis (1999) including “The police service is very concerned with my welfare”.

Police force, age, gender, length of service, working hours (full-time or part-time) and whether the participants occupied a frontline role were included as control variables.

Results and Discussion
Data were analysed using Mixed Model Analysis within SPSS. Analysis of the model estimates observed main effects for PC Fulfilment (b = .04, p < .001) and OB (b = .11, p < .001). Inclusion of the curvilinear term resulted in a just-significant improvement to the model fit (χ²(1) = 4.18, p = 0.04), with the estimate for this parameter explaining unique variance in the model over and above the linear term (b = -.02, p < 0.001). This provided support for Hypothesis 1(b). The linear and quadratic interaction terms also significantly improved the fit of the model to the data (χ²(2) = 18.06; p <.001). The individual estimates for the interaction terms both significantly differed from zero. Of particular note for the current analysis, the interaction between OB and the curvilinear effect of PC Fulfilment was significant (b = .02, p < .001); this interaction effect is plotted in Figure One.

Figure One: Plot of the Interactive Effect of Psychological Contract Fulfilment and Organisational Benevolence on Perceived Fairness of Alternative Pay Systems
Analysis of the interaction plot showed a closer relationship between PC Fulfilment and APS Fairness when OB was low, and a much weaker relationship when OB was high. A clearer curvilinear relationship between PC Fulfilment and APS Fairness was also seen when OB when is low. The interaction plot indicated a stronger association between PC Fulfilment and APS Fairness at low and medium levels of PC Fulfilment, but a weaker association between PC Fulfilment and APS fairness at high levels of PC Fulfilment. There was however no evidence of a U-shaped relationship between PC Fulfilment and APS Fairness.

As such, and in keeping with our hypotheses, psychological contract fulfilment/breach appeared to affect attitudes towards alternative pay systems more when an organisation is not seen as benevolent and acting in its workforce's interests. In these circumstances, low levels of psychological contract contract fulfilment predict low levels of perceived fairness of alternative pay systems. We suggest that this is because psychological contract breach/fulfilment will be seen as intentional and thus a more accurate guide as to possible future treatment under an alternative system. Although the effect wanes at high levels of psychological contract contract fulfilment it can be contrasted with the effect seen when organisational benevolence is high. Here, current treatment is a much weaker predictor of the perceived fairness of alternative systems; arguably because current psychological contract breach is less likely to be attributed to a deliberate attempt by the organisation to renege on its promises and so is a poorer indicator of possible future treatment.

In the context of repeated organisational change, these findings suggest that employees could be least supportive of possible future changes within an organisation, such as the introduction of alternative pay systems, when both their psychological contract has not been fulfilled and they do not believe that the organisation acts out of goodwill and benevolence towards its employees. Practical steps to encourage positive attributions about an organisation's actions and intentions as it moves forward with future changes could be useful in increasing the workforce's support for these future changes.

There are limitations within the current research, such as the small effect sizes observed and the use of a cross-sectional design. We also recognise that in addressing organisational benevolence we consider one aspect of trustworthiness (Mayer et al. 1995), and do not consider the role that other aspects of trustworthiness or indeed trust itself might play in this relationship. However the study nonetheless suggests that attitudes towards potential future changes may be contingent on current psychological contract fulfilment and perceptions of organisational benevolence. This could provide a useful foundation from which to further develop both theory and practice in regards to employee attitudes towards future organisational change.

References


T30 Standard Paper
What is normal? Selecting and developing personality norm groups
Rob Bailey and John Hackston, OPP Ltd
Category: Research Design, Analytical Techniques and Practical Applications
A feature that differentiates psychometric assessments from many others is the use of a norm group. By using an appropriate norm group, the results of an assessment can be compared against an understood standard, thereby allowing a meaningful interpretation. However, an interpretation can easily be swayed by which norm group has been chosen. This session aims to share research findings from four separate studies into norm groups, encourage debate and to put questions to researchers and publishers of psychometrics. We will examine job specific norms, international norms, general population vs. applicant norms, and the stability of norm groups over time.

T31 Keynote Session
Globalization, Sustainability, Future – Great Challenges Ahead
Prof Franz Josef Radermacher, University of Ulm
The alarm signals cannot be ignored: population explosion, famine, clear-cut rain forests, exploited mineral deposits, global warming – and millions of jobs in question because of always more intelligent machines. As it stands, the current world economic system is driving humankind to the edge - through overexploitation of nature and raw materials, the lack of social and cultural balances between the countries and the cultures of the world and due to massively conflicting interests of powerful actors.
The globalization of the economy, triggered above all by the incredible new possibilities of information technology, leads into the wrong direction due to inadequate worldwide rules. The body of rules governing world trade today as represented mainly by the World Trade Organization (WTO), together with the worldwide closely linked financial systems, increasingly determines economy around the globe. Questions concerning environment, balance in and
between societies and cultural diversity are too rarely addressed. The result is uncoordinated growth and increasing social divisions and resulting tensions in and between countries.

Major issues cover the interplay between issues such as globalization, information technology, sustainability and the future. Three long-term futures / attractors for future development are identified: (1) collapse, (2) neo-feudalization (Brazilianisation of the world) and an (3) eco-social market economy model, i.e. a green and inclusive capitalism and a balanced world. A responsible future is possible and can be achieved, but this needs new and bold approaches. No easy times ahead!


T32 Award Session 4 - Lifetime Achievement Award

‘Resilience! I can’t be Arsed!’

Chris Lewis, Aver Psychology

This Paper is a personal reflection of over 45 years working as an occupational psychologist. It considers what I have seen as hurdles and pitfalls that maybe make life more difficult for occupational psychologists, but I try to offer possible ways forward to achieve a more effective and enjoyable professional experience.

The title today is a quote that, to me, encapsulates the problem of ambiguous and sometimes ill-defined concepts in occupational psychology that are clearly useful but difficult to work with. This is the first hurdle especially in terms of operation and measurement.

The other hurdles and pitfalls that are suggested and briefly examined are:

1- **To have the notion does not mean you have the answer.** To identify an important piece of work behaviour or trait e.g. Resilience, does not mean you are ready to solve organisational or personal problems. There is someway to go.

2- **Not being clear about where and what is the ‘bottom line’.** To get organisations to buy into the services of occupational psychologists you have to know where they are coming from.

3- **Anthromorphosising organisations.** To attribute whole organisations with individual human characteristics. Considering them as caring, aggressive or resilient for example, can cause key structural issues to be ignored.

4- **To have Illusions of certainty.** To me this is the biggest pitfall. It is the belief that you measure and predict much more accurately than you actually can. This is a huge problem in the way psychometric tests are used as we seriously overestimate the scientific relevance of predictive validity and ignore the methodological shortcomings of parametric statistics.

5- **Implied effect inflation.** This is related to 4. Above. This is believing that statistical significance has, in itself, an application in practice. This has led to the over-stating of research findings in the popular press and the growing belief in some psychological publications that P-Values are just not enough when presenting research outcomes.

6- **Brushing aside fundamental scaling issues.** Virtually every psychological dimension that we use cannot be shown to be a ratio scale, and genuine interval scales are rare. They are arbitrary metrics, which results in most inter-individual comparisons being effectively meaningless. For example what does ‘zero resilience’ look like!

7- **Loading ‘evidence-based practice’ with poor research.** ‘Evidence-based practice’ is so important to occupational psychology but it requires the practitioner to be critically aware of the integrity and value of research findings.

8- **Judging the ‘scientific’ credentials of occupational psychology research.** Very little occupational psychology research is replicated and in most cases it would be impossible to do it. This research usually produces organisationally specific ‘case studies’. The danger here is to dismiss this research as insufficiently quantitative to be considered as scientifically rigorous. This can be a mistake.
9- Being insufficiently aware of occupational psychology history. Many concepts appear that are seen as ‘new’ ways of enhancing our understanding of workplace behaviour. However these have often been around before but under a different guise. Whilst their return is justified because ‘times have changed’, it is worth checking out why they fell out of fashion the first time.

10- Having an irrational fear of personal wisdom. Occupational psychologists train for a long time. Getting chartered can be quite a battle and progressing through the profession can bring cuts, bruises along with the achievements. They have a right to a personal view on people and work that should be respected.

Therefore, what do I feel is the way forward to be effective and satisfied occupational psychologists?

A - Addressing the pitfalls mentioned is a good start. It just reduces ongoing problems.

B - See yourself as primarily a diagnostician not as just a predictor of work behaviour. This is particularly important for those who make heavy use of psychometric tests. Your skill should mostly be about analyzing what’s happening now.

C – I take the view that occupational psychology is clearly a social science and as such it is well served by its research. Its quantitatively underpinned case studies add to what the discipline has to say. Individual wisdom should be fostered and cherished.

D – Whilst occupational psychology has a tendency to ‘reinvent the wheel’ it has changed. Most noticeably in acknowledging the existence of ‘affective processes’. ‘Emotions’ have now been recognised, and stringent attempts have been made to classify and measure them. This makes it so much richer for occupational psychologist now than in the past.

FINALLY

I must take this opportunity to thank all those people who have carried me through my career. My colleagues, my students and even most of my clients. And to thank, most sincerely, the Division of Occupational Psychology of the BPS for bestowing this coveted Award. It is so very much appreciated.

T33

The Resilience Debate – facing today’s biggest challenges

Chair, Ivan Roberston, Robertson Cooper Ltd & Prof Franz Josef Radermacher, University of Ulm

This is what we hope will be an exciting new addition to our programme and will be facilitated by Prof Ivan Robertson involving our keynote speaker Prof Franz Josef Radermacher and other invited guest speakers. We are keen to address global and strategic current and relevant issues at the conference. The pre-planning of the programme means that sometimes we may not have the flexibility to address emerging and significant issues in a timely manner. This session will aim to address an important issue in a dynamic fashion by allowing delegates to influence the topic to be discussed, the outcome of which will be announced during the conference. Watch out for more information on the shortlist of titles!

T34 Stage 2 Qualification for Candidates

Getting Started on the BPS DOP Qualification

Angie Ingman, Chair of the Occupational Psychology Board

Category: Learning, Training and Development

This session will provide information on the structure of the current qualification and the Board that oversees it. The areas covered begin with: Why bother? What is the Qualification about, how will it benefit you and your organisation? We will then look at the role of your Supervisor and how you can find the perfect match for you. Next, what do you need to be able to commit to, have you the opportunities to obtain the breadth of
experience needed. You’re ready to register on the Qualification, so what forms do you need to complete? This is
followed by the entry submission process and how your entries are assessed. Finally, what do you have to do when
you have demonstrated competence? There will be time for questions at the end and there will also be Board
representation throughout the conference.

T35 Standard Paper
Evaluation of a resilience training intervention in a policing context
Berni Gaughan and Gill Wall, West Midlands Police
Category: Learning, Training and Development

10 minute interaction
Ice-breaker: Reflective piece – 2-axes (L1, 2, 3 – Level of Difficulty) by classification where individuals have the
opportunity to apply the resiliency model Flach (1988, 1997) and Richardson et al (1990) from an experiential
learning perspective.

Link to conference theme of resilience
This research discusses the role of the effectiveness of resilience training in a policing context. Traditionally
pathological models were applied when investigating the impact of critical incidents on police officers (Burke, 2008),
leading to “old school attitudes” whereby resilience and well-being were taboo subjects because of their perceived
link to vulnerability (Klein, 2013). More recent resilience models position the individual’s response to distress as a
normal emotion which can result in positive outcomes by acting as a catalyst for growth and change (NATO Joint
Medical Committee 2008; Paton and Burke 2007). This research focuses on the role of resilience as a protective
factor in policing (Yuan, 2011) and that officers’ responses to challenging events can build resilience in ways that
increase officers’ capacity to adapt to future risk and uncertainty (Paton et al, 2008).

Why is the submission appropriate for the particular strand?
This submission is appropriate for the strand ‘learning, training and development’ because the research looks at how
the individual can transfer the learning from the classroom intervention into the workplace (Kearns, 2005). The
workplace diary intervention will enable exploration of what the ‘hot buttons’ are that create stress, which
approaches respondents applied to reduce the stress, and which were most effective. Whilst diaries have been used
as research tools for decades, their use as an intervention is relatively novel. They are emerging in clinical settings as
a means to promote psychological recovery, and research into their use suggests that there is promise in this
approach but that a body of evidence needs to be built up before they become routine (Aitken et al., 2013). Whilst
the relevance of reflection in transfer of learning is understood (Travers, Morisano, & Locke, 2014) the researchers
are not aware of any research where a diary-based intervention has been used to embed resilience training in an
occupational setting.

What is most novel or innovative about this research?
There are several reasons why the research is novel and innovative. Firstly, the applied nature of the research: the
policing service. The policing landscape is undergoing significant change, which was initiated by the Home Office’s
(2010) radical reforms to policing impacting on both national and local policing. Other organisations can learn from
this research as they reinvent themselves to deliver better change (Laloux, 2014).

Secondly, whilst many studies have investigated resilience (Richardson, 2002), few studies have been conducted in
the policing context in the United Kingdom (Klein, 2013). Third, the effectiveness of resilience training as a resilience
intervention in an organisational setting is virtually unknown (but see Christopher et al., 2015).

Why do I think delegates will be interested in the session?
We think the conference delegates will find the paper and session interesting because it explains the importance of resilience in overcoming personal and organisational challenges, as well as exploring how individuals can foster greater resilience by learning and growing from the experience and bounce back stronger and wiser (Paton, 2008). Additionally applying the resilience model to individuals helps build resilience along with a stronger stress shield (Paton, 2008), providing individuals with a greater understanding of “know thyself” when in stressful situations.

Why do I think the public will be interested in the session?
This input will be of interest to non-delegates as resilience draws across lots of disciplines not just psychology. The public will enjoy this session as it is research and evidence-based and includes practical tools that can be applied immediately to help them manage their stress better.

Psychological theories, models and research underpinning session
The session is underpinned by resilience research along with providing a brief account of the policing context. It illustrates the role of resilience in operational incidents and organisational culture. Research suggests delivering change and management style can be more stressful to individuals rather than operational incidents, (Gist & Woodall, 2000; Alexander & Wells, 1991; Burke & Paton, 2006).

Resilience research and theory illustrates the complexity of defining resilience, where there is no universal agreement defining the construct. Connor and Davidson (2003) argue resilience to be the embodiment of innate qualities that enable one to thrive in the face of adversity, whereas Neenan and Dryden (2009) suggest resilience is a set of flexible cognitive, behavioural and emotional responses that can be adjusted to address acute or chronic adversities. Luthar, Cicchetti and Becker (2000) take a positive stance and suggest resilience to be a dynamic process encompassing positive adaptation.

Smith and Charles (2008) in leadership resilience argue the need for officers to be able to deal with critical incidents and not to show emotion in a variety of settings, for example, dealing with angry and confused people, and delivering bad news. However, Gist and Woodall (2000) state that officers have an expectation of exposure to these types of critical incidents when applying to join the police service, thus critical incidents are generally not seen as a stressful part of the job (Klein, 2013).

On the other hand, findings by Alexander et al. (1993) and Biggam et al. (1997) Martinussen, Richardsen and Burke (2007) argue that officers feel under greater pressure to achieve organisational results rather than attending and resolving operational incidents (Klein, 2013). This is particularly important given the existing policing context which are undergoing unprecedented amount of change as highlighted in the College of Policing’s Leadership Review (2015).

From a practical application perspective, Paton et al. (2008) have developed a stress shield model to promote resilience in police officers and protect individuals from adversity. The stress shield model integrates person, team and organizational factors to provide a proactive framework for developing and sustaining police officer resilience. Therefore a proactive approach to resilience training can be seen to improve well-being and organisational performance and adapt to the challenges (Lewis & Zibarras, 2013). Additionally Cooper (2013) argues that 25% of the population are troubled by long hours and heavy workloads. A further 25% have significant worries over job insecurity, therefore resilience training is a single intervention that can be used to protect against burnout and improve organisational outcomes (Cooper, 2013).

Research objective
Evaluation of the effectiveness of resilience training in a policing context.
**Design and methodology**

The evaluation is exploratory and incorporates both qualitative and quantitative approaches.

Training participants were surveyed to ascertain perceptions of the training intervention and increase in knowledge, enabling level one and level two evaluation (Kirkpatrick, 1994). The training intervention was conducted in July 2015, with 21 participants (13 police officers, 2 PCSOs, 6 police staff).

Following completion of the training intervention, participants will be asked to undergo a supplementary intervention, adopting an experience sampling method approach (Csikszentmihalyi & Larson, 1987). Specifically, participants will complete a five-day stress diary during the working week; the diary will be completed immediately after experiencing a stressful event during the working day. The stress diary includes the following fields such as: intensity of stress (1-7); duration of stress; technique/s used to manage event; reflection on the efficacy of the approach. The stress diary acts both as an intervention to aid transfer of learning, and as a research data collection tool.

Participants will complete the six-item Brief Resilience Scale (BRS) (Smith et al., 2008) (e.g. I tend to bounce back quickly after hard times) before and after completion of the stress diary intervention period, and a focus group will be held with participants to explore their experience of the training and diary interventions.

The study followed BPS ethical guidelines.

**Data analysis**

The evaluation approach will be a realist-based one (Pawson & Tilley, 1997) incorporating quantitative analysis from the participant feedback, the stress diaries, and the BRS scores in conjunction with qualitative research of the feedback, diaries and focus group (thematic analysis conducted using NVivo).

Further, the analysis will explore the key points of stress experienced during the working day. This will contribute to the classification codes used in the reflective piece at the start of the session.

**Results**

Analysis of the results from the participant training intervention feedback show that participants scoring themselves Knowledgeable or Very Knowledgeable about personal resilience increased from 38% prior to training to 100% post-training.

Initial qualitative analysis indicates that participants were able to take away some key learning points from the training intervention, both to improve their own resilience as well as consider that of their staff (e.g. “If you can’t change it, change the way you think about it”) but also highlights areas where there is potential for improvement (e.g. tailoring the inputs to focus on specific work stressors in the policing context).

Additional analyses will be completed in September 2015.

**Discussion**

Participants demonstrated an increase in knowledge from 38% prior to training to 100% post training, although this measures learning at intellectual level (Bloor and Lahiff, 2001). Additionally an increase in knowledge does not explain how participants will master their environment (Senge, 2005) and overcome challenges they encounter. Therefore the stress diary will be a useful intervention to appreciate the tools and techniques the participants applied in the workplace post training to help reduce stress.
At qualitative level participants were able to offer examples of reframing problems so that they became manageable, so that ‘real life’ problem solving, could be taken from the classroom and applied to day to day work (e.g. “If you can’t change it, change the way you think about it”). Findings from what works in training practices, reveal learning integrated into routine behaviour is more effective at changing an individual’s attitudes and behaviour rather than traditional classroom based approaches alone (Wheller & Morris, 2010). Additionally by participants reframing problems this can close the gap between knowing and doing, therefore the stress diary analysis will further explore the construct of ‘learn by doing’ rather than the classroom based ‘learn by reading or listening’ (Wong & Cummings, 2007).

The discussion will be based on the results generated in September 2015.

**Conclusion**

Expected conclusions drawn from the research are that participants found the training to be valuable and 100% would recommend the training to colleagues. Particular types of organisational situations can increase participants’ stress levels and interventions can be built to decrease individual stress levels whilst at the same time improving organisational effectiveness. At the same time findings from the stress diary may well suggest different types of intervention for different organisational groups, for example; Police Officers, police staff and Police Community Support Workers.

**Practical application**

The findings have implications on the policing context, which is undergoing significant change. Where embedding a programme of resilience training could be one intervention to reduce barriers “old school attitudes” that suggest resilience and well-being to be a taboo subject because it involves vulnerability (Klein, 2013).

The research adds to the field of resilience within the police organisational context, where problems are ambiguous and solutions uncertain (Grint, 2007) and there is a need for officers to be agile and respond at pace to the changing circumstances not just in critical incidents but also when delivering change programmes. Thus the type of organisational problems influence the response, for example; a technical problem requires operational response in order to ‘get things done’ during a critical incident. In contrast delivering change requires resilience in the individual and organisation to deal with uncertainty, with no apparent solution.

Further research is recommended investigating how Occupational Psychologist can provide long term solutions to build individual and organisational resilience.

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**Struggling on regardless: presenteeism in UK prison officers**

Gail Kinman, Andrew Clements and Jacqui Hart, University of Bedfordshire

**Category: Wellbeing and Work**

**Introduction**

The term ‘presenteeism’ refers to situations where people continue to attend work, although they feel sufficiently unwell to take time off sick. There is growing evidence that such behaviour is commonplace with considerable costs for wellbeing and performance. Compared with absenteeism, however, little systematic research has focused on presenteeism: i.e. the reasons why employees continue to work while sick, and the implications for individual and organisational functioning. This presentation examines these issues by drawing on a national study of prison officers: a working environment where presenteeism may have particularly serious consequences.

Estimates of the prevalence of presenteeism vary depending on occupational group (Aronsson et al. 2000; Niven & Ciborowska, 2015). A review of the literature highlights several factors thought to underpin this behaviour. Presenteeism has been linked to terms and conditions of employment, such as sick leave policies and the availability
of sick pay (Johns, 2011). Job insecurity has also been implicated (Virtanen et al. 2003), whereby taking sick leave may be a sign of ‘weakness’ and leave employees vulnerable to job loss. Positive associations have also been found between job demands, time pressures and presenteeism (Demerouti et al. 2009). Ease of replacement is a further factor, whereby employees may find it less stressful to continue working rather than return to a backlog of work (Caverley et al. 2007). People may also engage in presenteeism for more personal reasons, such as feeling irreplaceable, a high need for control, or a sense of obligation to other team members (Aronsson et al. 2000; Grinyer & Singleton, 2000).

Although organisations may consider presenteeism more beneficial than absenteeism, there is growing evidence that it can be considerably more costly (Goetzel et al. 2004). Working while unwell can not only delay recovery, but also impair future health status and increase the risk of future sickness absence (Kivimaki et al. 2005). Moreover, it has recently been estimated that attending work while sick can cut individual productivity by at least one-third (Johns, 2011); communicated infectious disease may also damage the health and productivity of others (Rosvold & Bjertness, 2001). Presenteeism may also impair the quality of interpersonal relationships at work. This may be a particular problem in interdependent jobs, as one team member being under par can jeopardise the performance, and indeed the safety, of others. Alternatively, positive working relationships and support from managers and colleagues may reduce the incidence of presenteeism.

Presenteeism may have particularly serious implications for safety-critical jobs, such as healthcare. Research conducted by Niven and Ciborowska (2015) found that pharmacists who had attended work while unwell more frequently made significantly more minor errors and serious mistakes than those who had not. It was argued that trying to maintain performance requires greater compensatory effort (i.e. more concentration and greater vigilance) which, in turn, is likely to engender mental strain.

This brief literature review highlights the potential costs of presenteeism: particularly in safety-critical jobs. As yet, however, it is an under-researched area. It has been suggested that the factors that encourage presenteeism and the implications for individuals and organisations will, to a large extent, be dependent on people’s working environment (Johns, 2011). It is therefore crucial to gain insight into the reasons why people continue to work while sick and how this may influence wellbeing and functioning in different occupational groups – particularly those where safety concerns are fundamental.

Aims and context
This mixed-methods study utilises data from a survey of prison officers to consider three issues: a) the prevalence of presenteeism in the sector; b) the reasons why officers continue to work while sick; c) relationships between presenteeism and several work-related factors (demands, control, support and relationship quality). Links between presenteeism and several indices of wellbeing and professional functioning are also examined. Firstly, emotional exhaustion is linked with depleted physical and psychological resources, and depersonalisation/cynicism to impaired interpersonal relationships with service users. Both of these factors are highly relevant to wellbeing and performance in this occupational context. Insight into relationships between presenteeism and non-working life (such as work-life conflict and ‘off-the-job’ rumination about work issues) is also of interest, as adequate opportunities for respite and recovery are vital to maintain optimum health and performance.

Prison officers work interdependently in safety-critical environments. They are typically required to be vigilant for long periods of time, for their own safety and to protect co-workers and prisoners. Prisons in the UK are increasingly overcrowded and understaffed and incidents of violence and aggression and self-harm have risen dramatically (Ministry of Justice, 2015). Recent studies of prison officers have found high levels of job-related stress and mental health problems that exceed those of the general population (see Kinman et al. 2014).

Method
1,682 prison officers (85% male) responded to an online survey comprising a range of validated scales. A single item measured the extent to which respondents attended work while unwell (Cyr & Hagen, 2007). Job demands, control, manager and peer support and relationship satisfaction were assessed by the HSE Management Standards Indicator Tool (Cousins et al. 2004). Other scales measured emotional exhaustion and depersonalisation (Maslach et al. 1996), work-life conflict (Carlson et al. 2000) and affective rumination about work worries and concerns (Querstret & Cropley, 2012).

Findings

Quantitative

Eighty-four percent of prison officers reported being under pressure to come into work when unwell at least ‘sometimes’, with more than half (53%) ‘always’ feeling such pressure. Multiple regression analysis identified the key predictors of presenteeism as younger age, higher workplace demands, lower control, less support from managers, and poorer quality interpersonal relationships (all p<.001). Peer support did not significantly contribute to the variance in presenteeism scores. The total variance explained was 22%, with the strongest effects from demands and relationship quality. Significant positive relationships were found between presenteeism and emotional exhaustion and depersonalisation (both p<.001). Moreover, respondents who reported being present at work while sick more frequently tended to report more work-life conflict and ruminate about work more frequently (all p<.001).

Qualitative data

A single open-ended question invited respondents who reported coming into work while unwell were asked to provide the reasons. The data were subjected to thematic content analysis and the following themes emerged: Punitive systems – a strong sense of an ‘anti-sickness culture’ within prisons was conveyed, which was reinforced by perceptions of punitive sickness policies. Many respondents highlighted the requirement to attend capability hearings if they went off sick. Fears of the outcome of such hearings were both explicitly and implicitly linked to concerns about dismissal. Pressure from management – a lack of understanding and compassion from managers was commonly highlighted by respondents. Many reported that managers or prison governors often contacted staff at home (often on the first day of sick leave) to ask when they would be returning to work.

Letting colleagues down – concerns were expressed for the wellbeing of co-workers who might be overloaded if a member of the team was off sick.

Staff shortages – views were frequently expressed that, as staffing was already stretched, taking time off sick would have potentially serious consequences.

Fear of dismissal – feelings of vulnerability about being ‘the first in the firing line’ were often expressed, whereby a ‘poor sick record’ may lead to job loss.

Duty – this reflected a sense of moral obligation and commitment to the job, where it was perceived to be the participant’s duty to continue to work, regardless of how sick they felt.

Workload – some respondents indicated that they continued to work as there was no sickness cover and their work would accumulate during their absence. This would make their return considerably more difficult.

Additional themes that were expressed less frequently involved concerns that claims of sickness may not be believed by management or colleagues, or may be considered insufficiently serious to warrant taking time off. Anticipatory shame, where colleagues might gossip about people who were off sick, was a further reason provided to engage in presenteeism.

Implications
The findings of this mixed-method study provide insight into the prevalence of presenteeism among prison officers, the reasons they continue to work while unwell, and the wide-ranging consequences. Several characteristics of the working environment, most notably high demands and unsupportive relationships at work, were significant predictors of continuing to work while sick. The qualitative data complemented these findings by providing more in-depth knowledge of these factors. Evidence was provided that prison officers engage in presenteeism for a wide range of reasons. In general, however, prison officers seem to do so in response to external pressures, such as punitive sickness policies and fear of dismissal. Concerns about personal safety and the safety of colleagues were also expressed. More internal motivations for failing to take sick leave were generally related to concerns for the wellbeing of co-workers who may be overloaded. The study also highlighted significant relationships between presenteeism and several factors that can impair the wellbeing and functioning of prison officers.

It is vital to raise awareness of presenteeism and its wide-ranging impact. While encouraging staff back to work may (at least in the short term) maintain staffing levels, there are serious concerns for the long-term health and wellbeing of employees - particularly in safety critical jobs. This presentation will conclude with a discussion about how we, as occupational psychologists, can convince organisations to take a more long-term view of the ‘down-side’ of presenteeism, and how to foster a workplace culture where people who are genuinely sick are supported more effectively.

References
The very notions of impostors and acts of ‘imposture’ are prevalent and compelling themes that feature heavily across popular culture, history, and the arts (e.g. Eliav-Feldon, 2012; Kets de Vries, 1990; Rosenthal and Schäfer, 2014), with occupations and organizations often implicated along the way. The Oxford English dictionary (OED, 2015) has an impostor as “one who imposes on others; a deceiver, swindler, cheat; now chiefly, one who assumes a false character, or passes himself off as someone other than he really is”. We can observe that this definition comes in two parts; the first may make us think of more unethical forms of deception, fake identities, transgressions, and ‘imposing’ criminal acts. The second part of the definition, however, although still implying deception, appears perhaps milder and less objectionable, in terms of the mere conveyance of false impressions in general.

A very different use of the word altogether resides within the term ‘impostor syndrome’, defined as “a collection of feelings of inadequacy that persist even in face of information that indicates that the opposite is true. It is experienced internally as chronic self-doubt, and feelings of intellectual fraudulence” (Caltech Counseling Centre, 2015). Initially discovered as a phenomena by Pauline Clance and Suzanne Imes (1978), and after an apparent 30-year hiatus, the clinical term has spawned a recent ongoing rash of self-help books (e.g. Schulte, 2014; Young, 2011). High-achievers in general, and high-achieving women in the workplace, have been found to be particularly susceptible to impostor syndrome (e.g. Forbes, 2011), although it has also occasionally gone by other names, such as ‘Achilles syndrome’, and the attendant fears of failure and feelings of ‘pseudocompetence’ can affect both genders across a variety of life roles and domains (Clarkson, 1994).

Keeping an open mind about the meanings and forms of impostor and impostor syndrome, this paper seeks to explore the concepts more thoroughly and build theory and practical implications that should help in recognizing corresponding forms of impostor and experiences of imposture in workplaces. The subject has rarely, if at all, to the author’s knowledge, been reviewed or given systematic attention as a potential concept of value in fields of applied social science research. This is surprising, as it is likely to be of importance and interest to occupational and organizational psychology for at least three reasons:

- We spend large portions of our lives at work, one of our most important life domains, trying to craft positive identities and a sense of self through our jobs and relationships with others (Ashforth and Kreiner, 1999; Dutton, Roberts and Bednar, 2010; Wrzesniewski and Dutton, 2001). This can in turn promote our well-being, helping us to develop and maintain critical social and resilience-based resources for functioning at work along various virtuous cycles or pathways (Dutton and Ragins, 2007; Dutton et al., 2010). Viewed this way, smaller acts of imposture may constitute novel ways of understanding important forms of self-adjustment and positive identity construction or ‘identity work’ in workplace settings (Brown, 2015).

- Second, assuming a character or trying to be something different to what you feel you are constitutes something of an ethical (and existential) dilemma of modern life, and working life, about how to juggle authenticity with conformity in liberal societies (Taylor, 1992). How can we truly ‘be ourselves’ without lapsing into narcissism or nihilism (Lasch, 1991), and how can we conform continually to appearances without feeling like a fraud or a sense of cognitive dissonance? (Hamilton and Sanders, 1995; Marcuse, 1964; Whyte, 2002). The pressures to be many different things in modern life, ‘all things to all people’, or at least to choose between them, can be acute (Gergen, 1991), and can run high, in the form of status anxiety (de Botton, 2005), perfectionism (Vergauwe et al., 2014), crises of privacy (Brown, 2000), and the risk of a
harmful public shaming (Ronson, 2015). Impostors bring out and embody these dilemmas of self in particularly strong ways, with implications for the acute pressures of self that shape working lives.

- Finally, and related to the points above, impostors can reveal new ways of considering diversity and socialisation in the workplace, or how different people assimilate, make sense of, and negotiate demographically diverse identities and selves, shaping their well-being, as well as organizational politics and change. Unprecedented forms of diversity, multiculturalism, and globalization are argued to be changing people’s identity processes and politics (e.g. Arnett, 2002; Kraus, 2011; Vertovec, 2007), creating fragmentation alongside conflicting desires to belong (Younge, 2010). When new employees join organizations or experience changes, their socialization can be a surprising process for them to make sense of (Louis, 1980). This holds whether they have lots of freedom to experiment with how they assimilate by adopting or revising various ‘provisional selves’ or narratives (Ibarra, 1999; Ibarra and Barbulescu, 2010), or if they have a more stigmatized, conflicted self with less freedom to express it – the fear of prejudice accompanying many types of diversity, for example. In the latter case, employees may resort to more complex, quiet strategies to adapt to their work and achieve change in their organizations (Meyerson, 2001). Again, impostors often represent individuals who have boldly attempted to manage differences to their advantage, and to ‘fit in’ or ‘stand out’ against the odds.

In sum, the study of impostors carries important implications for themes of identity work, ethics, diversity, and socialisation. Impostors and imposture throw into sharp relief the problems – and some potential solutions – around how to present a well-crafted version or versions of oneself comfortably and resiliently in socially complex organizational environments.

Literature on (organizational) impostors and relevant theoretical perspectives

Academic literature dealing explicitly and systematically with impostors and impostor syndrome is relatively sparse, although the term does crop up reliably enough in psychology and other areas of social science to get a flavour of how to investigate it at least. Selective examples worth highlighting here include Manfred F.R. Kets de Vries’ psychodynamic work distinguishing personality characteristics of ‘true’ impostors from those who merely ‘feel’ like a fake (Kets de Vries, 1990, 2005), Clance and Imes’ (1978) early work on the impostor phenomenon as experienced by high-achieving women, some social psychology work on the effects of impostors in groups (Hornsey and Jetten, 2003), occasional work on the personalities and outcomes of impostor syndrome sufferers (Bernard, Dollinger and Ramaniah, 2002), and some work identifying leaders as potential impostors (Kets de Vries, 2003; Singh, 2008).

Based on this literature review and connecting it with reflection on organizational literatures, four relevant and complementary theoretical perspectives, all concerned with how we psychologically and socially experience a sense of self, were identified for further analyzing impostors:

- Psychodynamic and psychoanalytic perspectives on organizational life (e.g. Diamond and Allcorn, 2003), concerned with complex psychological experiences of identities, roles and relationships that may be unconsciously motivated, hard to articulate, and too subtle to be picked up by other approaches.
- An existential perspective that can be linked to business ethics, and emphasizes tensions around authenticity, conformity, moral character, freedom of choice, ambiguity, and emotion (e.g. Jackson, 2005).
- A dramaturgical perspective, probably most associated with the work of Erving Goffman, emphasizing the metaphorical ‘performance’ and ‘drama’ aspects of organizations, identity and self, as well as concepts like impression management, self-monitoring, and situational framings (Manning, 2008).
- A sensemaking perspective, most associated with the work of Karl Weick on organizational sensemaking (Weick, 1995), that views identity as an ongoing social construction, where individuals figure out who they are by retrospectively interpreting actions, stories, and situations as they unfold (Maitlis, 2009).

Famous impostors and cases of imposture: Analyzing secondary data for discourses
The current paper adopted qualitative analysis, more specifically critical discourse analysis, and applied it to accounts of famous impostors. Critical discourse analysis is concerned with the way social and political power relationships and their changes are affected by the way we speak and write about a particular subject (van Dijk, 1993). Language is given particular importance, as a discursive force that actively and socially constructs the way we perceive reality, rather than simply more passively describing or reflecting it (Phillips & Oswick, 2012).

Critical discourse analysis was thus applied to a series of key texts on impostors (e.g. The Ultimate Book of Impostors by Ian Graham (2013); Inventors & Impostors by Daniel Diehl and Mark Donnelly (2015); and Famous Impostors by Bram Stoker (1910)). Further media texts and online resources were mined for examples of prominent cases of impostors and imposture, including the website Listverse.com and the Nexis news database service. Table 1 below offers a very brief snapshot of the analysis of famous cases of impostors, associated themes of critical discourse, and potential implications for topics covered by occupational and organizational psychology research agendas. The inter-related discourses were derived using a mixture of bottom-up, emergent, inductive analysis of the source material, and more deductive, top-down analysis informed by the pre-existing literature reviewed above.

Table 1. Examples of impostors, key discourses of imposture, and organizational implications

<table>
<thead>
<tr>
<th>Famous impostor</th>
<th>Critical discourses of imposture</th>
<th>Organizational implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frank Abagnale</td>
<td>The playing of ‘deep roles’ (e.g. hero, villain, false prophet)</td>
<td>Leadership and entrepreneurship</td>
</tr>
<tr>
<td>Christian Karl Gerhartsreiter</td>
<td>Self-destruction, discovery and processes of public shaming</td>
<td>Ethical dilemmas</td>
</tr>
<tr>
<td>Diederik Stapels</td>
<td>Con-artistry: Schemes, frauds, hoaxes, power claims, identity thefts, and deceptions</td>
<td>Change agents</td>
</tr>
<tr>
<td>Billy Tipton</td>
<td>Chameleons and serial imposture</td>
<td>Paradoxes of talent and performance management</td>
</tr>
<tr>
<td>Esther Reed</td>
<td>Impostor syndrome, ego inadequacies</td>
<td>Structures of inequality, mobility and discrimination</td>
</tr>
<tr>
<td>Ferdinand Demara</td>
<td>Diversity modifications (e.g. women who lived and worked as men)</td>
<td></td>
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<tr>
<td>Refaat El-Sayed</td>
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</tbody>
</table>

Implications and conclusions for the workplace

Although many acts of imposture may seem historically dated and/or unlikely, extreme events, these two characteristics can both be argued to positively inform the study of work and organizations (e.g. Starbuck, 2009; Zickar, 2015). As Kets de Vries (1990, p667) notes, “it often seems as if the impostors show us something about ourselves which we may prefer not to see under normal circumstances...we are all impostors, we all play roles”.

Furthermore, as the final column on the right-hand side of Table 1 shows, many topics of interest to occupational and organizational psychology might feature on a research agenda surrounding impostors. Leaders, boundary spanners, whistle-blowers, change agents, social loafers and minority employees are all likely to sit on a continuum of imposture and its accompanying experiences. In conclusion, impostors remain something of a blind spot in terms of how we understand self, identity and well-being in workplaces, with strong practical implications for better managing workplace cultures, diversity, technology, and change.

References (illustrative examples only – not fully listed for space reasons)

"You've got mail!" - email, perceived pressure and work-life balance
Richard MacKinnon, Future Work Centre

Category: Wellbeing and Work

Introduction
Email is a core part of many employee’s lives. Despite its widespread usage and popularity (Ofcom, 2014) as a communication tool (Radicati and Levenstein, 2014), for some individuals and employers, it can be a source of major frustration, anxiety and lost productivity (Byron, 2008). It can also negatively impact employees’ perceptions of the work-home interface (Ferguson, 2012).

This study represents the first exploratory phase of an 18-month research initiative, focused on the impact of technology at work. To understand more about how email facilitates and negatively impacts the employee experience, we conducted a survey of just under 2,000 people across a variety of industries, sectors and job roles in the UK.

Our aim was to explore whether factors such as technology, email behaviour, demographics, work-life balance and personality play a role in our perceptions of email pressure and consequently in our coping strategies.

While this exploratory study is cross-sectional, our results and a thorough review of the literature allowed us to make some initial recommendations to both individuals and organisations, exploring both cognitive and behavioural strategies.

Methodology
We administered an online survey to a representative sample of just under 2,000 working adults in the UK to better understand their experience of email. In addition to standard biographical data, the survey included the following measures:

- The SWING: Survey of Work-home Interference from the University of Nijmegen (Geurts et al, 2005), which focuses on positive and negative work-home interface outcomes and their frequency
- A measure of perceived email pressure (the authors’ own)
- A Core Self-Evaluation measure (Judge et al, 2003)
- A measure of the perceived utility of email (the author’s own)
- Measures of email and technology usage (the author’s own)

Results
We found that, as with many workplace phenomena, the picture is far from clear. Email appears to be a double-edged sword, both facilitating flexibility and productivity but also acted as a source of unhappiness and pressure. It also contributes to negative work-life balance outcomes. Our interpretation of email appears to be moderated by core aspects of personality and this moderating effect has implications for actual work-life balance outcomes.

It also appears that the focus of much advice about email – that is, lowering the number of emails in your inbox – fails to address the core of the problem. Our research found a weak correlation between the volume of email and perceived pressure. It was how and when email was accessed and processed, that correlated more strongly with perceived email pressure.

Our analysis of the data highlighted the following key results:

- We found a strong relationship between using ‘push’ email and perceived email pressure. This means that employees who automatically receive email on their devices were more likely to report higher perceived email pressure.
- People who leave their email on all day were much more likely to report perceived email pressure.
• Checking email earlier in the morning or later at night is associated with higher levels of perceived email pressure.

• Managers experience significantly higher levels of perceived email pressure when compared to non-managers.

• Our research also highlighted some interesting group differences in the role personality (as measured by core self-evaluations) plays in our experience of email and how email has the potential to both positively and negatively impact our work-life balance:

• Higher email pressure was associated with more examples of work negatively impacting home life and home life negatively impacting performance at work.

• We found that personality appears to moderate the relationship between perceived email pressure and work-life balance. People who rate their own ability and sense of control over their environment lower find that work interferes more with their home life, and vice versa.

Conclusions

• We make a number of recommendations for how individuals and organisations can explore the challenge of email using both cognitive and behavioural strategies.

• We note that the impact of individual differences on outcomes and perceived email pressure implies that “one size fits all” organizational rules for management of email are unlikely to work for all employees.

• We also highlight the outstanding questions arising from this project and how they will be addressed in subsequent phases of this research initiative.

Key references:

T39 Europe Academy of Occupational Health Psychology (EAOHP) Symposium
Emerging challenges and priority areas in occupational health psychology: Future directions in research, policy and practice
T39a

Paper 1: Sustainable worker health: An emerging concept and domain of enquiry
Juliet Hassard, Tom Cox & Philip Dew Centre for Sustainable Working Life, Birkbeck University of London

Category: Wellbeing and Work

The concept of sustainable working life is of growing interest and discussion at scientific, professional and governmental levels. In October 2009, the Swedish EU Presidency organised a conference on Sustainable Work – A Challenge in Times of Economic Crises giving recognition to the importance of this subject area and helping to define its scope. Since this conference, several publications have been authored examining the expansive concept of sustainable work (e.g., EUROFOUND, 2015a; EURFOUND, 2015b). A central theme within these recent policy-level publications is the importance and need of devising new solutions for working conditions and career paths that aim to support workers in retaining their physical and mental health, motivation and productivity over an extended working life. Based on the results of a cursory literature review, the current presentation will reflect on how the field of occupational health psychology can inform this growing field of enquiry and respective practices in the field. The presentation will conclude by outlining the author’s reflections on the required next steps, at both research and practices levels, to support and facilitate sustainable worker health and work engagement.


T39b

Paper 2: The best practice awards for EU-OSHA’s healthy workplace policy campaign: Reflections from practice
Peter Kelly, Health and Safety Executive

Category: Wellbeing and Work

During the last 18 months the European Union has been engaged in promoting best practice in the psychosocial risk management through its EU-OSHA’s Healthy Workplace Policy Campaign. As part of this policy campaign, a Healthy Workplace Good Practice Award was conducted. The primary aim of the Healthy Workplace Good Practice Award was to recognise European companies demonstrating best practice in the management of work-related stress and psychosocial risk factors. Each country within the EU was asked to provide two examples of good practice. These examples were then assessed against criteria of best practice in psychosocial risk management. In total, 10 companies were awarded for examples of best practice and 10 companies were commended. Of those 10 companies awarded for best practice they represented a cross-section of EU employers from large multinationals and SMEs. The jury for the good practice award was made up of governments, industry, trade unions and EU representatives to reflect EU social dialogue. Awarded companies needed to show clear signs of innovation and transferability of processes. This presentation will present examples of innovative interventions used by organisations to manage psychosocial risk within their work environments. Discuss emerging issues, challenges, and advancements of good practice from awarded companies; and the lesson learned from the best practice awards which are likely to influence the future direction for of management of psychosocial risk in work.

T39c

Gail Kinman, University of Bedfordshire
This paper will consider some of the contemporary threats to work-life balance and their implications for the sustainable wellbeing of employees. Work-life conflict has generally increased during the recession, and funding for work-life balance initiatives has declined. Reduced support initiatives combined with the increased intensification of work has strong potential to further threaten work-life balance. E-working, alternative forms of work scheduling, and the growing utilisation of information communication technology can help workers manage boundaries between their work and personal lives. Nonetheless, there is a growing recognition of their potential to threaten recovery opportunities and impair rather than enhance wellbeing. A further risk factor is that organisations and employees may be prepared to ‘trade’ work-life balance for organisational success and continued employment over the short term, without acknowledging the serious implications for wellbeing over the longer term. Certain groups of employees (such as knowledge workers, those who are highly involved in their work, and people with caring responsibilities), may find it particularly challenging to maintain a healthy, sustainable work-life balance. Considerable variation also exists in the extent to which people wish their work and personal lives to be integrated. The need for OHP researchers and practitioners to develop theories, models and measures that can capture such variations will be emphasised, as will the importance of crafting creative, multi-level interventions to protect work-life balance and wellbeing sustainably with benefits for all stakeholders.

**T39d**

**Paper 4: Exploring the nuances of presenteeism at work: Integrating the worker’s vantage point**

Nathalie Saade, Nottingham University Business School, Stavroula Leka, Centre for Organizational Health and Development - University of Nottingham, Aditya Jain, Nottingham University Business School & Centre for Organizational Health and Development - University of Nottingham, Marek Korczynski, & Ziming Cai, Nottingham University Business School

**Category: Wellbeing and Work**

Employee attendance has received significant research attention for many decades. Research efforts were mainly focused on absenteeism due to its readily observable nature and costs to organizations (Johns, 2010). Nowadays, the attendance construct can be disaggregated to refer to absenteeism and an emerging topic of presenteeism at work. However, scholars have critically pointed to the area being markedly “atheoretical” and to its development independent to the wide literature on absenteeism (Johns, 2010). As a result there have been several research efforts to close this gap in the literature (e.g. Deery et al., 2014; Gosselin et al., 2013; Johns, 2011). The conceptualization of presenteeism, however, varies throughout the literature, evident through the many proposed definitions. The various definitions of presenteeism disagree on the nature or the core essence of the behavior, and have varying theoretical implications. It also follows that the different conceptualizations logically allow for different antecedents and consequences of presenteeism at work. If left unaddressed, these issues are problematic for the development of coherent theory, and risk overlooking fruitful avenues for achieving a more complete and a deeper understanding of presenteeism in the workplace. This paper maintains that it is important to explore the various conceptualizations and theoretical implications in the literature. This research therefore aims to study this behavior by placing the worker’s experience center stage, to arrive at an in-depth understanding of presenteeism, its antecedents, and consequences.

Thirty-five semi-structured interviews were conducted with working people in the UK from various industries and across a range of skill levels to capture their phenomenological experience at work in relation to attendance, health, performance and other relevant themes. Participants were recruited by advertising the study online on social media, and using a snowball technique. Each interview lasted about sixty to seventy minutes in duration, and the sample was balanced between males and females with ages ranging from 21 to 50 years. The interviews were audio-recorded and transcribed verbatim. The best practice guidelines detailed by Braun and Clarke (2006) were followed as the framework for analysis. The analysis highlighted three main themes related to the experience of presenteeism, the antecedents of presenteeism, and the consequences of presenteeism.
Findings illustrated that many participants experience imperfect presence at work. Some participants reported experiencing physical health complaints in the workplace and attending ill. Mental health and engagement levels were significant throughout most interviews, whereby participants reported feeling stressed, anxious, detached, lacking in energy towards work, and reduced willingness to exert effort. These accounts were reported as more frequent or chronic occurrences, relative to the sporadic nature of physical issues reported. On the other hand, some participants reported enjoying work. Some had cases of lapsed concentration when physically tired or sick, or after focusing for an extended period of time however this was not associated with general dissatisfaction with work. Antecedents to these fluctuations in the workers’ experiences mainly related to psychosocial factors (Leka & Jain, 2010). Thus, the interaction of the organizational characteristics and work environment with the individual level experiences appears as an essential pathway to consider in the emergence of presenteeism, for instance through effort-reward imbalance and the psychological contract. This interaction highlights health and affective outcomes attached to conditions pressuring attendance, which when highlighted reveal potentially distinct forms of presenteeism.

These findings illustrate that a broader conceptualization of presenteeism is useful, that accounts for mental health, engagement, and physical health along a continuum of severity. These are essential to the experience of attending work when their condition would have required rest, or being at work and working through dissatisfaction, detachment, or high levels of stress and anxiety. Furthermore, findings illustrate that appreciating the holistic picture is significant to appreciate the experience of presenteeism as a part in a whole. Understanding the broader picture allows for exploring the nuances in presenteeism and highlights its multidimensional nature (Baker-McLearn, 2010). This research therefore disaggregates the phenomenon as the data illustrates potentially different manifestations, and borrows from absenteeism theory such that we can discern between forms of presenteeism patterns as a function of volition in attendance (Chadwick-Jones et al., 1982; Schaufeli et al., 2009), ultimately positioning presenteeism within attendance dynamics. It is our hope that this theoretical contribution translates into ethical practice in organizations towards the early prevention of illness-related presenteeism.


T39e
Paper 5: Corporate Social Responsibility (CSR) and human development: The case of gender equality in Latin America
As the deadline to achieve the Millennium Development Goals (MDGs) gets closer, the discussion about the post-2015 agenda and the Sustainable Development Goals (SDGs) has reached its final stages (UN, 2013, 2014). This discussion has taken into account, on the one hand, the unaccomplished goals from the MDGs, and, on the other hand, the need of strengthening not only the role of governments but also the private sector participation. Within this agenda, gender equality is seen as a key element to address the unachieved MDGs, and an imperative task to accelerate global development beyond 2015 (OECD, 2013). Similarly, the role of the private sector has been identified as crucial, as it is increasingly being recognised that neither the MDGs nor the SDGs will be achieved without the cooperation of businesses (Sachs, 2012).

Therefore, the Corporate Social Responsibility (CSR) has become an important tool for human development by bringing the moral and ethical responsibility of businesses into social concerns. However, research on CSR issues has received little attention in developing countries, even though recent literature shows some efforts to remedy this situation (e.g. Anglia, 2013; Blowfield & Frynas, 2005; Blowfield, 2007; Dobers & Halme, 2009; Egri & Ralston, 2008; Fox, Ward, & Howard, 2002; Utting, 2007). Particularly, the practice of CSR in Latin American countries has been characterized by the use of more informal than formal policies with focus on community relations and environmental sustainability. Meanwhile gender and diversity are not frequently seen as a strong component of CSR policy in the region (Blowfield, 2007; Carlier, Llorente, & Grau, 2012; Dobers & Halme, 2009; Kowszyk, Covarubias, & García, 2011; Maxfield, 2007; Utting, 2007).

In consequence, this paper aims to understand the role of CSR in the human development agenda considering the case of gender equality in Latin America. From a public policy level and capabilities approach, this paper will report the results of a qualitative study implemented in Spanish speaking countries in the region. The methodology included a documentary analysis of regional reports as well as interviews with experts from multilateral organisations. The results and practical implications will be discussed at the conference.


T39f

**Paper 6: Wellbeing: translating theory into practice**

**John Hamilton**, Leeds Beckett University

**Category: Wellbeing and Work**

This short paper considers the role that theory plays in informing the work of health and wellbeing practitioners in the workplace. It considers the definition of wellbeing and examines the rationale for employer interest in the wellbeing of their employees. It outlines organisational, work activity and individual wellbeing factors for employers to consider. The paper concludes with a short case study that illustrates the use of a theoretical framework to better understand the drivers of engagement and wellbeing in the UK higher education in institution.

T40 Pecha Kucha

**Leadership... ON FIRE: Effective Leadership in a VUCA World Part 2**

**Developing & Coaching Resilient Leaders**

**Gene Johnson**, Working Matters Ltd

**Category: Research Design, Analytical Techniques and Practical Applications**

This session introduces to the DOP the vibrant presentation format of Pecha Kucha, where each presenter covers 20 slides in 20 seconds each. The format is ON FIRE (as in, ‘firing on all cylinders’). The common theme of this session is resilient leadership in the face of a VUCA (volatile, uncertain, complex, and ambiguous) world. As the workplace becomes more complex and unpredictable, effective leadership is more resilient and flexible. A total of 10 presenters across two sessions (A & B) will offer their practitioner experiences on helping organisations and leaders cope in this new world.

This short paper considers the role that theory plays in informing the work of health and wellbeing practitioners in the workplace. It considers the definition of wellbeing and examines the rationale for employer interest in the wellbeing of their employees. It outlines organisational, work activity and individual wellbeing factors for employers to consider. The paper concludes with a short case study that illustrates the use of a theoretical framework to better understand the drivers of engagement and wellbeing in the UK higher education in institution.

T40a

**Start with the end in mind: A practitioner’s perspective on demonstrating the positive impact of leadership development and coaching**

**Richard MacKinnon**, The Future Work Centre

**Category: Research Design, Analytical Techniques and Practical Applications**

This presentation will use an anonymised organisational case study to illustrate the application of an evidence-based approach (Briner, Rousseau) to the evaluation of development and coaching. The programme itself included modules to boost resilience, provide core coaching skills, expand strategic perspectives, adopt proactive and productive working habits and support the development of others. Coaching was rooted in the cognitive-behavioural
school. The programme was run globally and included over 100 delegates.

This session will very transparently illustrate the benefits of hindsight and the lessons learned through running the programme for over two years, including:

- The need to engage organisational stakeholders early on
- Communicating the value of varied forms of evidence
- Ensuring the narrative moves from pass/fail to continuous improvement
- The need for flexibility when evaluating the impact of a moving target
- The impact of cultural diversity on key evaluation metrics
- The role of pragmatism when it comes to impact analysis in the real world

T40b
How to teach a salty old sea-dog some new tricks...
Deborah Owen, Psynchronis

Category: Research Design, Analytical Techniques and Practical Applications

Organisation – a prestigious sailing club offering hospitality services, operating on an unwieldy and antiquated hierarchical structure. Managerial executives are volunteers incumbent for 18 months, with disparate occupational credentials. The corollary of inept governance of staff is chaotic and disjointed management with missed opportunities for global expansion.

Objective – a leadership strategy to support personnel confronting the challenge of an industry which is ever more complex and aggressive with competition from aspirants with markedly different, and more successful, business models.

Solution – strategic input to collectively build networks and management-capability enabling the formulation of organisational strategy. A series of multi-modular mentoring sessions for executives to challenge their thinking and explore effects of their leadership behaviour.

Result – impact of mediating factors of resilience intervention realised. Executives are knowledgeable about tools and techniques for successful leadership, can effectively identify immediate and future priorities, have developed trusted relationships and improved communication with resultant engaged personnel and collaborative problem-solving. Transformed VUCA into:

- ‘Visualisation’ to optimise opportunities
- ‘Understanding’ of organisational/staff challenges and opportunities
- ‘Communication’ optimisation/ ‘Commitment’ to the job-role
- ‘Adaptability’ from previous experience.

T40c
Developing SME Leadership – resilience and sustainable development
Jan Maskell, Independent Practitioner

Category: Research Design, Analytical Techniques and Practical Applications

Facilitating the implementation of a Low Carbon Community workspace Environmental Plan involved examining a range of issues and targets which could have been imposed on tenants and users. An appreciative approach was taken enabling occupants to work together as a community to explore their priorities actions and choices. Models and concepts taken from Appreciative Leadership and Appreciative Inquiry were used in workshop and coaching sessions to support each occupant to take action. The group developed their own set of Members Agreements, resulting in reduced energy, material and waste costs and included reducing carbon and water footprints. As the workspace brands itself as a ‘community’ this was an opportunity to enable occupants to work together to share knowledge, ideas and practice with resulting resilience.

VUCA world of sustainable economic, social and environmental development –
Working with SMEs as tenants and users of a Low Carbon Community workspace covering a variety of organisation types including artists, makerspace, researchers, campaigners, academics, engineers. Question - how to encourage more sustainable practice in line with the community vision?

Outcomes – reduced costs and footprints

Outcomes – increased knowledge, community development, leadership actions, personal and organisational resilience

T40d

Coaching resilience, situational awareness, leadership judgement and decision making

How Law, Empsy Ltd and Robert Herring, CBE, Performance Coach

Category: Research Design, Analytical Techniques and Practical Applications

Context

Senior personnel within organisations in defence, health and safety sectors such as ambulance, emergency and fire & rescue services who have an overall responsibility to manage all incident operations and human resources known as incident commanders are often faced with enormous demands on their cognitive workload in decision-making. They are required to set priorities, organize the incident response teams and formulate the overall incident action plan within a very short time.

Challenges

The above demands have increased to a critical level due to the relentless drive for efficiency and cost saving under the recent climate of austerity; as a result, the number of accidents, casualties and deaths has increased amongst the front-line operational staff such as fire-fighters. The situation calls for effective solutions in helping incident commanders to raise their level of resilience, situational awareness, and improve their decision-making and leadership behaviour.

Intervention

We used action research to introduce a new decision-making model to be followed by incident commanders to improve effectiveness and examine whether a coaching intervention can enhance their capability of resilience, situational awareness, and effective decision-making.

Psychological theory, model and research

Action research is based on Kolb’s (1984) experiential learning with a plan-act-evaluate-reflect cycle. Planning will include a focus group using semi-structured interviews to inform the ‘act’ phase - a three-session coaching intervention that includes the use of a psychometric tool to develop decision-making capability. Hogrefe’s Leadership Judgment Indicator (LJI-2) and coaching software – Coach on the Desktop (CotD) – developed by Formula 4 Leadership are used as part of the coaching intervention for the participants. The effectiveness of the coaching intervention will be evaluated in another focus group before reflecting on the process with all stakeholders. A further action cycle may be considered. Lessons learned will be reported in due course.
NHS post-merger leadership team development
Liza Walter-Nelson, Phare Practice
Category: Research Design, Analytical Techniques and Practical Applications

The Organisation:
NHS South, Central and West Commissioning Support Unit (CSU), a newly merged (April 2015) organisation within the NHS commissioning (purchasing of healthcare) landscape.

The Issue:
The merger in April 2015 was hot on the heels of the establishment of CSU’s, whereby 20+ CSU’s started life in 2013 following the Health and Social Care Act 2012, there are now (2015) just 6 such organisations across England. There has been much pressure to keep things on track and delivering services for leadership teams of these CSU’s. The issue was understanding in what shape the executive team was in following the merger.

The Process:
Semi structured interviews were conducted, utilising both a positive psychological approach (strengths based) and aspects of the Hardy Personality and a thematic analysis was applied (largely latent, but aspects of constructionist emerged)

Lessons learned:
That it is hard for Executives to really be honest with each other despite outwardly committing to ‘honesty’ and ‘openness’ as a way of being within the organisation, during such a heavy period of change and expectation of them as leaders. There are a variety of intricate and intrapersonal drivers of this.

T41 Symposium
Improving Standards of Practice of Assessment Centres
Helen Baron, Independent Consultant
Category: Psychological Assessment at Work
Following the publication of the BPS standard for Assessment Centre practice, The Design and Delivery of Assessment Centres, this symposium will provide practical examples of how following the standard can improve practice.
Evidence from centres in a variety of different contexts and industry sectors will be used to show how potential improvements to procedures can be identified and implemented together with the impact on outcomes.
The papers will be delivered by members of the Assessment Centre Standards Working Group which has a membership of experts and leading practitioners in the Assessment Centre field.

T41a
Paper 1: Using ISO 10667 to improve practice
Dave Bartram, CEB Talent Measurement Lab
Category: Psychological Assessment at Work
In October 2011, the British Standards Institution (BSI) launched ISO 10667 in the UK. This was the first ISO international standard to assure good practice in psychometric testing and other assessments used in the recruitment process and in other areas of occupational assessment.
This standard was developed by an international team with input from the BSI’s UK committee. This worked in conjunction with the British Psychological Society and a number of private and public sector bodies involved in testing and assessment – both as providers and consumers. The Assessment Service Delivery standard – known as ISO 10667 – is designed to provide assessment firms with the opportunity to demonstrate that good practice procedures are being followed.

Good measurement through assessment is the key to enhancing the acquisition and management of talent. Good talent measurement provides the ‘people intelligence’ managers need to deliver the business results. ISO 10667 is
an important step in addressing issues of good practice in the assessment of people in the workplace. Providers of assessment services should welcome the availability of a truly international standard as this will help them providing a uniform level of service quality to ensure customers realise value from using good assessments.

The standard is in two parts. The first is of particular interest to those buying in services of assessment providers or running internal assessment programmes: the second is directed at the actual assessment providers. ISO 10667 emphasises that good practice in assessment delivery involves collaboration between parties and it encourages joint provider-client working on the development of assessment specifications, how data might be used and the interpretation of results.

The standard is generating interest around the world and in the UK a number of organisations, both providers and commissioners of services, are getting their processes accredited against the standard. This is a similar process to attaining other popular standards such as ISO 9001 accreditation.

The ISO 10667 is defined at quite a high level. For example it requires that users of any assessment approach should have appropriate training without specifying what would constitute such training. It does require assessors to meet other relevant standards where they exist so that test users in the UK would be expected to meet the widely accepted BPS standards. There are no similar standards for assessment and development centres, only more general guidelines.

The first part of the presentation will briefly summarise the development of the ISO standard and its relevance for Assessment Centres. The second part will discuss the way in which the current BPS AC standard project has been influenced by ISO 10667 and how this increase in specificity can help clarify the definition of good practice.

T41b

**Paper 2: Five recommendations that could improve your AC practice**

**Category: Psychological Assessment at Work**

**Helen Baron**, Independent Consultant

The Centre for Evidence Based Management defines evidence based practice as “making decisions through the conscientious, explicit and judicious use of the best available evidence from multiple sources ... to increase the likelihood of a favourable outcome”. Psychologists have long espoused an evidence based approach and wherever possible the development of the Assessment Centre Standard followed this approach. Indeed the desire to encourage evidence based practice in assessment centre design and delivery was one of the main motivations behind developing the standards. The research evidence base was sometimes lacking and it was necessary to rely predominantly on expert judgement in some areas. At other times it was ethical rather than evidential considerations that drove the content of the standard.

This paper focuses on some areas where there is clear evidence underlying the recommendations. In each area an extract from the standard is quoted followed by a discussion of the available evidence. The first relates to taking an evidence based approach.

3.10 The service provider shall take an evidence based approach to centre provision and should provide clients with access to documentation supporting the validity of the approach

Evidence-based practice of psychology requires practitioners to follow psychological approaches and techniques that are most effective based on their expert evaluation of the best available research evidence. While single studies will influence judgement somewhat is the meta-analyses and systematic research syntheses that will have most weight.

The evidence based approach does not replace the judgement of an expert, rather it often requires expert judgment to evaluate the strength of evidence supporting a practice and consider whether findings from one area are likely to generalise to others. Documenting the evidence used is good practice as it encourages practitioners to consider the evidence base more explicitly and to keep up to date with current findings.
4.16 The design of exercises shall take account of the capacity of the assessors who will be observing the participants or evaluating exercise outputs.

There is a great deal of evidence that human information processing capacity is limited and that mistakes are made and evidence missed when the system is overloaded. We learn about the magic number seven (plus or minus two) in introduction to psychology. Neuropsychology is getting better at quantifying the limitations to our capacity to take in and process information. Kahneman (2011) provides a very readable introduction to some of the common biases and misjudgements we frequently make when we think we are being objective. One of the top 3 issues raised by assessors in a recent survey of Assessment Centre Practice (Dewberry, 2014) was being given insufficient time to evaluate and score candidates. Time pressure will tend to exacerbate the tendency to make errors rather than enable better quality assessments. Factors in centre design such as the number of candidates to be rated by one assessor, the number of ratings to be made for each exercise and the length of time available to collect evidence to support the ratings will all impact on the cognitive load on the assessor and therefore impact the accuracy of ratings.

4.31 Descriptive anchors shall be provided for at least two points on the rating scale to ensure consistent interpretation of the scale by all assessors. A fully defined behaviourally anchored rating scale should be used where possible.

Depnath, Lee and Tandon (2015) review the evidence for BARS (behaviourally anchored rating scales). Studies consistently find that the approach performs at least as well as, if not better than the alternate approaches in areas such as convergent and divergent validity, inter-rater reliability, reducing leniency and central tendency errors, criterion validity and accuracy. The use of BARS also reduced the tendency for ratings of one competence to affect ratings in another area.

4.44 Assessors shall understand the principles of effective assessment and be competent in the specific methodologies used in the centre.

While it may seem like common sense that assessors need training before they can be effective, Dewberry (2014) found that among the most frequently raised issues by assessment centre designers were the lack of opportunity for assessors to practice and untrained people being brought in as assessors at the last minute. Wirz et al (2013) found assessor training had the largest impact on accuracy of ratings among the factors they looked at. Other studies have also found positive impacts of training on rater reliability and accuracy and Woehr and Arthur (2003) found positive relationships with both convergent and divergent validity for both the presence (versus absence) of assessor training and also the length of assessor training.

7.4 Arithmetic approaches shall be used to determine the Overall Centre Rating whenever the Centre is designed to facilitate selection decisions.

This is perhaps the most contentious recommendation in the standard and yet the evidence to support it has been accumulating for some years. Gilbert (1981) found no difference in validity between clinical decision making and mechanical combination of scores. Such a null finding would alone tend to support arithmetic approaches since they are generally quicker and cheaper to implement. However current evidence is much stronger. A recent meta-analysis by Kuncel et al (2013) found ‘consistent and substantial loss of validity’ when scores were combined through discussion, even by experts, over arithmetic combinations such as averaging. For some criteria a multiple regression equation resulted in a validity coefficient up to double that for the results based on a clinical approach. Dilchert and Ones (2009) found similar results with the validity of the overall centre rating from consensus being 0.36 whereas the unit weighted sum of the assessment centre dimension scores had a validity of 0.44. This is a substantial increase in validity that surely cannot be ignored – even if some practitioners find the result anti-intuitive. The deficiencies of consensus decision making may go some way to explain why previous meta-analyses of assessment
centre validity (e.g. Gaugler et al, 1987) have always produced such disappointing results, substantially lower than findings for single method selection validities for cognitive tests or structured interviews. Dewberry and Jordan (2006) argued that poor decision making in consensus meetings could easily undermine the validity of an assessment centre.

Some designers may regret the absence of a consensus meeting because of its secondary benefits such as helping with the calibration of raters and collating learning points from the centre. However these should not drive the decision making process and there is nothing in the standard to prevent a meeting of assessors for exactly these purposes. Indeed the standard recommends a post centre evaluation of the process as well as ongoing training for assessors.

References

T41c
Paper 3: Reducing Assessor Workload and Improving Assessment Quality
Max Choi, Quest Partnership
Category: Psychological Assessment at Work
The Assessment Centre Standards published at the beginning of 2015 identified the need to ensure that assessors were not overloaded and provided standards that help improve quality assessments. This presentation provides practical advice on achieving this.

The well-known psychologist George A Miller, back in 1962 in his ‘Magic Number 7, plus or minus 2’ paper proved the limitations of humans to deal with too many things at any given time. Yet, there is a tendency to believe that assessors are super-human and to overload them on ACs. The Assessment Centre Standards make good sense however, the reality is that organisations are driven by time pressures and resources to deliver ACs and therefore it can be very challenging to achieve. This paper provides practical suggestions on how one can re-align ACs in a
practical manner that will improve assessor workload demands, improve quality, and follow the AC standards. The paper presents things that have been done including:

- Reducing the number of AC criteria to a manageable number
- Improving the AC criteria for effective and easier scoring linked to important job performance
- Shortening the assessor day and overall workload
- Having assessors focus on specialist roles rather than trying to do everything – as this is more likely to ensure competence, consistency, and quality
  Understanding equality issues relating to the above
- Achieving efficient wash-up processes – we will explore the contentious issue of whether to have a ‘discussion’ wash-up or an ‘algorithmic’ wash-up – which is better?
- Designing exercises with all the above in mind
- Designing the AC with this in mind – does not mean that you achieve less, as these efficiencies often mean you can look after the same (or even more candidates) professionally and competently

T41d
Paper 4: Compromises and Consequences in Implementing Assessment Centres
Nigel Evans, Nigel Evans Consulting Ltd, Penny Baker, SHL CEB LTD
Category: Psychological Assessment at Work

Without a doubt, the BPS Standard (2015) is already helping to improve practice. There are some excellent examples of best practice and on-going provider-client collaboration but, like it or not, Centres are resource intensive. Run well, they can be very effective but lack of awareness of sound practice together with pressure on costs and resources, can undermine this and lead to sub-optimal, sometimes poor, practice.

Assessment methodology is well established e.g. Woodruffe (2000), Ballantyne and Povah (2004) with specific research insights ever emerging. However, assessment centres are plagued by practical issues that tend to limit their effectiveness. This presentation will discuss common compromises that are made and will explore the hidden costs and consequences of these expediencies impacting the organisation, participants and line managers. The examples are drawn from the broad experience of the presenters working with a wide range of assessment centre providers and organisations.

The issues to be addressed will include:

- Competency models that are not appropriately defined for assessment purposes
- Adequately training assessors
- Ensuring sufficient administrative support for a centre
- Working with unconvincing role players
- Appropriate rating and scoring processes
- Feeding assessment information into decision making processes

For each area we discuss practical compromises that maximise the effectiveness of the assessment while taking account of the client constraints. It is not hard to spot questionable practice, however it will be shown that the BPS AC Standards do give a clear line to follow to cut through the large bandwidth of possible practice. The requirements of the standard help the practitioner to identify where changes need to made and where compromises are possible. This process helps organisation to run more professional and more effective centres, whether using internal or external expertise; it supports commissioning clients in selecting better centre service providers who can increase the return on investment for the centre and perhaps most importantly participants will have a professional, constructive, if not always entirely positive, experience where they have been assessed fairly and effectively.

The idea of the psychologist not being a pawn but a trusted advisor an organisation’s Assessment Centre implementation has been stressed before, however concrete examples of best vs questionable practice alongside the Standard does does wonders for illustrating what is achievable.
References
BPS and DOP (2014) The Design and Delivery of Assessment Centres. Leicester, British Psychological Society

T42 Discussion
Psychology of Health and Wellbeing working Group Health & Wellbeing: How does occupational psychology contribute?
Sharon De Mascia, Cognoscenti Business Psychologists Ltd, Tim Marsh, RyderMarshSharman, Professor Ivan Robertson, Robertson Cooper Ltd, Karen Royle, Ways to Work
Video appearances from: Sheena Johnson
Category: Research Design, Analytical Techniques and Practical Applications

Managing Mental Health in the Workplace -Sharon De Mascia
Mental ill health cost UK employers £24 billion per year which equates to around £1000 per employee per year. There can also be costs for the individuals who experience common mental health conditions, with some going off sick and never returning to the workplace, as a direct result of poor management of their condition. This is an unacceptable loss of talent and expertise. Managing common mental health conditions in the workplace is not exactly rocket science! There are a number of facets to successfully managing mental health in the workplace and Occupational Psychologists are well placed to help organisations manage this, still slightly taboo, area.

The Lessons From H&S for Applying Psychology to Wellbeing - Tim Marsh (RyderMarshSharman)
The world of health and safety has enjoyed great success if recent years with fatalities in the UK, for example at a record low of 131 in the last year. Psychologists have been at the forefront of this success in a number of ways: by finding robust user friendly ways to roll out soft (i.e. communication and influencing skills) for front line management; by understanding the practicalities of organisational culture and how senior commitment and front line engagement interact; by understanding the nature of human error and subjectivity and working to minimise its impact. In short psychologists working in safety are battle hardened vets of front line engagement. This talk covers a number of war stories!

Occupational psychologists and wellbeing at work - Ivan Robertson
Research evidence shows that psychological factors can play a key role in wellbeing at work. Recent research has helped to clarify the relationship between psychological wellbeing and physical health, revealing that cardiovascular health, immune system functioning and metabolism are all related to psychological wellbeing. In addition to this, psychological wellbeing itself is a significant factor in individual behaviour, organizational performance and attendance at work.
All of this means that occupational psychologists can, and should, play major role in supporting and improving the wellbeing of people in the workplace. This presentation discusses how occupational psychologists should approach wellbeing at work and provides examples of current interventions and potential future opportunities

Occupational Psychology Contributions to Return to Work Plans – Karen Royle
Returning to work after a serious injury or health problem can be a challenging time, emotionally, cognitively and practically. Managers have a part to play and so do Occupational Health and HR but there is also a significant role for Occupational Psychologists. This might be in terms of; re-building confidence and independence, identifying roles that match with the individuals’ new skill and ability level or establishing a clearer appreciation of how to enhance potential and performance. Occupational Psychologists can utilise their skills in; assessment and development, recruitment and selection, job analysis/design, and personal development/coaching to help individuals return to work.
The Future of Ageing: Changing Work Requirements and Environments – Sheena Johnson

Psychological health generally decreases with age but improves for older worker age groups (Health and Safety Executive, 2011). Attention is needed to reduce labour market exit before the ‘older worker’ age bracket is reached (Smeaton et al., 2010).

Workplace stress, boring or repetitive work, low autonomy and flexibility all influence employees’ decision-making with regards to retirement. These are especially important to people with health conditions or caring responsibilities (Department for Work and Pensions, 2014), both highly relevant to older workers.

Facilitating Wellbeing at Dentons UKMEA LLP- Carole Watling

Carole works for Dentons UKMEA LLP and is responsible for monitoring and managing wellbeing, amongst other things. In this video cameo, you will hear Carole talk about the challenges that she encounters in trying to facilitate wellbeing and how she overcomes them.

Cognitive and behavioural training for a Middle East construction workforce

Patricia Meiring, Bechtel, Muscat Oman and Ann Bicknell, Pera Training Institute

Category: Learning, Training and Development

Protecting workers from injury is the aim of safety awareness training when elimination or substitution of hazardous work activity have been considered. Understanding the baseline of competence, and how training can effect changes in behaviour is of great significance where companies have a legal and moral obligation to prevent and mitigate personal risk. This is particularly the case in countries where there is less legislative reform around health and safety standards, and possibly larger gaps between baseline competency and the standard of knowledge required for safe work.

On construction sites, assessments of competency prior to hire and training on project can demand an extremely fast turn-around time. For researchers, there are many experience based and individual difference variables in play and to assess. Stringent experimental conditions may not appear feasible, however as the power of Health and Safety Executive (HSE) and parallel bodies to levy fines on US or UK based international companies grows, their requirements to demonstrate duty of care through training forms an increasing part of normal business-as-usual practices on construction sites. As its core aim is a basic prevention of injury, there are strong arguments for re-interrogating safety training from a theoretical and methodological point of rigor to ‘get it right’.

It has been approximated that a low percentage of all training experiences are transferred from the training environment to the job. This percentage may initially be higher as suggested by some, but can fall quickly over time (Yusof, 2011; Burke & Hutchins, 2007). Attentional demands may be too high, particularly in a diverse language population for the goals of training to take effect. Even if behaviours are automatic, a decline in performance may be seen when signals are infrequent (Goldstein & Ford, 2002), for example on a construction site. Confusion may be experienced due to the inappropriate mixing of procedural and declarative knowledge (Clark & Voogel, 1985) or when supervision feedback of training is not made available.

This study separates training design between knowledge types and method of delivery in a diverse language workforce to investigate how much transfer occurs.

Training Design and Transfer

Transfer can be placed on a continuum of ‘near’ or ‘far’ from the level of performance being taught; near-transfer being something that is context bound, and far-transfer the idea that learners can apply their knowledge over many different contexts (Clark & Voogel, 1985; Kim & Lee, 2001). For Clark and Voogel (1985) near- and far-transfer is
discussed relative to the type of knowledge being learnt: procedural or declarative. Procedural knowledge involves
the steps of a behavioural sequence that are context bound; and declarative knowledge involves conceptual
attributes and principles that are formal in nature and can be used to solve un-encountered problems. Procedural
knowledge may focus on reinforcing behaviours using a sequence of steps so that an ideal behaviour is taught,
whereas declarative knowledge would focus on ‘understanding’ of concepts to use the information in a variety of
contexts (Case & Bereiter, 1984).

Royer (1979) proposes near-transfer requires a close match in training design whereas far-transfer requires an
approximate match (Kim & Lee, 2001). Classroom-based learning is particularly well-suited to declarative content
and large audiences provided the right language trainer is used. Simulated work environments are well-suited to
procedural knowledge as the method replicates real-world environments covering many contexts designed to
increase automaticity in behaviour (Burke & Hutchins, 2007). This also relies less heavily on language.

The study is able to separate training design within company business practice to investigate their specific
advantages. The study also imposes close matches in methodological approach with knowledge type; namely,
classroom training and simulation delivery methods.

Evaluation methods
Two difficulties in the evaluation of training are measures that only assess transfer in a training setting and not
performance outside of it; plus design approaches that are based on different psychological explanations of
behaviour i.e. similar evaluation measures are used for both procedural and declarative knowledge (Clark & Voogel,
1985). Immediate evaluation measures of pre- and post-testing, and behavioural observations were used to measure
understanding; testing measuring far-transfer and behavioural observations near-transfer. These measures form
part of the NIOSH Training Evaluation framework (DHHS, 1999) and are comparable to Levels 2 and 3 of the now
‘industry standard’ Kirkpatrick Model of Training Evaluation, 1959. These evaluation methods form business-as-
usual H&S practices. The study used both evaluation measures for both behavioural and cognitive training to
evaluate their effectiveness.

The diagrams below demonstrate the study’s training designs matched by knowledge type, method of delivery and
the type of transfer expected.

Training
Heat stress is a major risk for Middle East projects. Heat stress was selected as the topic for cognitive training as it
contains ideas and representations of types of illness, symptoms, and their control measures best described
conceptually. The content is simplified to ensure language differences are minimised.

Behavioural training demonstrates 100% tie-off over three contexts to enhance near-transfer. The project is five
floors in height. Working from height is identified as one of our top three risk factors throughout project delivery.
The aim is to train personnel on how to use a safety harness correctly when moving between scaffolds, steel beams and using a life-line best shown through a physical demonstration.

Although controls for both knowledge types were in place prior to 2014, the specific training was first developed for use within the study using technical specialists, and company standards within a British Standards Institute framework (BSI 18001 certification)

Sample
The cognitive training group is 586 construction workers of which 82% are from the Indian subcontinent, 6% from Bangladesh, and 6% from Turkey. The behavioural training group is 195 construction workers of which 53% are from the Indian subcontinent, 30% from Nepal, and 0.5% from Turkey.

96% of the cognitive group are manual workers employed to work on site. 4% are non-manuals, typically field engineers. Manual workers consist of formworkers (13%) painters (8%) and electricians (8%), and lead hands (9%) and foremen (6%) who hold positions of authority over HSE controls on site. For the behavioural group, 60% of participants are manual workers, and 23% non-manuals. This difference is notable due to the division in responsibility and their controls in managing risk on site. This group is comprised of foremen (6%), and scaffold erectors (66%) who are exposed to 100% tie-off practices.

In a country where there are many differences in cultural and intellectual ability an understanding of the learner should be at the forefront of training design (Sabin & Ahern, 2012). Often the assumption with not ‘getting it right’ is that a lack of or incorrect training can lead to injury; even where there is no strong scientific evidence establishing this causal relationship.

Results
Knowledge type and evaluation method
The study found declarative training participants showed a significantly higher measure of existing knowledge in pre-tests. Procedural training participants scored better on longitudinal behavioural observation measures although not significantly. Therefore, ‘matching’ evaluation measures (that correspond to knowledge type) are a seemingly better indication of understanding. Where training designs use both declarative and procedural knowledge the research design may necessitate a careful consideration of the evaluation methods used and is an important feature for a holistic understanding of competency. This finding displays the breadth of evaluation measures that may be necessary within training design and why this is often not completed in applied studies.

Cognitive training
Tests within subjects found a significant relationship between pre- and post-testing for the declarative group (r = 0.33). Therefore declarative training can enhance near-transfer. Declarative training is assumed to result in far less demonstration of near-transfer. No transfer was found for the declarative training group on post-test and behavioural observations scores. Interestingly, following the delivery of training in June, a large increase in the number of heat-related patients were admitted to the clinic (camp clinic n = 202, site clinic n – 151) when compared to the number of patients in 2013 (n = 0).

This is a positive indicator of far-transfer as participants demonstrated an awareness of training content and an increased ability to keep themselves safe - a good indication for the project. The evaluation measures prescribed desired site behaviours, but did not account for clinic admissions and so did not adequately reflect the behavioural outcome of cognitive training. Evaluation measures which have the capability to record unknown outcomes would be beneficial. Similarly, future research should investigate how an individual leaps from declarative knowledge to procedural knowledge and then behavioural performance. This displays the depth needed in our understanding of learning, and for evaluation measures that capture the full remit of transfer.
**Behavioural training**
No significant relationships between scores were identified for the procedural group, although their measures of central tendency were high – an indication of safe performance. Procedural evaluation measures were cross-sectional in nature, and so had no opportunity for identifying changes prior in transfer. Future research must consider longitudinal evaluation measures, not uncommon in safety management systems already collecting data. There is opportunity for far more research to be undertaken if company agreements, ethical concerns, and quality of delivery are addressed. Having the resources necessary to train, administer, test and score individuals can very quickly enhance the research process and provide the right people with the right training at the right time.

**A final note**
Some of the most ambitious Construction projects have recently been undertaken in the Middle East with companies putting a greater emphasis on health and safety and training. However, safety training research is variable. Definitive answers for safety training research questions are at the mercy of a large amount of variables that minimise effects, and may only account for small variances. Far less research has been undertaken in the Middle East (Thompson, 2010; Walker & Maune, 2000). If research is to be carried out, use the large amount of existing safety data collected on site. Research, when aligned with existing business practices, can include a far larger sample population.

The National Institute for Occupational Safety and Health (NIOSH) has proposed the Tier 4 training model to identify variables that influence and optimise training to increase effectiveness for different trainee populations. It is a simplified guide to introduce psychological research principles into the construction industry, (DHHS, 1999). These re-iterate the questions proposed in this research and support needs for further research initiatives of the kind to enhance academic knowledge, and inform multinational companies on what training is most effective.

**References**
T44 Workshop
Change Ahead! Improving an organisation’s change-resilience
Nick Hayter, IBM Smarter Workforce

Category: Leadership, Engagement and Motivation
Change-resilience refers to an organisation’s ability to recover from or adjust easily to change. Faced with turbulence and uncertainty, organisations that are more quickly able to adapt will be those that are more likely to thrive. Within this context, we increasingly work with clients that need a way to present data and insights to business leaders relating to their organisation’s readiness for change.

We have worked with numerous clients that use strategic employee surveys to measure employee engagement and engagement drivers (i.e., the ‘vital few’ issues that organisations need to work on to improve and sustain levels of employee engagement). For some of these clients, our Change-Resilience Index has provided a flexible way to measure, monitor and action-plan on important issues related to the demands of a fast-changing business context.

Introducing our Change-Resilience Index:

![Change-Resilience Index](image)

The purpose of our session will be to share, learn and contribute to the continual develop of our profession by considering ways we can use the index (or similar) to measure, predict and act upon an organisation’s level of change-resilience. We will share examples of how organisations have used the index, whilst ensuring that the session remains an open discussion; with opportunity for all attendees to ask questions, share their own experiences, inviting critique and encouraging openness to ideas. The objective is for everyone to come away from the session with practical tips and techniques to measure and improve an organisation’s change-resilience.

What are the main psychological theories, models and research underpinning your session?
The session will draw strongly on research methods (e.g., employee survey design). The session will also discuss examples of sustainable follow-up initiatives (e.g., situational engineering to improve ways of working, leadership development to improve manager effectiveness, methods for building personal resilience and coping with change).
Importantly, we will promote due consideration of a realistic budgets, timing and practicality when discussing the proposed interventions.

**How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?**
Our Change-Resilience Index has been used to help organisations understand their preparedness for change. Plus, it is used to identify ‘hotspots’ of employee groups; allowing organisations to focus the right attention to areas of the business that are not change-ready. The session will provide some tangible examples of applying a model which links to the conference theme. In addition, we will invite attendees to discuss the ways they can use similar approaches to improve organisational readiness and performance through times of change.

**Why is the submission appropriate for the particular category you have chosen?**
The Change-Resilience Index is derived from case studies and consulting expertise in employee survey research. Some of the components of the index are known (via extensive research) to be global drivers of engagement in organisations; other components of the index have been developed in conjunction with HR and business leaders from client organisations, working in collaboration with our survey industry experts. Put simply, the Change-Resilience Index measures drivers of engagement and leadership effectiveness; therefore, the category of Leadership, Engagement and Motivation is the most appropriate.

**What do you consider to be the most novel or innovative aspects of the ideas being presented?**
The session will present a way for Occupational Psychologists and practitioners to help organisations use employee feedback to evaluate their readiness for change – this is likely to be novel for many. The Change-Resilience Index provides flexibility to retrospectively analyse or interpret survey data – or as a stand-alone model used qualitatively with business leaders to evaluate their perceived readiness for change.

**Why do you think conference delegates will find the paper or session stimulating and useful?**
The session will engage people in discussing ways to present data to business leaders, using a language that helps them understand the importance of their role in leading through times of change and uncertainty.

**What might the public find interesting about your paper or session?**
All organisations are faced with the demands of change and uncertainty. Many organisations will use employee surveys to measure employee engagement and engagement drivers; but fail to connect the survey with strategic or operational changes. The Change-Resilience Index provides an easy to use framework for organisations to measure change-readiness.

**If any, what materials do you intend to make available to attendees and in what format?**
Printed handouts are not necessary – but may be helpful, if other sessions are also providing handouts.

**What is your preferred duration for the session?**
60 minutes

**How will the session be structured?**
15 minutes = Introduction, context and roundtable discussion of types of change
10 minutes = Positioning of the Change-Resilience Index and roundtable discussion/critique of the index
15 minutes = Roundtable discussion of the practical application of using a Change-Resilience Index
20 minutes = Positioning example follow-up interventions and roundtable discussion of other interventions

**What is the minimum, optimum and maximum number of attendees?**
Maximum would be 12, minimum would be 4, and optimal would be 8-10. That said, for larger groups, we could split the group in two for the group discussions, using two rooms if necessary.)
What are the physical requirements for the session?
Large enough room to accommodate a ‘roundtable’ table discussion between all attendees. There needs to be a projector (set-up to present PPT slides), positioned in a way that all attendees can see the screen – i.e. space left at one end of the roundtable for the presenter/facilitator.

What form will the discussion take?
Roundtable, using the structure outlined above. The overriding aim is to share, learn and contribute to ways in which we can measure, predict and act upon an organisation’s level of change-resilience.

What topics are to be debated and what do you see as the major questions to be raised and points to be argued?
Example topics/questions:
- What types of change pressures are organisations facing?
- What impact does change have on organisations?
- What are the characteristics of organisations that thrive through times of change, and why?
- What is resilience? What is organisational resilience? What is the Change-Resilience Index?
- What can you do to help organisations understand and measure change-resilience?
- What ways could you use the something similar to a Change-Resilience Index in the future?
- What interventions have you used to help build and sustain a change-resilience organisation?
- What interventions have you used to help employees build and sustain personal resilience?

How and by whom will the discussion be facilitated?
There will be two facilitators; one will be a Registered Psychologist, the other is working towards their Chartership. Both are experienced survey consultants; we work with organisations to design and implement strategic employee surveys and consult with business leaders to prioritise follow-up actions and embed sustainable solutions. We are passionate about using occupational psychology to enable organisations to engage and enable their workforce.

Who will be the main discussants and what is their experience and general perspective on the topic?
Ideally, we envisage the discussants will be practitioner psychologists or experienced HR/business personnel, who have worked with employee survey data to prioritise and act on results. However, the discussion would be fruitful with anyone who has an interest in the way businesses respond and adapt to today’s fast-changing world. The facilitators will ensure fair opportunity for everyone to participate.

T45 Short Paper
Exploring group satisfaction in relation to extraversion and group personality dispersion
Benjamin Kelly, University of Worcester
Category: Work Design, Organisational Change and Development

Introduction
Teams are important within the world we live in, as they can improve the productivity/effectivity within any work place, and are critical to today’s work force (Reyes, 2014; Lepine, Buckman, Crawford & Methot, 2011; Stevens & Campion, 1994). It has been found that group satisfaction is a key part of team work and team performance (Zeitun, Abdulqader & Alshare, 2013; Seo, Barret & Bartunek, 2004) due to its association with positive team work experience and how groups of people interact in order to overcome tasks and problems. The current study aims to focus upon group satisfaction.

When exploring team characteristics and group outcomes, both personality and group satisfaction have been found to be influential factors (Lai, 2014; Duffy, Shaw, & Stark, 2000) and yet they are rarely directly explored in conjunction with one another (Peeters, Rutte, van Tuijl, & Reymen, 2006). The current study aims to address this issue by using extraversion score as the independent variable and group satisfaction as the dependant variable.
Extraversion was the selected personality trait as it is considered a ‘desirable characteristic’ to teams (Mohammed & Angell, 2004) due to its association with enthusiasm, energy and optimism. These associations can benefit groups of people working together to overcome tasks, thus extraversion was the personality trait of focus with the current research.

Buunk, Nauta, and Molleman (2005) found that Affiliation (the preference for doing things together) is a key characteristic of extraversion, and when explored in relation to group satisfaction, these two elements were strongly related. Ho, Luk, Wong, Wong and Wong (2014) found that highly extraverted individuals had higher levels of group satisfaction compared to those individuals who did not rate highly on the extraversion personality trait. Clearly previous research suggests that extraversion and group satisfaction are linked. However, it is unclear whether extraversion can benefit or hinder a group, due to its association with dominance and control (Driskell, Goodwin, Salas, & O'Shea, 2006).

Personality trait dispersion explores an additional element of team characteristics; team composition and the impacts this can have (Peeters et al, 2006). There is mixed debate on whether being similar to others in a team leads to extra support or additional conflict within the team (French and Kotke, 2013; Humphrey, Hollenbeck, Meyer & Ilgen, 2011), thus the current study will also explore whether personality similarity or personality difference will improve the satisfaction of the team, with direct regards to the extraversion personality trait. There are two overarching theories when exploring Personality trait dispersion; personality homogeneity (i.e. personality similarity) and personality heterogeneity (i.e. personality difference). These will both be explored within the current study, with the aim of understanding if the term ‘personality clash’ or ‘opposites attract’ have any real meaning behind them.

Hypotheses
The current study aims to see if extraversion and group satisfaction are influential upon one another by exploring whether:

H1: Group satisfaction score will significantly differ between individuals of low, medium, and high extraversion scores

The current study also aims to see if personality dispersion is also an influential factor, i.e. if ‘big’ personalities are more likely to clash, or work well together. Thus the current study will also explore whether:

H2: Group satisfaction score will significantly differ between individuals of low and high personality dispersion

Design/methodology
This study adopted a between groups quasi-design, and was conducted in a laboratory setting. 100 psychology first year university students took part in this study; participants were categorised into low, medium, or high scores of extraversion following completion of The Mini Marker Big Five Scale (Saucier, 1994), and then 12 participants were randomly selected from each category (36 in total). Of these 12 people from each category, 9 of these formed their corresponding team (i.e. 12 people selected from the low scoring group, thus 9 of these individuals formed team 1 – low scoring). The final 3 participants from each group then came together to form the mixed team of 9 (team 4 – mixed scoring), resulting in 4 teams of 9 people (team 1 – low scoring, team 2 – medium scoring, team 3 - high scoring, team 4 – mixed scoring)

Once teams had been formed, participants then worked together in their respective teams on the ‘LOST!’ group task for 20 minutes, followed by completing the team satisfaction construct (Zeitun, Abdulqader & Alshare, 2013). This allowed for the comparison between the group satisfaction of teams with differing scores of extraversion.

Team 4 was created so that personality dispersion could also be explored; by comparing the group satisfaction scores of team 2 and team 4 it allowed one to explore the similarities/differences in group satisfaction between a
high dispersal group (team 4 – mixed team) and a low dispersal group (team 2 – medium team). Team 2 was selected as it was the ‘middle’ low dispersion group, allowing for maximum difference in dispersion between teams.

Ethical clearance was received for this study from the University of Worcester Research Ethics Committee. All participants gave consent to take part, and though a deceptive brief was used, this was very similar to the real brief. The study did not invoke any physical/psychological harm and/or distress, and a full debrief was provided alongside available support if required by students. The study was completed in accordance with BPS ethical guidelines (2009).

Data analysis and results
This paper aims to contribute to the theme of resilience in a challenging world by presenting key findings that outline the importance and interaction of personality with group satisfaction and group experiences, in order to help further our understanding of teams and their importance. Findings suggest there was no direct relationship between extraversion and group satisfaction. However this interaction may not be as clear as first anticipated. For example, the ANOVA statistical test that explored the differences between the low, medium and high extraversion groups found a non-significant difference, even though the raw data suggests group satisfaction scores increased with group extraversion scores. These findings are discussed further in relation to previous research.

In relation to personality dispersion, a significant difference was found between the low and high dispersion team, suggesting personality dispersion is an influential factor. The low dispersion team produced a significantly higher group satisfaction score, and when explored in relation to all other teams, the high dispersion team (the mixed team – team 4) scored the lowest group satisfaction score out of all 4 teams. This suggests teams that are similar tend to have more positive experiences of working together.

Discussion and conclusions
The findings of the study suggest that team work, group satisfaction and personality are all complex constructs that require in depth, holistic research in order to fully understand them. Although the analyses conducted did not yield fully significant results, they still further the understanding of group work and team processes, thus are still of great interest. The findings related to personality dispersion support the works of French and Kotke (2013) and Lehmann (2007) who found that when group members had similar extraversion levels/were matched against one another, it lead to higher levels of group satisfaction amongst the teams. The findings related directly to extraversion and group satisfaction were inconclusive, supporting the work of Driskell et al. (2006). The current study also further supports the work of French and Kotke (2013) who found no significant relationship between extraversion and satisfaction, but did demonstrate how extraversion and group satisfaction are clearly important to one another/evidently linked.

With regards to practical applications of this study, and the research studies included in this paper, it is clear that simply putting a group of people together and expecting them to succeed is far too simplistic an idea. The findings from this study can be useful to anyone looking to improve group work experiences, especially employers. The findings are clear that teams with low levels of extraversion personality dispersion (similar on levels of extraversion) are more likely to report higher levels of group satisfaction, thus are more likely to experience team work as positive. If employers can identify individuals of similar extraversion levels and form teams of these individual then group satisfaction should theoretically be higher. Therefore, as Zeitun et al. (2013) and Lepine et al. (2008) have found that group satisfaction and group performance are significantly positively linked, group performance is likely to increase which is of benefit to businesses.

The benefits of group work are clear (Reyes, 2014; Rhee, Parent, & Basu, 2013; Burdett & Hastie, 2009), and as a result will continue to be used within any work context. Helping individuals within groups have satisfying experiences of team work is of critical importance in order to improve the development, attitude, and performance of individuals and groups alike within todays work culture which is heavily based around group work and team based tasks.

References


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**T46 Short Paper**

**Facilitating organisational change: Adopting engaging leadership and socio-technical approaches**

Lauren Beaumont, Real World Group and Beverly Alimo-Metcalfe, University of Bradford

**Category:** Leadership, Engagement and Motivation

**Introduction:**

The merits of a socio-technical approach are well documented (Cherns 1976; Cherns 1987; Trist and Bamforth 1951). The approach operates on the basis that organisations are complex systems with both engineered (e.g., technology, infrastructure and process) and social (e.g., people, culture and values) components. It is only through jointly understanding and concurrently designing these interdependent dimensions together, can optimal change be achieved (Davis et al., 2013). Despite the contribution of a socio-technical approach to fields such as safety in crowd management (Crowder et al., 2012) and facilitating the introduction new technologies within organisations (Clegg et al. 1997), the uptake of the approach within the occupational psychology community is low (Baxter & Sommerville, 2011).

The idea that managers and leaders are instrumental in the adoption of change is certainly not new (Eisenbach, Watson & Pillai, 1999; Gill, 2002; Kavanagh and Ashkanasy, 2006). However, this paper will argue that the implementation of a socio-technical approach to change can be facilitated by first adopting an Engaging Leadership model which seeks to create through leadership, an organisational culture which empowers and engages employees, in turn creating a system that is fully able to embrace the key principles of a socio-technical approach, namely the operationalisation of end-users in driving innovation and change. This assertion is based upon the author’s experience of conducting socio-technical research that provides organisations with insight into the barriers and facilitators of technological change, only for the organisation to struggle to overcome them. This view is further supported in the literature which examines the lack of learning within the context of implementing new technologies into established systems (Clegg & Shepherd, 2007). Never has such an approach been more relevant in the context of today’s fast paced and changing world, particularly within the context of public services such as health and social care; where radical change is necessary in order to meet the new challenges of increasing demands for service amongst a context of funding cuts (Keogh, 2013).

Healthcare services are a public sector which could benefit greatly from concurrently adopting both engaging leadership and socio-technical principles during service reform; for example, cases such as Mid Staffordshire NHS Foundation Trust illustrate the disastrous consequences of an organisational culture that focused on ‘system’ business rather than the end-user, the patient (Frances Report, 2010). Studies such as the Whole System Demonstrator Programme further illustrate the challenges faced in the NHS when adopting new innovative changes that aim to improve services (Sanders et al. 2012). Such investigations show a need for a leadership framework which can empower and engage employees through allowing development, ideas and challenge to come from a bottom-up direction, thus putting end-users in the driving seat of change - the very foundation of socio-technical design principles.
The principles of engaging leadership were established in research conducted by Alimo-Metcalfe and Alban-Metcalfe (2001, 2005) which, using a repertory grid technique, collected data from a sample of 2013 senior and middle managers, reporting six emergent factors of engaging leadership:

1. **Valuing Individuals** (Illustrating genuine concern for others’ wellbeing and development);
2. **Networking and Achieving** (Inspirational communicator, networker and achiever);
3. **Enabling** (Empowers, delegates, develops potential);
4. **Acting with Integrity** (Integrity, consistency, honest and open);
5. **Being Accessible** (Accessible, approachable, in-touch);
6. **Being Decisive** (Decisive, risk-taking).

Evidence further supports a predictive relationship between this model of Engaging Leadership and higher levels of employee performance and wellbeing (Alimo-Metcalfe et al., 2005, 2007, 2008).

The present study aims to test the validity of this model from a ‘Grounded theory’ perspective within the leadership of NHS Clinical Commissioning Groups (CCGs), which are responsible for commissioning and overseeing NHS services within the given geographical location for which they are responsible. The study will further explore how engaging leadership practices facilitate a culture of innovation and healthcare improvement in line with socio-technical design principles.

**Purpose of the session is to:**

- Help people understand that the implementation of change can be facilitated by adopting an Engaging Leadership model
- Outline the benefits and limitations of the Engaging Leadership model
- Present current research findings
- Get feedback or advice from people working in these fields

**Method:**

Two CCGs were recruited, and links were established with their Governing Bodies (the primary leadership and decision making body within the CCG). A total of 25 semi-structured interviews were conducted with a ‘convenience sample’ of Governing Body members and a selection of their stakeholders.

The interview schedule was informed by a literature review designed to elicit key aspects/characteristics and behaviours of leadership, management and governance of CCGs, as well as those relating to healthcare innovation and quality.

NHS ethics procedures were followed to gain access to the sites and informed consent was gained from all participants prior to the interviews, which lasted approximately one hour. Interviews were conducted either face to face, or over the telephone and were recorded with participant consent using an audio recording device. In the event that audio recording was not permitted, the researcher obtained participant consent to make detailed research notes.

**Results and analysis:**

Analysis of the interview data has been conducted using NVivo software from the perspective of ‘Grounded theory’, to enable the themes to emerge from the data, so as to better allow the identification of new aspects/characteristics and behaviours (i.e., no pre-determined analysis framework was imposed upon the data).

Whilst this analysis is currently in progress, preliminary results have mapped over 30 discrete themes of CCG leadership, management and governance onto the model of Engaging Leadership validating the contents of the framework. The dataset has also provided new insight into how effective leadership, management and governance of CCGs support innovative practice, that can bring about improvements in the quality of healthcare provided. Whilst
this analysis is currently ongoing we fully expect it to conclude within the next two months and full results, including a template of the themes in relation to Engaging Leadership model to be available by the time of conference.

**Discussion:**
Preliminary results indicate that an Engaging Leadership model facilitates bottom-up driven innovation in the NHS, by creating a culture that more readily engages and facilitates change that is driven and owned by front-line staff. These findings have implications for improving the uptake of innovations in the NHS; an area of topical concern with reports such as the NHS Five Year Forward Review (2015), clearly stating that in order to close the expected funding gap in services and achieve an NHS that can deliver sustainability and quality ‘tweaking’ of services will not work. There is the need for full reform, which means embracing innovations, including new technologies and ways of working, at a rapid pace of change.

The results from this investigation highlight how a model of Engaging Leadership can help organisations to create a culture which supports and fosters innovation, driven and sustained by bottom-up employee engagement; thus embracing learning from the socio-technical literature base. By creating an engaging leadership culture it is proposed that socio-technical tools and techniques, which can help organisations create successful and sustained change, will be easier to utilise.

**References:**


Five Year Forward Review (2014). *NHS England, retrieved 3 August 2015, from*
Using Technology to help meet the new Assessment Centre Standards

Helen Worrall, Burnham Business Psychology and Kate Bradley, TMPW

Category: Psychological Assessment at Work

Nature and purpose of the session

This session involves a collaboration between two Occupational Psychology consultancies, to consider the impact of new technology on the application of assessment centre standards.

What are the Assessment Centre Standards?

The new Assessment and Development Centre Standards were launched this year (2015) by the British Psychological Society, Division of Occupational Psychology (BPS DOP) and are informed by a review of Assessment Centre (AC) and Development Centre (DC) research. Here we look at how technology can assist us in meeting key aspects of the standards.

The client

This technology has supported a large public sector client with their annual graduate recruitment campaign. This client receives approximately 3,000 applications every year for around 40 positions. Following the screening stages, the final 100 candidates attend an assessment centre, which is run by one of the consultancies alongside the hiring managers. Diversity is a priority for this client, as is ensuring an efficient and constructive feedback process.

The technology

The huge technological advancements of the last 50 years have affected psychological practice. These advancements have facilitated an increase in remote online testing; online simulations and, more recently, assessment. Despite this gradual movement towards technology in assessment, the same hasn’t been seen in Assessment Centres. Most AC exercises are still delivered by paper and pencil; evidence gathering and scoring is still mostly completed on paper and, as a result, administering centres is both expensive and cumbersome. When everything is done on paper it presents a number of risks and challenges, including the security of data and collation of candidate feedback. Furthermore, despite extensive AC use within the U.K., there is a great deal of sub-standard practice. One of the consultancies has been working on technological products relating to assessment over the past several years. One was developed specifically to bring efficiency to the running of ACs. It also produced key benefits for AC delivery*, such as:

- Easier, more detailed and more useful, evidence-based feedback provision
- Rigorous scoring of competencies
- Enhanced security of data and AC materials
The technology can also store data and integrate with other stores of data, enabling wider and longer-term evaluation of AC data.

* This is not the only technology of its kind; many of these points might be related to other similar technologies. The key message is about how we can use technology to enable quality and efficient assessment processes.

**Outline of the agenda**
The session will first cover the main points of the standards that this particular technology helps us to meet. We will then bring this to life through discussion of how the technology was implemented with a client who had previously been using an assessment process that did not align with the new standards. This will cover the challenges and learnings of implementing a new, technologically-based assessment system, which changed the format of their assessment to better meet best practice requirements.

**Key messages and insights**

**Technology and the Standards**

**Improving the structure of Assessment**
The standards address the design of the centre, keys aspects of which involve the rating criteria and rating scales employed. The standards specify that behavioural indicators should include both positive and negative indicators, and that these should be exercise-specific. They also note that a consistent rating scale should be used across all exercises, and that these should be behaviourally anchored rating scales (BARS) wherever possible. Web-based scoring systems with a set format, can oblige the centre designer to input positive and negative scale anchors for each indicator within a competency, within an exercise. Similarly, they can ensure that performance text is input for each score on the rating scale. Additionally, the rating scale can be defined at project level, meaning it will automatically be used across all exercises within a project.

**Enhancing Security of Data and Materials**
The standards refer to the importance of keeping materials and centre data secure. Technology enables us to create individual log-ins and passwords for all users, and to specify access codes for viewing candidate briefing documents, helping to maintain security of materials. The standards state that participant data and assessment information is stored securely during the centre. Through web-based scoring, technology provides the facility for wash up sheets to be populated automatically from Assessors’ scores. These are held securely within the online system and eliminate the need to write scores on paper that could be misplaced.

**Provision of Feedback**
The standards address feedback provision – an element that is particularly important for participant experience; they state that comprehensive qualitative feedback should be provided to participants of any centre regarding their performance, as soon as possible following a centre. Technology can be helpful here: reports can be automatically generated from evidence text produced when an Assessor scores a participant. This text can be edited and added to by the Assessor, ensuring the evidence is representative of the participant’s performance and that it summarises the interpretation of the Assessor.

**Evaluation**
A final point to take from the standards is around evaluation to address the reliability, validity and diversity impacts of a centre. Technology enables us to store all scores via one system, including demographic details of the candidates and assessors. This aids the analysis of performance at a centre compared with future performance in role; it can also help to ascertain whether assessors are scoring consistently across participants.

**Implementation**
The technology is being implemented at ACs running August 2015 and its use is being evaluated at every stage. Feedback will be gathered from a range of stakeholders including:
From the centre manager perspective, the technology helps to enforce best practice AC methodology. Feedback from the set up stage indicates that a key step before the upload of materials is for assessment practitioners to review client materials, ensuring they meet good practice standards. In order to upload assessment materials onto the platform, scoring criteria needed to be in BARS format, which required some amendments to the original client materials.

Assessor training sessions have been completed; initial feedback highlighted reservations around using the system in the scoring time available. However, once assessors practiced using the system, they provided feedback on its efficiency and time saving benefits expected. Full feedback will be gathered from assessors after the ACs have been completed.

**Ethical considerations**

The review and amends to existing materials ensured assessment content aligned to best practice as much as possible. Design of assessment content was not included within the scope of the project, presenting both some ethical and practical considerations. There became a requirement to balance amending the existing content to ensure it was fit for purpose, with working within resource constraints.

Other ethical points considered during this project which will be discussed in more detail in the session include:

- Impact of the technology on the assessor
- Data security and the storage of information
- Competence of users
- Transparency of the system and assessment mechanisms

**What are the main psychological models, theories and research underpinning the session?**

In drawing together the AC standards, the working group reviewed a wide range of research and other standards to determine what guidance to include. This included:


These papers outline key areas of research which inform the structure of ACs. The research shows that a full BARS approach leads to ratings with the most predictive validity; this is therefore recommended in the standards. The Standards do not include references; this list was gathered from a document shared by a DOP working group member in Linkedin group discussion. The list was referenced as being used in the production of the Standards. Therefore, the authors of this submission do not feel that in-depth discussion of the research is needed, because the submission is based on the AC Standards. The good practice points raised in the ‘Key Messages and Insights’ section above are drawn from the Standards, and these are based directly on the large bodies of research that exist in these areas.

**How does the proposal link to the conference theme?**

There are several ways in which this proposal links to the conference theme.

- How do Occupational Psychologists enable organisations to respond to external challenges and to new technology?
Many organisations have an increased focus on diversity in recruitment. Our role helps to address this challenge as we can design activities that minimise adverse impact. Part of this role is ongoing evaluation and data collection to review where adverse impact exists and take action to address this. Another challenge faced by organisations is employer brand and candidate experience. With continued competition to attract candidates and deliver an engaging recruitment experience, we can continue to deliver innovations in assessment to support this area.

- **How do Occupational Psychologists respond to new technology?**

This proposal demonstrates how we can combine latest advances in technology to facilitate best practice assessment methodology.

- **How does the use of technology help Occupational Psychology?**

Feedback on this technology demonstrates how it can encourage reflection and review, ensuring that materials are fit for purpose; this assists in balancing practical needs with best practice. Technology can help application of best practice principles in the AC standards, and help to deliver a more efficient process.

**Why is the submission appropriate for the Psychological assessment at work category?**

The submission covers assessment at ACs and DCs, which falls into the selection methods area of the Psychological Assessment at Work Category.

**What do you consider to be the novel or innovative aspects of the ideas being presented?**

Despite growing use of technology in other areas of assessment, psychologists have not yet fully utilised the power of technology to improve efficiency and robustness in assessment and development centres. This paper discusses specific ways that technology can help us to bring good assessment practice to our clients and to modernise our own practice, something that has not been previously addressed at the DOP Conference.

**Why do you think conference delegates will find the paper stimulating and useful?**

This paper will be useful for delegates interested in design and delivery of AC and DCs. Learning will be shared about the challenges and successes of implementing the new AC Standards. The AC Standards were introduced at DOP 2015; a year on, we can share experiences of how they are used in practice. The paper covers a novel topic: while technology has been featured in previous conferences, it has not been featured in relation to AC delivery.

**What might the public find interesting about the paper?**

The public will be interested to learn how the combined use of technology and best practice assessment methodology can help deliver results against diversity objectives, employer brand and candidate experience. Many graduate schemes include an AC; the public will engage with the changing face of ACs and the impact of this for providing a different candidate experience.

**T48 Short Paper**

**Perceived public perception on social workers professional practice and wellbeing**

Michelle McGrath, University of Winchester; Alison Legood, Aston University; Allan Lee, University of Manchester and Rosalind Searle, Coventry University

**Category:** Wellbeing and Work

**Purpose**

Social workers have been found to suffer from disproportionately high levels of stress and burnout in comparison to other professionals (Lloyd, King & Chenoweth, 2002). Indeed, against general occupational norms, social workers suffer from a greater battery of work-related illness (Ben-Zur & Michael, 2008), which have been linked to a host of job and occupational characteristics, such as role stress, work overload and work-family conflict (e.g., Kim & Stoner, 2008; Lizano & Mor Barak, 2012). While numerous job pressures have been identified within extant literature, one key job pressure that has been frequently overlooked, relates to the complex relationship between social workers and one of their key referents; the public.
The context within which this relationship is experienced by social workers is a challenging one, with ever mounting pressures, both internally and externally, to provide an efficient and effective service. Being perceived positively as a profession has important implications for staff recruitment, public acceptance of social workers and will influence the vitality and effectiveness of the profession (Reid & Misener, 2001). Thus, the aim of this paper is to explore how social workers experience, make sense of, and cope with public perceptions of their service. In doing so we seek to examine how social workers’ experience of public perceptions influences their role, and their professional practice as well as the strategies adopted by social workers as a means of coping with the pressures of public opinion.

Methodology
A total of sixteen UK social workers took part in qualitative interviews, of which one participant was male. Eleven worked within Local Authorities, while five were employed by private organisations. Eight were early career social workers (in the final stages of professional training, or within the first two years of practicing social work), while three were experienced social workers with more than two years’ experience. Participation was entirely voluntary, with participants free to withdraw at any point. Interviews were, with the permission of the respondents, audio recorded and fully transcribed Data was analysed using thematic analysis.

Findings and Discussion
The findings suggest that content of public perception is primarily perceived by social workers as negative. While the media were identified by all those interviewed as a primary contextual source driving negative and inaccurate perceptions, many participants also identified a significant role played by the Government in influencing these perceptions. Inaccuracies were perceived to be due to an overall ignorance and lack of awareness of social workers’ training, power and responsibilities. Surprisingly, it was perceived that the profession itself often perpetuated inaccuracies further, due to a lack of role clarity and external promotion. An unfavorable view of social workers’ competence and an underestimation of their education and qualifications were perceived as emanating not only from the general public, but also from other professionals service workers interact and collaborate with on a daily basis.

Positive promotion of the profession on a nationwide level felt unobtainable by those social workers we interviewed. However, more local actions were identified, such as self-promotion, which would still benefit the profession as a whole. The coping strategies identified in this research was particularly informative, with a sense of needing to be inherently resilient and engaging in various problem-focused coping mechanisms used to deal effectively with public perception. Specifically, behaviours, such as corrective actions (i.e., always arriving on time) were engaged in as an attempt to challenge the often-inaccurate views held and dispel the stereotypes service users and members of the public express towards the profession. Identifying how the social workers interviewed believed that they should take greater responsibility in changing public perceptions.

Implications to science/research
The primary aim of this research was to examine how social workers experience public perception. Specifically we identified the content of these perceptions and, more importantly, the impact of such perceptions on employee’s experiences at work and the coping mechanisms utilised to mitigate the potential negative effect on their well-being. The findings offer valuable insights on this topic and contribute meaningfully to the already extensive literature on social work.

Implications for practice
The practical implications offered here represent tentative suggestions, which by no means offer a comprehensive solution to this complex and sensitive topic. Public perceptions of the service are fuelled by multiple external sources, including the Government and the media, and this constitutes an important place to target efforts going forward. As with other public sector organisations, the social services appear to have operated historically in a largely reactive way, when faced with negativity, particularly in the press. What is needed is a more proactive,
continued strategy, which pre-empts such efforts to degrade the profession's reputation and instead promotes profession-enhancing content (Zugazaga et al., 2006). Self-promotion, supported by external bodies and public outlets, offers one way for the social services to contribute to a more balanced understanding of the social work role, which has the potential to positively impact on social worker wellbeing and professional practice.

**Originality/value**

This paper offers a unique perspective into the lived experiences of social workers dealing with public perception of their service. Exploring how social workers experience, make sense of, and cope with perceived public perception allows for an insight into the impact this perception has on the professional practice and well-being of staff members. With such a crucial societal role to play, it is imperative that future research continues to develop an understanding of how the social services can create a professional level of resilience to the challenging world within which they are couched.

**References**


**T49 Symposium**

**Changing Technologies, Changing Expectations: Developing Assessments to Meet the Needs of Today**

Tom Hopton, Saville Consulting UK Ltd.

**Category: Psychological Assessment at Work**

Assessment tools are increasingly being called upon to fulfil an ever-wider range of roles and functions within the workplace. This is driven by a number of factors including dramatic advances in assessment technologies and the changing needs and expectations of assessment users. This symposium is comprised of three papers which discuss different aspects of these changing requirements.

The first paper takes a broad look at changing trends in assessment technology. It explores the increased use of mobile devices and, drawing on a large global database, offers some reflections on the possible implications of such technological changes.

The second paper focuses more specifically on adapting assessments to the specific needs of a group of individuals. It takes a case study format and outlines the development, implementation and evaluation of screen reader compatible test versions which were created to accommodate the needs of visually impaired candidates.

The proposed symposium seems to be relevant to the Theme of the Conference as it refers to adapting to the changes in the world by modifying the assessment tools and strategies. Moreover, the symposium is relevant to the “Psychological Assessment at Work” Conference Category as the main focus of the symposium is on presenting new trends and tools with regards to the assessment process within the world of work.
Paper 1: Assessment in the 21st Century: Keeping up with changing technology
Tamara Ross, Saville Consulting UK Ltd

Category: Psychological Assessment at Work

Introduction
In early 2015, a major UK psychometric test publisher introduced HTML5 enabled aptitude tests to their assessment portfolio. This had been a long-term project in order to address the increasing demand from candidates and clients to be able to complete assessments on handheld devices such as mobile phones or tablets.

This paper explores the changes seen over the last four years in terms of device usage for the organisation’s range of psychometric tests, drawing comparisons between completions of aptitude tests, personality inventories and situational judgement tests (SJTs). As well as looking at overall trends, this paper examines the trends seen across different regions of the world. Finally, it discusses the implications of these trends for candidates, test publishers and organisations over the next 5-10 years.

The prevalence of mobile phones and tablet devices has increased dramatically in recent years and trends suggest that it can be expected to increase further. Therefore, it is important for test publishers to be ahead of the curve and implement the technology to support this. According to the 2014 Ofcom report, 50% of adults aged 25-54 now own a tablet device and nearly 6 in 10 consumers now report accessing the internet on their mobiles. The report forecasts that in 2015 there will be more than a billion tablet users including 328.3 million in China, 156 million in the US and 40.4 million in India. In addition to this, recent survey data has suggested that 27% of job seekers expect to be able to apply for a job from their mobile device (Jobvite, 2015). This trend is also evident in the recruitment sphere where emerging economies (including China and India) reported that there was a greater demand from candidates to complete tests via mobile devices (Fallaw & Kantrowitz, 2013). However, as mobile technology in psychometric testing is a relatively new phenomenon, there is currently very little research outlining the prevalence, trends and implications of this. As a test publisher, it is possible for us to access the latest candidate data and provide analysis on device usage and growing trends in the area.

Data Analysis
The data examined in this paper are the global usage statistics (login attempts and completions) for all of our online assessments from 2012 to 2015. It must be noted that prior to April 2015 it was not possible for candidates to access our aptitude tests on a mobile device and they would be forced to use a laptop or desktop computer with Flash Player. This would clearly be expected to impact on the overall mobile device usage figures to date. The most up to date 2015 data (i.e. the months post-April) will be available to present at the DOP in January 2016.

Nevertheless, usage of mobile devices (including phones and tablets) has increased steadily over the last four years, as has the percentage of devices with lower screen resolutions used to access the assessments. Overall access via mobile devices still remains relatively low at 5% of all logins internationally (see Figure 1), and 6% of all logins in the UK in 2015 (see Figure 2) but is expected to grow rapidly over the next decade since the April release of aptitude tests which can be completed on mobile devices.

Obviously our sample is not random and there are more data in some areas than others; however it can be considered as broadly representative of the trends seen in the industry. The most rapid increase in mobile usage was seen in India where this has risen from 0% to 5% in just two years, which supports other evidence suggesting that there is an increasing candidate appetite for mobile technology in this region (Fallaw & Kantrowitz, 2013). Interestingly, China has not displayed the predicted increase in mobile usage; however this is likely to be as a result of the large proportion of the publisher’s clients in this region testing at supervised test centres with desktop computers. Candidate cheating is a well-publicised issue in China (e.g. Chen & Schultz, 2015) and while the desire for...
mobile testing and greater accessibility is increasing, traditional methods such as online supervised and hard copy testing remain vital to counteract cheating.

The data also show that higher numbers of candidates are completing personality inventories and SJTs on mobile devices compared to aptitude tests. This is largely explained by the fact that these aptitude tests only became accessible on mobile devices in early 2015 (whereas the personality inventories and SJTs have been accessible on these devices for many years). In addition to this, candidates are prevented from completing aptitude tests if the system detects that their device is too small (if it is classed as a ‘handheld mobile phone’). The rationale behind this is that a bigger screen size is recommended when completing an aptitude test (which has strict time limits and clear right or wrong answers) to give candidates the best opportunity and thus restrict them to larger devices (e.g. tablet, laptop or desktop). For personality inventories (which tend to be untimed and without clear right or wrong answers) and SJTs (which also tend to be untimed) it is assumed that the device size will have less impact on candidate performance.

However, there may other be implications for SJTs as these are often designed to be highly visual and engaging for the candidate and the impact of this may be reduced for those completing on small devices. Once we have collected more data from the use of HTML5 enabled aptitude tests (post-April 2015), we will look to draw further comparisons between the devices used to complete these versus other assessments and this will be available to present at the DOP Conference 2016.

Discussion
There are numerous advantages to having psychometric tests accessible on mobile and tablet devices including the ability to access a larger talent pool more easily and to boost an organisation’s brand with up-to-date technology.
The candidate experience is enhanced as they can browse for jobs, apply and download assessments all from the same mobile device. However, there are also some concerns surrounding the use of mobile devices in online testing, particularly in high-stakes selection settings. Early research comparing test results of candidates completing on mobile versus non-mobile devices indicates that there may be some differences in scores on aptitude tests, but there are limited differences in scores for personality assessments and SJTs (Arthur et al., 2014).

In Arthur et al.’s study it was found that candidates who completed cognitive tests on mobile devices (which were defined by the authors as “handheld small screen devices such as smartphones, and personal digital assistants”) performed worse on average than those who carried out the tests on a desktop or laptop. One possible explanation for this was the small display screen which may have affected the speed at which candidates could read text within the test. We have attempted to counteract this risk by retaining limits on the size of the screen that can be used – while tablets can be used, it is not possible to complete our aptitude tests on mobile phones, for example. In the study by Arthur et al., there may also have been external distractions which affected candidate performance given that they could access the test from anywhere at any time (Arthur et al., 2014). It is also worth considering that, as discussed previously, although the organisational brand may be enhanced by appearing as ‘tech-savvy’ to their applicant pool, the organisation also risks losing candidate engagement with those completing on small devices. This applies particularly to organisations that have invested in highly visual or multimedia SJTs.

As familiarity with operating mobile devices increases, it may well be that these differences become largely eradicated over time in a similar way to the transition from paper-and-pencil tests to computerized versions (Noyes & Garland, 2008; Whiting & Kline, 2006), but there are also precautions that can be taken. For example, one could display a message informing candidates accessing tests on very small devices that they will not be able to start the test until they have moved to a larger device. Other warning messages can also appear for candidates whose screen resolutions are not high enough so they are given the opportunity to change devices before starting the test.

This paper aims to demonstrate the changing demands and behaviour of candidates in order to stimulate more research comparing performance on tests across different devices. It would also be useful to further understand candidate attitudes and perceptions around testing on mobile devices, including their views on the fairness of permitting assessment via such technologies. For example, the ability to access these tests remotely from any location could increase the chances of candidate collusion and this is something to be investigated and monitored over time.

Potential Implications

For Candidates:
- Ability to apply for jobs and complete online assessments from anywhere at any time
- Not restricted from applying for jobs by the need for a laptop or desktop computer
- The potential for distraction when completing online tests increases
- The potential for collusion may increase
- More options and therefore more responsibility with the candidate to choose a suitable device to complete tests on

For Organisations:
- Access to a larger applicant pool
- Access candidates more easily
- Appeal to high-tech candidates
- Increased candidate numbers (a benefit and a challenge)
- Potential questions around the quality of candidates – this may decrease if it becomes very easy to apply for a job and complete tests from a mobile device and candidates do not spend time preparing or completing the assessment in a suitable testing environment
Potential questions around the impact of highly visual SJTs when presented on small screens

For Test Publishers:

- Cost and resources in terms of building new technology and keeping it updated
- Reduction in the number of support queries (as tests become increasingly accessible and adaptive to the technical set-up of different devices)
- A need to monitor adverse impact
- Keeping technology up-to-date and in line with Applicant Tracking Systems so that candidates can go through the whole job application process on one device (as opposed to switching to a desktop computer halfway through in order to complete tests)
- Designing tests with a smaller screen in mind

References


T49b

Paper 2: Reading between the lines: Developing accessible tests for visually-impaired candidates

Tom Hopton, Saville Consulting UK Ltd.

Category: Psychological Assessment at Work

Purpose

This paper takes the form of a case study and outlines the development, implementation and evaluation of screen reader compatible test versions which were created to accommodate the needs of visually-impaired candidates.

The purpose of the paper is to share an example of applied practice with others in the industry. More broadly, it aims to open up discussion about best practice and appropriate methods for accommodating candidates with special requirements in assessment scenarios.

Agenda

In late 2014 we carried out a managed testing campaign for an administrative role, which saw around 22,000 candidates invited to complete online tests of verbal reasoning, numerical reasoning and error checking ability. During this campaign, a number of candidates specified that they had visual impairments which rendered them unable to complete the online tests in their standard format. We were tasked by the client with designing new test formats that allowed individuals with visual impairments to be assessed in an appropriate and equivalent manner to that of the main group of test-takers. An overriding focus of this investigation was attempting to produce accommodations which were fair and appropriate for the candidates. The accommodations couldn’t give the
visually-impaired candidates any advantage or disadvantage over the rest of the candidates they were being compared against. One of the clear goals for producing accommodation test versions was to ensure maximal comparability with the testing experience of the sighted candidates.

Initially, we gathered information about the candidates’ needs. This was from the candidates themselves as well as based on discussions with several individuals at the client organisation. For many of the candidates, familiarity with Braille and/or partial sight meant that they could use either existing Braille versions, or large print hard-copy test versions. However, there were a certain number of candidates (n=14) who were completely or nearly completely blind and who had no previous knowledge of Braille.

We investigated various potential options for responding to the needs of these fourteen. These options included having a sighted administrator read out the standard test content to the candidates, or developing test content scripts suitable for use with screen reader software. The various options were evaluated and discussed with the client. Ultimately, the client decided that they wanted to use a particular piece of screen reader software (JAWS, from Freedom Scientific, Inc.) to which they already had access.

Now with a brief to develop versions of the tests which could be read by JAWS screen reader software, we sought existing research and guidelines on testing candidates with visual impairments. Such sources included online resources such as “Designing for Screen Reader Compatibility” (http://webaim.org/techniques/screenreader/). This article contained an overview of key concepts relating how screen readers differ from human readers. For example, “content linearization” (i.e. presenting content “linearly to users, one item at a time”) is a feature of audio interfaces such as screen readers, whereas “sighted users can scan an entire screen almost instantaneously, comprehending the overall layout, the artistic style, and other macro-level aspects of the content”. The article also discussed which punctuation to use in order to generate pauses in the automated reading, as well as the use of titles and tagging content with certain kinds of headings to signpost changes in the information being presented.

We also referred back to the guidance in the UK’s Equality Act (2010) to help advise on best practice. In order to comply with the requirement to make “reasonable adjustments”, we had to avoid fundamentally changing the nature of the tests which we were scripting. In this case, there was a degree of tension between the two competing requirements for accessibility and standardisation. Clearly any changes to increase accessibility should not essentially interfere with the standardisation of the assessment process. This was particularly evident in our efforts to appropriately script the visual error checking task in a verbal manner, without changing it significantly. We ultimately created an amended version of the error checking format that aimed to balance the level of difficulty with suitability for use with screen reader software.

Once we’d drafted our screen reader scripts for all three aptitude tests in question, we refined the solution through several trialling phases, using individuals at the client organisation and colleagues as triallists. These trials provided us with useful feedback which we used to further enhance the adapted tests being developed. When the final versions of the adapted tests were developed and the response format had been agreed with the client, the scripts were used by a total of 14 candidates. Following the test administrations, we scored up the responses and returned the normed results to the client.

After the campaign we evaluated the outcomes of this project in several different ways. Following the guidance of Hornbaek (2006), we were able to use both subjective feedback from various users and stakeholders, as well as some quantitative performance data from the test-takers.

We were delighted to receive positive feedback from the client after the testing process was complete and we also sought feedback information from the candidates themselves. Seven out of the fourteen candidates gave permission to be contacted and we conducted short telephone discussions with them in order to collect feedback. These
discussions followed a scripted format and generated useful information to inform future development of screen reader compatible scripts.

In addition to qualitative feedback from the client and candidates, we also looked at the distribution of standardised scores achieved by the candidates. Even though the sample sizes of numbers of completions for each of the three tests were small and so it wasn’t possible to carry out detailed quantitative analyses, we were able to glean some information. For example, on the error checking test all but two of the candidates scored at the 99th percentile. This provided clear feedback that the format changes made, combined with the additional time given to candidates by the client, had likely rendered the test too easy. Unfortunately the client wasn’t in a position to share with us information about what decisions were made on the basis of the scores, but it would have been useful to know more about the implications of these results and the impact that they had. If developing another test of error checking in a screen reader format, we would recommend to the client setting a shorter time limit to compensate for the necessarily easier nature of having converted the standard visual checking format into an auditory checking format.

On the other hand, we were delighted to see that the accommodations made to the verbal and numerical formats appeared more reasonable, with mean percentile scores in these groups being the 44th and 42nd percentiles respectively. There was also a good range of performance differentiation on the verbal and numerical tests (with percentiles achieved in them ranging from the 1st to 90th and 1st to 98th, respectively). Nevertheless, it must be borne in mind that the standard deviations of the scores for the screen reader candidates were small on all three tests (in each case, less than 1/3 the size of the standard deviations in the norm used), which reflects that the range of scores shown in these groups were considerably smaller than in the norm group. This may be, at least in part, due to the small sample sizes available.

In conclusion, the combination of positive user experiences and client satisfaction, as well as the quantitative analysis, have provided some useful evidence that the accommodations in at least two of the three tests were successful in terms of maintaining an equivalent candidate experience to the standard test versions.

Key Messages & Insights

- Assessment technology is changing – as are the expectations of its users. In terms of testing accommodations for candidates with visual impairments, Braille is no longer the default solution. According to the organisation Blind in Business, only 7% of visually impaired individuals read Braille and electronic access is the most common format used these days.

- It is possible to adapt standard online aptitude tests to produce electronic versions which accommodate the needs of candidates with visual impairments.

- Such tests should be evaluated in both qualitative and quantitative ways, in order to provide evidence that the needs of candidates with visual impairments have been appropriately accommodated.

1. What are the main psychological theories, models and research underpinning your session?
   UK Equality Act (2010); human-machine interaction models - specifically concerning making content accessible for screen reader software (e.g. Theofanos & Redish, 2006); usability measurement (e.g. Hornbaek, 2006).

2. How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?
   For assessment practice to be resilient to changing and challenging demands, it is important for practitioners to have methods for adapting their approaches to the individual needs of assessment users. Developing accessible test versions for individuals with specific requirements (e.g. visual impairments) provides a clear example of this in practice.
3. Why is the submission appropriate for the particular category you have chosen?
This is an explicit example of implementing a new psychological assessment at work, so the category choice is clear.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
In order to produce a suitable auditory version of the visual error checking task, we had to generate a novel solution for how this content could be instantiated. The new format for the error checking task is not something which we are aware having been done before.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
A number of conference delegates are likely to be test developers themselves and/or engaged in similar activities (e.g. accommodating candidate needs) as those we discuss in this paper. It is therefore likely to be useful to many attendees to understand what fellow psychologists are researching and implementing, and to share with other professionals what is being learnt to improve our collective practice.

6. What might the public find interesting about your paper or session?
In the general public, there are many people who have experienced psychometric assessments and some may have negative views of such assessments. Understanding that test developers are discussing how to accommodate the needs of different people in line with the Equality Act (2010) could potentially be a powerful, positive message for occupational psychology as a discipline.

7. If any, what materials do you intend to make available to attendees and in what format (e.g., printed handouts, electronic copies of slides)?
Electronic copies of the presentation would be available on request (via the author’s provided email address) after the session.

References
- Information about designing content to be screen reader compatible [retrieved from http://webaim.org/techniques/screenreader/, 04.07.14.]

T49c
Paper 3: Great Expectations: Utilising technology to enhance the candidate assessment experience from completion to feedback
Daniela Chambers, Saville Consulting UK Ltd
Using technology to enhance candidate experience

This paper takes a case study approach in describing our experience of creating multi-media situational judgement tests for apprentice, undergraduate and graduate application processes with a leading UK organisation.

Candidate experience has always been a critical consideration for clients when designing their assessment processes. However, over the past couple of years we have seen the relative importance of candidate experience increase, particularly for roles that attract a high proportion of “Generation Y” applicants. As so-called “digital natives”, many of Generation Y have grown up in a world surrounded by technology and as such their expectations of the workplace include the use of technology. In the assessment space organisations, including the company that this case study is based on, have been looking to use their application process as a way to appeal to Generation Y’s technological expectations. To respond to this need, we created multi-media situational judgement assessments utilising highly stylised images, overlaid by voiceovers and sound effects, to provide an impactful presentation of content specifically designed to appeal to Generation Y’s expectations (Ng, Schweitzer, Lyons, 2010). This was recognised by the organisation’s applicants on social media with one applicant offering our situational judgement tests “The unofficial award for best Online Application testing” on Twitter, accompanied by the hashtag “VeryCool”.

The multiple requirements of an assessment solution

However, merely creating a highly engaging tool utilising the latest technology is not enough. In fact, assessment processes are increasingly obliged to fulfil a number of different requirements. One of the key requirements that the present organisation was facing was a huge increase in applicant numbers. The organisation had seen graduate applications double in two years to over 20,000, a trend they were anticipating would continue in future years. Introducing an online assessment tool that utilised technology to score the assessments instantly provided major benefits to the organisation, including:

- **Scalability**: recruiters able to deal with an additional 14,000 applications
- **Reduced costs per hire**: cost per applicant at this stage was 1/3 of the previous year’s cost
- **Quicker decision making**: applicants received a response within 48 hours compared to 2 weeks with the previous process.
- **Engagement**: withdrawal rates at this stage of the application process fall from 29% to 8% following the introduction of the situational judgement test.

Another key consideration with the introduction of any assessment process, particularly utilising technology, is accessibility. Situational judgement tests with low cognitive load have been shown to have less adverse impact towards minorities (Lievens, Peeters and Schollaert, 2008), particularly those with high fidelity presentation (Whetzel, McDaniel & Nguyen 2005). Research shows that a benefit of utilising technology to create high fidelity situational judgement tests is they tend to have stronger criterion related validity (Christian, Edwards and Bradley, 2010). To reduce cognitive load and reliance on working memory (which can be more challenging for some dyslexic candidates), and thus help minimise adverse impact, we ensured that the multi-media videos could be replayed as many times as possible. To try to maximise the accessibility of the assessment we took the following steps:

- For candidates who may be hard of hearing videos could be played with or without subtitles along with the voice over.
- The situational judgement tests were to be accessible from a wide variety of devices, including PCs, Macs, Ipads and mobile phones.
- The responses were presented in written format following advice from the British Dyslexia Association style guide. The text was all left aligned, used simple text, had evenly spaced fonts, took the form of black text on a cream background and we did not use any underlining, instead using bold text if anything needed highlighting.
Employability reports

Roles that attract a higher proportion of Generation Y individuals come with another unique challenge in an environment where 40% of all unemployed people in the UK are under the age of 25 (Catch 16-24: UKCES, UK Commission for Employment and Skills, 2014).

In addition to an engaging selection process the client were keen to go beyond their corporate social responsibility and invest in improving the chances of young people, particularly in those areas of the country which are traditionally connected to manufacturing. They wanted to provide a focus on the development of key behavioural skills of all candidates by supplying them with in-depth feedback reports. This was achieved by utilising technology and generating tailored reports for every individual applying. These reports provide an opportunity for candidates to understand their behavioural style within a workplace setting and leverage their strengths within the workplace, be that at the client’s organisation or another company. For example, the reports provided tips for future selection processes. Every individual received feedback, regardless of the selection decision they received, with minimal additional work for recruiters.

The reports were well received and provided unexpected benefits to the head and assistant head of graduate, undergraduate and apprentice recruitment, who in past years had invested much personal time in giving specific feedback to individuals. The reports all but eradicated these requirements.

Key messages and insights

- Applicant expectations of the assessment process are changing. There is more of an emphasis on engaging tools that utilise technological advancement.
- Technology can be used to address a number of assessment requirements such as scalability, presentation of content in an engaging format and reducing the time to hire.
- Accessibility of assessment processes are a key consideration. The design of any tool that utilises technology should carefully consider accessibility.
- Utilising technology within an assessment process can help fulfil wider social responsibilities by easily allowing feedback reports for all applicants to give guidance on employability. This helps encourage a positive applicant experience to those who might be experiencing the world of work for the first time.

1. What are the main psychological theories, models and research underpinning your session

There are a number of areas of research that underpin the expectations of Generation Y (e.g. Ng, Schweitzer & Lyons, 2010) along with the theories underpinning the development of situational judgement tests (e.g. Christian, Edwards & Bradley, 2010).

2. How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?

This case study gives an example of how an organisation reacted to the changing expectations of today’s applicants, specifically in roles that attract a large number of Generation Y applicants. By utilising technology the organisation was able to fulfill their requirements of modernising their assessment process in addition to playing their part in the wider social context of youth employability.

3. Why is the submission appropriate for the particular category you have chosen?

This is an example of a new assessment process utilising the latest technology which was introduced within a workplace setting.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented

The innovative design and presentation of situational judgement content to address a client requirement, along with fitting into the wider picture of increasing expectations of engaging assessment processes. There
was also the novel idea of utilising technology to provide employability reports to all applicants in order to fulfil a wider employability agenda.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
This is a practical example of the design and development of multi-media situational judgement assessments to meet client needs and fit in with the wider social work trends. Delegates will find it insightful to consider these wider social demands (e.g. technology, Generation Y, employability) and draw from the solution we put in place to meet these demands. Elements of these solutions can be transferred across different applications in the Occupational Psychology space.

6. What might the public find interesting about your paper or session?
Given the prevalence in the media about the employability of young people, the initiative to provide all applicants with detailed employability reports, including advice on how to utilise their strengths and work on the development areas both within the workplace and within an application process, is likely to be of interest to the public.

7. If any, what materials do you intend to make available to attendees and in what format (e.g. printed handouts, electronic copies of slides)?
Electronic copies of the presentation would be available on request (via the author’s provided email address) after the session.

References

T50 Workshop
Building Stability and Consistency in an Executive Leadership Team
Liza Walter-Nelson, Phare Practice Limited; Ali Dawson and Lynne Copp, The Worklife Company
Category: Leadership, Engagement and Motivation
Session Outcomes:
Attendees will have discovered more about how OP is being applied in a large organisation like the NHS, and engaged in meaningful debate about whether there are better ways to do this and what the longer term implications of leadership challenges in a VUCA world are, for public bodies; including whether and how, these scenarios should inform recruitment decisions for example, moving forward.

Attendees should leave feeling excited about the work taking place in the NHS environment and understand more about how they might support leaders through OP in that area, into the future.

Session Synopsis:
A presentation of the issues facing a leadership team in an NHS body going through a period of rapid change and growth. Helping them to address the challenges of this and identify the needs they have and the needs their staff
have to help resettle them from change and create stability from which to grow in the new environment. A look at the theory and practice applied to help them identify and create the stability and consistency needed though; Systems leadership, collaborative leadership, (i.e. Macdonald, Burke and Stewart, 2006 Systems Leadership; VanVactor 2012, collaborative leadership; DaCosta 2012, leadership in healthcare), and ensuring clear communication and development of organisational culture (The Vroom-Yetton-Jago Decision Model; Lewin, change theory; Goleman, emotional intelligence and leadership).

CSU’s were established across England following the Health and Social Care Act 2012, with 2012 being a shadow year whilst Primary Care Trusts (PCT’s) were closed, and CSU’s and Clinical Commissioning Groups (CCG’s) established and undertook an ‘Authorisation’ process. This CSU (South) was having to establish itself as an organisation, transfer staff from an organisation that was closing (PCT’s), pass through authorisation gateways and begin ‘selling’ it services to new and developing customers (CCG’s). The challenge was in creating a stable and consistent (in its behaviors) Leadership Team that would help settle staff and create followship.

This was an opportunity to look at and support the development of a leadership team at the very beginning of an organisation forming, it presented its own challenges, but also massive opportunities – did we get it right? Will attendees of the session think that there are different and / or better ways to have supported the team, are there wider implications that stretch beyond the next re-organisation for this organisation?

**Session Agenda:**
Practitioner Case Study: supporting the creation of a stable and consistent leadership team in a time of rapid change.

- **Presentation** by The Supplier and the Client (previously NHS South CSU) 20 minutes
  - A view on how and what were the main issues of building this leadership team, what needed to be addressed, what needed to be considered and what implications this has for future recruitment of leaders, leadership development and the role of leader in a turbulent environment.

- **Questions** at the Table (facilitated by the presenters): 30 minutes
  - Each table to review an aspect of the programme that was put in place, with a series of probing questions regarding good/bad/better, designed to elicit input about different types of theory and practice that could have been applied, could be applied in future and implications for future practice.
  - Participants will be asked to move around tables after 15 minutes to stir up further debate

- **Wash up/overall themes:** 10 minutes

Why attend?
This is an opportunity to hear a case study about leadership challenges in a rapidly changing environment, one that is highly political and in which politics plays a heavy role in everything from business operations to recruitment (especially of leader roles).

This case study presents a unique view of not only a business at start up, but an NHS organisation at start up following a massive reshuffle from the top down (Health and Social Care Act 2012) and what that means for leaders and staff. A debate about what has been applied and what could be applied, how this could, and should, inform wider issues such as selection and assessment of leaders, their ongoing development and the role that leaders play in helping staff to resettle in such an ever changing environment in order to maintain / build productivity.

This is an opportunity to provide valuable insight to the presenters as they continue to gather data about leadership in the NHS, working to understand how these leaders can be better supported to build their own resilience and...
resilience in others, and to help build an understanding of how future research could be shaped in this practitioner environment.

**T51 Short Paper**

**Importance of Occupational Psychology influencing government policy by Occupational Psychology in Public Policy (OPIPP)**

Christine Hamilton, Vice Chair DOP Scotland and OPIPP Convenor, Rosaline Searle, Chair in Organisational Behaviour and Psychology Coventry University, and Joanna Wilde, Aston Business School

**Category:** Psychological Assessment at Work

The strategic aims of the OPIPP Working Group are to ensure that DOP and Occupational Psychology:

- evidence is shaping UK public policy, by being a trusted voice/partner.
- is on the ‘front foot’ with regards to public policy issues enabling it to proactively respond to ‘world of work’ topics
- has a close and effective working relationship with regards to public policy with BPS

We have 3 policy themes for 2016:

- Inclusive Leadership
- Women on Boards
- NHS Culture Change

If you are interested in any of these themes or in Occupational psychology raising its profile do come along and discuss your thoughts with us.

**T52 Workshop**

**Developing resilience during times of change: Experiential introduction to Acceptance and Commitment Therapy (ACT)**

Taslim Tharani, Kingston Business School

**Category:** Wellbeing and Work

**The nature and purpose of the session**

To provide delegates with an experiential introduction to ACT, specifically how ACT can enable individuals to develop resilience and psychological flexibility during times of change.

**What are the main psychological theories, models and research underpinning your session?**

This session is based on Acceptance and Commitment Therapy (ACT), a therapeutic approach grounded on a strong philosophical (functional contextualism) and theoretical (Relational Frame Theory, RFT) foundation (Hayes, Strosahl and Wilson, 1999). ACT, a fairly new paradigm, is now being applied in workplace settings with a growing body of research exploring the impact of ACT interventions on the well-being of individuals within the workplace.

The workshop aims to develop Psychological flexibility which is the individual difference developed through ACT. It is defined as an ability to focus on the present moment as a conscious human being, and, based on what the situation affords, acting in accordance with one’s chosen goals and values (Hayes, Luoma, Bond, Musada & Lillis, 2006; Bond, Flaxman & Bunce, 2008).

Psychological flexibility is developed through 6 key processes, which fall within two groups:

1) Mindfulness or acceptance processes: an individual’s willingness to experience undesirable internal events (thoughts, feelings, sensations) without having to avoid, control or change them (Donaldson-Fielder & Bond, 2004).

2) Values and commitment to behaviour change processes: Accepting internal events enables internal resources and energy to be used towards achieving values based goals. Individuals are better able to take effective action towards their chosen goals and values (Hayes et al, 2006; Bond, & Flaxman, 2006).

Empirical research has shown ACT to have a number of benefits for both clients and professionals (e.g. therapists/health care professionals).
Research suggests that psychological flexibility is increases employee health (mental well being, job control) and performance (innovation, learning) (Bond and Bunce, 2000; Bond and Bunce, 2003; Donaldson & Bond, 2004; Bond and Flaxman, 2006; Bond, Flaxman and Bunce, 2008). In addition, research suggests that ACT, not only benefits clients, but can also alleviate burnout and stress in professionals (Hayes et al., 2004; Stafford-Brown & Pakenham, 2012; Luoma & Plumb 2013; Biglan et al., 2013; Lloyd et al., 2013). It has also been shown to facilitate openness to change and learning (Varra et al., 2008; Biglan et al., 2013; Bond & Flaxman, 2006).

How do you see your proposal linking with the main conference theme of Resilience in a challenging world? Why is the submission appropriate for the particular category you have chosen?

ACT enables people to ‘feel the fear and do it anyway.’ It enables individuals to be willing to experience difficulties, challenges and uncertainty, whilst still taking action and steps towards what is important, not only to themselves, but also to their roles within organisations. This workshop will enable delegates to learn how to relate more flexibly to their thoughts and feelings, so that they are more able to develop flexibility and resilience, particularly during times of continuous and challenging change.

This workshop directly links to the conference theme, and also well-being at work.

What do you consider to be the most novel or innovative aspects of the ideas being presented?

The fact that it is an experiential workshop, the best way to learn is to really experience it yourself. ACT in itself is new and emerging third wave therapy, it is only in the last decade that research is being published and coming to the forefront of academia. Functional contextualism and relational frame theory provide a new way of understanding language and how we are constrained by it. In addition, ACT is a mindfulness based approach, which again is a new and innovative approach to well-being and performance in the workplace.

In addition, delegates will be exposed to a relatively new ACT tool called The ACT Matrix, which is growing in popularity, particularly as a tool to use within organisational and coaching settings.

Why do you think conference delegates will find the paper or session stimulating and useful? What might the public find interesting about your paper or session?

The material will be extremely informative and stimulating. The session brings together research and theory from evolutionary psychology, cognitive psychology, contextual behavioural science and neuroscience. It will demonstrate why and how we get trapped by the way our minds have evolved and will offer a new approach to working with difficult thoughts and emotions. It suggests that resilience can be developed, and will offer specific techniques on how to develop resilience. In addition, it will suggest that ‘stress’ itself isn’t the problem, it is the lack of recovery from stress that is the problem.

If any, what materials do you intend to make available to attendees and in what format (e.g. printed handouts, electronic copies of slides)?

Printed handouts and electronic copies of slides will be made available to attendees.

What is your preferred duration for the session?

The preferred duration is three hours, however, we will fit into the availability within the programme. The longer the session, the more opportunity there will be to really get to grips with ACT and learn the basic tools and techniques.

How will the session be structured – provide agenda or timetable if possible

The agenda may change depending on the amount of time given, however the key agenda points are as follows:

- Welcome and Introductions
- Why is change challenging?
- What does resilience look like in the context of change?
Introducing Psychological Flexibility and The Matrix

Summary & Bold move

What is the minimum, optimum and maximum number of attendees?
Minimum: 6 delegates
Optimum: 15-20 delegates
Maximum: 40 delegates

What are the physical requirements for the session – preferred room layout, equipment required?
Chairs in a circle/semi-circle

What are the learning objectives and outcomes for attendees?
1) To gain an overall understanding of the ACT model.
2) To experience The ACT Matrix tool firsthand
3) To develop skills which will enhance delegates own behavioural flexibility and adaptability so that they are better able to respond effectively to change and uncertainty
4) Learn tools to help delegates enhance their own well-being, decreasing their risk of burn out
5) To provide take away exercises that can be incorporated into delegates everyday lives as well as exercises that could be introduced to clients

What specific content is to be taught in the workshop?
• An overall understanding of the ACT model
• The ACT Matrix
  o This will include mindfulness exercises, values identification and committing to action
• An understanding of what stress and resilience is
• Links to further resources

What teaching and learning methods will be used? (include any skills practice sessions)
The workshop will be experiential with a combination of presenting, exercises and discussions.

What is your target audience (postgraduates, practitioners, researchers?)
The target audience is broad; it is aimed towards anyone who is keen to develop their own resilience, or who would like to introduce ACT to their clients.

At what level will the workshop be aimed (e.g. basic, intermediate or advanced)
Introductory level – although as The ACT Matrix will be introduced, those who already have some experience in ACT but who haven’t experienced The Matrix would also benefit

Will participation lead to any recognised certification or accreditation?
No

Audio Visual Requirements
As standard you will receive a PC or laptop with PowerPoint, LCD Projector & Screen. Please note that you must bring your presentation on a USB Memory Stick.
If you require any further audio visual equipment please outline below:
[ ]Flipchart & Pens
[ ]DVD Player
[ ]Sound clips for Power Point
[ ]Internet connection
Forgiveness Education in the Workplace

Ke Zhao, Robert Enright and John Klatt, University of Wisconsin-Madison

Category: Wellbeing and Work

Interpersonal interactions in a work setting can be a source of unfair behavior between one individual and another, and workers who perceive they are treated unfairly by others can respond with negative emotions and behaviors. As emotional suffering syndromes, anger (Murphy & Tyler, 2008) and anxiety (Tepper, 2001; Spell & Arnold, 2007) were found to be significantly and negatively associated with workplace injustice, and both anger and anxiety could bring negative influences to employees. Recent researchers argued that forgiveness can be a positive alternative to anger, resentment and desire for revenge when coping with workplace injustice (Bobocel, 2013; Palanski, 2012; Struthers, Dupuis, & Eaton, 2005). Practitioners have noted forgiveness can be an important psychological response for those suffering from perceived interpersonal injustices (Subkoviak et al., 1995; Baskin & Enright, 2004; Klatt & Enright, 2009; Worthington, Lin, & Ho, 2012).

Limited research in the literature has been conducted to examine the effect of interpersonal justice in the workplace, and early research tended to focus on the organizational structure of companies, not individuals’ anger requiring forgiving other who has been unjust to them in the workplace. In this study we designed a forgiveness education program to help people work on their perceived injustice due to interpersonal conflicts in the workplace. Our study used Enright’s Forgiveness Process Model (FPM, Enright & Fitzgibbons, 2000) as the basis for the
forgiveness education program. Counseling and educational interventions based on the FPM have been effective in addressing the psychological issues common in workplace injustice (see Baskin & Enright, 2004 for a meta-analysis), and researches have shown that forgiveness interventions are capable of reducing or remediating the negative psychological symptoms associated with workplace injustice, specifically anger and anxiety. We compared this to the well-established technique of relaxation training, which has been found effective in the workplace (Lesiuk, 2005; Smith, 2008).

Participants were recruited in Wales and West Midlands. A total of 41 participants, 19 in the forgiveness group and 22 in the relaxation group were included in data analyses. Participants were randomly assigned to either the forgiveness (experimental) group or the relaxation (control) group. There was a 12-week training period between the pre-test and post-test, and the follow-up occurred 4 weeks after the post-test. All instruments were administered using a web based system in which each participant logged into a unique web link and completed assessments. A form of bibliotherapy was used in the 12-week self-directed training in which participants received a manual and a structured plan each week. The book Forgiveness is a Choice: A Step-by-Step Process for Resolving Anger and Restoring Hope (Enright, 2001) was used to guide participants through the forgiveness process. This book explains the concept of forgiveness in detail and then helps people comprehend and move through four phases of forgiveness. The relaxation training used the book Relaxation: Exercises and Inspirations for Well-Being (Brewer, 2003) and focused on teaching participants about the need for relaxation, how to recognize the signs of stress in life, and how to implement relaxation strategies.

Forgiveness was assessed using an electronically altered version of the Enright Forgiveness Inventory (EFI, Enright, Rique, & Coyle, 2000). Participants’ level of anger, anxiety and anger-in were assessed by the State-Trait Personality Inventory Form Y (STPI, Spielberger & Reheiser, 2009) and the AX/In (Anger-in) scale of the STAXI (Spielberger, 1996).

We summarize the types of reported workplace injustices in Table 1. Means and standard deviations for all dependent variables are presented in Table 2. We examined the effectiveness of two kinds of training programs by using two types of analyses. We used within-subject repeated measures MANOVA with training program as a between group factor to investigate the effects of the training programs on participants’ level of forgiveness, anxiety, and anger. Then we examined within-group change for both training programs separately using matched pair t-tests. The results of the MANOVA analyses are presented in Table 3. We conducted within group analyses using Matched Pair Wilcoxon tests to further investigate the effectiveness of the two training programs. Results are reported in Table 4.

The results showed that participants in both groups experienced significant improvement on all outcome variables over time, and the forgiveness group had greater changes than the relaxation group on trait anxiety and state anger. This indicates both training programs had a positive impact on psychological well-being, and forgiveness appears to be more effective than relaxation for reducing anxiety as a personality of the individual and individual’s momentary feeling of anger following injustice in the workplace. Matched Pair Wilcoxon tests revealed the forgiveness group demonstrated greater within-group change than the relaxation group. The pre-test to follow-up comparisons for the forgiveness group are particularly encouraging: all of the significant pre-test to post-test outcomes were maintained at follow-up, but this is not applied to the relaxation group although both groups showed significant improvement on forgiveness from pre-test to post-test. This indicates that: the relaxation training may have provided sufficient support to temporarily improve forgiveness, but the forgiveness education has made stronger and longer effect to bring positive change in forgiveness to last beyond the 12-week training period.

We conclude both training programs were effective, and the two between-group differences in trait anxiety and state anger favored the forgiveness education program. Although both training programs resulted in positive change, the forgiveness education program was stronger. In addition, the forgiveness group changed on more
variables than the relaxation group and the effect sizes were stronger for the forgiveness group than for the relaxation group.

This is the first study to show that moral education, with a focus on the psychology of forgiveness, can be used effectively within the workplace to affect positive psychological change. What seems to have happened here is that as workers learn to forgive others for injustices in the workplace, their overall pattern of anxiety diminishes. Further, the workers who learned to forgive have a way to cope with situational anger, which can occur frequently and unexpectedly at work. The findings of this study have important implications for preventive psychological approaches at work. We suggest an annual seminar of forgiveness so that this theme can be present in workplaces on a continual basis rather than as a one-time activity that is soon forgotten.

References

**T54 Short Paper**

**Shared Leadership and Workplace Safety: A Social Network Approach**

*Sara Guediri*, University of Manchester and *Laura Fruhen*, University of Western Australia

**Category:** Work Design, Organisational Change and Development

**Introduction**

Existing research as well as accident and disaster investigations have shown that leaders play an important role in influencing workplace safety (e.g., Clarke, 2013). However, little attention has been paid to alternative sources for safety guidance other than the formal leader. Safety research acknowledges that formal, designated leaders are not the sole determinants of the status of safety at work. In statistical terms, findings from existing research have often shown that the amount of variance explained in safety outcomes through formal leadership is moderate. This raises the question who else shapes workplace safety in organisations and therefore represents an effective source of influence to employees’ safety performance. In this study we explore the role of shared leadership amongst team members to enhance workplace safety. Within the leadership literature, it has been theorised that the concept of leadership is not restricted to a single, individual leader, but expands to a shared attribute among co-workers (Pearce & Conger, 2003). The present study is novel as it goes beyond formal leaders as a source of guidance and explores the role of team members’ shared leadership for safety. Our research advances the safety leadership literature by investigating co-workers’ mutual influence as a pathway to foster safe working. Methodologically, the study offers an important contribution by using a social network approach to capture shared leadership activities within a team. The study holds important practical implications for how safety is managed.

Organisational research (non-safety-specific) has shown that co-workers exert mutual influence on each other, which has a positive effect on performance outcomes, and is effective over and above the influence of single leadership (Wang, Waldman, & Zhang, 2014). However, with regards to workplace safety the influence of shared leadership has not been explored. We propose that team members’ shared leadership might be an important source of guidance and motivation that influences the safety performance of colleagues. The status of safety within a work environment is often ambiguous and discretionary judgment is required to interpret organisational safety policies and procedures. Shared leadership interactions among team colleagues might have a positive effect on the sense-making process that is essential to developing a shared understanding of safety norms and values. In addition, safety issues often arise spontaneously (e.g., due to a sudden equipment failure), requiring fast and adequate interpretation of the situation and the actions to be taken. Managers and supervisors are not always present or available, whilst co-workers have greater proximity to each other relative to their vertical leader. Thus, interactions among co-workers occur more frequently and are likely to be less restricted than leader-employee interactions. We therefore hypothesise that co-workers’ shared leadership at the team-level is positively related to individual-level safety performance.

The occurrence of shared leadership within a team has been linked to the team’s formal leader’s practices (Wang et al., 2014). In a safety-critical environment, a formal leader’s view on safety issues might affect the extent to which shared leadership is effective for influencing safety. Leader chronic unease is defined as an individual’s tendency to be wary and experience discomfort about the management of safety risks (Fruhen, Flin, & McLeod, 2013; Reason, 1997). Formal leader’s chronic unease has been discussed as a concept through which leaders stimulate risk awareness in others. If a formal leader has low levels of safety unease and is rarely concerned or wary about safety matters, shared leadership might be particularly relevant to compensate for the lack of safety concerns through the formal leader. We investigate formal leaders’ safety unease as a moderator of the relationship of shared leadership to safety performance (see Figure 1).
Method
We conducted a survey study in a UK food manufacturing company. To overcome the issue of common-source bias we used two-source data from team members and team leaders. Team members reported the extent to which their team peers engage in shared leadership and team leaders rated their team members’ safety performance. The sample included 103 team members nested within 11 teams. The study gained ethical approval by the Ethics Committee of the authors’ affiliated University. Prior to taking part, all participants were provided with an information sheet that outlined the purpose of the research, what participation entails, and that taking part is voluntary. All information collected from participants is treated with highest confidentiality and no information from individuals is reported.

Measures

Shared Leadership. We adopt a social network approach to measure shared leadership. For this, each participant was issued with a definition of task-oriented and relation-oriented leadership and a name list of their fellow team members. Participants were asked to rate to what extent they rely on each person for task-oriented and relation-oriented leadership. From these responses, we computed the network density for each team, which represents the extent to which leadership is distributed among a high/low proportion of team members. High density indicates higher levels of shared leadership.

Leader Safety Unease. Team leaders rated to what extent different work scenarios make them feel uneasy with regards to safety. The scale was specifically designed to be applicable to the host organisation’s workplace.

Safety performance. Team leaders rated each of their team members’ safety performance using Griffin and Neal’s (2000) six-item scale.

Results
Using multi-level modelling, we tested whether shared leadership at the team-level is related to individual team members’ safety performance. Results showed that task-oriented and relation-oriented shared leadership did not have significant main effects on safety performance. However, task-oriented shared leadership significantly interacted with leaders’ safety unease for safety (see Table 1). The direction of this interaction showed that if formal team leaders had little concern for safety matters and a tendency not to worry about safety matters, shared task-oriented leadership was positively related to safety performance, but not if formal leaders had a high tendency to be concerned about safety matters (see Figure 2). We also repeated the analysis for safety performance split into its two sub-dimensions, safety compliance and safety participation. This analysis showed the same significant moderation effect where task-oriented leadership was related to safety performance if leaders’ concern for safety was low (see Table 1). The finding suggests that team members’ mutual influence can counteract a lack of formal leaders’ concern for safety. Although the direct effects for task-oriented and relation-oriented leadership were non-significant, an interesting trend emerged showing that task-oriented leadership was positively related to safety...
performance, whilst the association between relation-oriented shared leadership and safety performance was negative. This indicates that different forms of shared leadership might have differing effects on safety performance.

**Table 1.** Testing the relationship between shared leadership with safety performance, safety compliance, safety participation and leader safety unease as moderator.

<table>
<thead>
<tr>
<th>Team-Level Independent Variables</th>
<th>Safety Performance</th>
<th>Safety Compliance</th>
<th>Safety Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task-oriented Shared Leadership (Density)</td>
<td>.17</td>
<td>.14</td>
<td>.22</td>
</tr>
<tr>
<td>Relation-oriented Shared Leadership (Density)</td>
<td>-.14</td>
<td>-.06</td>
<td>-.21</td>
</tr>
<tr>
<td>Moderator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal Leader Chronic Unease</td>
<td>-.19</td>
<td>-.34</td>
<td>-.04</td>
</tr>
<tr>
<td>Interactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task-oriented Density * Leader Chronic Unease</td>
<td>-.66**</td>
<td>-.56**</td>
<td>-.70**</td>
</tr>
<tr>
<td>Relation-oriented Density * Leader Chronic Unease</td>
<td>-.33</td>
<td>-.34</td>
<td>-.30</td>
</tr>
</tbody>
</table>

**Table 1.** Testing the relationship between shared leadership with safety performance, safety compliance, safety participation and leader safety unease as moderator.

Discussion
Results showed that shared leadership is effective for enhancing employees’ safety performance under certain conditions. If a team’s formal leader tends not to be concerned about safety, task-oriented shared leadership is an effective pathway through which employees can lead each other with regards to safety. Under the absence of a formal leader’s concern for safety, team members might look more towards their peers for guidance and clarification on safety matters.

Figure 2. Leader safety unease as moderator of the relationship between shared task-oriented leadership and safety performance.

If a supervisor or manager tends to be highly wary about safety matters, there might be less need for team members to rely on each other for safety guidance. Thus, the results from the study suggest that the impact of shared leadership is dependent on the team’s designated leader’s concern for safety.

The results also showed a trend that shared relationship-oriented leadership was negatively linked to safety performance. This indicates that not all forms of shared leadership might be effective in improving safety. The finding is consistent with the team cohesion literature where task cohesion has been found to be more important than relation cohesion.

Practical Implications
The study holds important implications for how safety is managed in the workplace. Mutual influence among co-workers might offer an additional pathway to enhance safety in the workplace beyond formal leadership. In particular, if formal leadership is absent or inadequate, shared task-oriented leadership might provide an important source of guidance for employees to ensure safe working and ultimately avoid harm. Results also tentatively
indicated that only task-oriented, but not relation-oriented leadership might have benefits for workplace safety. Thus, if an organisation is interested in encouraging shared leadership amongst its employees, such efforts should be coupled with guidance on the types of shared leadership practices that are effective and under which conditions these are most likely to have impact.

Relevance for the Conference Theme: Resilience in a Challenging World
Organisational factors such as leadership were identified within investigations of accidents that happened over two decades ago (e.g., Bhopal gas leak incident in 1984), yet the same factors including leadership still emerge as key underlying causes in more recent major accident events such as the Deepwater Horizon Oil Spill. This underlines that although academics, policy makers and practitioners recognise organisational factors as important aspects for safety, the understanding and implementation of these are still incomplete. The present study investigates the potential of shared leadership to strengthen organisations’ safety capabilities and meet the challenge of creating and sustaining a safe workplace in the face of other demands such as cost, speed and operational efficiency.

References

T55 Short Paper
Resilience in police emergency services 999 call operators
David Biggs, University of Gloucestershire

Category: Wellbeing and Work

Introduction
Police work is stressful and individuals working for the emergency services have to build up resilience in this type of work (Kingshott, Bailey & Wolfe, 2004). The police are the last port of call for a variety of issues ranging from criminal damage to terrorism. Indeed, when the other emergency services cannot assist often it is left to the police to deal with the situation (Boots, Biggs & Elcock, 2014). Reflecting on the job demands and personal risk as a police officer threats can be quite considerable ranging from organisational constraints through to death (Boots, et al, 2014). While emergency call handlers may not necessarily witness first hand crime and violence, they are often in the position of hearing it, seeing it on CCTV or receiving reports of incidents. An example of a call is an extract from a 16 minute phone call as follows:

I heard another bang, he’s letting off guns. He’s banging down the front door. Please help me. My son could be dead. He’s coming through the door. Oh God, I’ve got about one minute before I die. Please... (Adams, 2005, p.2)

During this incident, the operator repeatedly asked, “can you tell me your address” (Adams, 2005, p.2) as the telephone system did not readily give this information. The call operator could only do as much as they could while at the same time they could hear shots and the final disparaging words of the murderer who after shooting their son, shot his wife dead (Adams, 2005).
This example, although not a day to day occurrence, does illustrate that individuals within the police services experience tragic events that go beyond normal encounters (Violanti & Paton, 1999; Ravalier & Biggs, 2009). How individuals deal with these stressful events and build up resilience is essential to understand in order to help those within the emergency services.

Research Design
At time one, 22 call operators were interviewed along with two managers and a trainer. The manager and trainer were not in direct contact with the public so were excluded from the analysis although they provided a useful context for the study. At time two, 15 call operators were interviewed approximately a year after the first study. Security clearance had been arranged by the Director of the emergency management centre facilitated by the previous work experience of the researcher. Ethical considerations were also made given the sensitivity of the subject for both the researchers and the participants. Pseudonyms have been used below to protect the identity of the participants. Inductive thematic analysis was used to analyse the scripts as suggested by Braun and Clarke (2006).

Results
NVivo 10 was used to categorise the data. A total of 85 codes were generated by going through the transcripts of the call operators and these were coded 247 times in the data. Three clear themes arose as shown in table 1. The most common 36 codes are listed in table 1 as these were shared with most of the call operators. The 49 less common codes were only the view of one or two of the call takers and consisted of fairly unique insights ranging from age helping with stress, through to eating chocolate to de-stress.

Table 1: The most common 36 codes given, with number of participants (N=37) and number of mentions divided by theme

<table>
<thead>
<tr>
<th>Building resilience in the job</th>
<th>Organisational dysfunctions</th>
<th>Job demands</th>
</tr>
</thead>
<tbody>
<tr>
<td>teamwork, 13, 23</td>
<td>not a call centre, 7, 13</td>
<td>difficult call, 7, 9</td>
</tr>
<tr>
<td>Mary Gober training, 8, 11</td>
<td>bad management, 9, 13</td>
<td>job description, 5, 6</td>
</tr>
<tr>
<td>distance themselves from the incident, 6, 9</td>
<td>system problems, 9, 13</td>
<td>calm the caller down, 5, 5</td>
</tr>
<tr>
<td>training effecting performance, 5, 7</td>
<td>short staff is the pressure, 5, 7</td>
<td>adrenalin rush dealing with crime, 2, 3</td>
</tr>
<tr>
<td>Good to help someone, 5, 6</td>
<td>take stress home, 6, 6</td>
<td>correct info is crucial, 2, 3</td>
</tr>
<tr>
<td>management are good, 5, 5</td>
<td>leave work at work due to security reasons, 5, 5</td>
<td>handle call not so well feel bad, 2, 3</td>
</tr>
<tr>
<td>need intelligence to perform well, 4, 5</td>
<td>lack of staff, 3, 3</td>
<td>public can be rude, 3, 3</td>
</tr>
<tr>
<td>develop a hard shell to cope, 2, 3</td>
<td>security compromised, 1, 3</td>
<td>dead body didn’t affect me at the time but then couldn’t sleep, 2, 2</td>
</tr>
<tr>
<td>development centres encouraging teamwork, 3, 3</td>
<td>feedback bad, 2, 2</td>
<td>stressful dealing with a lot of different issues, 2, 2</td>
</tr>
<tr>
<td>ways of dealing with stress, 3, 3</td>
<td>government at fault for problems, 2, 2</td>
<td>suicide difficult to sleep after, 2, 2</td>
</tr>
<tr>
<td>work allows time with the kids, 2, 3</td>
<td>impersonal environment at times, 1, 2</td>
<td>variety makes it interesting, 2, 2</td>
</tr>
<tr>
<td>use distancing for emotional resilience, 2, 2</td>
<td>insulted as took sick leave, 2, 2</td>
<td>workload, 2, 2</td>
</tr>
</tbody>
</table>
Discussion

The study was successful in illuminating a very difficult area of investigation involving emergency call operators and their work. The calls were varied ranging from car vandalism and burglary through to less common murders and suicide. The amount of demand that could be on a call operator was enormous as reported in the following extracts:

This guy just rang up and said “oh hello, I’ve had the gas on in my house for four hours, what would happen if I light a cigarette?” you don’t want to be doing that. (Maz)

If someone phones up and says they are committing suicide and says I’ve cut my wrists, what do you say? (John)

One [call] I had was a very young girl, she was only about 5 and it was simply the fact that she needed help and it was difficult trying to help because she couldn’t give me any information ... I was just concerned with trying to help that little girl. (Alex)

The inductive thematic analysis clearly reflected the research questions and revealed three important themes. By far the most popular theme was building resilience in the job. Teamwork was the most important way in which the participants built up their resilience as shown in the following extracts:

We all do the same. We are all working in the same office, so we want a happy environment, its not them and us, some people do, officers, dispatchers and call takers all work together we all want to achieve the same thing (Charlie)

We work closely together, it helps if the shift get on, we work for 6 days together, it makes it a nicer place to be. If you get on with the people it makes the job better. It makes a pleasant environment (Frank)

Teamwork aided the call operators as if they had received a difficult call, their colleagues would understand if they needed assistance. It helped build the resilience up for the individual as they could count on their colleagues. Indeed, staff shortages and management failing to predict busy times were seen as a real problem in dealing with the job coded under the organisational dysfunctions theme.

Training was also seen as a way of building up resilience with two codes relating directly to its effectiveness in dealing with the job. Call operators felt that their training was essential and often wanted more as in the following extract:

People need more training, they deserve more training, regular group training for 2 weeks when all sorts of questions about phone calls can be answered, and training is needed in how to handle types of calls, whether nasty or emergencies (Jo)

A difference did seem to emerge between the time one and time two study with specific Mary Gober training being implemented over the period of the study. This aided the call operators use their language carefully in order to resolve many situations successfully.

Other resilience building strategies were more individual ranging from using intelligence through to developing a hard shell, as seen here:

Researcher: So you develop a harder shell?
Participant: Yes you have to, it is the job, we are all human and if you didn’t you couldn’t cope with some incidents, you have to be immune to it, especially if you have children at home.
Interestingly, counselling although available wasn’t used by many of the participants on a day to day basis. Teamwork, training, individual factors such as developing a harder shell or desensitising yourself from the role all seemed to aid call operators develop resilience in the job.

References

T56 Careers Case Study
What about a Phd?
Fiona Beddoes-Jones, The Cognitive Fitness Consultancy
Category: Learning, Training and Development
Is going down the PhD route for you? Is it worth the financial, emotional and physical investments required? Learn from the experience from someone who has been through it and got out the otherside. This session is a case study of going through a PhD and what to expect, before during and after. There will be a chance to ask questions at the end.

T57 Short Paper
Greed isn’t good
Almuth McDowall and Duncan Jackson, Birkbeck University of London, Zara Whysall, Lane4 & Nottingham Trent University and Paul Hajduk, PayData
Category: Leadership, Engagement and Motivation
Introduction
There is no doubt that the UK has witnessed examples of highly unsuccessful, if not downright destructive Chief Executive Officer (CEO) leadership, from Fred Goodwin at the Royal Bank of Scotland to former chairman of the CO-OP bank, Paul Flowers. Such high profile examples have raised broader questions about performance at the top, and whether current organisational practice encourages the right kinds of behaviours, attitudes and aspirations. In particular, the link between CEOs’ rewards and their respective performance is a topic for hot, and often fraught, debate, with the magnitude of executive rewards continuing to grow, yet for reasons that cannot easily be attributed to economic factors alone.

In the UK, concrete examples have stirred controversy about how and how much organisations should pay their CEOs. The highest paid FTSE 100 CEO, WPP’s Martin Sorrell, receives a £42.9m salary, which is reportedly 810 times that of the advertising group’s average worker (FT, 2015). Sir Martin received a £36m pay-out in 2014 as a result of a long term incentive plan, put forward in 2012 as a result of shareholder dismay (Cookson, 2015). The CEO of BAE systems, Ian King, received a £1m pay rise in 2014 to £3,519,000, equivalent to an increase of 41% on his previous package, pitched against a £1.5bn drop in BAE sales at the time of the announcement (Guardian, 2015). Whilst some may take the position that CEOs are wealth creating entrepreneurs whose pay is entirely justified, due to the
responsibility they shoulder and the risks they take, this doesn’t necessarily explain why executive pay has accelerated in relation to the pay of the workforce in general. Recent reports on executive pay trends highlight that:

- Between 2000 and 2014 the median total earnings for FTSE 100 CEO increased by 278%, while the corresponding rise in total earnings for full-time employees was 48%. In 2000 the average FTSE 100 CEO earned 47 times more than the average full-time employee, by 2014 this had increased to 120 times more than a full-time employee (Income Data Services, IDS, 2014)
- Put differently, average CEO pay has increased by about 500%, in comparison to ordinary salaries increasing by 20% (Hildyard, 2013).

Given the ever increasing pay gap, and the issues around the effectiveness of leaders right at the top, it is now time to consider a behavioural perspective to consider to what extent current CEO reward practice needs to change and how this might be underpinned by evidence from behavioural science.

Objectives and data collection
The current submission took a triangulated approach to data collection and evaluation. The overarching questions are to what extent current reward structures encourage the right kinds of CEO characteristics and also how CEO reward practice may need to change in the future. These are the sources of information drawn on:

a) A workshop (n = 14) and follow up consultations with a small but senior sample of senior leaders, reward specialists and reward consultants; this focused on where practice needs to go in the future, but also what the likely barriers to changes will be.

b) A wider survey of over 50 top HRD specialists, reward specialists, CEOs and reward consultants; this focused on the differences between the now and the future, and also how people’s perceptions of rewards could be clustered.

c) Thorough evaluation of academic literature to outline the relevant theories, research and findings using rapid evidence assessment methodology.

Key findings
In overview, the key findings from this report can be drawn together as follows, grouped according to the reward context, the behavioural basis for CEO selection and reward, organisational practices, and reward processes:

The executive reward context:
- The gap between CEO pay and other people’s pay continues to increase even during times of economic recession and reward is rarely sufficiently adjusted to reflect a decline in company performance

The behavioural basis for CEO selection and reward
- Currently, CEOs with narcissistic personality characteristics are more likely to make it to the top of organisations, and are more adept at negotiating higher rewards when they get there
- CEO selection processes are in need of an overhaul, with more explicit criteria needed, which are then also linked to reward practice.
- There is a gap between the behaviours typically demonstrated by CEOs currently and those needed from our business leaders in the future, with a longer-term, broader stakeholder focused and more behaviour (as opposed to purely results) based perspective required

Organisational practices:
- More sophisticated measures of performance and company reporting are needed to encourage sustainable business performance, including a broader range of metrics beyond pure financial performance
- Organisations need to avoid perpetuating the myth of the CEO to encourage greater shared leadership (and ensure that rewards reflect this).

Reward processes:
Vested interests need to be recognised and counter acted with training and awareness raising. The literature corroborates that higher rewards do not necessarily equate to behavioural incentives and that ranked comparisons are more important than absolute sizes of rewards.

CEO effectiveness is likely to vary across tenure, suggesting that year on year increases to rewards are not justified.

Less importance should be attached to comparisons with predecessors’ packages in determining CEO rewards, and more importance attached to rewarding the appropriate behaviours and ethics.

**Recommendations for change**

As others have outlined before us, CEO performance is a complex issue (Dorff, 2014; Pepper, 2015), and so, by definition, are corresponding rewards. Organisations need to become more diverse, more embracing of shared and accountable leadership, more transparent in their reporting and more concerned with shareholder rather than stakeholder value; and also recognise that reward perceptions will differ within and across organisations – it is important to make these explicit. A key barrier to change is the lack of knowledge or guidance around how CEO rewards should be allocated in order to promote desired leadership behaviours, ethics and values, in the absence of which organisations redo what they have done before rather than strive to continuously improve. However, changes at policy level are also needed to underpin organisational change; including greater mandates for broader, more transparent reporting and consequences for organisations that don’t comply. Equally, best practice should be highlighted so that organisations hungry for change can learn from effective case studies. But perhaps most importantly, all stakeholders need to take heed from the evidence offered by behavioural science. Reward practice remains curiously lacking in evidence – it’s time to start now to build a solid foundation.

**Select key references**


**T58 Short Paper**

For individual and organisational health, resilience must have morals too

Julie Wacker and Laura Chard, JL Work Solutions

**Category:** Wellbeing and Work

**Overview:**

This paper integrates two studies and extensive case studies of resilience training that have important implications for the practical application of OP in the field of resilience training. It is known that resilience is a predictor of sales performance, and the first study found that two aspects of psychopathy are also predictors of sales performance, and these two aspects of psychopathy have clear similarities with what we consider to be resilient behaviour. Therefore it is important that we use research findings from the second study about the trait measures of integrity to develop a Resilience Moral Code. We posit this moral code must be integrated into resilience training in order that healthy resilience, and not elements of psychopathic behaviour, is encouraged as a result of the training.

Machiavellianism egocentricity, which was the strongest predictor of sales output in the study, is characterised by successful manipulation, using interpersonal strategies that support the use of deception and exploitation (Ali,
Amorim & Chamorro-Premuzix, 2009). The Machiavellian individual is a successful manipulator, defined by a lack of interpersonal affect in interpersonal relationships, a lack of concern with conventional morality and low ideological commitment (Christie & Geis, 1970). When the definition of Machiavellianism is considered in the context of how anecdotally sales people are viewed, the results of the study are indeed not surprising; we have a stereotyped view of sales people being manipulative in order to “get their results”. The definition of a Sales role almost entirely consists of the mastery of persuasion, therefore an ability and orientation to control and manipulate, or to use a more modern phrase, ‘spin’, the feature and benefits of a product may aid in improving sales performance.

Machiavellians also show an orientation for a lack of concern for conventional morality (Christie & Geis, 1970), however again this may be argued as being a positive attribute in certain sales roles, but only to a point. Clearly, as Verbeke, Ouwerkerk & Peelen (1996) argued, the sales person does find themselves in ethically demanding situations, and indeed if the sales person is high in Machiavellian orientation, then they are more likely to make unethical decisions. However, if sales people are more likely to be prepared to sell anything to anyone without concern for morality, then they will be more successful on an objective measure of sales performance, but is that OK? Clearly, there is a problem with a success that involves unethical decision-making, we may only look to the financial crash of 2008 to see that the longevity of that strategy does not work – morals must be part of the story too.

Resilience is taught partly by developing an Optimistic Attributional Style and one of the key features of this attitude is not blaming yourself excessively for adversities and mistakes (Seligman, 1990). We can start to see that someone with Machiavellian traits therefore could also be described as having this element of resilience, in bucket loads! They do not blame themselves for mistakes, they do not dwell on adversities and they persist in getting what they want with their goal orientated outlook.

Fearlessness was also shown to have a significant and positive correlation with sales output, and this makes sense for a sales environment. The sales person needs to be fearless in picking up the phone and calling customers, fearless in presenting information at meetings, all with the full knowledge that they may be rejected at any time. Again, we can see the implication from this is the possibility that the desired resilience that comes from having an Optimistic Attributional Style may well also develop into being fearlessness, or a psychopathic trait. Although it may appear positive to ‘have no fear’, having no fear means that people do not assess risk and they act impulsively and again this is not good for an organisation’s sustainability in the long run.

So how do we teach people resilience without it tipping over into psychopathic traits? Does resilience also require moral boundaries because otherwise we run the risk of training people in a resilience that unintentionally encourages elements of psychopathic behaviour?

The answer lies in integrating integrity development into resilience training and we can do that by using the Resilience Moral Code Model (see diagram) which shows the spectrum of behaviours between a person with psychopathic personality traits and a person of integrity traits. The Resilience Moral Code can be integrated specifically in the techniques that teach people resilience including the Optimistic Attributional Style and ABC model (Seligman, 1990). In the study of integrity, 310 business people revealed there are 7 trait measures that positively predict integrity, and these can be used to develop 8 behavioural elements on a spectrum that runs from psychopathy to integrity, and is made specifically a part of healthy resilience training.
Resilience is a way of looking at life and the adversities that we encounter. It traditionally teaches us to attribute and regulate our thoughts in order to protect ourselves from unnecessary stress or anxiety. Yet this cannot be done
in a moral vacuum, people must also know when they need to take responsibility for their actions (or ‘blame’
themselves), they need to know when their persistence is verging on excessive risk taking, they need to know that
being too flexible can lead to impulsivity, they need to know that achieving individual goals also must fit with the
requirements of the greater good, they must know that emotions such as fear are important indicators of risk not
something to be ignored or avoided, they must know that ruthlessly achieving their goals at all costs including deceit
will not offer long-term success and can contribute to stress or burn-out.

Summary

Resilience training can be a crucial self-development process for many individuals helping them to healthily deal with
adversity and meet their goals. Yet our experience from implementing resilience techniques has shown we also
need to be developing moral boundaries for truly healthy individuals and organisations. These moral lines are not
always clear and require discussion and self-reflection however integrating the Resilience Moral Code model into
people’s thought processes will allow for this process to be clearer and easier to action. Resilience on its own is not
enough for our challenging world, the banking crisis taught us that and resilience training itself must
change. Integrity and ethics can be integrated into resilience training as this can truly help us face the challenges in
our world.

T59 Short Paper

Defence Trainer Capability (DTC)- Workplace Trainer Culture

Catherine Steele, University of Leicester; Daisy Mundy and Stephanie McLay, Edif ERA; Kazia Solowiej, University of
Worcester and Ann Bicknell, Independent Consultant

Category: Learning, Training and Development

Introduction:
The Defence Trainer Capability (DTC) project was initiated by the Directorate of Training, Education, Skills,
Recruiting and Resettlement (TESRR) and the Defence Centre of Training Support (DCTS) in September 2013 and
aims to up-skill the trainer to meet the challenges presented by the modern learner, either in a formal or
informal learning environment. Work to develop the trainer is well underway but it is recognised that, for this
capability to be sustainable, the selection and career management of those in trainer roles must also be
addressed.

The role of workplace learning in employee development has seen a rise in emphasis over recent years, as
organisations try new approaches that are not tied to formal structured methods such as classroom instruction
(Jennings, 2012; Cross et al, 2010; RSSB, 2013). This change in emphasis is not purely about replacing formal
training methods but rather about better exploiting the limited training time and budgets available to realise
better employee development, increased performance and improved flexibility in the provision of learning
opportunities (Jennings, 2011). Organisations are now beginning to recognise the potential benefits of moving to
a continuous learning culture, “where employees change their behaviour upon deepening and broadening of their
skills, knowledge, and worldviews,” (Noe et al, 2014 cited in Tombs-Katz, 2014: 45). Recent research on behalf of
the National Health Service (NHS) highlighted skills such as coaching, mentoring, collaborating and reflecting as
critical competencies to foster the right conditions for informal learning in the workplace (Tombs-Katz, 2014),
concluding that a continuous learning culture is not just a function of a top-down strategy and formal training, but
involves leadership at all levels.

One of the end-state goals of the DTC is that the workplace trainer concept should be embedded across Defence
to support non-formal training delivery. Previous research noted that there was confusion across Defence
regarding the definition of workplace training and that there were differing perceptions as to what constitutes a
workplace trainer across the different cap-badges/branches (Mundy et al, 2014). The report also identified
organisations within Defence which appeared to have a workplace trainer culture and suggested that there
might be potential benefits associated with this type of culture which could support the wider goals of DTC. Further examination and evaluation of this area of good practice were recommended to determine whether these wider benefits could be made relevant and achievable for all Defence organisations.

Mundy et al (2014) also identify other potential benefits associated with a workplace trainer culture which have direct relevance to the DTC project, suggesting that the type of workplace trainer culture identified in certain military examples “allows the organisation to grow a trainer capability for the delivery of non-formal training, but also provides the individual with a better understanding of the nature of the trainer role, i.e. the Knowledge Skills and Attributes (KSA) required and the intrinsic benefits associated with being a trainer.” (Mundy et al, 2014: 45). This understanding supports self-selection, in turn helping to attract volunteers for other trainer roles and providing the organisation with opportunities to identify trainer potential and manage talent. Indications from the data collected in Phase 1 suggested that “individuals who complete trainer assignments are valued by the organisation for their wider trainer skills and knowledge and are exploited back in their units not only as workplace trainers themselves, but also as role models, coaches and mentors to support developing workplace trainers,” (Mundy et al, 2014: 45). The Phase 1 report suggested that there might be potential for this type of culture to feed through-life trainer development, by using workplace experience to nurture and develop the supervisory and coaching skills required and thus supporting progression to other DTC roles e.g. Defence Trainer Supervisor (DTS) and Defence Trainer Manager (DTM).

As such this research aims to determine:

- What evidence exists that there are benefits associated with a workplace trainer culture, over and above the delivery of non-formal training?
- What evidence exists that similar benefit could be realised by embedding a workplace trainer culture across Defence?

A two stage approach will be used to scope the potential benefits of embedding a workplace trainer culture across Defence and identify options for taking this forward. Stage one will identify evidence that organisations are realising benefits from a workplace trainer culture. Stage two will develop a model of a workplace trainer culture suitable for all Defence contexts and outline a proposed action plan for implementing and evaluating the model.

The outputs of this study will provide Defence with a proposed model of a workplace trainer culture that is feasible and desirable to the majority of stakeholders and an action plan showing how implementation could take place. It will also provide stakeholders with a clearer understanding of the current workplace training situation so that the potential benefits of change can be considered from a more informed position before moving into subsequent phases of the project.

**Methodology/Data Analysis:**

Stage one of the project will investigate live case studies within Defence specifically to examine their approach to a workplace trainer culture and identify evidence of any associated benefits resulting from this. Additional data will be gathered from recent historical case studies in other defence and non-defence domains, to identify any supporting, secondary source evidence that benefits have been realised in other organisations with workplace trainer cultures.

Mundy et al, 2014 identified two examples of organisations within Defence (Royal Marines (RM) and Infantry) which appear to have a workplace trainer culture and suggested that there were potential benefits which might be associated with this, both for the individual and the organisation (Mundy et al, 2014: 45). These organisations now offer potential case studies for examining different approaches to workplace trainer culture within Defence and gathering data on whether any benefits have been realised as a result. In order to balance the research from a Defence perspective, two additional case studies from the Royal Air Force (RAF) and the Royal Navy (RN) have
been identified that could be considered suitable examples of organisations where a workplace trainer culture is in place.

For each of the case studies identified, semi-structured interviews/focus groups will be conducted with individuals and groups from a selected sample in order to gather qualitative data on approaches and attitudes to the workplace trainer culture within the organisation and any perceived benefits associated with the culture.

Case study research is a method of study in depth rather than breadth, where the emphasis is on close examination of data within a specific context (Kothari, 2004). For Stage one of this study, case study methodology has the specific advantage that the examination of the data is conducted within a real-life context (Yin, 1984) enabling the collection of detailed, primary source, qualitative accounts which explore and describe the workplace trainer culture and its associated benefits from the perspective of a Defence organisation. As workplace training is not a clearly defined concept within Defence at this time (Mundy et al, 2014) the collection of this rich, qualitative data will help to explain the complexities of each situation (Zainal, 2007), allowing the researcher to study any differences in approach between case studies and identify the key characteristics of different types of workplace trainer culture. This will provide valuable additional data over and above the identification of benefits, e.g. conditions required for a workplace trainer culture, processes and hierarchies involved, which will support the analyses in Stage two of the study.

Stage two of this research will use Soft Systems Methodology (SSM) to examine the current Defence approach to workplace training and to model the concept of a workplace trainer culture as a human activity system that could be applied in a pan-Defence context. SSM is a mature and well established approach. The seven stages of SSM (Figure 1) use cycles of discussion, debate and learning to understand a problem situation, develop a conceptual model of a desired system and then compare this with the real world to identify potential changes. Data will be gathered using document review, interviews, focus groups and Subject Matter Expert (SME) panels. Procedures and analysis will follow the seven step model of SSM (Checkland and Scholes, 1999) and will take an iterative rather than a linear approach.

Interviews and focus groups will be conducted with representatives from each of the four Services. These will provide the data to develop a ‘rich picture’ of their Service’s current approach to workplace training. These interviews and focus groups will cover a range of ranks and appointments to reflect the different perspectives from the training policy desk, the working unit and the training development department. Representatives from both regular and reserve units are included in this research.

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**Figure 1: The Seven Stage overview of Soft Systems Methodology (Checkland, 1999)**

**Results/Discussion:**

At the time of submission for the conference the case studies and SSM interviews are ongoing. These will be completed by October 2015 and full results will be available to present at the conference in January 2016.
This research has been funded by the Dstl Training Programme through the Defence Human Capability Science and Technology Centre and is part of a larger DTC research project. The nature of training across defence is changing as a response to organisational requirements and transformation. Therefore the research team feel the research fits with the conference theme of Resilience in a Challenging World.

References:

T60
DOP 2016 Annual General Meeting
Join DOP committee members to find out more about your DOP. Please note: Only full members of the DOP are able to vote.
Friday 8 January

**F01 Standard Paper**

**Developing Personal Resilience**
Britt Tajet-Foxell

*Category: Wellbeing and Work*

What do the Royal Ballet, the British Olympic Association, and the Norwegian Opera all have in common? They have all had Brit Tajet-Foxell as their performance-focused Occupational Psychologist. Using examples from elite sport and case studies from world class performance, in this specially invited session, we will explore the different aspects of personal resilience and how you can develop it, in yourself and in your clients and organisations.

**F02 Discussion by Learning a Living Working Group**

**New thinking on leadership and implications for practitioners occupational psychologists**

Kim Bradley-Cole, Work Psychologist and Lecturer in Occupational & Organisational Psychology, University of Surrey, Parvin Begum, MSc Occupational Psychologist (in Training), Liz Taylor, MSc Occupational Psychology, MBPsS, Independent Practitioner, Adam Chan, MBPsS, MSc Occupational Psychology, Independent Consultant & Researcher

**So you think you know about Leadership?**

Join us for a dialogue to re-energise your thinking about leadership and leadership development. Leadership is of paramount importance to organisations and as Occupational Psychologists we must be equipped to address leadership in a volatile, complex and uncertain future. Yet perspectives on leadership are in flux and development interventions generally have a poor record of success in practice.

This participative workshop aims to challenge your assumptions, explore alternative thinking and generate actionable learning outcomes around leader selection and leadership development. If you want to use different thinking to develop different solutions, then come along for a lively, informal and informative session.

Participants will be invited to share their current concepts of leadership and leadership development. We will facilitate exploratory dialogue around the challenges of leadership with a focus on the future. We will aim to identify what is “taken for granted” and how this shapes approaches and responses to leadership. We will share views and experiences around development interventions and the associated evidence-base.

Participants will hear about the shifting paradigm of leadership and the implications for selection and development. The session will conclude by identifying the key areas for our own learning and development to ensure Occupational Psychologists are equipped to engage with senior professionals in management and HR in the increasingly complex and contested arena of leadership.

**F03 Symposium**

**Assessment of Resilience and Emotional Agility**

Rainer Kurz, Cubiks

*Category: Psychological Assessment at Work*

This Symposium addresses the 2016 BPS DOP Conference theme ‘Resilience in a changing world’ through four papers that cover the assessment of resilience and emotional agility.

The first paper applies Predictive Analytics to a large PAPI 3 Sales & Leadership personality questionnaire validation data set in order to maximise criterion-related validity through a theoretically sound hierarchical model which extends the Big 5 personality factors through Achievement.

The second paper illuminates the relationship between a new measure of Emotional Agility and the existing Lumina Spark personality questionnaire as well as external rater feedback on the Great 8 competencies.
The third paper focuses on the role of Emotional Resilience within the Emotional Intelligence Profile (EIP).

The fourth paper looks at the joint factor structure of three personality tools and how the scales relate to performance measures in an emergency training simulation.

The symposium clarifies the relationship between popular constructs such as Emotional Intelligence and Learning Agility, established personality theory and new concepts such as Emotional Agility.

F03a
Paper 1: Measuring Emotional Agilities through Predictive Analytics
Rainer Kurz, Cubiks
Category: Psychological Assessment at Work

Introduction
Every few years a new buzz enters the world of assessment. Gardner (1983) introduced the term multiple intelligences complementing well-recognised differential ability areas with intrapersonal and interpersonal intelligences. Around the same time Boyatzis (1982) developed a model of around 30 competencies that underpin managerial performance. Goleman (1995) popularised this work with his book on Emotional Intelligence (EI) – a concept which seems to encompass all non-cognitive competencies.

Siegling, Saklofske and Petrides (2014) commented: Because ‘non-cognitive intelligences’ tend to be loosely defined, great overlap exists between them. It is almost impossible to delineate where one starts and the other stops because their sampling domains, when specified, overlap very considerably. Indeed, it may be fair to say that the proliferation of labels like ‘intrapersonal, interpersonal, emotional, and social’ to describe what is, by and large, the same sampling domain is a demonstration of the ‘jangle fallacy’ (viz., a groundless inference that two constructs are different simply because they have different labels) that has been plaguing personality research for a long time (Block, 1995).

Of all these interrelated constructs, EI is by far the most prevalent both in the academic as well as in the popular literature yet links to personality variables remain unclear. However recent advances found the emergence of hierarchical personality modelling. Digman (1997) found that an Alpha factor emerges out of Agreeableness, Emotional Stability and Conscientiousness while Extraversion and Openness form a Beta factor. Musek (2008) showed that even these higher-order factors correlate giving rise to the General Factor of Personality (GfP).

Learning Agility is another popular concept that has received considerable traction. In the Lominger Choices 360 assessment tool this term is referred to as the overarching construct that is covered through 20 competencies grouped in 4 clusters.

There seems to be a high degree of convergence between EI, GfP and Learning Agility. The 1996 Review of Personality Tests BPS Guidelines indicate that $r > .45$ is considered ‘adequate’ supportive evidence of construct convergence. In fact in a 2000 study conducted with retail sales assistants from a range of retail stores a sum of 20 PAPI 2 personality scales correlated .583 (N=73) with the Schutte et al (1998) 33 item measure of Emotional Intelligence with particularly high correlations for Need to relate closely to individuals (.535), Social harmoniser (.516), Need to be supportive (.496) and Integrative Planner (.468). Moderate correlations were found for Conceptual thinker (.437), Need to belong to groups (.420), Need for rules and supervision (.409), Need to control others (.394), Work pace (.392), Need to finish a task (.353), Need to be noticed (.351), Attention to detail (.313), Need to achieve (.291), Need for change (.275), Leadership role (.272) and Hard worker (.243). In a factor analysis EI emerged in the Agreeableness factor with secondary loadings on Extraversion and Emotional Stability.
This paper outlines the application of Predictive Analytics to the development of an integrated assessment model of Emotional Agilities where personality predictor facets and competency markers group into 6 factors within 3 empirically derived clusters.

**Design**
In the course of the cross-cultural development of the PAPI 3 Sales & Leadership personality questionnaire launched in April 2014 N=929 professionals and managers were rated by at least 2 reviewers of their choice on 16 competencies. The PAPI 3 Sales & Leadership questionnaire measures with a 7 points Likert scale 26 scales five of which are sub-divided into Facets of 3 items each. Each competency was measured with either 2 or 4 items.

**Method**
Predictive Analytics were employed to create a hierarchical model linking personality facets to capabilities.

The first step was the investigation of the criterion space. A PCA with varimax rotation was conducted yielding Enterprising, Excelling and Engaging Clusters from reviewer ratings of the 22 competencies.

In a second step inspection of personality scale correlates lead to a research model where markers for the Big 5 personality factors and Need for Achievement were assembled into integer weight prediction equations that exceeded validities of .20 at factor, cluster and overall score level.

The third steps consisted of an iterative process to develop a short predictor measure. Based on validation against the sum of the 22 competencies each of the remaining 21 predictor scales were split into two homogenous Facets of 3 items each. Based on inductive considerations short predictor scales were assembled for each factor consisting of three facets with satisfactory internal consistency. The resulting short predictor tool features three Facets per Factor i.e. 54 items in total. Its unit weight composite achieved the same raw validity of .23 (N=929) against the sum of the 22 competencies as the research model based on the full 161 item questionnaire.

The fourth step required further refinement of the criterion space where each competency was decomposed into its 2 or 4 constituent items. A PCA (N=1106) at this level of detail revealed that a six factor solution closely matching the 6 factor model on the predictor side. Inspection of correlations of the 50 items with overall criterion score as well as predictor facets and factors identified 18 marker items that were closely linked to the 18 predictor facets.

Combines criterion scores across Self and Reviewer ratings were calculated for all criterion items. A PCA of the combines 18 Marker Items yielded a clear 6 factor solutions as expected with few cross-loadings (see Table 1). The combined criterion rating scales showed satisfactory reliabilities with an Internal Consistency value of .862 for the Emotional Agility total criterion scale, .813 for Enterprising, .692 for Excelling and .733 for Engaging. At Factor level the internal consistency values averaged .698.
Table 1: PCA Varimax rotated solutions of 18 criterion marker items (Mean of Self and Reviewer Ratings) showing component loadings (loadings <.40 omitted).

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvaue</td>
<td>5.815</td>
<td>1.756</td>
<td>1.530</td>
<td>1.207</td>
<td>0.905</td>
<td>0.242</td>
</tr>
<tr>
<td>% Variance explained</td>
<td>31.194</td>
<td>9.754</td>
<td>8.499</td>
<td>6.765</td>
<td>5.475</td>
<td>2.233</td>
</tr>
<tr>
<td>Big 5 + 1 Construct</td>
<td>Extraversion</td>
<td>Openness</td>
<td>Achievement</td>
<td>Stability</td>
<td>Conscientious</td>
<td>Agreeableness</td>
</tr>
<tr>
<td>Emotional Agility Construct</td>
<td>Directing</td>
<td>Creating</td>
<td>Smiling</td>
<td>Adapting</td>
<td>Delivering</td>
<td>Supporting</td>
</tr>
<tr>
<td>C1</td>
<td>Produces original ideas</td>
<td>0.12</td>
<td>0.013</td>
<td>0.023</td>
<td>0.017</td>
<td>0.009</td>
</tr>
<tr>
<td>C2</td>
<td>Groups complex concepts with ease</td>
<td>0.013</td>
<td>0.017</td>
<td>0.009</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>C3</td>
<td>Seeks out new approaches to situations and tasks</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>C4</td>
<td>Takes difficult decisions with ease</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>C5</td>
<td>Uses compelling arguments to convince others</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>C6</td>
<td>Demonstrates confidence when leading a group</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>D1</td>
<td>Demonstrates passion at work</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>D2</td>
<td>Stresses to achieve success</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>D3</td>
<td>Demonstrates tenacity and perseverance</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>D4</td>
<td>Exhibits a high level of dynamism</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>E1</td>
<td>Avoids critical errors that others have overlooked</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>E2</td>
<td>Actively participates and contributes to team processes</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>E3</td>
<td>Helps others meet or exceed goals and objectives</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>E4</td>
<td>Exhibits an understanding of what motivates human individuals</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>F1</td>
<td>Easily adapts to new situations and changes at work</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>F2</td>
<td>Maintains a positive approach in the face of setbacks and failure</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>F3</td>
<td>Exhibits a calm and controlled manner in the face of difficult situations</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The validity coefficients between Emotional Agility predictor-criterion pairs (see Table 2) all exceeded .20 with a .27 value for the Total Emotional Agility score pairing across jobs, organisations, languages and cultures.

Table 2: Emotional Agility Predictor-Criterion correlations (N=929) between self-report questionnaire and reviewer rating scales with aligned pairs in the diagonal.

<table>
<thead>
<tr>
<th>Emotional Agility Predictor</th>
<th>200°</th>
<th>201°</th>
<th>161°</th>
<th>204°</th>
<th>237°</th>
<th>300°</th>
<th>227°</th>
<th>0.050</th>
<th>1.82°</th>
<th>1.172°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entering Predictor</td>
<td>220°</td>
<td>37°</td>
<td>0.15</td>
<td>141°</td>
<td>344°</td>
<td>334°</td>
<td>108°</td>
<td>0.078°</td>
<td>1.121°</td>
<td>1.123°</td>
</tr>
<tr>
<td>Exciting Predictor</td>
<td>0.002</td>
<td>-11.0°</td>
<td>24.0°</td>
<td>-111°</td>
<td>-102°</td>
<td>-0.097°</td>
<td>174°</td>
<td>0.238°</td>
<td>0.066°</td>
<td>1.123°</td>
</tr>
<tr>
<td>Engaging Predictor</td>
<td>196°</td>
<td>188°</td>
<td>0.033</td>
<td>206°</td>
<td>126°</td>
<td>228°</td>
<td>0.081°</td>
<td>0.072°</td>
<td>233°</td>
<td>0.268°</td>
</tr>
<tr>
<td>Creating Predictor</td>
<td>0.001</td>
<td>203°</td>
<td>-0.085°</td>
<td>0.007</td>
<td>0.270°</td>
<td>0.104°</td>
<td>-0.005°</td>
<td>-0.135°</td>
<td>0.061</td>
<td>0.066°</td>
</tr>
<tr>
<td>Directing Predictor</td>
<td>250°</td>
<td>363°</td>
<td>0.167°</td>
<td>1.465</td>
<td>0.244°</td>
<td>1.366°</td>
<td>0.167°</td>
<td>0.151°</td>
<td>1.121°</td>
<td>1.130°</td>
</tr>
<tr>
<td>Striving Predictor</td>
<td>0.001</td>
<td>-0.29°</td>
<td>0.163°</td>
<td>0.023</td>
<td>0.023°</td>
<td>0.204°</td>
<td>0.268°</td>
<td>0.001</td>
<td>0.050°</td>
<td>0.001</td>
</tr>
<tr>
<td>Delivering Predictor</td>
<td>0.001</td>
<td>-1.57°</td>
<td>1.01°</td>
<td>-1.090°</td>
<td>-1.144°</td>
<td>-1.140°</td>
<td>0.015</td>
<td>2.283°</td>
<td>1.122°</td>
<td>1.155°</td>
</tr>
<tr>
<td>Supporting Predictor</td>
<td>0.256°</td>
<td>-0.237°</td>
<td>-1.22°</td>
<td>-1.206°</td>
<td>-1.15°</td>
<td>1.272°</td>
<td>0.265°</td>
<td>0.021</td>
<td>0.313°</td>
<td>0.153°</td>
</tr>
<tr>
<td>Adapting Predictor</td>
<td>0.040</td>
<td>-0.561°</td>
<td>1.12°</td>
<td>1.158°</td>
<td>0.018°</td>
<td>0.870°</td>
<td>-0.071°</td>
<td>-1.117°</td>
<td>0.040</td>
<td>0.229°</td>
</tr>
</tbody>
</table>

Table 2: Emotional Agility Predictor-Criterion correlations (N=929) between self-report questionnaire and reviewer rating scales with aligned pairs in the diagonal.

Discussion

The Big 5 +1 model appears to be a valid alternative to the Great 8 Competencies (Kurz & Bartram, 2002) retaining the alignment of predictor and criterion variables albeit using a more parsimonious model.

The factor analysis concurred with the findings of Woods & Hardy (2009) who found that an Achievement factor emerged after the Big 5 with no cross-loadings on a ‘traditional’ Conscientiousness factor.

The .27 effect size of the simple personality scale composite against an 18 criterion marker item composite is comparable to the raw validity of .25 for the Competency Potential Prediction score of Wave Professional Styles against a 36 item composite measure of overall performance reported by Hopton (2012).

The validity analysis shows a negative correlation of narrow Conscientiousness and small positive correlations for the Achievement predictor. The strongest predictive value was observed for Directing based on Extraversion theme facets followed by Supporting based on Agreeableness markers.

Whereas Bartram (2005) drew exclusively on Boss external raters the current reviewers are drawn from a wider range of co-workers so that people oriented constructs become more valued than pure task completion.

At the three cluster level the solution is similar to the Three Effectiveness Factors of Kurz, Saville & MacIver (2009).
The Emotional Agility label (https://hbr.org/2013/11/emotional-agility) coined by Susan David and Christina Congleton for the total score combines the appeal of the Emotional Intelligence concept with the fashionable Learning Agility label while synthesising both approaches with personality and competency theory.

**Selected References**


**Paper 2: Examining the relationship between the Emotional Agility questionnaire and performance at work**

**Julie Ensor** and **Stewart Desson**, Lumina Learning LLP

**Category:** Psychological Assessment at Work

**Introduction**

In today’s increasingly demanding working environments there is ever-growing need for employees to demonstrate and develop their emotional resilience. Over the last decade, the concept of emotional intelligence (Mayer, Salovey, & Caruso, 1997, 2000) has received much attention in the popular literature particular in relation to better understanding and developing resilience (Bar-On, Parker, & James, 2000).

However there continues to be disagreement over what the construct of emotional intelligence is and is not, and importantly how it differs from personality, if at all. Indeed correlations with personality are often too high to ignore. McCrae (2000) performed a conceptual comparison between the Big Five factors of personality and aspects of emotional intelligence as proposed by Bar-On (1997) and Goleman (1995). Upon mapping features of these conceptualizations of emotional intelligence onto the big five, McCrae noted several strong overlaps. McCrae concluded that ‘emotional intelligence’ should be associated with low scores for neuroticism and high scores for extraversion, openness, agreeableness, and conscientiousness” (p. 266). Indeed most Emotional Intelligence models tend to contain items that arguably measure personality traits, but tend to simply differ in the range and scope of traits they focus on, with ‘Emotional intelligence’ tending to be a function of being high on ‘desirable’ traits such as confidence and empathy and low on neurotic traits such as anxiety. However some authors suggest that there appears to be a “dark side” of EI including over-confidence, narcissism, Machiavellian social manipulation, and inflated self-esteem (Zeidner, Richard & Matthews (2008); Roberts, MacCann, Matthews, & Zeidner, 2010) although this tends to be generally overlooked in most measures of EI.

While some authors see emotional intelligence as a function of being high on certain personality traits, there is a growing body of evidence that behavioural effectiveness and mental health are influenced more by how people relate to their thoughts and emotions rather than whether they are negative or positive. This suggests that emotional intelligence may be less a function of simply not experiencing anxiety (high emotional stability) but rather
how individuals evaluate these emotions and, most importantly, how these emotions impact their behaviours. Indeed most measures of emotional intelligence do not distinguish between inwardly held thoughts and emotions and actual behaviours in different contexts. However the concept of Emotional Agility considers that emotional intelligence should focus not just on what traits come natural to you but also how well you manage your traits in different contexts. Indeed what constitutes ‘emotional intelligence’ is likely to vary between individual and contexts, and perhaps an emotionally intelligent response is one where an individual effectively ‘tunes up’ or ‘tunes down’ certain behaviours to meet contextual demands, or being emotionally agile. The growing evidence that how people relate to their emotions, thoughts and feelings can be more relevant to performance than the composition of those thoughts underpins some of the more recent CBT approaches such as mindfulness based cognitive therapy, metacognitive therapy, and acceptance and commitment therapy (Bond et al, 2011).

The Emotional Agility questionnaire is a trait based construct of emotional intelligence as measured through a big five lens. The measure was developed by reviewing the literature and measures of emotional intelligence and mapping each scale measure to a big five factor. The measure incorporates the approach used to develop the Lumina Spark personality questionnaire where each end of a scale is measured independently and in a positive way. For example, many emotional intelligence models emphasises the importance of confidence. But does this suggest that those lower in confidence are less emotionally intelligent? And what about being overconfident? The emotional agility measure looks at both modesty and self-doubt as well as confidence and overconfidence as separate scales and individuals can be high or low on each scale. This balanced approach considers that all traits can be measured in a positive way, just as all traits can be overplayed, and engages the possibility that individuals can possess contradictory traits that manifest in different ways and in different contexts. Indeed, the emotional agility measure uses three persona sub-dimensions to distinguish between inner thoughts and emotions (underlying persona), effective behaviours (everyday persona) and potentially ineffective behaviours (overextended persona).

The purpose of the present paper was to investigate how the Emotional Agility measure relates to the big five personality traits and work performance. It is hypothesised that the three personas will have differential relationships with performance with the everyday and overextended being better predictors as these are focused more on behaviours rather than more privately held internal thoughts feelings and preferences measured through the underlying persona.

Design/Methodology
247 participants completed the Emotional Agility, Lumina Spark questionnaire as well as gathered external rater feedback on the Great 8 competencies. Their mean age was 40 and 45% were male. Participants were predominately working professionals and the majority were British (66%) with the remainder mostly Canadian (10%) and American (5%). The Emotional Agility questionnaire measures eight ‘Emotional Qualities’ and eight ‘Emotional Reactors’. Each Emotional Quality and Reactor are examined through 3 Persona sub-scales each rated on a five-point scale ranging from ‘strongly disagree’ to ‘strongly agree’. The Emotional Agility questionnaire showed good internal reliability with scale alphas ranging from 72-.89 and mean alpha coefficient .79. Participants were asked to think of their inner and most natural selves when answering the underlying questions and to think of how they actually behaved when answering the everyday and overextended questions. Performance at work was measured using the Great 8 competencies (Kurz, 2003), assessing key areas of performance on a 7-point effectiveness scale. Correlations were run to explore the convergent validity pattern of the ‘Underlying’, ‘Everyday’ and ‘Overextended’ personas against the big five personality traits using the Lumina Spark measure of personality and external rater feedback across the Great 8 competencies.

Results
Regarding convergent validity, the emotional agility questionnaire was developed to measure emotional intelligence using the big five as a guiding framework, and as such Emotional Agility sub-scales were hypothesised to correlate with conceptually related big five traits. Correlational analyses revealed that Emotional Qualities and Emotional
Reactors had strong relationships with their conceptual link with the related big five traits in most cases, suggesting good convergent validity. In some cases the different personas demonstrated differential relationships with unexpected big five traits suggesting that some traits, when measured at the extreme, may be more strongly associated with other traits. For example, inner confidence (self-belief) correlated highest as expected with emotional stability .47, whereas conveying outer confidence correlated highest with Extraversion .46 while overconfidence correlated highest with low Agreeableness (Outcome Focused).

Regarding criterion validity results show that in several cases, traits less associated with emotional intelligence correlated positively with performance. For example ‘calm-seeking’ (low extraversion) was significantly correlated with Delivering Results .12, Autonomous (low Agreeableness) correlated significantly with many performance competencies most notably Driving Performance .16 and Unassuming (higher Neuroticism) was significantly correlated with Delivering Results .14. This supports the current hypothesis that more balanced and positive measurements of traits at each end of the polarity will result in more positive relationships with performance. Results also show that the three persona sub-scales interacted differently with performance. Interestingly most of the underlying qualities associated with higher Neuroticism (‘self-critical’, ‘apprehensive’, ‘mood intense’ were not significantly related to performance, although ‘stress sensitive’ was negatively correlated with Creating Concepts, Relating to People and Respecting People. However in the everyday persona, higher Modesty was associated positively with performance, while the overextended persona of the Neurotic qualities showed more negative relationships with performance.

Discussion

The current research aimed to investigate the convergent and criterion validity of the Lumina Emotional Agility questionnaire. The measure has been designed to capture trait emotional intelligence by mapping common constructs measured in emotional intelligence measures and mapping these to the Big five factors. The measure also extends the measure of emotional intelligence by 1. measuring traits typically not associated with emotional intelligence but in a positively framed way and (i.e. low agreeableness, high neuroticism etc.) and thus reducing the bias commonly found in emotional intelligence measures for certain traits and 2. measuring traits using three distinct persona’s or ‘lenses’, namely, internal preferences (underlying persona), typical patterns of behaviour (everyday) and more extreme behaviours (overextended). The objective of this research was to investigate whether this expanded approach could help better understand the relationship between emotional intelligence and performance at work.

The present research findings suggests that separating out underlying feelings (e.g. anxiety) from positive behavioural manifestations (e.g. vigilance) and the ‘too much of a thing effect’ (e.g. situational avoidance due to self-doubt) are differentially related to external measures of performance. This seems to support the growing body of evidence that behavioural effectiveness and mental health are influenced more by how people relate to their thoughts and emotions rather than whether they are negative or positive. Indeed the present research found that feeling more sensitive to stress and frustration, having higher bouts of self-doubt, and having higher frequency of worry and anxiety were not significantly correlated with external measures of performance as measured using the Great 8 competencies. However it was the more extreme behaviours associated with such feelings such as being closed to new experiences or not controlling one’s anger or frustration that negatively impacted performance significantly. This suggests that there is notable difference to be made between feeling or having a preference to behave a certain way, and actually behaving in the way.

The present research also challenged some claims that emotional intelligence is a function of being high on all four of the big five traits and low on neuroticism. Part of the reason for these findings in the past may be due to an overly biased conceptualisation of these high ends of the big five traits, with the ‘low’ ends often focusing at the most extreme behaviours. The present research lends some support to this assertion as significant positive relationships were found between scales that measure positive manifestations of higher Neuroticism (modesty and being
humble), lower Extraversion (calm-seeking) and lower Agreeableness (autonomy). Interestingly, traits that are considered opposite to these (and more typically associated with Emotional Intelligence) were also positively correlated. This suggests that traits associated with opposite ends of the personality spectrum may reflect distinct and relevant concepts in emotional intelligence.

The questionnaire could help provide greater self-awareness for individuals on how they relate to their emotions and the impact their emotions thoughts and feelings have on their behaviour and the degree of ‘agility’ they have over their responses. Further the humanistic approach that recognises the benefits and positives of every trait, and that every trait can ‘overextend’ provides a much less biased view of emotional intelligence and therefore is more conducive for use in work environments and team interventions.

Further research is required to replicate these results on a different research sample; the current sample was notably small and limited to English speaking individuals, and the majority British, American and Canadian. Further research is also required to better understand how the three personas relate to more specific measures behavioural effectiveness relating to ‘emotional intelligent’ competencies.

In summary, the three persona lens of ‘emotional intelligence’ measurement is an innovative approach that broadens the measurement of emotional intelligence. Importantly, it highlights the important role that emotional agility, plays in emotional intelligence, rather than emotional intelligence simply being a function of scoring high on particular personality traits. Further the humanistic approach to assessing emotional intelligence using the Emotional Agility questionnaire is aimed at reducing a bias for certain traits and recognising that all traits can be used positively, shifting the emphasis on how effectively we can manage our traits rather than the traits themselves.

References
Emotional intelligence from the perspective of the five-factor model of personality.

F03c
Paper 3: The Correlates of the EIP Emotional Resilience Scale
Jolyon Maddocks, JCA (Occupational Psychologists) Limited
Category: Psychological Assessment at Work
Introduction
Emotional Intelligence is defined by JCA as *the practice of managing one’s personality to be both personally and interpersonally effective*. A core aspect of this is Emotional Resilience; *being able to bounce back from adversity and setbacks*. Emotional Resilience is, scale 5, one of 16 scales on the Emotional Intelligence Profile. It is theoretically related to several aspects of EI as measured by the EIP and described by Maddocks (2014).

The purpose of the research is to conceptualise Emotional Resilience as measured by the Emotional Intelligence Profile through pattern of correlations with the other scales in the EIP. The Emotional Resilience scale is measured by 7 items such as "I have the capacity for managing stress" to "I pick myself up easily when faced with problems". The scale has high reliability with $\alpha = .83$ for the 7 items.

**Research Objectives**

This research aims to investigate the correlates of Emotional Resilience as well as to explore whether Emotional Resilience differ by demographics.

**Design and Methodology**

In a cross-sectional design, $N=2125$ managers at different level (Middle, Senior and Director) across 7 occupational sectors and a self-employed group were administered the Emotional Intelligence Profile (EIP) through the JCA online system which they self-rated on a five-point rating scale from “Strongly Agree” to “Strongly Disagree”.

The 136 EIP items are grouped into 16 scales which are expressed as attitude, feeling and behaviour. The scales are organised into Personal and Interpersonal Intelligence at the top of the hierarchical EIP framework as shown in Figure 1. It is hypothesised that Emotional Resilience will correlate more strongly with Self Regard, followed by Personal Power, Goal Directedness, Flexibility, Conflict Handling and Balanced Outlook in correlational analysis among the 16 EIP Scales. In addition, Emotional Resilience was expected to correlate negatively with the “under” and “over” multi-scales.

A sub-sample of $N=1572$ was used to test whether there were group differences on the Emotional Resilience scale.

General-linear-model one-way analyses of variance (GLM ANOVAs) using Tukey’s Honestly Significant Difference test applied to control for Type 1 error rate while making multiple pairwise comparisons at $\alpha = .05$ level were performed to evaluate the effect of group differences on the Emotional Resilience scale mean. Group differences tested were Age, Occupational Level and Occupational Sector. In order to compare whether the means between the two independent groups; Male and Female, were significantly different, an independent t-test was also carried out on the Emotional Resilience scale.

**Results**

Table 1 shows the correlational pattern of Emotional Resilience with the 16 EIP scales as well as the multi scales. As expected, Self Regard correlated the strongest with Emotional Resilience, followed by Conflict Handling, Flexibility, Balanced Outlook, Goal Directedness and Personal Power. For the multi-scales, Emotional Resilience correlated negatively with Pessimistic, Dependent and Passive followed by Under Controlled.

Table 2, 3, 4 and 5 shows the mean and standard deviations of the different demographic groups in this managerial sample. There was significant differences on the mean of Emotional Resilience across Age, Occupational Level and Occupational Sector. The multiple pairwise comparisons revealed that the age group of 16 to 19 reported significantly lower emotional resilience than the age group of 40 to 49 and over 50. Age group of 20 to 29 rated themselves as significantly lower on Emotional Resilience than the 50 and over age group. Similarly, the age group of 50 and over reported having higher Emotional Resilience than the age group of 16 to 19, 20 to 29 and 30 to 39.
The multiple pairwise comparison also revealed significant mean differences across occupation level where Director reported having significantly higher Emotional Resilience than Middle Managers and Middle Managers reported having lower Emotional Resilience than both Directors and Middle Managers.

Finally, for the Occupational Sector group, Sales people reported themselves as having higher Emotional Resilience than Admin/Support job roles and Human Resources. No significant differences were found on gender.

**Discussion**

This paper highlights that Emotional Resilience is an important component of personal development at work. The correlates of Emotional Resilience helps to understand this construct while group differences reveal that Emotional Resilience varies across age, occupational level and sectors where older people seem to be more emotionally resilient and higher complexity job require more emotional resilience. Moreover sales seem to be an occupational sector where Emotional Resilience is needed to sell more in a competitive market.

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**F03d**

Paper 4: Can personality assessment be used to predict performance in crisis management?

Christine D’Silva, Cubiks

**Category:** Psychological Assessment at Work

**Introduction**

In a changing world the threat of attack on organisations and public safety is ever present. Organisations need to equip themselves to deal with this threat. Crisis management is the process by which an organisation deals with a major event that threatens to harm the organisation, its employees, stakeholders, or the general public. Three elements are common to a crisis: (a) a threat to the organisation, (b) the element of surprise, and (c) a short decision time (Seeger, Sellnow, & Ulmer 1998).

A number of both government and commercial organisations set-up crisis management teams to deal with emergency events. They will often use a range of simulations to prepare and train the team for different types of events. According to Choi et al. (2010) performance of these teams can depend on a complex array of external factors (e.g. technology, the team’s location in the task flow and relationships with other teams) and internal factors (e.g. team dynamics, planning and decision making). Flin and Slavin (1994) identified that the personality of individual crisis managers working in off-shore installation can influence performance. They identified a number of characteristics important to successfully managing an event: leadership, team working, communication skills, decision making under time pressure and stress, evaluating the situation, planning, implementing and monitoring an emergency response strategy, and stress management.

The objective of this study was to determine whether psychological assessments could be of benefit in selecting and training candidates for a role in crisis management. The aim was to conduct a preliminary study to establish whether a psychological assessment of an individual’s personality characteristics has any utility in predicting success in crisis management. The specific objectives were as follows:

1. To identify and assess the characteristics that may predict individual and group performance in a crisis simulation
2. To identify a method of observing and measuring performance in a crisis simulation
3. To correlate the psychological assessment scores with the performance measure to identify whether any of the psychometric assessment scores predict performance levels

**Methodology**

Participants in the disaster simulation exercises were asked to complete three psychometric assessments prior to the simulation. Their performance during the simulation was assessed by a trained observer. The psychometric tests included:

- PAPI, a measure of personality in the work place, comprising 20 scales
CIPQ, a general personality measure, comprising 17 scales

CTRQ, a measure of an individual’s behaviour in teams, assessing preferences for seven team roles

A checklist of behaviours and seven competencies were derived from a literature review of crises management across a range of industries. Individual performance was monitored throughout the exercise using the checklist of behaviours. Observers then provided ratings against the set of competencies and for overall performance following the exercise. Observers also provided a group rating reflecting the overall performance of the group. A full data set was available for 82 participants.

Data Analysis and Results

For the criterion data, on N=82, correlations for individual criteria ranged between .259 (Idea generation with Leadership) and .645 (Information seeking with Implementation).

Factor Analysis on the predictor data (N=157) produced a clear Big 5 structure as would be expected.

Significant correlations (N=82) were obtained for the Extraversion factor (.366) which included loadings from the CIPQ Emotional Stability scales and Agreeableness (.238) while Conscientiousness (-.201) and Openness (.194) failed to reach statistical significance.

With view to specific predictor scales based on the literature, 17 correlations were predicted between the personality scales and the overall performance measure. Analysis revealed that 13 of the predicted correlations were significant and in the correct direction and two correlations were non-significant but in the right direction. The remaining two correlations for CIPQ Achieving and Even-tempered were close to zero. The absolute range of the predicted correlations was .039 to .458, with a median correlation of .282 (see Table 1).

Eight additional significant correlations were observed. While these were not predicted, they made sense post hoc.

The best predictor scales in PAPI were Need to influence (.458), Leadership role (.457) and Need to be noticed (.417).

The best predictor scales in CIPQ were Socially confident (.432) and Lively (.462). For CTRQ it was the role of Leader (.276).

Overall, the results suggest that those willing to take the lead, with a calm disposition and with a preference for variety and working together are most likely to perform well in a crisis. CIPQ and CTRQ are adding little over PAPI and could hence be dropped, especially since there is increased Emotional Stability coverage in the new version ‘PAPI 3 Sales and Leadership’.

Table 1: Correlations between personality scales and performance variables (predicted correlations underlined, significant correlations highlighted.)

<table>
<thead>
<tr>
<th></th>
<th>Overall performance</th>
<th>Leadership</th>
<th>Idea generation</th>
<th>Information seeking</th>
<th>Analysis</th>
<th>Team building</th>
<th>Frame-works setting</th>
<th>Group rating</th>
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</thead>
<tbody>
<tr>
<td>PAPI P Need to influence</td>
<td>.458**</td>
<td>.153</td>
<td>.292*</td>
<td>.409**</td>
<td>.497**</td>
<td>.490**</td>
<td>.328**</td>
<td>.250*</td>
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<tr>
<td>PAPI L Leadership role</td>
<td>.457**</td>
<td>.271*</td>
<td>.290*</td>
<td>.387**</td>
<td>.468**</td>
<td>.537**</td>
<td>.328**</td>
<td>.327*</td>
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<td>-.002</td>
<td>-.212</td>
<td>-.143</td>
<td>-.190</td>
<td>-.173</td>
<td>-.104</td>
<td>-.039</td>
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<tr>
<td>PAPI H Integrative planner</td>
<td>-.090</td>
<td>.114</td>
<td>-.079</td>
<td>.047</td>
<td>-.062</td>
<td>-.015</td>
<td>.081</td>
<td>.210</td>
</tr>
<tr>
<td>PAPI D Attention to detail</td>
<td>-.112</td>
<td>-.126</td>
<td>-.155</td>
<td>-.085</td>
<td>-.290**</td>
<td>-.212</td>
<td>-.016</td>
<td>.023</td>
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<td>.-282*</td>
<td>-.023</td>
<td>-.272</td>
<td>-.183</td>
<td>-.266*</td>
<td>-.429**</td>
<td>-.208</td>
<td>-.212</td>
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<td>PAPI R Conceptual thinker</td>
<td>.122</td>
<td>-.088</td>
<td>.117</td>
<td>.026</td>
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<td>Variable</td>
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<td>Leadership</td>
<td>Idea generation</td>
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<td>Information seeking</td>
<td>Analysis</td>
<td>Team building</td>
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<td>PAPI Z Need for change</td>
<td>.272</td>
<td>.215</td>
<td>.150</td>
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<td>.302**</td>
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<td>-.008</td>
<td>-.154</td>
<td>-.107</td>
<td>-.253*</td>
<td>-.113</td>
<td>-.059</td>
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<tr>
<td>PAPI X Need to be noticed</td>
<td>.417**</td>
<td>.177</td>
<td>.398*</td>
<td>.425*</td>
<td>.466**</td>
<td>.328**</td>
<td>.308**</td>
<td>.261*</td>
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<td>PAPI B Need to belong to groups</td>
<td>.355**</td>
<td>.322**</td>
<td>.221*</td>
<td>.173</td>
<td>.269*</td>
<td>.192</td>
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<td>.188</td>
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<td>PAPI S Social harmoniser</td>
<td>.305**</td>
<td>.270</td>
<td>.293*</td>
<td>.194</td>
<td>.161</td>
<td>.144</td>
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<td>.119</td>
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<td>PAPI O Need to relate closely to individ.</td>
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<td>-.089</td>
<td>-.095</td>
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<td>.287*</td>
<td>.223*</td>
<td>.348*</td>
<td>.399*</td>
<td>.305**</td>
<td>.211</td>
<td>.119</td>
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<tr>
<td>PAPI T Work pace</td>
<td>.229*</td>
<td>.378*</td>
<td>.146</td>
<td>.327*</td>
<td>.258</td>
<td>.345**</td>
<td>.228*</td>
<td>.222*</td>
</tr>
<tr>
<td>PAPI K Need to be forceful</td>
<td>.225*</td>
<td>.174</td>
<td>.228*</td>
<td>.208</td>
<td>.206</td>
<td>.243*</td>
<td>.072</td>
<td>.034</td>
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<td>PAPI E Emotional restraint</td>
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<td>.072</td>
<td>-.184</td>
<td>.060</td>
<td>-.060</td>
<td>-.040</td>
<td>.109</td>
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</tr>
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<td>PAPI A Need to achieve</td>
<td>.294**</td>
<td>.029</td>
<td>.295*</td>
<td>.250*</td>
<td>.184</td>
<td>.356**</td>
<td>.223*</td>
<td>.178</td>
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<td>-.009</td>
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<td>-.013</td>
<td>-.055</td>
<td>-.150</td>
<td>-.046</td>
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<td>.175</td>
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<td>.139</td>
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<td>.115</td>
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<td>.260</td>
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<td>-.284*</td>
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<td>CIPQ E2 Lively</td>
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<td>.249*</td>
<td>.365*</td>
<td>.379*</td>
<td>.295**</td>
<td>.446**</td>
<td>.306*</td>
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<td>CIPQ E3 Open</td>
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<td>.257*</td>
<td>.305*</td>
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<td>CIPQ E4 Shaping</td>
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<td>.299*</td>
<td>.341*</td>
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<td>CIPQ N2 Calm</td>
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<td>CTRQ IN Innovator</td>
<td>.154</td>
<td>.061</td>
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<td>.199</td>
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<td>.275*</td>
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</tr>
</tbody>
</table>
Overall performance | Leadership | Idea generation | Implementation | Information seeking | Analysis | Team building | Frame-work setting | Group rating
--- | --- | --- | --- | --- | --- | --- | --- | ---
CTRQ EL Explorer | .115 | .052 | .111 | .123 | .099 | .048 | .050 | .034 | .148
CTRQ AN Evaluator | .040 | .131 | .057 | .207 | -.009 | .029 | .142 | .238* | .180
CTRQ LE Leader | **.276** | **.301** | **.257** | **.390** | **.289** | **.418** | .175 | .188 | **.253**
CTRQ OR Organiser | -.038 | .118 | .019 | .124 | -.050 | -.035 | .097 | .206 | .072
CTRQ TB Team builder | .151 | **.234** | .167 | .135 | .126 | .153 | .085 | .143 | .133
CTRQ EP Expert | -.052 | -.094 | -.048 | -.026 | -.054 | -.134 | -.040 | .157 | .004

**Conclusions**

The results from this study suggest that personality assessment can make a useful contribution to identifying selection and training crisis management teams. The key areas to assess are leadership, extraversion and emotional stability. Providing feedback and training in these areas to increase self-awareness and develop managing strategies may enhance performance in crisis management.

The results suggest that specific predictor scales can far exceed the validity of broad Big 5 factors. Variety seeking emerged as an unexpectedly strong positive predictor while negative correlations for Self-disciplined and Need for rules and supervision indicate that ‘too much Conscientiousness’ can get in the way – certainly in emergency situations.

**References**


**F04 Symposium by Work Life Balance Working Group**

**Switching on and switching off – building e-resilience for work-life balance and wellbeing**

Facilitators: Gail Kinman, Almuth Macdowall and Christine Grant

Discussant: Binna Kandola, OBE

**Category: Wellbeing and Work**

**Introduction and overview**

There is no doubt that we have become increasingly reliant on information communication technology (ICT); indeed many of us are wedded to our smartphones and tablets. Technology use can enable employees to work ‘anytime and anywhere’, with strong potential to enhance flexibility and improve work-life balance. Nonetheless, there is a dark side to constant engagement with technology. In 2013, a young Indonesian copywriter literally ‘worked herself to death’ having worked and tweeted constantly for more than 30 hours fuelled by energy drinks (Gorman, 2013). This is an extreme case, but evidence is accumulating that many people feel unable to ‘switch off’ their ICTs for various reasons. This symposium examines the implications of this ‘digital leash’ for work-life balance and wellbeing.

There is evidence that work-life conflict is increasing in the UK (YouGov, 2014). It has been argued that the growing intrusion of work into personal life is facilitated by the use of ICTs (Haeger & Lingham, 2014; White & Thatcher, 2015). Respite from work concerns is vital in order to replenish physical, psychological and cognitive resources; a lack of ‘down time’ can have a major impact on job performance, as well as health and satisfaction with work and
personal life (Geurts & Sonnentag, 2006). It is therefore vital for occupational psychologists to gain insight into the positive and negative implications of ICTs to help individuals and organisations develop ‘e-resilience’ so they can manage their technology more effectively and sustainably, with benefits for all stakeholders.

This symposium comprises five thought-provoking papers based on issues examined in our recent BPS-funded research seminar series ‘Exploring the ‘always on culture’: Implications of technology use across the working life span for well-being, work-life balance and work outcomes’. The papers will be delivered by experts in the field of work-life balance and technology use. The talks will draw on a range of theoretical and methodological approaches to explore personal experiences of ICT use and work-life balance and the role played by organisational context and individual difference factors. This symposium will identify the factors that underpin e-resilience in order to help organisations and individuals engage with ICTs in a more healthy and sustainable manner. The session will conclude with an audience discussion facilitated by Professor Binna Kandola. This will focus on the concept of e-resilience, how research findings may be translated into interventions across different employment contexts, and priorities for future research.

The objectives of this symposium are to:

a) Raise awareness of the ‘always on culture’ and the implications for work-life balance
b) Showcase UK-focused research that examines these issues using differing methodologies at the organisational and individual level.
c) Outline the gaps in our understanding and highlight priorities for future research
d) Consider the implications for practice to help individuals and organisations develop e-resilience in order to manage their ICT use more effectively and sustainably
e) Allow delegates to reflect on their personal experiences of ICT use and the implications for their work-life balance, well being and e-resilience

References and further reading


F04a

Paper 1: Powering On: Switching Off: An investigation into the effects of the ‘switched on’ culture on employee work-life balance

Chloe Nevitt and Christine Grant, Coventry University

Category: Wellbeing and Work

Introduction

Although the use of ICT for work purposes has increased considerably, little is yet known about the implications for the personal life of employees. The need for further insight into this issue has been highlighted (Stephens, Cho & Ballard, 2012). In-depth information is required in order to help organisations develop evidence-based support systems to help employees manage their ICT use more effectively and sustainably (Kelly et al, 2011). As yet, however, few organisations have introduced policies to assist employees with the effects of being continually connected to the workplace (Leonardi et al, 2010).
Previous research has called for a deeper understanding of the multifaceted relationship between ICT use and wellbeing (Kreiner, Hollensbe & Sheep, 2009). In particular, the need for a better understanding of how technologies effect employee work-life balance when used outside of regular working hours has been emphasised (Wright et al, 2014). The present study, therefore, seeks to explore and understand how the ‘switched on’ culture can impact on work-life balance.

Study One

Method
A mixed-methods design was utilised. Participants who use remote-access work technologies outside of their regular working hours were recruited. The sampling strategy also aimed to contain an even distribution of gender, age, job type and level in order to gain insight of the effects upon a range of employees. Firstly, a web-based survey was completed by 171 employees. The questionnaire assessed demographic and occupational background as well as the frequency and duration of technology use. All 28 items from the E-Work Life scale were also included (Grant, 2013).

Findings
Initial analysis showed that there was a positive correlation between participants’ overall E-Work Life score and the frequency of their technology use beyond working hours, which was statistically significant ($r_s(169) = .21, p = .006$). Analysis showed there was also a positive correlation between the E-Work Life score and the extent to which individuals felt they received support from their employer in using technology beyond working hours ($r_s(17) = .193, p = .011$). The data are currently being further analysed for correlations and other relevant statistical tests will be conducted. The E-Work Life scale items were tested for face and content validity, with a Cronbach’s Alpha score of 0.67 which is lower than that of the original scale construction which returned a score of 0.80 (Grant, 2013).

Study Two

Method
For the second part of the study, 12 participants took part in semi-structured interviews. Items from the survey formed the basis for further exploration of relevant issues during interview and transcripts were thematically analysed.

Findings and discussion
Analysis identified several key themes, including employer support, work demands and pressures, personal wellbeing and flexibility. Preliminary analysis indicates that individuals value support from their employer and that a lack of support can have negative implications for their work-life balance. Furthermore, interviews have shown that individuals’ wellbeing and stress levels can be negatively affected by technology use when working beyond working hours. The findings of this study will help to inform organisational understanding for individual managers, practitioners and HR policy regarding the provision and use of remote-access technology for employees. Further analysis of results should help to determine more specific goals for HR departments.

References and background reading:
F04b

Paper 2: The organisational context of ICT use for work-related purposes during non-work time

Svenja Schlachter, Mark Cropley, Dr Rachel Avery, University of Surrey

Category: Wellbeing and Work

Introduction
Using one’s information and communication technologies (ICTs) for work-related purposes during non-work time has frequently been found to be negatively associated with recovery (Barber & Jenkins, 2014; Richardson & Thompson, 2012), work-life balance (Fenner & Renn, 2010; Richardson & Thompson, 2012) and well-being (Arlinghaus & Nachreiner, 2013; Mazmanian et al., 2013). Given the mostly negative outcomes of using ICTs to perform work-related tasks and communications outside of work hours, it is of interest how this behaviour could be influenced and accordingly, which antecedents predict the extent to which employees engage in this behaviour. Frequently reported antecedents are perceived expectations of responsiveness and availability (Mazmanian et al., 2013).

Although such expectations appear to be a common justification to engage in work-related ICT use outside of work hours, potential misperceptions regarding assumed expectations of others have been suggested. Furthermore, less is known about the more specific organisational antecedents encouraging or discouraging this behaviour.

Building on theories regarding behaviour performed in social contexts, such as observational learning (Bandura, 1986) and social norms (Ajzen, 1991), we suggest different antecedents of work-related ICT use during non-work time which originate in the organisational context. Firstly, work-related ICT use might be influenced by social norms at one’s workplace and expectations assumed to be held by supervisors and colleagues (Richardson & Benbunan-Fich, 2011). Secondly, perceived expectations regarding work-related ICT use could be deduced from contextual cues such as the provision of ICTs by one’s employer (Richardson & Benbunan-Fich, 2011) or the ICT use behaviourally modelled by supervisors and colleagues (Koch & Binnewies, 2015). Another suggested antecedent in the organisational context is perceived job insecurity fuelling ICT use during non-work time, as impression management behaviour in order to project dedication to avoid a potential job loss (Boswell et al., 2014). This paper examines these different organisational antecedents in conjunction with each other to compare their contribution to the prediction of work-related ICT use during non-work time.

The aforementioned organisational antecedents are further examined in relation to more general, higher-order motivations to engage in work-related ICT use during non-work time, namely controlled and autonomous motivations (Gagné et al., 2015), exploring whether organisational factors contribute to the former as opposed to the latter. In addition, it was investigated how these higher-order motivations in turn are associated with performing work-related ICT use during non-work time. Considering underlying motivations and how they are associated with antecedents of ICT use is deemed of interest given that an autonomous motivation in the work context is related to more favourable outcomes (Gagné et al., 2015). It has further been reported that these higher-order motivations partly explain the paradox that some employees experience negative outcomes of work-related ICT use outside of work hours, whereas others gain benefits from it (Ohly & Latour, 2014).

Method
Data for this cross-sectional study was collected online using the snowballing sampling method drawing on professional contacts and social media. Full datasets were provided by 157 full-time, office-based employees (63.7%
female) with a mean age of 37.92 years (SD = 11.70). The mean contracted work hours per week was 37.70 (SD = 3.80); the mean self-reported actual work hours per week was 45.11 (SD = 8.11).

ICT use was operationalised by the self-reported frequency and duration of work-related ICT use during non-work time. We further gathered data differentiated by different timings for self-initiated ICT use, namely on a typical workday and at a typical weekend. Most of the study’s measures were previously validated scales, but some had to be adapted for this study. Further scales were constructed for this study using expert recommendations.

**Findings**

Using hierarchical regression analyses, we identified the organisational antecedents which contributed significantly to predicting ICT use outside of work hours:

- Frequency on a workday: Colleagues’ ICT use and a low perceived segmentation norm;
- Frequency at the weekend: Colleagues’ ICT use, perceived expectations of one’s supervisor and a low perceived segmentation norm;
- Duration on a workday: A low perceived segmentation norm and low level of job insecurity;
- Duration at the weekend: Colleagues’ ICT use.

When adding the two suggested higher-order motivations to the regression analyses, autonomous motivation was found to be a highly influential antecedent of work-related ICT use during non-work time. Although controlled motivation was positively correlated with ICT use, it could not add exploratory power above autonomous motivation.

Correlation analyses indicated that the organisational antecedents are associated with a controlled motivation to engage in work-related ICT use, but not with an autonomous motivation. Conducted mediation analyses could, however, not identify any indirect effects of a controlled motivation.

**Discussion**

The purpose of this cross-sectional study was to examine different organisational antecedents of work-related ICT use during non-work time in conjunction with each other aiming to provide a more fine-grained picture of the organisational context encouraging or discouraging work-related ICT use outside of work hours.

The most influential and consistent antecedents in one’s organisational context were colleagues’ ICT use and a low perceived segmentation norm. Less consistent antecedents were supervisor’s expectations and low job insecurity. Colleagues’ expectations, supervisor’s ICT use and the provision of ICTs by one’s employer failed to contribute to the explained variance in work-related ICT use when considered in conjunction with the aforementioned significant predictors. There were slight differences when analysing ICT use frequency as opposed to duration, and ICT use on a workday as opposed to at the weekend. These findings illustrate the complexity of ICT use for work-related purposes during non-work time and the need to consider these facets separately. Although controlled and autonomous motivation to engage in work-related ICT use could not be established as mediators between organisational antecedents and work-related ICT use, they nonetheless added to explaining the variance in this behaviour. Autonomous motivation, in particular, was found as highly influential predictor of such behaviour indicating that employees are not only passive “victims” of pressures to be available and responsive 24/7, but engage in work-related ICT use on their own account fuelling the always-on culture themselves.

Examining different organisational antecedents of work-related ICT use during non-work time offers starting points for influencing this behaviour. Since the work-related ICT use of colleagues was revealed to be highly influential, we encourage an active discussion in work teams about team members’ ICT use and how it impacts the team. In contrast, a social norm which is permissive of leaving work at one’s workplace and within work hours, discourages such ICT use and could therefore alleviate the feeling of being pressured into working 24/7. However, the
importance of an autonomous motivation underlying work-related ICT use outside of work hours emphasises the role of the individual employee in this organisational context and employees need to reflect on their own contribution to the self-sustaining cycle of responsiveness (Perlow, 2012).

References and background reading

F04c
Paper 3: Managing digital interruptions in an always-connected world
Anna L Cox, UCL Interaction Centre, University College London
Category: Wellbeing and Work
Advances in modern digital technologies have enabled us to have access to information from, and interact with, a whole host of products and services from the tiny but powerful computer we carry in our pockets. We can view and reply to our work email, instant message our colleagues, see what our friends did at the weekend via Facebook, check our bank balance, monitor how many steps we’ve taken today and even control the boiler in our home. Wearable computing such as smartwatches are providing even easier access to digital notifications. What are the implications of the ways in which people are receiving these notifications, and why should this matter to us when we think about the impacts of modern technologies on our lives?

The negative impacts of notifications are well documented: people complain about being alerted to work emails when they’re with their friends or family. Not only do some people find it stressful to be constantly connected to the
office but the people around them complain that they’re not really listening, and feel that they’re not getting their full attention. So work intruding on non-work time is clearly bad if you don’t have control of it.

However, less attention has been given to the impacts of non-work interrupting work time. There are a number of situations in which people are clear that they want to receive such interruptions: these include emergency phone-calls. But do we really want our smart washing machine telling us that it’s nearly finished its cycle whilst we’re in the middle of an important meeting? Whilst this might seem like a trivial example it highlights the issues that arise when our technologies start nudging us to give them attention.

We all know that it’s not possible to be really engaged in two things at once. Psychologists have been investigating the limits of our attention for decades. We know that interruptions have negative impacts on productivity. Every time we switch our attention from one activity to another we incur a time cost - the time it takes to understand how best to deal with the interruption, and another time penalty to work out just where we left off our primary task we switch back. This makes everything take longer than it need to.

But we don’t just interact with our technologies when they buzz us with a notification. We give our attention to our devices all the time! My research has investigated how people manage their email. Participants reported how the often found themselves engaged in digital activities that they hadn’t intended to conduct – checking email on their mobile phone instead of watching a family movie with their children. In fact, the design of technology has resulted in people checking their email all the time. In our interviews people have told us they check email as soon as they wake up, and whilst commuting, and even in the bathroom. My talk will describe how boundary theory provides us with a framework to understand the strategies people are using to manage the different parts of their lives through different email accounts, through apps, and through the devices that they own.

Background reading

F04d
Paper 4: Enabled intensification? ICT use, work-life balance and wellbeing in UK academics
Gail Kinman, University of Bedfordshire
Category: Wellbeing and Work
Introduction
The job demands experienced by academics have increased and diversified over the last ten years or so, leading to longer working hours and increased work-life conflict for many (Coates et al. 2009; Kinman, 2014; Winefield et al. 2014; Kinman & Wray, 2015). The schedule flexibility experienced by many academics, however, can potentially offset the negative impact of work intensification on work-life balance and wellbeing (Kinman & Jones 2013). There
is evidence that academics typically favour a high level of integration between their work and home lives, and a considerable proportion of their work is done at home (Kinman & Jones, 2004). The potential for information communication technology (ICT) to facilitate work-home boundary management is recognised (Gozu et al. 2015). Used effectively, therefore, ICT may help academics maximise their flexibility to improve their work-life balance and their productivity.

There is evidence that schedule flexibility is not always beneficial for work-life balance. Indeed it has been argued that high work demands combined with the ability to work ‘anywhere anytime’ can lead to enabled intensification, where employees use flexibility to work longer and harder rather than to improve their work-life balance (Kelliher & Anderson, 2010). The high level of involvement and absorption in the job role that is common amongst academics (Kinman & Jones, 2008) may compound this risk. Academics may therefore be particularly likely to engage with ICTs for work purposes outside standard working hours. Studies conducted in the UK and Australia suggest that academics have to deal with an increasing volume of email and frequently read and send messages during evenings, weekends and holiday periods (Kinman & Jones, 2004; Pignata et al. 2015). The increasing evidence that email overload and lack of respite from ICT can lead to emotional exhaustion and cognitive failures (Brown et al. 2014; Hadlington, 2015) raises concerns for their recovery, work-life balance and job performance.

This presentation draws on data obtained via an online survey and personal interviews to examine academics’ use of ICT for work purposes and the implications for their recovery, work-life balance, wellbeing and job performance. The role of job demands, job involvement, schedule flexibility, and preference for work-life integration/separation is also explored.

Method
Academic employees working in UK universities completed an on-line survey. Validated measures were used to assess variables such as workload demands, schedule flexibility, job involvement and preference for integration/separation. Work-life conflict, recovery, emotional exhaustion and job satisfaction were also assessed. Email volume, importance and overload, as well as perceived impact on personal and work outcomes were measured. These topics were considered in greater depth in a series of personal interviews where other relevant issues, such as email management behaviours, were explored. Attitudes towards e-mail management initiatives that were available, or could be introduced by universities, were also considered. The data were subjected to thematic content analysis.

Findings and discussion
The ability to access email at times of their choosing was generally viewed positively by academics. The potential for ICTs to facilitate flexible working and work-life balance was also recognised. Nonetheless, academics commonly accessed emails outside standard working hours and perceived a high level of email overload; both of which were strongly related to impaired recovery, work-life conflict and psychological distress. Perceptions of email demand also had negative implications for job performance, especially when sustained periods of concentration and reflection were required. Nonetheless, few used email management strategies and many perceived a lack of control over their email behaviours.

Several factors, such as work demands, the need to respond promptly to student queries, high involvement in the job role, habitual behaviours and personal choice, appeared to underpin engagement with email during evenings, weekends and holiday periods. A considerable proportion of academics saw their personal and work time as inextricably linked, where emails were read and replied to anywhere and anytime. The benefits of abstention from email were recognised, but academics who preferred a high level of integration between their work and personal lives and who had more control over email engagement, were less likely to report email overload and work-life conflict.
Engagement with email, especially during weekends and holiday periods, had strong potential to engender rumination about work problems that, in turn, could impair recovery. This had serious implications for wellbeing and job performance. Nonetheless, some academics preferred to spend some time each day, even during holiday periods, checking emails in order to maintain feelings of control. Although many gained some satisfaction from keeping on top of their emails over the short term, some saw this as a ‘Sisyphean task’ where an empty in-box would quickly be replenished. Many academics disclosed making ‘contracts’ with family (and with themselves) where email would only be accessed at specified times in order to safeguard personal time. Nonetheless the use of ‘masking’ behaviours, where email was read surreptitiously, was also common. Moreover, conflict with, and resentment from, family members about this issue was evident and feelings of guilt were expressed. Concerns were also raised that being ‘always on’ increased the expectations of students, colleagues and managers about their availability.

The findings emphasise the need for academics to develop e-resilience. Few respondents indicated that any guidance was available to help them manage their email more effectively. Indeed, universities’ expectations for their staff to respond to emails seem to be generally increasing. There is evidence that limiting access to email can reduce stress (Kushlev & Dunn, 2015). Preferences for work-life integration and the high levels of job involvement found among academics suggest however that ‘one size fits all’ email management interventions may not be acceptable in a sector where high levels of control over working methods is expected. There is evidence that self-regulation underpins optimum ICT behaviours (van Deursen et al. 2015), but many academics seem unable to develop ‘healthy’ self management strategies. The findings of this study have potential to aid the development of interventions to help universities develop email management initiatives that are congruent with the nature of academic work to help employees manage their ICT use more effectively and protect their work-life balance, wellbeing and professional functioning.

References and further reading


The way we work is fundamentally changing. Office-based professional roles in particular are now increasingly relying on electronic communication, where individuals use a whole range of applications including email, instant messaging services and social media to communicate with each other. But what are the effects of this? Is “Email making us stupid” (Reuters, 2010)? The potential implications for business seem stark, with productivity losses due to the ineffective use of electronic communications estimated at billions of dollars for large organisations (Intel, 2010).

This is not a trend which is likely to cease, as email and social media use is still growing dramatically. So what are the implications for well being? There are several aspects that need to be considered from a psychological perspective to consider: a) why and how do individuals engage in electronic communication, b) what happens when they are unable to do so, and c) how good (or not) are humans at multi-tasking. In order to explore these issues, it is important to consider experimental evidence rather than rely on cross-sectional survey studies which currently dominate the field (Schlachter et al., 2015). This paper reviews relevant, and thought-provoking, experimental evidence to identify potential avenues for future research arising from a rapid evidence assessment. The review process is in progress but will be completed at the time of the conference to underpin the contribution, but preliminary results are discussed below.

Concerning why and how individuals engage in electronic communication and what might happen when they are prevented from doing so, Gwizdka (2004) found that email users fall into two categories: ‘keepers’ and ‘cleaners’. The authors identified implications for interface design, but it may be as important to consider psychological factors (e.g. what is the consequence of holding on to emails in terms of attention regulation); and also consider whether this fairly simple taxonomy could be extended. Clayton (2015) found that the performance of iphone users on cognitive tasks deteriorated when they were separated from their phones under laboratory conditions and blood pressure, heart rate and anxiety all increased. Regarding the multi-tasking aspect, evidence from the educational domain has shown that students who use digital technologies to multi-task when attending lectures performed significantly worse than two control groups (Wood et al., 2012).
The evidence will be integrated to consider how similar studies might be designed with direct reference to a work context and the implications for well being of employees. Particular emphasis will be given to the quality and contemporary relevance of any evidence, given the rapid evolving nature of the field.

Conclusion and implications for practice
At present, it would appear that we lack field research or laboratory research which indicate what happens when people engage in electronic communication particularly with reference to performance and wellbeing outcomes. This session will summarise what we know, what we don’t yet know, and consider what organisations can do to further our evidence base.

References and background reading

Integrating Emotional Intelligence, Personality & Intelligence
Thomas Evans and Gail Steptoe-Warren, Coventry University
Category: Wellbeing and Work
Main Theory, Models and Research:
The current study aims to present the reasoning behind an integrated model of affect-related individual differences. The current work first addresses the issues surrounding emotional intelligence, and adopts the view of Caruso (2003), Emmerling and Goleman (2003) and Evans et al. (2015) in differentiating between ability, competency and trait theories of emotional intelligence. Following use of a metaphor to illustrate how the models can be differentiated, recent research which theoretically and empirically identifies and differentiates between them, and which subsequently address many common critiques e.g. jingle-jangle, will be detailed. The metaphor will then be returned to, to explain how the models interact to predict behaviour. For example, theoretically, emotional intelligence competencies reflect the behavioural manifestations of emotional intelligence ability (Ryan, Emmerling, & Spencer, 2009).

Second, the current presentation will adopt the assumptions that the ability and trait approaches can be situated within existing individual difference models. In line with Pérez-González and Sanchez-Ruiz (2014) and Petrides, Pérez-González and Furnham (2007) trait emotional intelligence is conceived as a distinct compound construct at the lower levels of personality hierarchies. Similarly, concurrent with MacCann et al. (2014), emotional intelligence ability will be situated as a second-stratum factor of intelligence.

Third, the role of the atheoretical emotional intelligence competencies model will be discussed. The current presentation argues that the competencies within social/emotional domains that are relevant to emotional intelligence (e.g. self-awareness) may be the product of interactions between ability and trait emotional intelligence and environmental factors. This is concurrent with the definition of emotional intelligence competencies as the behavioural manifestation of emotional intelligence abilities. One mechanism proposed to underlie the process is that of working memory, drawing parallels to the relationships between intelligence, working memory and performance (Hunter, 1986).

Fourth, the subsequent integrated model of affect-related individual differences is presented. The model will be presented in context of the existing literature e.g. to explain why high emotional intelligence ability and competencies are both required for successful adaption to stressors (Davis & Humphrey, 2014), alongside the implications for understanding and use. From an academic perspective, recommendations are made for the
empirical use of the integrated model, including guidance for theoretically-concurrent study design. From an applied perspective, the ways in which affective individual differences can be measured and taught will be discussed.

Finally, details of the empirical work currently being conducted to validate the model will be discussed. The research is currently exploring the predictive validity of a competency construct formed from trait and ability EI facets, in comparison to a mock construct formed from neuroticism and crystallised intelligence. The research hopes to validate and refine the proposed model, and provide further insight into how the integration of theories and constructs can lead to an improved understanding of a wide range of phenomena.

**Resilience in a Challenging World:** Work environments appear to be increasingly changing and challenging. As such, interest in many affective phenomena in the workplace context is growing e.g. work-life balance, frustration, etc, and thus a framework is needed to better understand and act upon these phenomena. The current study provides an integrated model of affective individual differences which should support improved understanding and application of constructs and interventions to facilitate resilience, despite the increasing demands of work.

**Wellbeing and Work:** The current research is concerned with how affective individual difference constructs can be integrated, and thus how we can better understand affective phenomena. Given the increasing interest surrounding the affective components of various organisational phenomenon e.g. emotion work, the current research is likely to be of interest to most delegates, however especially those working in surrounding affective fields e.g. stress and coping, wellbeing, etc.

**Novel and Innovative Aspects:** The most innovative aspect of the current study will be in the revolutionising of understanding. Emotional intelligence is thought to be a problematic construct, especially when considering the wider ‘intelligence’ context from which it was developed. The current paper attempts to rid the shackles of past criticisms by providing numerous novel additions to the literature: operationalising emotional intelligence clearly, differentiating between different emotional intelligence constructs, and integrating them with more well-known frameworks. As such, the potential for emotional intelligence should be better-realised, allowing delegates to consider novel ways in which emotional intelligence and affective individual differences matters for their own practices.

**Stimulating and Useful for Delegates and Public Interest:** As emotional intelligence was popularised in the public eye by Goleman with a book entitled ‘Emotional Intelligence: Why it can matter more than IQ’, the public is likely to be interested in the current paper. The integrated theory presented should contextualise and help further articulate many of the bold claims originally made about emotional intelligence, and thus should attract significant attention as an important step in modernising wider understanding of the construct. The current paper should also facilitate better articulation of what we (researchers and practitioners) mean by emotional intelligence and related constructs, and thus better the future communications of research findings and applied practices to the general public.

**Materials:** In addition to making an online copy of the presented paper available, a ‘cheat-sheet’ will be accessible in paper and online format to all delegates. This will illustrate the integrated model alongside implications for both academic and applied arenas. This will be a key factor in ensuring the presentation impacts future works, and will contain contact details of the current author to ensure a continued debate.

**Interaction:** Due to the substantial controversy surrounding emotional intelligence, and the complexity of the integration, sufficient time will be given for questions, suggestions and responses to the research. There will also be opportunities for interaction within the presentation e.g. to discuss how findings relate to their own practice. To ensure individuals can engage with and relate to the research, a minimum of ten minutes of the time allocated will be dedicated to interacting with others.
References:


F06 Occupational Psychology Qualifications Board

Stage 2 Qualification for Supervisors

Angie Ingman, Chair of the Occupational Psychology Board

Category: Learning, Training and Development

This session will provide all the relevant information for anyone who is thinking about Supervising Trainees through the Qualification in Occupational Psychology (Stage 2). We will talk through the Qualification, what we are trying to achieve and how Supervision is the first point of assessment. We will discuss the issues we have had and how we are rectifying these to provide a transparent, fair and consistent Qualification that remains robust. In this 40 minute session we will also discuss how we are going to support our Supervisors in this important role. We also have a stand at the conference if any prospective or existing supervisors would like to have a one-on-one session with a member of the Board.

F07 Workshop

Leading to promote resilience

Renee Bleau, University of Glasgow; Alexander Haslam, University of Queensland and Stephen Reicher, University of St Andrews

Category: Leadership, Engagement and Motivation

1. Main psychological theories, models and research underpinning the workshop.

The workshop is underpinned by social identity theory applied in the organisational domain, utilizing the ASPIRe model (Haslam, *et al*, 2003, Haslam, *et al*, 2011). In particular, the importance of social identity and self-categorization principles are highlighted as being a crucial focus for strategic organisational activity, in which resilience is key. The workshop will present theory and evidence, which underpins the ASPIRe model (figure 1) and provide exercises for participants to engage in some experiential aspects of the model, demonstrating the efficacy of the model to harness social and personal identity resources in the workplace. Evidence relating the building of strong resilient groups to the functional roles of leadership and followership will be presented in the context of the ‘identity leadership’ model (Reicher, *et al*, 2005, Haslam, *et al*, 2011).
2. **How does the proposal link with the main conference theme?**

The workshop’s title reveals its central emphasis on: Leading to promote resilience, which indicates a clear and evident link to the main conference theme.

3. **Why is the submission appropriate for the particular category of “Workshop” (type 5)?**

The objective of the submission is two-fold: 1/ to present interested participants (both researchers and practitioners) with the theoretical underpinnings and empirical research evidence for the 'identity leadership' model, highlighting its importance in leading for resilience, in the context of strong groups of leaders and followers (NPoL) 2/ to provide experiential exercises for participants to reveal the potential value of these models for both research and practice. Given this two-fold objective, a workshop format is ideal.

4. **What do we consider to be the most innovative aspects?**

The contextualizing of leadership within the apposite context of social embeddedness of individuals in organizations, in contrast to the often decontextualized, individualistic models of leadership, is the central innovative aspect.

5. **Why do we think delegates will find the session stimulating and useful?**

The content and pace of delivery of material, in a carefully timed workshop, with the right balance of material from presenters and engagement of participants in relevant activities will energize and provoke thought. Participants will receive a signed off certificate of engagement following partaking.

6. **What might the public find interesting about the session?**

While the workshop is intended for psychologists, the implications of the models applied in practice in the world of work, are potentially far-reaching in terms of public interest. Resilience is key in the current challenging world of work, and people are hungry to discover how to make things better in the workplace. The workshop will highlight the theory and evidence for the impact of an ASPIRe model in the context of 'identity leadership' to harness people resources as members of strong groups with a view to improving well-being and organisational productivity.

7. **Materials for attendees.**

Attendees will receive a printed QR code of relevant materials.


Additional questions:
Preferred duration: 180 minutes.

Structured agenda (estimated timings):

0-10  Introduction
10-55  Background theory and evidence of 'Identity Leadership' Model
55-100 Background theory and evidence Leaders and Followers as collaborative agents
100-130 Applied 'identity leadership' / Leadership exercises in groups
130-150 Feedback from groups in overall group
150-170 Facilitators’ comments and responses to questions
170-180 Wrap up and distribution of QR codes (see 7. Above)

(NB: short breaks will be introduced as needed in the context of the emerging flow of the workshop)

Minimum number of attendees: 20    Maximum number of attendees: 50

Physical requirements: facility for PowerPoint projection, and large scope for moving around with chairs, to facilitate free flow of participants into groups and subgroups for exercises. Flipcharts are needed for participants to write up notes from discussions, and colour marker pens.

Learning objectives and outcomes:

1. Appreciate how the ASPIRe model fits in with the NPoL.
2. Understand the role of groups in developing resilience and the role of leadership in developing groups
3. Understand the principles of 'identity leadership' and its relationship to traditional models of leadership.
4. Understand the different phases of the leadership process in terms of understanding the nature of group identities, representing these identities, articulating these identities and embedding them in social reality.
5. Understand how to implement these phases in practice in terms of how to build groups that are cohesive, inclusive and resilient.
6. Gain new insight into how to measure leadership effectiveness from an 'identity leadership' perspective
7. Reflect on how this might apply in different contexts, especially one's own working environment

Specific content to be taught in the workshop: the social identity leadership model and how it relates to leadership and followership in groups, practical implementation of the model in the context of promoting resilience in a challenging world.

Teaching and learning methods: a combination of lecture style presentation of material, small group work discussion, feedback of small groups into the larger group, overview from facilitators to wrap up, answer questions and reinforce key learning points, engagement in experiential exercise to facilitate internalization of learning, distribution of materials via QR code.

Target audience: all are welcome.
Level of expertise: all levels, basic knowledge of OP needed.
Recognised certification: signed off certificates of engagement. WORDS: 953.

F08 Standard Paper
Psychological wellbeing: Health, resilience and performance at work
Ivan Robertson, Robertson Cooper Ltd, Cary Cooper, Manchester Business School; Mustafa Sarkar, University of Gloucestershire and Curran Tom, University of Bath
Category: Wellbeing and Work
Introduction
An established body of research links the psychological well-being of a workforce to work-related outcomes, including individual and organisational productivity (Ford et al., 2011; Taris & Schreurs, 2009). This research suggests that work-based interventions supporting resilience, designed to protect and sustain well-being and performance in the face of adversity, would be likely to deliver benefits for both employees and their organisations. Resilience intervention protocols have yielded adaptive changes in various outcome variables (e.g., well-being, performance; Arnetz et al., 2009; Grant et al., 2009; Pipe et al., 2012). Yet, to date, no research has attempted to synthesize these resilience-based interventions. With this in mind, the purpose of this study is to provide a systematic review of workplace resilience training and to synthesize their effects on personal resilience and four broad categories of dependent variables: (a) mental health and subjective well-being outcomes, (b) psychosocial outcomes, (c) physical/biological outcomes, and (d) performance outcomes.

**Method**
A computerised literature search of the Cochrane Central Register of Controlled Trials, MEDLINE and PsycINFO was conducted using the search terms resilien* (for resilience, resiliency, and resilient), training, intervention, and work. Studies were selected for inclusion if they: (a) were published in an English language journal; (b) were specifically resilience-based interventions; (c) employed a randomised controlled design, controlled design, or any other trial design that yielded quantitative values and; (d) were conducted in working populations. Table 1 provides a summary of the studies identified. Methodological rigor was assessed using the Cochrane Collaboration’s assessment tool.

**Results**
**Does resilience training enhance resilience?** Six studies (viz. Carr et al., 2013; Grant et al., 2009; Pidgeon et al., 2014; Sherlock-Storey et al., 2013; Sood et al., 2011; Waite & Richardson, 2003) measured resilience, with three of the six showing a significant positive effect (viz. Grant et al., 2009; Sherlock-Storey et al., 2013; Sood et al., 2011).

**Mental health and subjective well-being outcomes.** A sample size weighted mean effect size based on the 13 effect sizes available for this cluster of variables gives a value of $d = 0.78$ (a large effect).

**Psychosocial outcomes.** The majority of the studies (excluding Abbot et al., 2009; Arnetz et al., 2009) also investigated psychosocial outcomes as dependent variables. Three such studies (viz. Jennings et al., 2013; Pidgeon et al., 2014; Sherlock-Storey et al., 2013) measured self-efficacy, with all showing a positive effect. In addition, results for other psychosocial outcomes (e.g., work satisfaction, social skills) were generally in the direction of a beneficial effect.

**Physical/biological outcomes.** Most of the effect sizes observed, regardless of statistical significance, were small-to-moderate in magnitude. There were, though, two exceptions to this. First, the results of the study by Pipe et al. (2012) showed that resilience training resulted in significantly large reductions in fatigue ($d = -1.44, p < .01$). Second, the results of the study by Arnetz et al. (2009) showed that resilience training resulted in a significantly large increase in antithrombin ($d = 1.03, p = .04$), an anticoagulant helpful in preventing thrombosis.

**Performance outcomes.** Six studies examined performance outcomes, but there was no common dependent variable across these studies. Two studies that assessed observed performance and goal attainment showed positive trends, with a large effect for both of these variables (viz. Arnetz et al., 2009; Grant et al., 2009).

**Conclusion**
This systematic review is the first step in identifying the impact of resilience training in the workplace and provides initial evidence of the impact of resilience training on personal resilience, mental health and subjective well-being outcomes, and performance. More work-based studies in this area are required to better enable us to determine which aspects of resilience training are effective and to identify potential mediators. By further exploring and understanding these issues, researchers will not only be able to contribute to the overall success of organizations, but also boost the well-being and engagement of organization members.

**References**
References preceded by an asterisk were included in the systematic review.


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**F09 Standard Paper**

**Personality and the work environment: how well do we fit the modern office?**

**John Hackston**, OPP Ltd

**Category:** Work Design, Organisational Change and Development

**Introduction**
Despite the potential of technology to facilitate home working, many people are still office workers, and open-plan office working is the norm. The adoption of open-plan working may have been driven in part by a perception that such offices can facilitate communication and diminish the negative effects of rigid hierarchies in organisations. However, research suggests that these benefits, if indeed they exist, are outweighed by the negative effects of the open-plan environment (Kim & de Dear, 2013), such as noise levels, distraction, and lack of privacy. Nevertheless, open-plan offices continue to increase in popularity in organisations, primarily for financial reasons (Leach & Clegg, 2011).

Cost is also a driver of the move to ‘hot-desking’, where a worker no longer has their own dedicated desk, but instead can use one of a number of desks, workstations or areas that they share in common with other workers. Hot-desking and similar shared workspace arrangements are becoming especially prevalent in areas where space is expensive and at a premium; however they can reduce job satisfaction and worker productivity (Bosch-Sijtsema et al, 2010). This may be because they have a negative effect on an employee’s sense of security and their ‘territory’, both as an individual and as a member of a group, of ownership of that part of the workplace that is ‘theirs’ (Vischer, 2008). Other research (Wells, 2000) has posited a link between personalisation of the work area and well-being, suggesting that the ability to temporarily personalise a hot desk may increase resilience and ameliorate some of the negative effects.

In the past, a number of links have been made between personality and the working environment. For example, Williams, Armstrong, & Malcolm (1985) discussed office layout and allied factors in personality terms, and Salter (1995) attempted to ‘type’ the workplace. More recently, concerns have been raised about the impact of the modern open-plan office environment on Introverts in particular (Cain, 2012). This topic has however received relatively little attention from I-O psychologists, despite the potential impact on the resilience of the workforce.

This presentation will describe the results of a survey into personality differences in attitudes to the office environment, including:

- Preferred or ideal working environment
- Satisfaction and happiness at work and how this is affected by the work environment
- Personalisation of the work area
- Likes and dislikes within the work environment.

The practical implications of the research will be outlined. These will include strategies for designing offices that should help people of all personality preferences work effectively, as well as specific environmental features to avoid or promote for individual personality types. In particular, the question of whether the modern office is ‘toxic’ for Introverts will be addressed.

Methodology

Data was collected via an online survey between April and June 2015, from participants who already knew their personality type; all had previously completed the Myers-Briggs Type Indicator® questionnaire (Myers et al, 1998), and had feedback to help them decide on their true or “best fit” personality type, as measured by four dimensions, Extraversion/Introversion, Sensing/iNtuition, Thinking/Feeling and Judging/Perceiving. Participants were also asked for demographic information (gender, age, industry sector, job, job level, country in which they worked) and completed a number of questions about their office environment, including:

- Actual and ideal work environments
- Degree of satisfaction with their work environment and their work
- Personalisation of their work environment
- A short questionnaire covering a range of aspects of their work environment

A number of differences in attitudes to the work environment were hypothesised, in particular between Extraverts and Introverts.
311 people completed the survey. 71% were female, and 29% male; age ranged from 22 to 79 years, with an average (mean) of 47 years.

Results
Detailed results will be presented at the conference. In summary, however:

- Though many respondents actually worked in some form of open-plan office environment, most would prefer a small shared office or private office.
- There was a clear and statistically significant difference between Extraverts and Introverts in their ideal working environment, in the direction hypothesised. Introverts were more likely than Extraverts to prefer a private office or home office; Extraverts were particularly likely to prefer a small shared office. Though open-plan offices were not preferred by a majority of either Extraverts or Introverts, Extraverts were significantly more likely to put this as a preference than were Introverts.
- Overall, those who worked in a private office were significantly more likely to rate themselves as satisfied or very satisfied with their working environment than were any other group. This effect acts independently of seniority.
- People who were not allowed to personalise their work area were less satisfied with their work environment and had lower job satisfaction, in line with previous research (Wells, 2000).
- As predicted by previous research (Byron and Laurence, 2015), respondents had a wide range of reasons for personalising their workspace.
- Some features of the workplace were desired by almost everyone, such as having one’s own desk and working area, having well-designed workplaces and having ‘quiet areas’ available. Others, such as desk-sharing or hot-desking, were disliked by most people.
- Other features of the workplace showed differences in attitudes between people of different Type preferences, most clearly between Extraverts and Introverts and between those with a Judging and a Perceiving preference, although Thinking-Feeling differences and Sensing-iNtuition differences were also shown.
- When compared with trends in office design, many of the E-I differences may tend to favour Extraverts in the workplace. This was reflected in the results of the survey, where, when working in fully or partially open-plan offices but not in other layouts, Extraverts on average reported significantly higher levels of job satisfaction and happiness at work than did Introverts.

Discussion
The results of the survey support previous research, for example into the unpopularity of open-plan offices and hot-desking, and the positive effects of personalisation. In our session we will build on these and the more detailed findings to present recommendations for improvements to the office environment that should be of use to all workers, as well as specific suggestions to help people of different personality preferences. Using further research and interviews with office furniture and layout specialists, we will be able to demonstrate how these recommendations can be achieved. In an interactive session, delegates will take part in group exercises to identify their ideal office environment and to develop their own strategies for adapting their working conditions, and will be given a checklist to use within their own organisation or with their clients.

References
F10 Discussion
Pathway: Selecting and developing the next generation of occupational psychologists
Richard MacKinnon, Andrew Smith and Justin McNamara, The Future Work Centre

Category: Learning, Training and Development

Session overview
This interactive discussion session will present one organisation’s attempt to provide early career psychologists with viable psychology-focused roles straight out of their postgraduate education. One element of our core mission is to develop the next generation of occupational psychologists in the UK.

From our own experience and reports shared at DOP conferences over the last decade, we understand the challenges early career psychologists face when looking for a job post-MSc.

Many roles require commercial experience, while others are so specialised that they offer little opportunity to progress along the Chartership experience route required of them by the BPS. Further, the volume of MSc graduates exceeds the available roles by some margin.

We set about addressing this challenge by designing roles specifically for these early career practitioners, requiring no organisational or commercial experience. In addition, successful applicants would participate in a structured three-year development programme to develop their research and practitioner skills, as well as their awareness of contemporary issues in the workplace. Chartership supervision is provided, as is coaching and mentoring, so that career development can be accelerated and structured as much as possible.

In this session, we want to share our observations about:
- Designing a selection process for early career practitioners
- Assessing and selecting suitable candidates
- Deploying such an innovative development programme

so other employers can learn from our experience.

We also want to discuss our findings with employers of early career psychologists, graduates themselves and those who coordinate MSc programmes, to triangulate the development needs of MSc graduates and better understand how we can shape roles and development pathways that will meet the needs of these graduates, the profession and indeed society at large.
Our session will consist of:

- A presentation of our aims and experience.
- Three facilitated “working party” focus groups, representing MSc graduates, employers and educators.
- Each group reviewing the theory, practice and contextual information early career psychologists require for a) successfully securing a role post-MSc and b) on-going career success
- A final plenary session to bring together the outputs and report back to the participant group as a whole.

We will collate the outputs from this session into a paper we will make freely available to stakeholders post-conference.

F11 Short Paper

**Virtual Leadership: The battle for greater resilience requires a new leadership and organisation mind-set**

**Steve Gilbert, Casuga Limited**

**Category:** Leadership, Engagement and Motivation

My background is in technology and consultancy with some of the major global organisations in the industry. With over 20 years of managing in diverse, international environments, I have seen the gradual erosion of traditional working patterns, from single office concepts to virtual management. It is the latter where from personal experience and research there appears to be a lack of attention to understanding and increasing leadership expertise in this area. As a result of a small study across over 30 participants who manage virtually these concerns are echoed. What emerged was a need to change the organisational and leadership mind-set and to be aware of the greater resilience needed by managers in virtual situations and the potentially negative effects on performance and well-being and of course organisation effectiveness.

Firstly, too much virtual working has evolved in an ad-hoc or accidental manner (Duarte and Snyder, 2008) and therefore it lacks a coherent strategy around of leadership, recruitment, development and support. Secondly, the definition of virtual working needs to be more inclusive; from mobile-workers, hot-desking, multi-office and home-based, as well as in the international context. Thirdly, there are some misguided beliefs and practices including an over-reliance on the use of technology that in effect masks some of the fundamental issues. Finally, to start to address these issues there needs to be a better understanding of the impact on individuals; from work-life balance, boundary and work-load management and greater resilience needed of leaders.

The study found that it is the organisation mind-set that needs to change to better embrace and integrate virtual working and the impact on leadership. As its findings show little or no specific recruitment policy or process in recognition of managing in a virtual environment. This was compounded by very little to support and develop awareness of the difficulty of managing in a virtual environment. The reality is that almost everyone in the contemporary workplace is involved in managing, liaising or constructing business in a virtual way. The point being that once employees are ‘virtualised’ their attitudes, self-sufficiency and belonging change, this impacts on how they will accept management and the organisational controls. This is especially so of performance measures, rewards and how they can be motivated and engaged that continue to be non-virtual cognizant. It was also evident that to manage virtually, especially, in an international context, required much more resilience on behalf of leaders to maintain engagement and motivation. The impact of increased workload and work-life boundaries due to extended hours and the increasing requirement of almost 24/7 accessibility. The important point is this needs to be a major consideration of the difference between managing virtually compared to in-office management of a similar sized team. Another key factor is that the over-reliance on technology masks issues of language, culture and demographics as in baby boomers vs millenials as well as gender. This is combined with technologies invasiveness and people differing abilities in using and wanting to kinds of technology. In general there is also a lack of face-to-face time and an impact of developing relationships, rapport building and trust and the way in which management, support and performance is moving on-line.
Prior to exploring the study, what does the theory say about the main aspects of the research? On defining virtual working, Bell & Kozowlowski (2002) referred to a ‘virtual continuum’. As said earlier we all are affected by virtual working, it is only time, distance and context that differ. Hartman & Gus (1996) noted the decline of the single office concept; in essence two offices make a virtual environment. Lipnack & Stamps (2000) suggest that technology links workers and leaders into the organisation but this is, as the study revealed, dangerous talk. Pauleen (2004) cited that it actually can also create a lack of shared culture and language and this impacts on the ability of leaders to motivate and engage. Personal experience suggests that in-country and intra-office overrides virtual leadership and priorities. The irony is of course that without technology the global economy might not exist and that has made things easy, it’s just we could make it better for leaders and individuals and business and organisation effectiveness.

Other aspects of theory highlighted the changing nature of work (Parker, Wall and Cordery 2001) and the new challenges for leadership (Bass & Avolio, 1993). An additional challenge and much researched is Computer Mediated Communication (DeChurch & Marks, 2006) that highlights that the use of technology that lacks social cues both masks or creates issues of language and culture and impacts on normal communication. Did the earlier work of the Tavistock (1950’s) on Human Computer Interaction or Social Technical Systems (Emery & Trist, 1960) have ever envisaged the proliferation of technology and our dependence upon it? The answer is certainly not and hence Marten (2004) suggests that operationalizing virtual working and managing that environment is difficult. Other aspects include acceptance and use of technology differentiate by age, gender and culture (Ginsbug, 2011).

On leadership with regard to virtual management, certain styles and traits have their supporters of which the main are for a more transformational approach (Bruno, 1978, Braga, 2003), as opposed to transactional. Bass and Avolio (1993) state categorically that transformational is better suited to virtual leadership. Whilst others suggest transformational leadership is too narrowly defined (Currie & Lockett, 2007) or poorly articulated (Northouse, 1977) and too difficult to operationalize (Keely, 1995). The point is firstly that we have moved on with authentic and leadership as practice for example but that nevertheless perhaps certain characteristics are better in a virtual context. Secondly, and the key point is, are these specifically being looked for when recruiting and selecting virtual leaders. According to Nemiro et al (2008) there is a need for better recruitment, better job design and better operationalization which suggests we are not. This becomes more evident in decision-making, conflict resolution (Hinds & Mortesen, 2005) and integrating the extended team (Golden, 2007) and managing morale (Thomas et al, 2006), all of which needs to be operationalized more effectively.

Another aspect of leadership that comes under discussion, is the leader’s own knowledge experience of culture and of technology. On the latter, Heifetz & Laurie (2001) cite that leaders need a better understanding of the use of tand limitations of technology. Kirkman et al (2006) say this is especially true when trying to build rapport and trust across different cultures. Finally, Cummings (2008) argued that the frequency of technology communication, the amount of email, means the message and the priority could get lost especially across cultures. Face-to-face time therefore becomes even more critical and in some organisations leaders are just not able to prioritise this or given budget to do so.

This lack of face-to-face time is critical in dealing with cultural difference and geographic and demographic challenges but this requires greater resilience from leaders. This because as one increases accessibility there will be an increase in workload management as per Renaud (2006) and Bellotti (2005) and an impact on work-life balance exacerbated if nothing else by being inundated with communications (Barley, 2005). In essence, good leaders and leaders for good, increase their workload by having to cope and manage across an extended day. This is compounded by the need to manage across culture to maintain a level of motivation and performance and of course engagement. One of the main misguided beliefs is there that managers who manage virtual can take on more staff, this is a mind-set that the organisation and leaders themselves must change. The study suggests that managing virtually takes more time and effort to be effective.
The study
The study was carried out in 2013 and consisted of 20 semi-structured interviews of leaders who were managing in a virtual context. A pre-questionnaire was sent to respondents to ascertain they were actually managing in a virtual context. In addition, 30 questionnaires were sent out to other participants in a survey format, less rich but still adding to the data. In terms of logistics, each interview was done remotely and recorded, then transcribed and analysed. The interviewed itself consisted of 20 questions and was timed for around 45 minutes. The participants were from UK, US, India and Europe ranging in age from 27-50 of which 40% female and 60% male and who worked in a variety of sectors. It became evident that participants were both managing and being managed virtually which added to the richness of the study.

The analysis was thematic rather than discourse or grounded theory that were the other forms looked at prior to selecting thematic. The were three main themes that were generated:

1. What are the main challenges of managing in a virtual environment?
2. What does the organisations do to support virtual leadership?
3. Are there leadership qualities or traits that make better virtual leaders?

First and foremost there was no distinction expressed regarding virtual working, it seem to encompass remote, mobile, inter-office, home-working and international. The experience of the participants varied in terms of the amount of time they work virtually ranging from 30% to 90%. Her then are some of the findings from the study.

Challenges
1. Time-zones differences wee a major concern resulting in 18 hour days being common, early morning and/or late evenings was normal.
2. Scheduling, tracking and prioritising of work and actually getting work done also had became more time consuming for leaders than normal.
3. Engagement was an issue, the difficulty of really connecting with employees, presenteeism on calls and too many competing demands of those around them, i.e. intra-office or country.
4. And getting focussed on the task and managing an extended grapevine to find out what was going on was common rather than direct.
5. Technology- not everyone had the same but Skype, phone were common but full video conferencing and Lync were also used but not everyone like using tech with video or had capability to use it.
6. English dominated and that caused language and meaning issues.
7. In fact communications inefficiencies were common from technology to people drooping out themselves.
8. One comment was that technology connected but didn’t necessarily connect people but leaders and organisations failed to see this.
9. Being kept up to date, balancing managing vs autonomy and self-sufficiency were common difficulties.
10. Issues such as some preferring email rather than conference calls to enable them time to respond and check what they were saying. This required lots of follow up or repeating messages or requests from leaders, again more time consuming.

Organisation support
1. There genral consensus of opinion is that there needs to be a focus and key sponsor for virtual teams and that does not just mean a global title but someone who really understands the challenges of managing in virtual environment.
2. Redefining roles, job design and performance measures and impact on
leaders, i.e. extra consideration for stress, greater resilience and specific training on virtual management and culture is also needed.

3. The key is don’t let virtual just happen, it needs to have a strategy and include integrating within the extended team.

4. The organisation needs to help maximise virtual presence and also be aware that face-to-face time in vital.

5. The mind-set needs to change in that virtual management is more time-consuming if it is to be organisationally effective.

6. Don’t assume technology use or availability is a level playing field, implement, train and continually support and make virtual players and leaders expert users.

7. Recruit as much as possible for virtual teams and leaders with specific traits, qualities and experience levels.

Leadership qualities

1. No special training, recruitment or real support was common.

2. Most gained through experience, some bad, of culture, dynamics and differences.

3. Understanding of formality, social cures and language is a recurring problem included getting to know people and cultures. The result is that some stereotyping, misguided practices and beliefs had to be undone but that damage had already been caused.

4. One of specific cultural difference was the understanding of time, i.e. in Germany time is static in Mexico very, very flexible.

5. The difficulty of building trust and rapport was very evident.

6. Additional complexities such as Germans talking to Indians in English and a US employee who is actually French and a UK employee who is Polish compound issues, creating scope for misunderstanding.

7. Decision-making and conflict resolution were also difficult but no training was given in this vital area that impacted don business.

8. Lack of training of cultural awareness and even if some had training as leader, this was not the case for the team members.

9. No awareness of the impact on work-life balance seemed to be recognised by organisations. Again the mind-set needs to change as in one or two cases leaders were managing multiple teams, too many hats, too many minds was leading to stress and burnout.

Summary

The presentation will conclude by re-iterating these findings and the research and concludes with six key recommendations for further investigation and action.

1. Organisations need to change their mind-set and create and manage a strategy specifically for virtual working and this includes in leader recruitment, selection and training.

2. There is a not only a need to focus on specific recruitment and training but also the use of technology and the awareness of the extra demands of managing in a virtual environment.

3. Greater awareness of stress caused by disappearing work-life boundaries vs accessibility of leaders and therefore the need for greater resilience of individuals in a virtual environment, especially internationally.

4. A renewed focus on cultural awareness and understanding is absolutely key to successful virtual management.

5. There also needs to be a careful assessment and training to understand the difficulties and potentially the extra time required in decision-making, conflict management and prioritising work.

6. A focus on supporting managers to promote better engagement and factor in new elements for increasing motivation and new ways to reward and help deliver more consistently performance.
Finally, there are four further reading recommendations regarding 7 Critical Success Factors for Working Virtually for Organisations by Duarte and Snyder. The 6 Challenges for Working Virtually by Nemiro et al along with their VEquitee and Virtual Working in Practice by Gibson and Gibbs. Also a set specific recommendations for ‘Building Resilience’ in leaders.

F12 Short Paper

The resilience dynamic and diagnostic: A proactive and pragmatic measure of leader resilience
Shelley Winter, Emily Amdurer, Jonathan Dean, Kristin Mann and Gregory Fernandes, YSC

Category: Leadership, Engagement and Motivation

Introduction

There is growing interest on what it takes to be an effective leader in the 21st century. Some workplaces are now using the military term VUCA (volatile, uncertain, complex and ambiguous) to reflect the level of change and uncertainty in their business contexts. Whereas change may have once been a discreet workplace event, it is now inevitable, on-going and often significant. With this level of change, leaders are constantly trying to work through new challenges and find ways to enable their people to thrive within a changing context. As a result, many organisations are looking for training or strategies to increase resilience in their leaders and their people. The Resilience Dynamic model provides an intuitive, pragmatic and holistic way of understanding resilience and evaluating current behavior. The model’s diagnostic supports the development of resilience by measuring current behavior and highlighting opportunities to further build resilience. It helps individuals to target key behaviours and strategies to both enhance their personal resilience and leadership skills to develop resilience in their people. In this paper we discuss the research underlying the model, describe the process we took to design and validate the diagnostic and finally, the benefits to the business community and intended use of the diagnostic.

Theory

Resilience has been defined as the ability to resist maladaptation in the face of risky experiences (Bonanno, 2004). Early studies followed high-risk children (Garmezy, 1971) and identified “protective factors” that made some children more adaptable (Luthar, Cicchetti, & Becker, 2000). These are factors such as optimism (Masten, 1994), self-esteem, striving and self-discipline (Garmezy, Masten, & Tellegen, 1984) and external factors of receiving social support by a caregiver (Masten & Coatsworth, 1998). While research on adult resilience appears to focus on resilience as a trait, by examining constructs such as hardness, (Kobasa, Maddi, & Kahn, 1982, Florian, Mikulincer, & Taubman, 1995) some scholars indicate that adults have the capacity to grow and overcome difficulties (Bonanno, 2004). With growing pressures in the workplace it is reasonable to consider protective factors as being developable. Taking this lead, organisational researchers have begun to study how resilience training and interventions could help build employees’ capabilities (Luthans, Avey, Avolio, & Peterson, 2010, Reivich, Seligman, & McBride, 2011).

Design

Based on our review of the literature we saw social support, self-efficacy, optimism, hope, meaning making and applied learning as being critical for resilience formation in organisations. To ensure the evidence in the literature was experienced in the applied context of resilience and leadership, we conducted face validity on these categories with YSC consultants. These business psychologist consultants have insight into leaders’ experiences by working with thousands of FTSE 100 and Fortune 500 top executives. These conversations led to two main outcomes.

First, we categorised the research streams into five distinct drivers of resilience: 1) building support’ is the ability to build positive relationships which create systems of support during stressful events, 2) ‘developing confidence’ is the capacity to build belief in abilities, to achieve a specific goal, 3) ‘striving’ is the ability to persevere by seeing multiple routes to a goal in the face of challenges, 4) ‘recovery’ is the ability to re-energise you toward your goal by making time and space to reflect on the event, finally 5) ‘adapting’ is the capacity to incorporate learning to evolve with the changing context.

The second conclusion of these conversations is the dual process of building resilience as an individual and as a leader. Consultants described how executives of resilient teams and organisations fostered certain behaviours within their teams to enhance resilience in their people. However, they also noted many leaders would focus on
their own resilience and felt unequipped to support the resilience of their people. Finding insufficient evidence in
the literature of what leaders do differently to create cultures of resilience, outside of military leaders (Bartone,
2006; Schaubroeck, Riolli, Peng, & Spain, 2011), we created a model including the five distinct areas for both leaders
and individuals (resulting in 10 different behaviour categories), along the continuum of preparing, responding and
learning (Figure 1).

Methodology and Results
To build the measure we mapped behaviours mentioned in the interviews with YSC consultants, on to the 10
constructs and created new reflective items. We assessed content validity by pre-testing the items in a question-
methodology (Q-sort) with 10 resilience scholars and consultants who specialise in managing change. After item-
reduction the scale yielded an inter-rater agreement score of .53 (moderate agreement; Landis & Koch, 1977).
To assess the internal consistency and construct validity we posted the Resilience Dynamic on Amazon
Mechanical Turk. The sample included 400 managers, with an average of 10 direct reports. The majority were men
(251 men), averaging 36 years of age and had an average of 14 years of work experience (range: 1 – 32 years). The
data was analysed using Principal Components Analysis (with varimax rotation) and the total scale and sub-scales all
yielded a Cronbach’s alpha score above .70, indicating strong internal consistency. We also looked at important
work and life outcomes including, organizational commitment, job satisfaction, engagement, psychological capital
and life satisfaction and found resilience (as measured by this diagnostic) to be positively and significantly associated
with them (Table 1).

Application
The combination of academic research and applied inquiry that underpin the model brings together two
critical evidence bases. Furthermore, the psychometric diagnostic that underpins the Resilience Dynamic Model
provides a valid and reliable test to measure degree of individual and leadership resilience. Our client experience is
that the model resonates with all levels of leaders, from emerging leaders (for example team leaders) to executive
team members. The proposition that demonstrating, shaping and encouraging these behaviours in their people is
both practical and energising for these leaders. Rather than feeling that they and their teams need to just ‘cope’
with the change, they feel empowered to support their people and foster resilience through different means.
Furthermore, presenting these behaviours in a workshop forum provides leaders the space to actively feel the
benefits of the model and normalise their reactions to pressure, change or challenge. Sighs of relief can be heard
across the room, when leaders realise they no long have to just ‘soldier on’ in the face of challenge and change.

In the session we will share the model, results of the analyses, sample items of the diagnostic and sample
reports. In the report sample participants will review tips on how to build capacity in their own roles, as leaders in
their departments and in partnership with others. We will explain how we have used the model and the diagnostic
through leadership workshops with different organisations across different industries to build resilience through
leadership workshops. We will share stories of how the diagnostic helped individuals to target behaviours that
enhance their ability to thrive amidst workplace change and how leaders proactively built greater capacity in their
teams and organisations. These examples will give participants a framework to understand resilience from a
proactive and applied perspective.

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Figure 1
Introduction

Many occupational safety and health (OSH) practitioners are responsible for the health and safety of people who work autonomously and remotely from their main organisation’s locations or operations for at least a fraction of their work-time (e.g., teleworkers, mobile maintenance engineers, community nurses, police officers). In Western Europe, nearly half of the workforce might be classified as falling into the category of distributed workers with numbers forecasted to exceed 50%, which is approximately 129.5 million workers (ICD, 2010).

Distributed working poses a challenge for OSH leadership as OSH practitioners have little opportunity to observe working practices, directly identify OSH problems, or offer immediate and direct advice to workers or their line managers. Current OSH leadership models and frameworks of safety leadership are developed for face-to-face interaction between managers and those they manage. A key issue, that we seek to examine in this paper, is whether current models for OSH leadership are fit for purpose when it comes to protecting the health and safety of distributed workforce. If existing OSH leadership frameworks cannot indicate good practice in the distributed context, new leadership models and frameworks may need to be developed to address the challenges of managing the OSH practices of distributed workers and ensure that workers are resilient to the challenges of working in a distributed work context.

To examine whether current models for OSH leadership are fit for the distributed context, we conducted a systematic literature review. Our review was guided by two research questions. (i) Are current OSH leadership frameworks applicable in the context of distributed working? (ii) What other frameworks or models may be applicable to/optimal for OSH leadership of distributed workers?

Methods

We undertook a systematic literature review, examining extant research into OSH leadership of distributed workers. We searched PubMed, Psycinfo, ScholarGoogle and Web of Science databases. As well as requiring papers to address distributed working, OSH or wellbeing, and leadership, we applied the following additional inclusion criteria to our search: empirical papers, published from 1995 to February 2015, published in English in peer reviewed journals. Some 23 papers met the inclusion criteria. Full information on the literature search and inter-rater consistency in selecting papers can be obtained upon request from the first author.

Findings

In the following section we provide an overview of the papers that we identified during our literature search and discuss how the findings in each relate to the three research questions.
Are current OSH leadership frameworks applicable in the context of distributed working?

Most studies focused on social support. Six studies found that perceived support from organisations and managers and good leader-worker relationships predict OSH related outcomes for distributed workers. Instrumental support appeared important as did knowledge exchange between units. Communication and access to information and communications technologies (ICTs), especially video-conferencing, appeared important for facilitating communication (Chen et al., 2008; Gray-Stanley et al., 2010; Madlock, 2013; Zohar et al., 2014; Golden & Veigo, 2008; Weymouth et al., 2007).

Two studies looked at transformational leadership. Transformational leadership was found to be important for motivating safe behaviours and well-being, but only in certain conditions; 1) if the leader is trusted by his or her employees (Conchie, 2013), 2) if employees are focused on their hopes and aspirations 3) if the focus on avoiding mistakes was low or 4) the leader was oriented towards employees performing well (Whitford & Moss, 2009).

One study found that competent leadership was related to worker job satisfaction (Yang et al, 2012).

Two studies focused on group-level safety climate, i.e., the extent to which the supervisor in the group focused on creating a good safety climate. It was found that sophisticated safety climate, subsuming support structures and processes and investment, was important for safety (Huang et al., 2013, 2014) and leaders’ demonstrating commitment to safety (safety climate) was important for safety behaviours (Huang et al.,2013, 2014).

Furthermore, motivation (and motivational strategies such as planning, supervisors using motivating language) predicted safety behaviour/well-being indicators (Conchie, 2013); Madlock, 2013; Mulki & Jaramillo, 2011; Nesheim & Gressgaard, 2014).

Most of the studies above reported using scales that were not adapted to the distributed worker context. Huang et al. (2013, 2014) are exceptions as they used safety climate indicators tailored to drivers.

What other frameworks or models may be applicable to/optimal for OSH leadership of distributed workers?

Eleven studies explored concepts specific to the distributed worker context. Three studies reported that face-to-face communication and instant messaging were related to stress from interruptions for distributed workers/lack of interruptions a positive feature of telework (Fonner & Roloff, 2012; Konradt et al., 2000; Nurmi, 2011) and Nurmi (2011) found that email messages should be clear and to the point.

Seven studies found that communication and support were challenges for distributed working, including in respect of OSH, and especially if natural face-to-face communication was difficult and/or ICTs had to be used instead (e.g. for asynchronous working). Communication issues were found to cause problems with role ambiguity, workload etc. (Greer & Payne, 2014; McDonough et al.,2014; Mihhailova, 2009; Nesheim & Gressgaard, 2014; Nurmi, 2011; Weymouth et al., 2007; Mihhailova & Turk, 2011). Weymouth et al. (2007) also found that managers’ workload may get in the way of effective OSH leadership.

Finally, two studies found that distributed workers benefited in several ways (e.g. job satisfaction, feedback, personal development, empowerment) if managers also engaged in similar distributed work (perhaps through enabling better understanding of teleworkers context) (Golden & Fromen, 2011; Long et al., 2013).

Discussion

In the present study, we found that a range of existing leadership frameworks could be used to understand good OSH among distributed workers. The papers examined identify behaviours that are especially important in respect of
leading and managing for positive OSH outcomes for distributed workers: for example high levels of instrumental support, engendering trust, using motivating language and competent communications.

However, aspects specific to the distributed workers context limited the applicability of these models without modification. Clearly distributed working brings a number of specific management and leadership challenges beyond those applicable to a traditional workforce. For example, given distance and asynchronous communication, leaders may find it challenging to build trusting relationships with followers, and specific strategies may need to be developed to overcome some aspects of the distributed context.

References
Identifying disruptive talent: Individual-level predictors of workplace innovation

Vicki Ashworth and Charlotte Flaxman, Work Psychology Group and Fiona Patterson, Work Psychology Group / University of Cambridge

Category: Psychological Assessment at Work

Background

In recent years, the global economic climate has necessitated an increased need for resilience in businesses, for example responding flexibly and creatively to changes in market demands, financial pressures, and increased competition. Innovation is essential for organisations to boost their resilience in the contemporary business world. To promote innovative behaviours organisations need to reliably identify and capitalise on the innovative potential of their employees (Patterson & Kerrin, 2013). Therefore, the characteristics and behaviours that predict innovation are of particular interest and benefit to both employers and employees across a range of sectors. Whilst employees need a supportive work environment to promote and facilitate innovation (Patterson et al, 2009), propensity to innovate is driven predominantly by individuals’ own motivational qualities, abilities and attributes (Patterson et al., 2009; Sears & Baba, 2011).

The Innovation Potential Indicator (IPI) is a multi-dimensional, trait-based measure of innovative behaviour which encompasses four key dimensions comprising aspects of work style, motivation, personality and intellect (Patterson, 1999). The underlying theoretical model captures behaviours associated with both the idea generation and idea implementation phases of the innovation process.

The IPI is a self-report measure that captures the important behaviours associated with the different phases within the innovation process and offers organisations a way to look at the innovation potential within their employees. The measure is used for assessment for development and allows employees to reflect on their individual strengths and development needs.

During the 1990s when the IPI was originally developed, innovation research focussed on intelligence and cognition, knowledge, personality and motivation (Patterson, 2002). For example, it is generally accepted that those high in Openness to Experience will tend to have a higher propensity for innovation (Hammond et al., 2011), whereas other personality traits such as Conscientiousness, have been found to be negative predictors of innovation (Patterson,
More recent research has identified a broader range of personal resources linked to innovation that also play a role including: emotional intelligence (Suliman & Al-Shaikh, 2007), mood states (Baas et al, 2008), personal initiative (Rank et al, 2004), self-efficacy (Jaussi et al, 2007), and various motivational qualities (Patterson 2013).

With these new constructs emerging, the aim of this study is to extend and refresh the existing IPI model to incorporate these newly identified factors associated with innovation.

**Current Structure of the IPI**

The IPI currently consists of 36 behavioural descriptions associated with innovation in either a positive or negative way and encompasses aspects of work style, motivation, personality and intellect. The items currently measure four constructs; Consistency of Work Styles (CWS), Challenging Behaviour (CB), Adaptation (AD) and Motivation to Change (MTC). Of these factors, ‘Motivation to Change’ has been found consistently to be one of the best predictors of subsequent innovation outcomes for employees and teams (Burch, Pavelis & Port, 2008).

The model has been used and evaluated in a variety of organisational contexts and shows evidence of internal reliability (α= .69 to .73). An early study of the model (using a double-blind quasi-experimental approach, N=40), showed good evidence of criterion-related validity in predicting supervisor appraisals of innovation. A further eleven independent studies (N=1100) investigated the construct validity of the four factors including links with the Big Five (Costa & McCrae, 1992), Eysenck’s 3 factor model of personality (Eysenck & Eysenck, 1991) and Typical Intellectual Engagement (Goff & Ackerman, 1992). Correlations in the expected directions ranged from $r= -.39$ to $.66$, $p<.05$, providing evidence of construct validity for the IPI model.

**Methodology**

**Research Design**

The main purpose of this current research is to evaluate the psychometric properties of the IPI and an extended model of constructs. The revised measure was piloted alongside a measure of innovative workplace behaviour (Janssen 2000), used as an outcomes measure to examine criterion-related validity; and the TEIque-SF measure of emotional intelligence (Cooper et al, 2010) to explore construct validity.

**Item Development**

Following a literature review to identify the most recent research on individual-level factors associated with innovation, new items were developed in relation to the following constructs; (i) personal initiative, (ii) resilience, (iii) self-efficacy, (iv) intrinsic motivation, (v) emotional intelligence and (vi) intellectual curiosity. An example item for resilience is “I adapt easily to changing situations and circumstances” and an example item for emotional intelligence is “Understanding others’ perspectives comes easily to me”.

New items were constructed by 6 organisational psychologists with subject matter expertise in innovation. Following item writing and reviews, a total of 86 new items were selected for piloting. This included four new items for the existing four factor model and between 14 and 16 items for each of the new factors. A total of 86 new items were piloted alongside the existing 36 items within the IPI model.

**Piloting**

Ninety-four employees in an international manufacturing organisation based in the UK participated in the piloting of the new content. Within this organisation, innovation is considered to be a desirable and important aspect of employees’ roles.

**Results**

At the time of submission, data collection is still underway. Analysis of the data will involve detailed item analyses and Confirmatory Factor Analysis (CFA) will be used to examine the factor structure. The scale descriptives, internal
reliability and inter-correlations between the scales will be reported to explore both the robustness of the model and the construct validity.

Following finalisation of the model, the following analysis will be conducted:

- Analysis of the relationship between the existing IPI content and new IPI content.
- Recently within the literature, emotional intelligence has been identified as a particularly important individual level factor influencing innovational potential. Thus, the association between the new IPI model and the TEIQue measure of emotional intelligence to explore underlying constructs.

Discussion/Next Steps

Innovation is becoming increasingly important in order for businesses to be resilient to the challenging climate in which they must operate, both within the UK and internationally. Anecdotally, HR practitioners are calling for the need to hire ‘disruptive talent’ to enhance innovation at work. However, a robust measure that integrates the very latest research in this area has been lacking. Furthermore, whilst researchers recognise the importance of team, and organisational level resources in promoting innovation, the evidence also shows that individual level factors are the necessary foundations for innovation (Patterson et al, 2009; Sears & Baba, 2011).

Our research builds upon contemporary research relating to employee innovation and aims to examine more closely the personal attributes and resources associated with innovation potential. By providing employees and organisations with a greater understanding about their potential to innovate, a more robust assessment would allow an organisation to more accurately focus on optimising appropriate conditions and development interventions for employee innovation.

Recent literature has identified Emotional Intelligence as a particularly important individual factor influencing innovation potential (Patterson & Kerrin, 2013). Thus, this research provides the opportunity to investigate initial construct validity, looking at the relationship between employee innovation and emotional intelligence. Although this research will provide some criterion related validity evidence, the authors acknowledge the limitations evident in using a self-report as a measure; most notably that this may lead to common method bias and percept-percept inflation. A future research agenda will be offered to extend the development and validation of the underlying model.

References


F15 DOP Chair’s Address

Reinventing the Division of Occupational Psychology

Roxane Gervais, DOP Chair
The DOP’s theme this year, Resilience in a Challenging World, possibly could describe the Division of Occupational Psychology. The Division has gone through several changes and challenges, and has become more resilient due to these. I will take this opportunity to discuss why it is necessary to build on this resilience to allow the Division to move to the next level of becoming more visible and thereby more recognised as a professional body. A professional body that contributes significantly to improving the work environment.

F16 Keynote Session

Age in the Workplace: Opportunities for supporting workers across the lifespan

Prof Donald Truxillo, Portland State University
The industrialized workforce is aging. This is due to a range of factors: The inability of some workers to retire due to the recent economic downturn, increased national retirement ages to sustain retirement systems, and the choice of some older people to return to work. In addition to becoming older, the workforce is becoming more age-diverse, and people of different ages are working side-by-side as never before. Much of the mainstream media has focused on generational differences and caricatures of “entitled millennials”. However, framing this issue in terms of possible generational differences and negative generational stereotypes – which are theoretically questionable and not necessarily supported by the empirical research to date – is counterproductive. Instead, organizations and societies may be better served by the application of established theories of lifespan development and how to apply these to support workers of all ages across the work lifespan. Despite this need of organizations to address the multi-age workforce, and research that demonstrates the differing needs of older and younger workers, there have been few studies on specific interventions to support workers at different life stages.
In this talk, I will begin by describing recent demographic changes and future projections about the workforce, making the case that employers should address age-related changes in the workforce to maintain worker morale, productivity, well-being, and performance. I will also discuss the research on theoretically driven, psychosocial interventions, demonstrating both gaps in the literature on interventions for older workers as well as the promise of the few age-focused intervention studies to date. Next, I will describe the developing organizational psychology literature on aging and work – both theory and empirical studies. I will discuss the promise of this line of research for the development of effective workplace solutions to address age differences and to develop age-sensitive HR systems. I will conclude with suggested next steps for research on age-focused organizational interventions.
F17 Age Panel (Created by the DOP's International group)
Chair Bina Kandola, Professor Donald Truxillo, Portland state university USA and
Sharice Chambers, Age Friendly Nottingham
Category: Wellbeing and Work
This panel focuses on ageing and cities. It includes both our key note speaker and world leading authority, and those from a range of local and national organisations focused on Age to highlight what workplaces and cities are doing to engage and connect with their older citizens. Are there roles occupational psychology could play here? What are the latest developments from practitioners and leading organisations?

F18 Short Paper
Investigating the relationship between ethical leadership and employee wellbeing in a non-profit setting
Neill Thompson and Josh Rivers, Northumbria University
Category: Leadership, Engagement and Motivation
Introduction/Background
Ethical leadership has been shown to have positive outcomes within the workplace, including increased job satisfaction (Den Hartog & De Hoogh, 2009), improved task performance (Mayer, Aquino, Greenbaum & Kuenzi, 2012), fewer deviant acts (Schaubroeck, 2012) and increased job dedication (Mayer, Kuenzie, Greenbaum, Bardes & Salvador, 2009). Little research has been conducted to investigate the influence of ethical leadership on employee well-being despite previous research suggesting that positive leadership behaviours can enhance followers’ health and well-being (Liu et al., 2010).
One recent study that has investigated the influence of ethical leadership on well-being was conducted by Chughtai, Byrne and Flood (2014) who found relationships between ethical leadership and increased work engagement and decreased emotional exhaustion, in a sample of trainee accountants. Their research suggests that ethical leader behaviours may improve employee well-being.

To date, little research has investigated the influence of ethical leadership on employee well-being despite research showing that positive leadership behaviours improve employee health and well-being (Liu et al., 2010). Research that has investigated these effects has found a positive correlation between ethical leadership and engagement and a negative correlation with exhaustion as well as a potential mediator for this relationship, trust in supervisor (Chughtai et al., 2014). The present study will use a different sample to determine whether findings generalise across different job sectors and will conduct the research using non-profit organisations. McMurray, Pirola-Merlo, Sarros and Islam (2010) highlighted that non-profit organisations are neglected in leadership research; therefore, it is unknown whether leadership styles that are effective in for-profit organisations are as effective in the not-for-profit sector. Hence, the present study aims to determine whether ethical leadership is an effective leadership style for increasing engagement and decreasing exhaustion in non-profit organisations. Finally, ethical leadership has not been compared to another leadership style in empirical research; therefore the present study will investigate whether transformational leadership is a greater predictor of well-being than ethical leadership.
Aims and Objectives
Previous research suggests that ethical leadership is likely to have a significant effect on employee engagement and emotional exhaustion. In addition, Chughtai et al. (2014) proposed that the effect of ethical leadership on engagement and exhaustion is indirectly transmitted through trust in supervisor. Therefore, the present study hypothesised that:
1) Ethical leadership will be positively correlated with trust in supervisor.
2) Trust in supervisor will be positively correlated with employee engagement.
3) Trust in supervisor will be negatively correlated with emotional exhaustion.
4) Trust in supervisor will mediate the positive relationship between ethical leadership and employee engagement.
5) Trust in supervisor will mediate the negative relationship between ethical leadership and emotional exhaustion.

Method
An on-line survey was distributed that included the following measures: Ethical Leadership Scale (Brown et al., 2005); Global Transformational Leadership Scale (Carless et al., 2000); Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006); Maslach Burnout Inventory-General Survey (Schaufeli et al. 1996; Affective Trust Scale (Yang and Mossholder, 2010).

137 employees from UK student’s unions (81 female, 53 male, 3 undisclosed) with a mean age of 28.10 and age range of 19-63 participated in the study.
A students’ union is a non-profit organisation, with the purpose of representing students at an institutional and national level. They are run by students, who are elected into their positions, as well as a dedicated team of permanent staff who work alongside the elected officers.

To test the research hypotheses, structural equation modelling (SEM) was conducted using AMOS 7.0 (Arbuckle, 2006).

Findings
The study found ethical leadership was positively related to trust in supervisor and trust in supervisor was positively related to work engagement and negatively related to emotional exhaustion. Furthermore, trust in supervisor fully mediated the positive correlation between ethical leadership and work engagement, and the negative correlation with emotional exhaustion.
Furthermore, the results indicate a positive correlation between transformational leadership and work engagement and a negative correlation with emotional exhaustion.

Conclusions
The study adds to the growing body of literature investigating the importance of ethical leadership in today’s organisations. It is essential to understand how ethical leadership has a positive effect on well-being and this study provided a link between ethical leaders stimulating feelings of trust on the part of employees and enhancing engagement as well as reducing exhaustion. In addition, this study is the first of its kind to compare ethical leadership with transformational leadership and the results suggested that ethical leadership was the most effective for improving the well-being of employees, using two indicators, work engagement and emotional exhaustion.
Overall, this research on ethical leadership contributes to an increasing amount of empirical research supporting its positive effects as a leadership style in organisations.

Links to the conference theme
Linking to the conference theme ‘Resilience in a challenging world’ this research aims to describe the importance of taking an ethics consideration in leadership research and practice. It does so by focusing on the non-profit sector that is increasingly being recognized as an area future area of challenge for Occupational Psychology, which is also often unrepresented in the literature. It is hoped that this paper will broaden perspectives of leadership research in the context of a non-traditional sector.

F19 Short Paper
Predictive validation of an SJT for high-stakes undergraduate healthcare admissions
Stuart Martin, Fiona Patterson, Helena Edwards, Fran Cousans and Anna Rosselli, Work Psychology Group
Category: Psychological Assessment at Work

Introduction
Historically, educational attainment has been the basis for medical school selection (Cleland et al. 2012), and described as the ‘academic backbone’ of successful progression through medical school and performance in clinical practice (McManus et al. 2013). However, it is increasingly recognised that academic ability is a necessary, but not sufficient, requirement for successful performance in medical school and beyond (Patterson et al. 2016a). Researchers have highlighted the importance of non-academic attributes for enabling doctors to cope with the demands and challenges of medical practice (Powis 2014). Evidence shows that unsatisfactory medical students and doctors commonly have issues related to non-academic domains, therefore, ensuring that medical school selection considers important non-academic attributes alongside traditional academic attainment is important (Powis 2014, Patterson et al. 2016a). Furthermore, non-academic attributes, such as emotional intelligence, are necessary for medical trainees to become successful doctors (Libbrecht et al. 2014) and research has found that complaints about doctors often relate to their non-academic attributes (Powis 2014). Therefore, evidence for a method of selecting for these attributes in UK medical/dental school admissions is likely to be of benefit and interest to the public.

Situational judgement tests (SJTs) may offer an objective way of reliably assessing these attributes (Clevenger et al. 2001). SJTs are designed to assess an applicant’s situational judgement regarding scenarios encountered in a specific role, measuring the non-academic skills of large groups of candidates in medical school admissions processes (Lievens 2013). There is a good level of consensus among researchers that, when appropriately designed and implemented, SJTs are reliable, have predictive and incremental validity, are fair, positively perceived, and show fewer subgroup differences than some other methods, such as cognitive ability tests (Patterson et al. 2012, 2016a,b).

The UK Clinical Aptitude Test (UKCAT) is used by a consortium of universities to help make informed choices from amongst the many highly qualified applicants who apply for UK medical and dental degree programmes. A new SJT was launched live in 2013 as part of the UKCAT (N=25,679), to evaluate important non-academic professional attributes deemed crucial in medical/dental students. The three assessed by the SJT (Integrity, Perspective Taking and Teamwork) are beneficial in giving medical students the skills to cope with the demands of medicine, and facilitating resilience in the face of the challenges they might face. From 2015, Resilience and Adaptability will be piloted as a fourth domain. The first SJT cohort began their courses in 2014, enabling an exploration of the relationships between SJT scores and in-training performance.

A preliminary validation study was conducted in 2014 which focused on the first cohort of students who completed the pilot SJT in 2012. This helped to identify suitable methodologies for undertaking research in this area. The present study therefore takes a refined methodology and focuses on the first group of students to complete the live SJT administered in 2013, who began their first year of medical/dental training in autumn 2014.

The aim of this research was to evaluate the predictive validity of the UKCAT SJT, further the research on medical school admission SJT use, and to refine suitable methodologies for assessing predictive validity in the future. This study presents the first validation evidence of an SJT for medical school admissions in the UK.

Method

Four schools were identified to take part in the validation study; three medical and one dental. Participants (N=223) were first year medical/dental students who began their course in autumn 2014, having sat the first live version of the UKCAT SJT over the summer of 2013. The mean age at the point of taking the UKCAT was 18.6 years; 54.7% of the sample were female; 61.9% were White, 30.5% were Black and Minority Ethnic (BME), and 7.6% did not disclose ethnicity.

The UKCAT SJT (α=.75-.79, N=25,679) assesses three non-academic attributes, identified through an analysis of the role of a medical student, namely Integrity, Perspective Taking, and Team Involvement. The SJT uses a rating response format and is comprised of 66 items (over 16 scenarios) from one of six different test forms, which are
statistically equated to ensure equivalence. The raw post-equated SJT scores and associated bands (1–4, with 1 representing the highest scores) were used as predictor variables.

Identifying an appropriate criterion-matched outcome measure for validation studies can be difficult, especially for non-academic attributes, where appropriate outcome measures do not usually pre-exist (Powis 2014), necessitating the design of a measure for this study. In the preliminary study in 2014, a bespoke outcome measure, employing individual behavioural performance indicators for the three target attributes, was utilised. However, limitations with this measure were identified in relation to the tutors’ ability to differentiate between students. In response, an alternative approach, known as the Relative Percentile Method (RPM), was utilised, in which participants’ performance is ranked in relation to a comparison group. There is evidence to show that this method achieves a greater range and more accurate scores than rating each student independently (Goffin et al. 2009). This study therefore sought to further the evidence into how this alternative approach to designing outcome measures could be useful in examining predictive validity, through improved differentiation in feedback on students’ performance.

Tutors at each of the four schools completed the RPM questionnaire, which required them to rank each of their tutees in relation to the entire cohort of first year medical/dental students at their school on each of the three target attributes (Integrity, Perspective Taking, and Team Involvement). Factor analysis supported the creation of a Mean Tutor Rank score, comprised of the three attributes’ scores. In addition, tutors were asked to provide an Overall Judgement of the student (Particularly Promising, Average, or Likely to Struggle).

All four schools received ethical approval to participate in the research via locally agreed channels. All potential participants (students and tutors) were briefed about the research either verbally or in writing (at the discretion of the school) and provided consent. It was explained that at no point would students’ names be known to researchers or reported and that they were free to not participate or withdraw at any time.

Results

Significant positive relationships were found between the SJT and the Integrity, Perspective Taking, Team Involvement and mean tutor ratings (Mean Tutor Rank, N=217, corrected r=.34), indicating adequate to good evidence of criterion validity (EFPA 2013). There was also a significant positive correlation with Overall Judgement (N=220, corrected rs=.20). Students identified by their tutors as ‘Likely to Struggle’ obtained significantly lower SJT scores than those identified as ‘Particularly Promising’.

Analysis of the SJT bands and the criterion-matched tutor rank outcomes indicated that across all three target attributes, significant differences exist between Bands 1 and 2, and Bands 1 and 3+4 (combined), with those in Band 1 receiving statistically higher tutor ratings. Those in Band 3+4 (combined), received the lowest ratings, however they were not significantly lower than those in Band 2. Although the association was not significant between SJT Band and Overall Judgement, the highest proportion of ‘Likely to Struggle’ were in Bands 3 and 4, and the highest proportion of ‘Particularly Promising’ were in Band 1.

Discussion

The positive correlations between SJT scores and criterion-matched tutor ratings in the present study, alongside the significant differences in tutor ratings for the SJT bands, provides positive early evidence of the predictive validity of the UKCAT SJT. Furthermore, the positive relationship of SJT scores with the Overall Judgement rating, indicates that the SJT is also predictive of a more general outcome measure. These findings support the use of an SJT to select for non-academic attributes in undergraduate medical and dental admissions alongside other measures of attainment.

Further research examining this prediction in the longer term would be beneficial to determine the predictive validity of the SJT later in medical school and further along the training pathway, especially as research has
suggested that SJTs may become more predictive after medical school in clinical practice, when the non-academic attributes become increasingly relevant (Patterson et al. 2016a).

The study also furthers understanding of conducting selection validation research in an early career high-stakes healthcare context. A preliminary validation study of the UKCAT identified limitations with the use of individual behavioural performance indicators to measure performance on the key attributes assessed by the SJT, with regards to differentiation between participants. The use of the RPM in the current study enabled better differentiation between participants on the outcome measures, facilitating the examination of the SJT’s predictive validity, supporting the RPM as a useful tool for future selection validation studies.

This study serves to highlight the practical reality of restricted range within this context. As is common in selection validation studies, a restricted range of scores on the predictor variable (SJT score) was evident in the study sample. Consequently, the study sample contained a greater proportion of the highest scoring SJT bands (Bands 1 and 2) and a lower proportion of the lowest scoring SJT bands (Bands 3 and 4). This has an impact on the extent to which insight can be provided regarding how those who receive the lowest SJT scores perform in training. This was seen despite schools currently being advised not to directly use SJT scores to inform selection decisions. However, given that the SJT correlates with the other selection methods in the UKCAT selection process, those who were selected based upon good performance on the other measures would also have likely scored well on the SJT. To provide more information regarding in-training performance of those receiving the lowest SJT scores, future validity studies should seek to over-sample lower SJT scores. This would provide more direct evidence of how the SJT performs at this end of the score distribution.

Overall, the findings provide encouraging early evidence to support the UKCAT SJT as a shortlisting tool for entry into medicine/dentistry and further understanding of the benefits and challenges of selection validation research in an early career high-stakes healthcare context. This study supports the continued use of SJTs to assess non-academic attributes in selection, to help ensure that the doctors who are selected have the skills available to cope with the challenges of medical practice.

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The rising challenge of developing ward based clinical teams

Margaret Bradley, Real World Group and Ashley Hambling, South West Yorkshire Partnership Foundation Trust

Category: Learning, Training and Development

Background to and Rationale for the Presentation

There appears to be a dearth of literature on the practical difficulties associated with training and developing ward based clinical teams in the NHS. However, working in the NHS over several years it has become very apparent that this is a big problem. Ward based clinical teams are not unique in that they are required to provide a 24 hr service; however, the lack of consistency in individual staff members across any given shift (i.e. rotas for individual staff members rather than groups of staff) is relatively rare in other industries, and makes it very difficult to get any consistency across staff groups in order to systematically train and develop staff.

The challenge for training and developing ward based clinical teams has become increasingly complex as the NHS has seen a rise in the adoption of 12 hour shifts, as opposed to the traditional 8 hour shift pattern (Ball, Maben, Murrells, Day and Griffiths, 2015). The implication of this is that with the traditional 8hr shift system there was a handover period of approximately 2 hours where several members of the team could be together at the same time as the early and late shifts overlapped. From working with ward based teams it is clear that this has traditionally been a very valuable time for wards, providing vital opportunities for team meetings and team development, both informal and formal. In a system that operates 12hr shifts, this period of overlap is no longer available and there is little or no time for training and development activities in the day-to-day operations of the ward.

The rise in 12hr shifts is felt to be due to them being a more cost effective way of delivering the service, as well as having the benefits of greater continuity of care on a shift by shift basis (Ford, 2015). The impact of the implementation of these longer shift patterns is starting to be considered (Ball et at, 2015), however there appears to be no research to date on the impact on team training and development.

The importance of effective team working in the NHS is widely acknowledged (e.g. West, Ekert, Steward and Pasmore (2014)) and studies have examined what development opportunities are required to enhance team working. These studies have found that effective team working is largely dependent on team members working closely together, communicating well and having forums where they can meet and discuss service users or the service provided, discuss problems, share ideas and come up with solutions (e.g. Alimo-Metcalfe, Bradley, Alban-Metcalfe and Locker, 2013). In essence this means that the team need to have informal team development opportunities built into their day-to-day activities.

The importance and efficacy of more formal training and development opportunities aimed at improving the way team members work together has also been examined by researchers and a meta-analysis found that team training accounted for a 20% variance in team performance, demonstrating the importance of well designed team training (Salas et al, 2012)

Given the importance of:

1. Team development, both formal and informal, in the NHS
2. The lack of research on ward based team training and development in the NHS
3. The implementation of 12hr shifts in the NHS
any research on the implementation of training and development in ward based clinical teams, especially those that operate 12hr shifts, will provide valuable insights for both NHS managers and training and development specialists, both practical and academic, into:

1. The development of teams in the NHS, including the impact of this development;
2. The impact of the implementation of 12hr shifts on team based training and development.

**About the Presentation**

The presentation draws on ongoing research that is being conducted by Real World Group in partnership with South West Yorkshire Partnership Foundation Trust (SWYPFT). Real World Group is a spin out company from the University of Leeds that specialises in leadership and team working research and development. Its founding director, Professor Beverly Alimo-Metcalfe, is now a Professor of Leadership Studies at Bradford University School of Management. SWYPFT is primarily a mental health trust that has a mixture of community and ward based mental health teams. The Trust hosted a large scale research project in partnership with Bradford University School of Management and other mental health trusts in the Yorkshire and the Humber region that examined leadership and team working within 50 mental health teams. As part of this research a series of team development workbooks was designed and, in their commitment to the research and to developing teams, SWYPFT decided to undertake a second research study, the current study, designed to evaluate the design, implementation and impact of the developmental workbooks.

The research involved the implementation of the workbooks with 15 teams across SWYPFT; the teams were a mixture of community based and ward based teams. The design of the study was for the teams to:

- Undertake the LTQ Team 360, a team 360-degree feedback tool, in order to identify their training needs;
- Select the most appropriate developmental workbook based on their LTQ Team 360 results;
- Undertake the development within the workbook with the support of an external facilitator known to the teams;
- Have a repeat LTQ Team 360 approximately six months post development to see if there had been any impact of the development;
- Participate in other evaluative elements of the research, such as interviews and surveys.

In total, it was anticipated that the teams would be involved in the project for approximately a year.

In essence, the aim was for the project to have a quasi-scientific research design that followed best practice in training and development. **However**, it soon became abundantly clear when working with the teams, especially the ward based teams that had all recently moved to a 12hr shift system, that undertaking the team based development was extremely problematic due to the difficulty in getting the majority of the team together for development.

As the difficulties in implementing the project as planned unfolded, the focus of the project altered, with an additional and overarching aim being to: **understand how to develop clinical teams, especially those that operate on a 12hr shift system.**

As the project has developed, a variety of approaches with differing effects have been utilised to develop the clinical teams. This has lead to greatly enhanced knowledge on how (and how not!) to implement training and development initiatives in the NHS and the production of practical guidance for teams to be able to do this. The developmental workbooks themselves have been altered to accommodate the feedback gathered from teams, especially with regards to making them more accessible for differing group sizes and different time scales. At all times the approaches trialled tried to comply with best practice in training and development.

**Presentation Structure**

The presentation will:

- Introduce the rationale for the presentation and background literature (as above)
Introduce the research undertaken with the teams
Introduce the literature that either directly or indirectly relates to developing clinical teams
Discuss the training and development approaches implemented within the teams, including what worked well and what was not so effective
Discuss any impact the development has had on teams
Relate the above to the overarching question of how to develop ward-based clinical teams that work 12 hour shifts. Including the results of a literature review
Discuss the learning from the project, both practical and, where possible, academic
Discuss the implications of the research for the NHS and for training and development more generally.
The interactive element will be time to gather thoughts and suggestions from the audience on implementing training and development in these circumstances, plus time for questions. It should be a very thought provoking presentation with rich discussion (10 mins).

Ethical Issues
All of the teams participating in the project had the choice of whether or not to do so. Anyone participating in the evaluation did so with informed consent. All individuals and teams remain anonymous for the purposes of the presentation.

Submission requirements:
1. The presentation will be largely practically based but will draw on relevant training and development literature, NHS literature and team working literature.
2. Relevance to conference theme: this presentation fits with the conference theme because it is about teams’ resilience and ability to adapt to the new shift system, which has largely been driven by efficiency requirements.
3. Appropriate for Learning, Training and Development Category because it is about learning, training and development.
4. Novel or interesting aspects: the impact of 12hr shifts is of increasing interest (as above); as yet no one has looked at the impact of these shifts on training and development.
5. Stimulating and useful? It is very much about training and development in practice and the realities of this. The audience will hopefully learn from the practical insights we have gained from working on the project.
6. Public find useful? The public are users of the NHS so may be interested in the context in which NHS teams work and develop.
7. Materials: an electronic version of the presentation will be made available on the Real World Group website.

References


Perceived mentor affirmation: The key to mentee well-being?
Mubeena Nowrung, Madoka Kumashiro and Nigel Guenole, Goldsmiths, University of London

Category: Wellbeing and Work

Introduction
A mentor is a more experienced and knowledgeable individual providing guidance and support related to career and personal development to a less experienced individual (the mentee) (Kram, 1985). Despite the large number of studies highlighting the positive impact of mentoring on mentee outcomes, literature reviews converge in reporting a lack of theory to drive data collection and explain the processes underlying the mentoring relationship. A dearth of experimental studies is also noted (Allen, Eby, O'Brien & Lentz, 2008). This study aims to address these gaps by 1) applying a novel theoretical perspective, the Michelangelo Phenomenon (Drigotas, Rusbult, Wieselquist & Whitton, 1999) to conceptualise the mentoring relationship, and 2) using a between-subjects experimental design.

The Michelangelo phenomenon, a model of interpersonal growth and behaviour, asserts that partner affirmation (partner behaviours consistent with the other’s ideal self) promotes movement towards one’s most valued self-goals, which in turn leads to greater personal and relationship well-being. While previous research supports the model mainly in romantic relationships, it can be applied to any highly interdependent relationship (Kumashiro, Rusbult, Wolf & Estrada, 2006). We therefore propose that the Michelangelo phenomenon can also be applied to the mentoring relationship. Specifically, the key to effective mentoring may lie in mentor affirmation: mentor behaviours and beliefs consistent with mentees’ most important career goals. Mentor affirmation is expected to contribute to greater movement towards important career goals, which subsequently enhances personal well-being among mentees.

Drawing upon the literature on the Michelangelo phenomenon, two hypotheses are formulated:

1. Higher perceived mentor affirmation will be associated with greater movement towards mentees’ most important career goals.
2. Movement towards most important career goals will mediate the relationship between perceived mentor affirmation and mentee personal well-being, operationalised as positive affect.

Study 1

Method

Participants
Participants were 102 undergraduate Psychology students; 19.6% male and 78.4% female, mean age = 21.9 years (SD = 4.60).

Procedure
Participants were randomly assigned to one of four conditions differing in degree of affirmation displayed by a hypothetical mentor: affirming, disaffirming, indifferent, control. Affirmation was manipulated using vignettes. In each condition, participants read a paragraph describing the corresponding mentor and were asked to imagine interacting with that mentor. They then reported how they expected to feel as a result of these interactions using the measures described below.

Measures

Expected mentor affirmation. Using a 24-item scale adapted from Michelangelo research (Kumashiro et al., 2006), participants rated on a 5-point Likert scale the extent to which they perceived the mentor to be affirming (e.g. ‘I believe mentor A would reliably assist my attempts to accomplish my most important career goals when I ask her to’). Higher scores indicated greater expected mentor affirmation (α = .93).

Expected movement towards most important career goals. Using a 4-item scale adapted from Michelangelo research (Kumashiro et al., 2006), participants reported on a 5-point Likert scale, the extent to which they expected to progress towards career goals in four domains (specific career goals, professional skills and knowledge, interpersonal skills, overall work ideal self). Higher scores indicated greater expected movement (α = .87).
**Expected positive affect.** Using a shortened version of the positive affect subscale of the ‘Positive and Negative Affect Schedule’ (PANAS) (Watson, Clark & Tellegen, 1988), participants indicated on a 5-point Likert scale the extent to which they expected to experience the following emotions: ‘interested, excited, enthusiastic, determined, attentive’ as a result of working with the mentor. Higher scores indicated greater expected positive affect (α = .87).

**Results**

The data were analysed using SPSS for Windows 22.0. A manipulation check indicated that, on average, those in the affirming (M = 3.98, SD = .48) and control conditions (M = 3.85, SD = .47) expected the mentor to be more affirming than those in the disaffirming condition (M = 3.39, SD = .59), (F(3,98)= 4.76, p = .004).

As predicted, ANOVA results indicated a significant mean difference in expected positive affect across conditions (F(3,77)= 3.99, p = .01). Post-hoc analyses using Bonferroni correction indicated that participants in the affirming condition (M = 4.02, SD = .61) expected to experience greater positive affect than those in the disaffirming (M = 3.35, SD = .90) and indifferent conditions (M = 3.50, SD = .93).

The Michelangelo model was analysed as a mediator model using bootstrapping. Bootstrapping provides a confidence interval for the indirect effect of the independent variable on the dependent variable through the mediating variable; mediation is significant if the 95% bias-corrected confidence intervals for the indirect effect do not include zero (Preacher & Hayes, 2004).

As predicted, participants expecting the mentor to be affirming expected to experience greater positive affect (F(1, 100)= 52.84, p < .001; β = .59, p < .001). Results based on 5000 bootstrapped samples indicated that both the direct (DE=.43, SE=.13, p < .001) and total effects (TE=.76, SE=.11, p < .001) of expected mentor affirmation on expected positive affect were significant. The indirect effect of expected mentor affirmation on expected positive affect through expected movement was also significant (IE=.34, SE=.10; lower 95% CI=.15, upper 95% CI=.56). Because zero is not in the 95% confidence interval, the indirect effect is significantly different from zero at p < .05. This implies that expected movement towards most important career goals partially mediated the relationship between expected mentor affirmation and expected positive affect.

This study was hypothetical in nature and based on a student sample. Therefore, a second study was conducted to investigate the applicability of the Michelangelo model in actual mentoring relationships.

**Study 2**

**Method**

**Participants**

Participants were 241 working adults; 46.1% male and 53.9% female, mean age = 34.8 years (SD = 10.4). 96.3% were in a work-related mentoring relationship at the time of the study, and 3.7% had been in one at most six months before the study. The mean duration of the relationships was 41.0 months (SD = 44.6). 57.3% of the relationships had been established informally through mentees’ personal networking with mentors, and 42.7% had been established formally through mentoring schemes.

**Procedure**

Participants were recruited via Amazon’s Mechanical Turk website, and were paid $1.50 for their participation. A self-report online survey consisting of the measures described below was used. Possible covariates including age, gender, duration and type of mentoring relationship (formal or informal) were also examined.

**Measures**

**Perceived mentor affirmation.** Using a shortened 12-item scale adapted from Michelangelo research, participants rated the extent to which they perceived their mentor to be affirming (e.g. ‘My mentor treats me in a way that is}
consistent with my career objectives’) on a 7-point Likert scale. Higher scores indicated greater perceived mentor affirmation (α = .95).

**Movement towards most important career goals.** Using a 5-item scale adapted from Michelangelo research, participants reported on a 5-point Likert scale the extent to which they had progressed towards career goals in five domains (specific career goals, professional skills and knowledge, interpersonal skills, other domains, overall work ideal self), as a result of working with their mentor. Higher scores indicated greater movement (α = .85).

**Positive affect.** Using the positive affect subscale of the ‘Scale of Positive and Negative Experience’ (SPANE) (Diener et al., 2010), participants indicated on a 5-point Likert scale the extent to which they experienced the following emotions: ‘positive, good, pleasant, happy, joyful, contented’, following interactions with their mentor. Higher scores indicated greater positive affect (α = .84).

**Results**

As predicted, participants perceiving the mentor to be affirming experienced greater positive affect (F(5, 229)= 22.87, p < .001; β = .57, p < .001), controlling for age, gender, duration and type of mentoring relationship. Results based on 5000 bootstrapped samples indicated that both the direct (DE=.24, SE=.05, p < .001) and total effects (TE=.38, SE=.04, p < .001) of perceived mentor affirmation on positive affect were significant. The indirect effect of perceived mentor affirmation on positive affect through movement was also significant (IE=.14, SE=.03; lower 95% CI=.08, upper 95% CI=.20). Because zero is not in the 95% confidence interval, the indirect effect is significantly different from zero at p < .05. This implies that movement partially mediated the relationship between perceived mentor affirmation and positive affect.

**Discussion and conclusions**

The current research tested the applicability of a new theoretical perspective, the Michelangelo phenomenon, to conceptualise the mentoring relationship. As predicted, mentees perceiving that their mentor affirms their most important career goals experienced greater positive affect. Mediation analyses indicated that this was partly because they experienced greater movement towards their most important career goals; this movement may make mentees feel that they can satisfy their motive for professional growth, resulting in enhanced positive affect. Also, having an affirming mentor may make mentees feel that their career plans are supported, resulting in positive feelings. These findings are consistent with those on Michelangelo research indicating that when their partners are affirming, individuals tend to experience greater personal well-being (Kumashiro et al., 2006).

In sum, the findings provide preliminary evidence for the Michelangelo model as an adequate framework to enhance our understanding of the mentoring relationship. “Affirmation” can have useful practical implications for mentoring relationships. Mentors, for example, can be made aware of this concept, and explained how by being affirming of mentees’ career goals they can facilitate movement towards these goals, subsequently making the mentoring experience more positive for mentees by contributing to their personal well-being.

**Relevance to conference theme**

The findings provide insight into one of the possible ways through which the personal well-being of individuals at work can be promoted: by having affirming mentors. Affirmation makes mentees feel that they are supported and that they can move closer to their most important career aspirations. This may be especially beneficial when facing challenges at work. The support and guidance they receive from affirming mentors may be key in assisting individuals to persevere in their chosen career path, and help them develop skills conducive for bouncing back from setbacks. Thus, affirming mentors can indirectly help foster resilience among individuals, enabling them to effectively face a rapidly changing and challenging work environment.
Audience and public interest
Our research conceptualises the mentoring relationship from a novel theoretical perspective and provides initial evidence for the validity of the Michelangelo phenomenon as framework to enhance our understanding of the mentoring relationship. The ideas and findings put forward thus respond to the call of researchers to advance theory development in the field of mentoring, and also have practical implications for mentoring schemes. Conference delegates are likely to find this stimulating and interesting. Also, the general public is likely to have been in mentoring relationships (as the mentor or the mentee) at some point in their career. They will therefore, to some extent, be able to relate the concepts discussed to their own experiences, and find the paper engaging and insightful.

References

Undergraduate engagement with proactive career behaviours: A goal-setting approach
Andrew Clements, University of Bedfordshire and Caroline Kamau, Birkbeck University of London

Introduction
Increasing numbers of graduates are competing for a finite quantity of desired jobs (Helyer & Lee, 2014, 2012). Consequently the “employability” of graduates is a strategic priority for the Higher Education sector (Tomlinson, 2012). Employability may be defined as a set of understandings and achievements that foster career success (Knight & Yorke, 2004) or the ability of an individual to gain and keep desired employment (Rothwell & Arnold, 2007). Individuals who perceive their employability as greater feel less job insecurity (De Cuyper, Mäkikangas, Kinnunen, Mauno, & De Witte, 2012), and may therefore be more resilient in a changing labour market.

There is a need to encourage greater undergraduate engagement with behaviours promoting employability (Tansley, Jome, Haase, & Maatens, 2001). There is evidence that students may lack a clear understanding of employability and its importance until their final year of study (Tymon, 2013). There is a need to examine factors enhancing student engagement with employability, and yet few studies (e.g. van Emmerik, Schreurs, de Cuyper, Jawahar, & Peeters, 2012) have explored employability using theories of motivation.

Theoretical underpinning
Goal setting theory (e.g. Locke & Latham, 2002) underpins the present research. Goal setting theory is a motivational theory which suggests that individuals perform better when they set challenging (but achievable) goals.
Important constructs in goal setting theory include self-efficacy (i.e. belief that one can achieve important goals), goal commitment (i.e. dedication to the goals chosen) and goal regulation (e.g. whether one is inclined to seek success versus avoid failure). The objective of the present study was therefore to test a model of goal setting theory in shaping engagement with behaviours that should enhance career success, and the impact of student workload on engagement with these behaviours.

**Hypotheses**
- Career goal commitment will moderate the association between mastery approach (tendency towards challenge-seeking) goal regulation and proactive career behaviours
- Academic workload will moderate the association between mastery approach and proactive career behaviours
- Employment-related workload will moderate the association between mastery approach and proactive career behaviours
- Proactive career behaviours will mediate the relationship between mastery approach and perceived employability

**Method**

**Design** – A correlational survey design was adopted for this study. The variables included were self-efficacy, mastery approach goal regulation, perceived academic workload and perceived employment workload; goal-commitment, proactive career behaviours, and perceived employability.

**Participants** – a sample of 407 undergraduate students was obtained for the present study. An attempt to seek a stratified sample was made by seeking access from departments representing both vocational and non-vocational courses, at a mixture of pre- and post-1992 institutions. The mean age of the sample was 22.95 (SD=6.92). Participants tended to be in full-time studies (86.3%), female (71.5%), and white British (58.1%).

**Materials**
- Self-efficacy – measured using the New General Self-Efficacy Scale (NGSE; Chen, Gully & Eden, 2001), comprising 8 items.
- Mastery approach goal regulation – measured using a 4-item sub-scale from the Achievement Goals for a Work Domain measure (Baranik, Barron & Finney, 2007).
- Perceived academic workload and perceived employment-related workload were both measured using the 3 item work pressure subscale of the Work Characteristic Measure (ten Brummelhuis, van der Lippe, Kluewer & Flap, 2008).
- Career goal commitment – measured using the Klein et al Unidimensional Target-free measure (KUT; Klein, Cooper, Molloy & Swanson, 2014), comprising 4 items.
- Proactive career behaviours – measured using the Proactive Career Behavior Measure (Strauss, Griffin & Parker, 2012). The measure consists of four subscales, each comprising 3 items. The subscales are career planning, proactive skill development, career consultation and network building.
- Perceptions of employability – measured using the Perceived Employability Measure (Kirves, Kinnunen, De Cuyper and Määkikangas, 2014), comprising 3 items.

**Procedure** – Participants were invited to complete an online survey, through email messages via departmental contacts or through posters distributed in departments. Participation typically lasted 10-15 minutes. Participants were given the opportunity to request a summary of the research findings, and the opportunity to enter a prize draw for one of three £20 Amazon vouchers. The prize draw was conducted once data collection was completed.

**Ethics** – This study complied with the BPS (2009) code of ethics and conduct. Participation was voluntary. No identifying information was required of participants, to preserve confidentiality. Participants provided passwords in
order to facilitate withdrawal of data. Participants had the option of providing an email address to enter the prize draw. Email addresses were kept separate from the data set. All data was kept on password protected computers.

Data analysis – Data were analysed using structural equation modelling (SEM). SEM is a method for testing the structure of hypothesised models through regression (Byrne, 2010). Guidelines provided by Sauer and Dick (1993) were followed in testing moderation and mediation in the theoretical model.

Results
The theoretical model showed a reasonably good fit for the data ($\chi^2=1187.313$, df=603, $p<.001$; CMIN/df= 1.97; RMSEA=.05; CFI=.93; TLI=.92; PNFI=.74; AIC=1461.31). This model explained 22.9% of the variance in perceived employability. However, not all hypotheses were confirmed.

The pathway from Mastery approach goal regulation to career goal commitment was significant ($\beta=.45$, $p<.001$), and the pathway from goal commitment to proactive career behaviours were also significant, suggesting that goal commitment mediated rather than moderated the relationship between mastery approach and proactive career behaviours.

The inclusion of workload measures in the model did not appear to change the pathways between mastery approach and proactive career behaviours. Thus workload did not appear to moderate the relationship between mastery approach and proactive career behaviours. Further, the only significant association in terms of workload was found between employment-related workload and networking, although this relationship was weak ($\beta=.12$, $p=.02$).

The final hypothesis, that proactive career behaviours would mediate the relationship between mastery approach and perceived employability, was partially accepted. Once proactive career behaviours were included in the model, the mastery approach-perceived employability pathway was no longer significant ($\beta=.07$, $p=.57$). Mastery approach was significantly associated with all proactive career behaviours with the exception of career planning ($\beta=.00$, $p=.97$). However, only skill development ($\beta=.26$, $p<.001$) and network building ($\beta=.18$, $p=.002$) were significantly associated with perceived employability. In the case of these two behaviours, the association between mastery approach and perceived employability was fully mediated.

Discussion
While two hypotheses were not supported, the results nevertheless suggest that career goal commitment and mastery approach orientation are relevant to understanding student engagement with proactive career behaviours. In most cases there was no association between workload perceptions and engagement with proactive career behaviours, with the exception of employment-workload linked to network building. Workload was measured by perceptions of pressure, which may have been inappropriate. Future research might instead test the link between academic and employment work with proactive career behaviours by instead the nature of tasks performed by students.

Not all proactive career behaviours appeared to contribute to students’ sense of their own employability. As van Emmerik et al (2012) note, individuals are more likely to act upon their perceptions of reality than “objective” facts. It is possible that students are not recognising the benefits of career planning or consultation. Alternatively, the lack of association may represent the more distant rather than immediate effects felt by engaging in planning behaviour.

Given the relevance of mastery approach and goal commitment to reported engagement with proactive career behaviours, we suggest that goal setting theory represents a useful framework for encouraging students to engage with proactive career behaviours. Further research should further this study by testing the impact of forming specific rather than vague career goals on student engagement with employability.

The contribution of this study to the conference programme
This paper is submitted for the learning, training and development category, due to its relevance for the career development of undergraduate students.
This study is novel in that little research appears to adopt a motivational approach to exploring undergraduate engagement with employability. It is likely to be of interest to delegates from academia, particularly those who are involved in supporting employability within their students.

This research is likely to be of interest to the public, e.g. students, in that it contributes to the development of an evidence base for supporting student employability. Of particular interest is that it raises the question of which behaviours students experience as most important.

Interactive element
It is anticipated that the presentation of the study will last no more than 30 minutes. Following this, a 10 minute discussion is planned, exploring how goal-setting may be used to enhance student engagement with proactive career behaviours. The discussion may also explore practical issues involved in managing student career goals.

References

F23 Short Paper
The influence of the occupational context on employees’ engagement
Luke Fletcher, Brighton Business School, University of Brighton
Category: Leadership, Engagement and Motivation
Introduction and Research Objectives

Engagement was first theorised by Kahn (1990, p.700) to describe ‘the simultaneous employment and expression of a person’s "preferred self" in task behaviours that promote connections to work and to others, personal presence (physical, cognitive, and emotional), and active, full role performances’. Engagement is argued, and evidenced, to be important for facilitating high levels of performance, wellbeing and health, particularly during challenging times (Schaufeli, 2014). Thus, it is a relevant topic for discussion on resilience in a challenging world.

Although research on engagement has flourished, there is a growing concern that most studies have not considered the impact of the wider organisational context (Jenkins and Delbridge, 2013). This, as Purcell (2014, p.242), argues is ‘taking us backwards to a dangerously simplistic view of work relations’. The current study aims to address this concern by qualitatively exploring the role of the occupational context in shaping the lived experience of engagement.

The occupational context refers to the salient characteristics of occupational group the employee belongs to, such as skills, demands, qualifications, and experience. Some studies have highlighted how engagement within specific occupations may be affected by work conditions that are salient within that context. For example, Bakker and Bal (2010) showed that autonomy, performance feedback, and opportunities for development are important for the engagement of starting teachers. Despite this, no studies have compared different occupational groups. Given that Kahn’s (1990) original qualitative study highlighted differences between the summer camp counsellors and the designers in the architecture firm in how their engagement was expressed, the occupational context may be a crucial way in which personal role engagement is experienced within an organisation. Therefore, the first research question (RQ) of this study is:

RQ1: What features of the occupational context are relevant to employees' lived experience of personal role engagement?

Another area to explore is the psychological mechanism that connects the occupational context with engagement. Kahn (1990) argued that meaningfulness, availability, and safety are the intermediary processes through which the wider organisational context exerts its effects on engagement. Meaningfulness connotes the feeling that one’s work role is personally valuable, significant and worthwhile; psychological availability refers to an individual’s psychological readiness to be engaged in their work role; and psychological safety signifies a sense that one can express one’s thoughts and feelings at work without fear of negative consequences.

RQ2: In what ways do meaningfulness, availability safety connect the occupational context with the experience of personal role engagement?

Methodology and Analysis

The research sites

Six medium-sized, UK-based organisations participated in the study: two manufacturing organisations, two professional services organisations, and two public sector organisations.

The manufacturing organisations. Box Co and Corrugated Co are family-owned manufacturing businesses that produce cardboard packaging for clients across the UK and parts of Europe. Each employs approximately 150 staff, who occupy a range of job roles from low-skilled machine operative job roles to highly-skilled engineering and design specialists through to administrative, organisational, and managerial roles. However, the majority of job roles can be categorised as production roles rather than office/ administrative.

The professional services organisations. Financial Co and Accountancy Co are medium-sized financial services businesses that provide accountancy services including bookkeeping, tax consultancy, and auditing. They both conform to a traditional LLP partnership structure, and employ approximately 250 to 300 staff. There are a range of office-based job roles from client-facing financial service roles to internally-facing support function roles. Although
the majority can be considered client-facing roles, there is a significant proportion that are internal support or organisational roles.

**The public sector organisations.** Council East and Council South are medium-sized local government authorities that provide public services, such as housing, planning, benefits, leisure and environmental services, with each employing approximately 500 officers. There are two main types of job role at both Councils: a) those within the service delivery functions – around two thirds are employed as generalists or specialists within one of the public services provided; and those within the corporate support functions - around one third are employed as generalists or specialists within the corporate area, such as IT or marketing.

**Sample characteristics**
A total of 151 participants across the six organisations were recruited; of which 124 completed the interview (i.e., 82% response rate). Sub-sample sizes ranged from 16 (Corrugated Co) to 26 (Council East). The interviewees reflected the job role, age, tenure and gender distributions of their respective organisations reasonably well.

**Qualitative interviews**
Semi-structured interviews were conducted with the 124 employees face-to-face at the respondent’s workplace. As engagement is a multi-dimensional concept, the interview was structured around each dimension (i.e., emotional – enthusiasm and positivity, cognitive – focus and attention, physical – energy and effort) of engagement in turn. Interviewees were specifically asked to describe their level of such engagement and explain why they felt that way. A cross-case thematic analytic approach was adopted.

**Results**

**Manufacturing Organisations**
A minority discussed how they did not have high engagement due to feeling a lack of overall variety and challenge. Although these individuals felt that their work roles were physically demanding, they felt they lacked intellectual stimulation through the design of their work tasks and the structure of their workdays. These individuals felt 'happy' with their job role, yet they felt 'bored' by the routine nature of their work. This indicates that some employees perceived that their occupational roles did not give them enough varied and challenging work tasks, which reduced the perceived worth and value of the work role (i.e., meaningfulness) due to feeling that the role was stagnant in terms of developing and utilising one's skills and abilities. Another small minority discussed how they did not have high engagement due to feeling a lack of connection with the product they were making and/or with the customers the products were sold to. However, there were a few individuals who did report moderate or high engagement due to feeling a meaningful connection with customers. These tended to be the administration and sales staff who had direct contact with customers rather than those in production roles.

**Professional Service Organisations**
The majority described how their engagement was fairly high due to the professional nature of the occupation. The occupation as a 'professional services worker' offered a wide variety of challenging tasks that utilised the individual's skills. It was particularly the way in which the occupation was directed towards 'adding value' to clients' businesses that fostered meaningfulness. Moreover, this sense of meaningfulness seemed to be shaped by the occupational identity of being a 'professional services worker'. It was how this identity was perceived by the individual in relation to their life history, career experiences, and other social identities, that primarily influenced engagement. For some there was a good level of congruence between their 'actual' and their 'ideal' perceived occupational identities. This helped maintain fairly high levels of engagement as the individual felt that their occupational role reflected important aspects of their self-concept. However, for a small minority there was some incongruence or disconnection between their 'actual' and their 'ideal' perceived occupational identities. This made it more difficult for the individual to fully engage because they felt that their occupational role did not completely reflect important...
aspects of their self-concept. This may have also reduced availability as time and personal resources may have been used to ruminate on this incongruence.

Public Sector Organisations

A large proportion of interviewees described how their engagement was fairly high due to the professional nature of the occupation. The occupation as ‘public servant’ offered a wide variety of challenging tasks and activities that utilised the individual’s skills. It was particularly the way in which the occupation was directed towards helping the local community become more sustainable, and towards ‘making a difference’ to the lives of the general public, that fostered meaningfulness. Additionally, a significant number of interviewees discussed how they felt intrinsically motivated and a sense of duty as a public servant. This tended to be specific to their area of work that they felt particularly interested in rather than a general drive to work for the ‘public good’.

Discussion and Conclusions

Occupational roles that offered the employee a variety of challenging tasks and responsibilities helped foster engagement because the individual felt that their work roles were stimulating and that their skills were being utilised (Kahn, 1990). It was identified that production roles may not have offered high enough levels of variety and challenge needed to maintain high levels of engagement over the long-term, whereas accountancy and public sector roles provided sufficient motivational job design features needed for engagement. Related to this, occupational roles that provided the employee with regular opportunities to see the direct impact of, and build emotional connections with, the beneficiaries of their work helped the employee feel engaged because it strengthened and expanded the value and purpose of one’s work role. It was identified that those who had direct contact with customers had more opportunities to see the impact and build connections with beneficiaries than those that did not (Grant, 2007). Furthermore, occupational identities were particularly salient in professional services and public sector organisations because the types of roles and work activities reflected key features of particular identities. Employees varied in the extent to which they were engaged depending on whether these identities were relevant and congruent to their self-concept, and whether the occupational role was able to fulfill the needs and values of these identities. Thus, individuals seek to have their occupational identities affirmed through the characteristics of their job roles and the values of the organisation (Kahn & Heaphy, 2014). Finally, meaningfulness may constitute the core psychological process that connects positive occupational identities and characteristics with the experience of personal role engagement. These findings indicate that engagement theory should consider not just job design and work role fit as key antecedents of meaningfulness (Kahn, 1990), but also salient occupational characteristics and identities that strengthen the work role’s status, value and purpose (Wrzesniewski et al., 1997).

In conclusion, this paper presents a novel qualitative study that advances empirical research and engagement theory by showing how occupational roles and identities shape the ways in which jobs are designed, organised and interpreted, thus changing the extent to which individuals could engage with their work roles through the psychological process of meaningfulness. It may be useful and interesting to practitioners and the public as it draws on personal, individualised accounts rather than on quantitative survey measures, and in doing so identifies interesting and relatable aspects of the occupational role and one’s self concept that are relevant to engagement.

Note: Electronic copy of paper and slides to be made available before conference

References


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**F24 Short Paper**

**Putting the evidence into practice: applying the results of a validation study**

**John Hackston**, OPP Ltd and **Andrea Olseski**, BGL

**Category:** Psychological Assessment at Work

**Introduction and background**

In recent years, there has been a growing movement to implement evidence-based practice in occupational psychology and HR (Briner and Rousseau, 2011). There is however a lack of agreement, even in the academic community, about what the evidence shows and how it should be applied to practice (Guest and Zijlstra, 2012). One way around this problem may be to carry out local research, but even here collecting and presenting the evidence is only the beginning of the process; there are many pressures acting to prevent organisations from acting on the results of research (Klehe, 2004). This paper describes a case study where the practice of selection has been based on evidence, and will present the situation from the perspectives of both the client organisation and the occupational psychologist.

The client, a large financial services and consumer insurance group, wanted to enhance the way in which it selected Customer Service Representatives for its contact centres. In particular, it wanted to identify the personality factors that would drive the competencies most strongly related to performance in this role. The initial decision, based on the available evidence, was to use the 16PF personality questionnaire (Russell and Karol, 2002).

Guidelines for good practice, such as the ITC guidelines on test use (ITC, 2013), stress the importance of choosing tests on the basis of validity evidence. Experience suggests that this advice may often be ignored in real-world practice; however on this occasion the client was keen to base its selection and development processes on firm evidence. Initially, the client’s staff had intended to run a study themselves, with just 30 high-performing representatives taking part; however, after attending training to use the 16PF, they realised that a larger-scale study, with a larger population and a wider range of performance, would provide more solid evidence. At this point the client decided to work in partnership with occupational psychologists, and after consultation, a validity study was set up. In our conference presentation, we will describe this process and touch on some of the pitfalls and misconceptions that can occur when setting up a validity study.

**Validation study**

**Methodology**

110 representatives completed a personality questionnaire, the 16PF 5th edition. This gave scores on 16 scales or “factors” of personality and was also used to predict each person’s potentiality against a range of 20 competences. As measures of job performance, Customer Satisfaction (CSAT) and First Call Resolution and Next Issue Avoidance (FCR/NIA) ratings were collected for the previous 6 months. In addition, Customer Experience Coaches (team leaders) rated each of their representatives against 6 behavioural competencies: Customer Focus, Development, Get Things Done, Resilience, Team Work and Influencing. Data was also collected on the gender, age and tenure of each representative.
Results
Compared with the general population, the Customer Experience Representatives were on average:
- Less Self-Reliant – more group-orientated, happy to be part of a team, and with a preference for group decision-making (Cohen d = 0.8)
- More Socially Bold – more socially confident and willing to take risks than most (Cohen d=0.5)

In predicting CSAT and FCR/NIA, the better representatives were more Dominant, more Warm, and less Private (more forthright and self-disclosing).

Representatives who were more Emotionally Stable and less Vigilant (more trusting) tended to be rated as a better performer by their coach. Of these ratings, resilience was most clearly related to personality. Development was not significantly correlated with any of the personality scales or derived variables.

**Correlation of 16PF factors with Coach ratings**

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<tr>
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<th>Warmth</th>
<th>Emotional stability</th>
<th>Vigilance</th>
<th>Abstractedness</th>
<th>Tension</th>
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Implementing the findings

Presenting the results
Following data collection and analysis, the findings were presented to the client’s executive board. The board were of course interested in improving future selection, and in our conference presentation we will show some of the recommendations that were made, and the way in which they were presented. Straightforward illustrations were used rather than formal utility analysis, given concerns about the acceptance of such methods (Cabera and Raju, 2001). The board were also interested in other aspects of the research, including the personality profile of the Customer Experience Representative population and the insight that Coach ratings gave into what was important to these team leaders (and in how this related to expected future industry trends).

Further research
Local validation studies can be useful, but are only one form of evidence. The client independently commissioned research from another consultancy, to look into the attributes of a “good performer” in the role. The results of this research matched closely with the findings of the 16PF validity study, providing further evidence for the use of the questionnaire.

Putting the evidence into practice
The client now uses the 16PF in selection of new representatives, based on the evidence from the validity study and from further research. Initially, they used a standard “profile report”, but found this too time-consuming; now they are using an automated selection system, Sirius, which is based around the 16PF and can be linked back to the factors identified in the research. By making administration, interpretation and decision-making more straightforward, the client can still base their selection decisions on solid evidence, while maintaining a cost-effective recruitment process.
Conclusion
All too often, recruitment practices are based on factors other than the objective evidence (König et al., 2010), but such evidence may be easier to collect and implement than many organisations fear. By speaking the language of evidence and demonstrable results, HR can have valuable leverage to persuade senior management to adopt objective assessment, despite pressures to the contrary. We will conclude our presentation with a checklist for organisations seeking to base their practice on the evidence.

References

F25 Short Paper
Promoting and assessing values in residential care using an SJT
Helena Edwards, Analise La Band, Vicki Ashworth and Fiona Patterson, Work Psychology Group
Category: Psychological Assessment at Work

Introduction
Concerns regarding the unsatisfactory treatment and care of patients in the health and social care system have been increasingly highlighted in recent years, most notoriously via the Mid Staffordshire NHS Foundation Trust Public Inquiry (Francis, 2013). The Francis Report (Francis, 2013) highlighted the significant impact of staff values and behaviours on the level of patient care, recommending increased emphasis on, and commitment to, common values throughout the healthcare system and the enhancement of recruitment practices, amongst other areas, to integrate such values. In addition, the costs of poor staff retention in the social care sector, in terms of both economics and service provision, have been highlighted as unsustainable (Skills for Care, 2011). This further highlights a need to consider recruitment practices which are fit for purpose in this context and resilient to the challenges posed by the political climate and the unfavourable press received by the sector.

With a public expectation of greater transparency in relation to how health and social care employers determine the suitability of their employees to provide safe and high quality care, employers in the health and social care context are under increasing pressure to demonstrate that their employees possess the appropriate attitudes and values to help and care for patients. Furthermore, these employers face the important challenge of ensuring their recruitment practices are fit to select the right people with the right values and behaviours to care for patients in a way that demonstrates compassion, dignity, integrity and respect. A robust selection tool that can provide resilience in the face of such challenges is of the highest importance.

The following research is a unique example in residential care of an employer seeking to implement a bespoke approach to selection which will enable them to effectively assess the alignment between prospective employees’
values and those of the client organisation. This paper presents an overview of the development of a bespoke values-based Situational Judgement Test (SJT) utilised as part of the selection process for recruiting frontline care staff. The bespoke approach poses several benefits, including increased stakeholder engagement and acceptance and provision of a more realistic and relevant job preview for potential applicants. The SJT development also forms part of a broader initiative to embed, articulate and promote a set of core values across the client organisation.

This paper is considered to be appropriate for the Conference strand ‘Psychological Assessment at Work’ as it presents a novel approach to values-based recruitment, specifically within the context of social care where there is an absence of any evidence-based literature. In addition, as there is limited evidence in the broader selection literature of the appropriate tools and methods for assessing values, the case study is well-placed to provide insight and have an impact in this area.

Conference delegates should find the session stimulating as we share some of the challenges faced in relation to stakeholder engagement and development of an SJT in this specific context. The session will provide insight into the practical development and application of values-based selection methods which conference delegates are likely to find useful, especially in view of the notable absence of examples within the research literature.

**Method**

As a selection tool, SJTs are growing in popularity because they have useful levels of face, content and predictive validity (see Lievens, Peeters & Schollaert, 2008; Christian, Edwards & Bradley 2010). There is also good evidence from healthcare settings that appropriately designed SJTs are a useful methodology to evaluate a range of professional attributes, such as empathy and integrity (e.g. Lievens & Patterson, 2011), both of which are considered important characteristics for Care Assistants to possess, based on initial consultation with stakeholders within the client organisation.

SJTs can also be used in settings where applicants have no prior job specific experience (e.g. at entry to University; see Motowidlo & Beier, 2010); this feature is particularly attractive for the client organisation who receive applications to the Care Assistant role from a large proportion of new job-seekers and individuals with very limited work experience in some cases. The decision to undertake development of a bespoke SJT for selection to the frontline Care Assistant role in the client organisation is therefore underpinned by research evidence.

The development of the bespoke selection tool plays a wider role, beyond informing the selection process, in promoting the values of importance in the Care Assistant role. The client organisation have undertaken a comprehensive branding activity to highlight the underpinning values expected of employees working in the organisation. The SJT will assist with embedding such values by clearly articulating and promoting them in the nature of the test content as well as the outputs being utilised to inform the subsequent interview process. The output of the SJT will be designed to provide recruiting managers with an understanding of the alignment between individuals’ values and those of the organisation, with suggested areas to probe further in relation to obtaining a true reflection of an applicant’s values and how they might be demonstrated. Furthermore, the SJT constitutes part of a refined attraction strategy aimed at inviting high quality applicants with values compatible with those identified as relevant for the Care Assistant role. The job-relevant SJT scenarios will provide a realistic job preview and representation of the organisational values, encouraging applicants to reflect on their suitability for the role and increasing the likelihood that highly unsuitable applicants will ‘self-select’ out of the application process.

Due to the development of a bespoke SJT being a novel approach in the residential care sector, a prototype SJT was developed as an initial proof of concept and in order to inform further development of the tool. In accordance with best practice, a collaborative approach to development of the tool involving current job incumbents and others closely involved with the role was undertaken. The prototype was intended to be used as an initial ‘proof of concept’ and to provide an opportunity to seek feedback on the content of scenarios prior to further development of the test. The initial prototype sample was limited (N=5) and therefore detailed evaluation data was unavailable, however the
majority of individuals agreed or strongly agreed that the content of the SJT items were of an appropriate level for those applying for a Care Assistant role.

As per the prototype development phase, Critical Incident Technique interviews were conducted with 12 subject matter experts (SMEs) from within the client organisation, who had experience working in the Care Assistant role, of managing Care Assistants or working closely with Care Assistants in allied roles (e.g. care home nursing). The purpose of these interviews was to elicit information to assist with the development of items for the SJT. Following the item development interviews, we conducted a detailed qualitative internal review of all items in terms of content and in consideration of best practice item development principles.

An item review workshop was held with SMEs, including Care Assistants, care home managers, and HR professionals from within the client organisation. The item content was reviewed to ensure that all items were fair and relevant; in addition, consensus was sought for each item in relation to the scoring key (correct answer). Any comments provided by SMEs or generated during the review process were recorded, with relevant updates to the items made as part of the review process. Following the review workshop, all content underwent a final internal QA and was finalised for piloting.

The SJT was administered via an online testing platform; applicants were presented with an introduction to the SJT (referred to as a ‘Scenario Assessment’), including an overview of the purpose and structure of the SJT. Following completion of the SJT, applicants were invited, voluntarily, to complete an evaluation questionnaire regarding their perceptions of the SJT; applicants were asked to respond to statements about the SJT’s relevance, appropriateness and fairness.

Results
The SJT was piloted with a total of 197 applicants, which is sufficient to allow robust psychometric analysis. Analysis suggests that the test has good psychometric properties and can differentiate between applicants. After removal of poorly performing items, the test was found to have an internal reliability of $\alpha=0.70$ (for 50 items).

In terms of group differences, there were no gender differences in performance on the SJT, however there was a significant difference in total score on the SJT between applicants who reported English as being their first language and those who reported that English was not their first language.

Applicant perceptions of the SJT were positive, with the majority of applicants agreeing that the SJT was fair, relevant and appropriate as part of the selection process for Care Assistants; feedback also indicates that the SJT was successful in providing a realistic insight into the role of a Care Assistant in the client organisation.

Discussion
The development and piloting of an SJT in this context has produced some encouraging results to inform measurement of the key characteristics and values required for effectiveness in the Care Assistant role. By conducting a pilot study with a good applicant sample size, we have acquired rich data in relation to the psychometric properties of the test and its constituent items. The pilot data provides good evidence that the test specification is suitable for this context, and that an SJT designed in this format represents a reliable measurement methodology to assess the key attributes required for Care Assistants at the client organisation.

Early consultation with the client organisation, as part of development of the SJT specification, highlighted some important considerations and potential challenges for measuring values in this context. The applicant population for which the SJT will be designed consists largely of individuals with a lower level of educational achievement, for whom English may be a second language and who may have limited or no previous experience in an employment context. A challenge therefore exists in being able to develop an SJT which accurately reflects the nature of the role
and values of importance, whilst ensuring test content is still accessible by individuals with a differing level of reading ability and work experience.

In addition, as the SJT has a wider role in promoting organisational values, both as part of attraction and selection activities there is a need to ensure engagement with the process and a commitment to delivery of values-based recruitment more broadly is achieved with internal organisational stakeholders. It is essential that recruiting managers across care homes in the organisation have an understanding of the purpose of the SJT and find the outputs both accessible and valuable in terms of providing additional insight regarding an applicant’s attitudes and values, beyond an understanding of their skills and abilities as obtained from other elements of the selection process. Furthermore, as the SJT outputs will be designed to inform subsequent interviews, we need to ensure recruiting managers feel more empowered to objectively and appropriately explore individuals’ values as part of the interview process, as informed by the SJT. Involvement of these individuals as well as other stakeholders as part of the SJT development process is intended to increase commitment to the use of this values-based selection tool.

References
Skills for Care (2011). *Care Home Recruitment & Selection Overview - Job Design Pilot Project in Residential Care*.

F26 Short Paper
The antecedents, communication and impact of workplace frustration: A qualitative perspective
Sophie Ward, Thomas Rhys Evans and Gail Steptoe-Warren, Coventry University
Category: Wellbeing and Work
Theories, Models and Research: Workplace frustration, which according to Spector (1978) is a result of ‘interference with goal attainment or maintenance that is caused by some stimulus condition within the organisation’, is becoming a significant issue for organisations, especially as it is linked to deviant behaviour (Elias 2013: 204). Deviant behaviour, also referred to as counterproductive work behaviour, can significantly harm an organisation and/or other individuals within the workplace (Klotz & Buckley, 2013), as it includes behaviours such as workplace violence, absenteeism, decreased productivity, employee theft and fraud (Spector, Fox & Domagalski, 2006). The latter of which is said to be one of the fastest growing crimes in the USA, costing organisations as much as $660 billion annually and accounting for 6% of losses in annual revenues (Meiners, 2005). Indeed, in today’s organisations workplace frustration is a significant issue, with frustrated employees now accounting for around 20% or more of an organisations workforce (Hay Group, 2013). It is therefore of high importance that frustration within organisations, and the way in which it is communicated, is fully understood so that successful interventions can be developed to provide individual and organisational benefits.

Despite workplace frustration being an ongoing issue within organisations (Hay Group, 2013), the area of frustration has often been neglected in organisational research, with only minimal studies having been carried out and consequential models appearing simplistic. Indeed, in line with Dollard et al’s (1939) frustration-aggression hypothesis and Berkowitz’s (1989) reformation of the hypothesis, the majority of research and models, such as that developed by Spector (1978), focus greatly on workplace aggression as a consequence of frustration (Berkowitz, 1989; Dollard et al., 1939; Fox & Spector, 1999; Spector, 1975: 1978: Storm & Spector, 1987), or on the impact of
frustration on performance (Lazar, Jones & Shneiderman, 2006; Libb & Serum, 1974, Mckinney et al., 1951; Spector, 1978). Some researchers have moved beyond Dollard et al’s (1939) assumption that ‘aggression is always a consequence of frustration’, identifying factors such as type A and B personality, which may have an influence on whether an individual shows their frustrations using overt aggression (Berkowitz, 1989). This research again, although useful, focuses solely on aggression as a consequence.

The above research is therefore limited in its explanation of workplace frustration, as it ignores the diverse range of potential consequences of frustration which may have a significant impact upon the individual and/or organisation e.g. psychological withdrawal, counterproductive work behaviours, anxiety and turnover. It also appears to ignore other important aspects of workplace frustration, such as, how frustration is communicated within organisations and, in particular, the methods used to do this. This is of particular importance, as if communicated in the right way, communicating frustration could potentially be positive for an organisation, bringing about positive change. If communicated in the wrong way however, it could be extremely detrimental to the organisation, as well as the individual themselves and their relationships, resulting in issues at an individual, group and organisational level.

In an attempt to modernise and expand further the current understanding of workplace frustration, the current study adopts the qualitative perspective. A critical incident-based questionnaire was completed by over one-hundred employed individuals, who each detailed a recent example of frustration they experienced at work. The qualitative data captured explored the cause of, and reaction to, the frustrating experience. The comments were analysed using Thematic Analysis (Braun and Clarke 2006) to explore the key themes of the discourse.

With regards to the causes of workplace frustration, four key themes were identified; contractual concerns (both actual and psychological), demands, work environment, and communication. Three themes surrounding the reaction to frustration were developed, representing the affective (aggressive and non-active), behavioural (positive and negative) and cognitive (withdrawal, control and professionalism) components of their response. Quotes illustrating these superordinate, and subsequent subordinate themes will be presented, alongside supportive information from the quantitative data collected.

Results suggest workplace frustration can be caused by a multitude of factors, and that a holistic and contextualised perspective is needed to advance understanding. Results also suggest that the importance placed upon aggressive responses to workplace frustration has been over-emphasised by the past literature, and that there is a smorgasbord of potential responses, use of which partially depends upon the level of perceived control and importance of professionalism. Results provide novel additions to the literature on workplace frustration, and associated fields e.g. emotion work, and provide the structure for a more detailed understanding and model of workplace frustration from which interventions can be developed. As such, recommendations for practice are explored and debated.

Note: The current research has been conducted in line with the relevant institutions Ethical guidelines, as well as the Health and Care Professions Council’s (2012) Standards of Conduct, Performance and Ethics, and British Psychological Society’s (2009) Code of Ethics and Conduct principles. Ethical considerations such as anonymity, and a participant’s right to withdraw, were addressed by using unique participant numbers and informing participants of their right to withdraw from the study at any time before fourteen days after participation.

Resilience in a challenging world: As mentioned previously, workplace frustration is becoming a significant issue in today’s organisations, with frustrated employees now accounting for around 20% or more of an organisation’s workforce (Hay Group, 2013). This is not surprising given the extraordinary demands of today’s fast-changing world which are impacting on the world of work. Indeed, as a result of rapid changes internal and external to organisations, including that of new technology which has been highlighted in recent media (The Guardian, 2015) and the current economy (OECD, 2014), many more causes of workplace frustration have emerged. Moreover, there has been an increase in the number of methods in which a frustrated employee can communicate their frustration and harm the
organisation or other individuals in the workplace (Klotz & Buckley, 2013). These rapid changes have resulted in an inability of the academic literature to maintain its relevance and usefulness, and therefore it is important that modern research into workplace frustration is conducted. The current research therefore highlights the most up-to-date understanding of the causes and communication of workplace frustration, as well as recommendations for reducing this frustration. This will likely be of great value to organisations, practitioners, researchers and the wider community. This will help organisations and individuals to develop a greater understanding of workplace frustration to face today’s challenging environment, and work towards a more sustainable future.

Wellbeing and Work: This research is of high importance to wellbeing and work as it will focus on the experience and management of emotions in the workplace. In particular, it provides a more in-depth understanding of frustration, an emotion that can have a significant negative impact on an employee’s wellbeing and productivity, as well as on their organisation as a whole. As the experience of employee frustration within organisations is increasing, it is imperative that organisations, practitioners and researchers gain a wider understanding of the causes of frustration, the way it is communicated and the consequences, so that ways of reducing frustration and dealing with frustration positively can be sought, bringing about individual, team and organisational benefits.

Novel and Innovative Aspects: As stated previously despite workplace frustration being an ongoing issue within organisations, the area of frustration has often been neglected in organisational research, with only minimal studies having been carried out and consequential models appearing simplistic. The majority of past research conduct is also limited, and due to rapid internal and external changes to organisations the research is also outdated. The current research however will provide delegates with novel insights, supported by a broader and modernised understanding of workplace frustration, as well as ideas for reducing workplace frustration and further research within the area which will be highly informative.

Stimulating and Useful Aspects for Delegates and Public: As a common and salient experience but frequently taboo topic, workplace frustration is a field of significant interest for delegates and the public. The current research hopes to engage with this interest to educate on the intricacies of frustration in the workplace, to provide delegates, and the public, with a better understanding of the experience. Furthermore, practical recommendations for how frustrating experiences can be better prevented and managed will be discussed in detail. Considering both the theoretical and applied perspectives, the current research will be of significant interest to the general public, academics, and practitioners.

Materials: A copy of the presentation will be made available for all to access online, and printed hand-outs will also be available on the day for all delegates. Contact details will be provided to encourage questions, debates, and collaborations post-conference.

References:
F27 Short Paper

The 'state' of engagement and the importance of basic psychological needs

Emily Pepin, Aimia inc. / City University London

Category: Leadership, Engagement and Motivation

Introduction

At their finest people are self-motivated, curious, and inspired. They strive to master new skills and apply their unique talents and strengths. This assumption forms the foundation of self-determination theory (SDT, Ryan & Deci 1991) and within organisational psychology can uncover how positive employee outcomes are energized and maintained. Self-determination theory (SDT) proposes that when basic psychological needs are fulfilled optimal growth and development is fostered (Deci & Ryan, 2011, Ryan & Deci 2000, Baard, Deci, & Ryan 2004).

This study explores drivers of work-engagement as defined by the Job demands-resources model (JD-R), using basic psychological need satisfaction (BPNs) as a guiding framework. Primarily the role of intrinsic motivation, as acquired through daily Basic Psychological Need satisfaction (BPNs) and its influence on daily work-engagement is examined.

Self-Determination Theory in Organisations
Needs are fundamental determinants of human behaviour (Latham & Pinder 2005 more refs), three universal psychological needs are at the core of SDT, when satisfied cultivate thriving over surviving (Deci & Ryan 2000). The extent to which the needs of competence, autonomy and relatedness are satisfied influence the degree of autonomous motivation experienced (Deci 2005). Autonomous motivation is “behaving with a full sense of volition and choice” facilitates a superior sense of wellbeing in contrast to experiencing purely controlled motivation (Deci & Ryan 2007). An autonomously-motivated individual will pursue certain tasks for the enjoyment experienced not for extrinsic rewards (Ryan & Deci 2000). In contrast with extrinsic motivation when individuals pursue activities contingent on external pressure therefore behaviour driven intrinsically is thought to be higher quality (Deci & Ryan 2008). This study focuses on understanding the cultivation of intrinsic motivation in organisations as this paves the way for facilitation of superior well-being and performance in employees.

**The Three Basic Psychological Needs**

Autonomy is feeling one has control over the environment and experiencing a meaningful rationale behind behaviours. Competence is similar to self-efficacy in that it engenders self-belief but also proposes individuals need to feel a sense of mastery within their immediate environment and a confidence in their ability to cope with even the most difficult situations. Relatedness is the need to feel connected to others in a given environment, to feel a sense of belongingness with a particular place (Deci & Ryan 1989).

**Work-engagement and the Job Demands-Resources Model**

Engagement is an affective connection with work, when jobs are challenging, inspiring, and fulfilling (Bakker, Schaufeli, Leiter & Taris, 2008). This study views engagement as an independent construct characterized by vigor, dedication, and absorption (Bakker, Schaufeli, Leiter, & Taris, 2008) Vigor is the experience of high levels of energy and mental resilience and willingness to expend effort even during difficulties. Dedication reflects a strong desire to invest in ones work, experiencing enthusiasm, pride, and inspiration. Absorption is described as being fully engrossed and concentrated on ones work.

Early research illustrated engagement as a persistent affective-cognitive mind-set (Schaufeli, et al 2002). Whilst this assumed stability may be true of an individual’s attitude towards work, it cannot explain why an engaged employee experiences engagement fluctuations around their baseline, nor explain the antecedents surrounding it. State work-engagement, manifesting as a feeling, is likely related to real world events than judgements and likely yields much more theoretically valuable insights than investigating trait engagement alone. Bakker and Bal (2010) explored weekly work engagement with 54 Dutch teachers, assessing the relationships between weekly resources and work-engagement. A positive relationships was found. This study provides evidence of the short-term impact of job-resources on work-engagement. In summary this state perspective can begin answering when employees are most engaged and accounts for individual differences aligning with both JDR and BPNs theories.

**Transient BPNs and Engagement**

This study aims to provide support for the importance of BPNs in the JD-R model creating an updated model for work-engagement that is also relevant at a day-level. Van den Broeck et al 2008 found that BPNs partially explained the relationship between job-resources and vigour. In other words employees within a resource-rich environment will be more likely to experience heightened psychological freedom (autonomy), they may feel effective in their role (competence) and they will feel connected to others at work (relatedness), resulting in increased work-engagement (Van den Broeck, et al 2008, Lindenberg 2001). Therefore it is expected that BPNs mediates the relationship between resources and engagement at a daily level.

**Hypothesis**

Daily basic psychological needs mediate the relationship between day level resources and daily self-reported engagement.
Participants
86 Participants from 4 different offices within 1 organisation. The sample consisted of 53 females, the majority of the sample were on a full-time contract and permanent (72), 2 participants were part-time out of these 3 were contractors and 12 did not answer. The participants ages ranged from 22 to 63 with a mean age of 32.81 (SD 7.5). Participants were from a range of organisational and educational levels.

Procedure
Participants were recruited via seminars and were informed the study was about their individual working style, they were sent a standardised information sheet and instructions for the study. First an initial questionnaire captured demographics and the trait measures. At the beginning of the initial questionnaire participants were required to read anonymity and confidentiality declaration, confirm they were over 18 and consent to take part in the study, it was highlighted they could withdraw from the investigation at any time. Participants were required to complete daily questionnaires in the last hour of their working day. Daily links were automatically put into their work calendar for the 10 working days to reduce attrition.

Measures
Trait
Demographics
General Level Work Engagement UWES 9 item.
General Level Basic Psychological Need Satisfaction

State
Engagement modified UWES 9item
Basic psychological need satisfaction
Job-resources

Hypotheses Testing
This analysis assessed comprised 4 nested multilevel models for comparison. The ICC calculated from the null was .536. In other words, 53.6% of the variance within state work-engagement is attributable to differences at the person level, supporting the use of the multilevel method. In short the fit was significantly improved by Model 3 (difference -2 X log = 112, df=27, p<.001). Specifically day-level BPNs was shown to be a significant predictor (p=<.001), suggesting that on days when individuals experience a higher degree of BPNs also reported increased state work-engagement. The significant effect of job-autonomy present in earlier models disappeared. Indicating presence of a mediation of the relationship between job-autonomy and state-work engagement via BPNs.

Discussion
The main aim of this study was to provide support for the addition of BPNs as an important explanatory variable behind day-specific engagement. It was hypothesized that BPNs would mediate the relationship between resources and engagement. These analyses revealed that not only daily reported BPNs positively predicted day-specific work-engagement but also a potential mediating effect was uncovered. Such that, BPNs may mediate the relationship between job-autonomy and state-work engagement, supporting the hypothesis suggesting that BPNs is an important addition to the JDR model at a daily level. This finding extends a previous cross-sectional study (Van den Broeck et al 2008).

JDR and SDT acknowledge that individuals and environments will differ in perceived salient resources; there is no one formula that is right for every employee just as no employee will thrive in every environment. Therefore theories suggesting the cultivation of a generic resource is unwise (e.g. demands control, and demands control support, Karasek & Theorell 1990, De Lange, Taris, Kompier, Houtman & Bongers 2003) not everyone employee may find the particular resource valuable, this merger assumes individuals are the creators of their own bespoke
environment and only one “algorithm” will be optimal for them. As such the opportunities employees have to gain salient resources and fulfil BPNs instead of the actual need or resource strength or what specifically these might be is most salient for employee wellbeing. This proposition is supported by the present studies finding and previous findings (van den Broeck et al 2008) that BPNs mediate the relationship between job-autonomy at least implies that whatever significantly influenced that resource to predict engagement maybe encompassed within BPNs, for example by the need of autonomy. In other words by accepting that different environments will fulfil needs differently, one also accepts that people will find different environments “fulfilling” depending on the activities/aspects they hold salient (Greguras, & Diefendorff, 2009).

Such is the relationship between BPNs and resources that BPNs could buffer negative impact of demands within the working environment the same as resources. BPNs may facilitate stronger buffering effects against job-demands due to optimal wellbeing. Indeed research has shown (Parker, Jimmieson, & Amiot 2009) that employees experiencing high self-determined motivation within an environment that permitted high job-control also reported amplified engagement. Those low in self-determined motivation still found autonomy useful for buffering demands but also reported higher stress-related health complaints. Implying that high-self-determined motivation enhanced the buffering effect of salient resources.

In conclusion then this could mean that resources may be categorised into the 3 groups reflecting BPNs creating a meaningful, yet organised framework for understanding how optimal engagement is facilitated. Theoretically this is an exciting proposition, as two prominent employee well-being and motivational theories are merged. Offering a more parsimonious yet thorough illustration of employee engagement and the underlying explanatory mechanisms that maintain and energise it.

**Practical Outcomes**

Practical outcomes of this study aim to equip individuals with relevant insight to make decisions about their role, this will cultivate a culture that allows people to understand and increase important job and personal resources giving them the ability to thrive at work, not just survive and Individuals resilience at work is heightened. Indeed findings from this study are being applied directly within an organisation. Specifically they are helping cultivate an advanced approach to engagement using daily level measures. This new approach to employee engagement and wellbeing interventions shows how as scientific practitioners we can give scientific, relevant and real time insights to the key drivers of optimal functioning in employees. This approach focuses on increasing the individual’s propensity to adapt and deal with a work environment, one that changes on a daily basis.

**Conclusion**

This study provides preliminary evidence for extension and adaptation of the JDR model. It is clear that BPNs is critical for cultivating vitality, growth, development, well-being and engagement at a day-specific level. Thus creating a more accurate theoretical model reflecting the relationships influencing employee’s everyday experiences. Importantly employees may need to create bespoke resource ‘formulas’ directly aligned to their conception of BPNs. This study provided support of the importance of this daily BPNs for the cultivation of optimal well-being in employees with exciting practical applications.
The subject of gendered leadership, specifically the gender inequality in senior leadership roles, continues to be of interest globally to organisations, politicians, the media and the public, with international targets for female leadership representation in the boardroom, (Director, 2015). The 2013 governmental Davies Report recommended a target of 25% female representation on all UK FTSE 100 organisations by 2015. By January 2015 the target figure had not been achieved, however, the recent 2015 Cranfield Female FTSE Board Report suggests that the UK FTSE 100 Executive Boards are likely to achieve the 25% target of female representation by the end of this, (2015), year.

Eagly’s, (1987), gender role theory, Schein’s, (1973), think manager–think male paradigm; Heilman’s (1983) lack of fit model as applied to leadership roles; Eagly and Karau’s (2002) role congruity model and the masculinity-femininity paradigm, all suggest that culturally, leadership stereotypes, particularly senior leadership stereotypes, are masculine ones.

There are several different approaches within the literature which go some way towards explaining the global situation that women do not often occupy managerial, especially senior managerial and leadership, positions. For example, Eagly and Karau’s (2002) Role Congruity Theory explains the lack of women in higher leading positions by suggesting that gender roles and leadership roles are often not congruent to each other, with the female gender roles being stereotypically contrary to leadership roles. Therefore women are perceived as ‘the wrong fit’ for leadership roles, because classic leadership behaviours such as assertiveness and decision-making are perceived as more masculine behaviours.

Snaebjornsson and Edvardsson, (2013), focused on leadership, gender and nationality. Consistent with Schein’s, (1973), think manager–think male paradigm; their research identified that although women and men are seen as equally efficient in leading positions, women, (more than men), tended to believe that a successful manager has to be male. Additionally, because their meta research included papers from America, Asia, Africa and Europe, this appears to suggest that these findings may be consistent around the world. A finding which echoes Koenig et al’s (2011), meta-analysis of three research paradigms, all exploring whether leader stereotypes are masculine. Apparently, they are. (See also Schein and Davidson, (1993)).

Another concept which might go some way in assisting us to understand the lack of women in leadership is the so called ‘imposter syndrome’. This suggests that women in leading positions are more likely than men to feel like impostors as they do not feel intrinsically worthy of, or capable of doing, the leading role, (Boots & Biggs, 2014).

In a juxtaposition to the usual approaches of personality typing, Brown, Acevedo, and Fisher, (2013), developed The Fisher Temperament Inventory, (TFI). In a novel approach to understanding gendered leadership perspectives, this author has applied the premise of the TFI temperament types to the study of leadership styles for the first time.

The TFI identifies four suits of behavioural traits associated with four broad neural systems; Curious/Energetic; Cautious/Social Norm Compliant; Analytical/Tough-Minded and Prosocial/Empathetic. These four broad temperament types have also been referred to by Fisher, (2009; 2013), and Fisher et al. (2010), as: The Explorer for Curious/Energetic; The Builder for Cautious/Social Norm Compliant; The Director for Analytical/Tough-Minded and The Negotiator for Prosocial/Empathetic.
In two parallel 2013 studies, Brown et al. used the item statements of the TFI to elicit different thoughts and feelings within participants, which were monitored via functional magnetic resonance imaging, (fMRI). Scores for the Curious/Energetic temperament type co-varied with activation in the substantia nigra, which is consistent with activation in the dopamine system. Scores for Cautious/Social Norm Compliant, behavioural traits linked with serotonin, co-varied with activation in the ventrolateral prefrontal cortex which is also consistent with serotonin activation. Scores for Analytical/Tough-Minded co-varied with activity in the brain architecture of the occipital and parietal cortices which are also associated with visual acuity and mathematical thinking, which are associated with the hormone testosterone. Finally, scores for Prosocial/Empathetic co-varied with activity in the inferior frontal gyrus, the anterior insula and the fusiform gyrus; all regions of the brain associated with mirror neurons and empathy, which in turn are associated with the oestrogen/oxytocin hormonal system.

In summary then; Curious/Energetic, Explorer traits may be said to be associated with dopamine; Cautious/Social Norm Compliant, Builder traits with serotonin; Analytical/Tough-Minded, Director traits with testosterone, and Prosocial/Empathetic, Negotiator traits with Oestrogen and oxytocin.

The hormone testosterone is associated with cognitive focus, drive and competitiveness. High testosterone levels have also been found to correlate with a reduced use of words related to social connections and concern for others, (Pannebaker et al., 2004), suggesting that higher levels of testosterone seem to make people more competitively driven and more ‘I/Me’ focused. Hypothetically, the more directive and focused approach of the Director can theoretically be correlated with a Transactional leadership style where discrete tasks are rewarded or punished within the highly structured confines of the organizational relationship, where leadership ‘power’ is explicit, legitimate and if necessary, coercive, (Bass, 1985 and 1990).

The oestrogen/oxytocin hormonal system is associated with nurturing traits, pro-social activities and high levels of trust. Relationships and people are paramount to the Negotiator temperament type, which can be theoretically correlated with a Relational leadership style where the development of mutually supportive relationships between a leader and their colleagues and followers is critical.

The hormone dopamine is associated with adrenalin and noradrenalin which by turn correlate with increased risk taking behaviours, rule-breaking, levels of excitement, a low boredom threshold and a general lack of focused attention. The Explorer temperament type may be hypothetically correlated with a Charismatic leadership style where the leader engenders loyalty in their followers by the strength of their personality and ideas.

The hormone serotonin is a chemical neurotransmitter associated with moderating emotional, cognitive and physical behaviours. It is a general mood balancer associated with calmness, positive mood and sociability, with Brown et al. suggesting that it may be indirectly correlated with social norm compliance. The Builder temperament type may be hypothetically correlated with a Transformational leadership style, (Bass, 1985 &1990), where a pro-social normative approach to positive and lasting beneficial organisational change is often a primary leadership focus.

Despite being correlated to biological, hormonal drivers, the four temperament types are not determined by gender although there are some interesting correlations, (Brown et al. 2013). Fisher, (2009), has empirical data using a 40,000 participant, American general population sample, which suggests for example that a greater proportion of men have a Director/Transactional preference than women, and conversely, more women than men have a Negotiator/Relational preference. (These figures are not included here because of the submission word limit, however they will be included in the presentation and paper at the conference should it be accepted).

Applied to the gendered leadership debate for the first time, and at the leading edge of thinking around the subject, this paper explores the possibility that leadership performance may be related, at least in some part, to hormonal, biological factors, which may in turn correlate to certain leadership style preferences. The author posits that
perhaps differences in temperament types may provide a new and alternative perspective on gendered leadership. Moreover, greater understanding of an individual’s temperament type would also provide a new element within the approach to personal resilience, which is increased by self-awareness and self-understanding. Collectively, organisational resilience, particularly Board diversity and resilience, could potentially also be increased by a greater understanding of the temperament type preferences of which the Board is made up.

(1749 words including abstract and references)

References:


Cranfield University School of Management. (2015), Female FTSE Board Report.

Davies Report, (2013)


DOP02 Can CAT reduce test score differences across a range of demographic categories?
Sean Keeley, IBM

Category: Psychological Assessment at Work

INTRODUCTION
Computerised-adaptive testing (or CAT) systems are often credited with allowing groups which have historically done less well on psychometric tests to reduce the observed differences in test scores by taking time out of the test equation (Keeley and Parkes, 2015a). Historically, psychometric test use in the UK has involved the use of timed assessments and the literature suggested that timed assessments tend to disadvantage particular groups (Keeley and Parkes, 2015b). This implies that changes from timed to untimed assessments may advantage those groups more.

These studies examine the score differences for CAT (adaptive, untimed versions) versus non-CAT (static, fixed time versions) on some cognitive ability tests (specifically verbal, logical and numerical) looking at gender and ethnic differences, and see if the expected reductions in test performance differences take place.

BACKGROUND
CAT is a sophisticated test delivery method that creates and delivers a customized test for each examinee using computers, aiming to measure various psychological constructs such as ability, achievement, attitude and personality traits in the most efficient and effective ways. Compared to static, timed, multiple choice tests where everyone is required to take a fixed set of items and has a fixed amount of time in which to complete the tests, CAT generally has a variable amount of questions and is usually untimed.

WHY CAT MAY BE SEEN AS BETTER
There are many advantages recorded in the literature with regard to CAT (Linacre, 2000; Rudner, 1998) including:
Shorter duration (Average reduction of 50%+ in terms of number of questions (and therefore time taken)).
More reliable measure (Reliability calculated for each candidate rather than as a single figure for the test regardless of test taker)
More accurate due to adaptive nature of assessment (minimum SEM required) as CAT provides uniformly accurate scores across the latent trait being measured – this is not true of conventional fixed tests where the precision of measurement decreases for very low or very high scores (Thiessen & Mislevy, 2000)
Increased test taker motivation (less able candidates are not disheartened by increasingly difficult items; more able candidates are not frustrated by time taken to complete ‘simple’ questions).
Increased test taker experience (fewer questions, shorter duration, more tailored to the candidate)
Increased test effectiveness (greater differentiation based on actually cognitive ability rather than a combination of ability and processing speed)
Greater test security (reduced item exposure combined with greater ease of item bank replenishment)
More easily enhanced and updated
Immediate scores and feedback available (as with almost all online assessments)
Can result in lower testing costs due to a combination of many of the advantages already listed
Decreased administration time (both on-site and off-site)
More candidates assessed in the same time period via internet, unproctored settings.

THE STUDY
The study in terms of this paper involves two separate hypotheses: one involving gender and one involving ethnicity. In essence, both hypotheses are based on a single premise, generally that timed assessments have a greater effect on candidates from a background which may be perceived as having a disadvantage on psychometric tests.

Study 1: Comparison of changes in performance in terms of test performance for Non-CAT fixed length, untimed ability tests vs CAT variable length, untimed ability tests, based on differences in gender.

The general hypothesis being tested is that using CAT versions rather than non-CAT versions of the ‘same’ assessments results in a reduction in the difference between males and females on a series of cognitive tests. The comparison is directly between CAT and non-CAT administration.

Study 2: Comparison of changes in performance in terms of test performance for Non-CAT fixed length, untimed ability tests vs CAT variable length, untimed ability tests, based on differences in ethnicity.

The general hypothesis being tested is that using CAT versions rather than non-CAT versions of the ‘same’ assessments results in a reduction in the difference between ‘whites’ and ‘non-whites’ (and further divisions into more specific ethnic grouping) on a series of cognitive tests. The comparison is directly between CAT and non-CAT administration.

METHOD
The candidates were real-life graduate applicants to high-stake roles with a public sector organisation, and had taken a CAT version of three ability tests in English. The candidates were predominantly applying from the UK for roles in the UK.

All items in both the CAT and the non-CAT versions have been calibrated on a common scale, and IRT scoring is used for both versions (Lord, 1980). This ensures that the items have equal difficulty across versions. All of the versions (CAT and not-CAT) were administered and scored using IBM’s 2xAssess test platform.

The CAT tests were:
- IBM CAT Logical Reasoning (CAT LRT)
- IBM CAT Numerical Reasoning (CAT NRT)
- IBM CAT Verbal Reasoning (CAT VRT)

The non-CAT tests were:
- IBM Infinity Series Logical Reasoning (Infinity LRT)
- IBM Infinity Series Numerical Reasoning (Infinity NRT)
- IBM Infinity Series Verbal Reasoning (Infinity VRT)

The items in each set of tests were common i.e. the items in the CAT LRT were the same as the items in Infinity LRT. The item calibrations and norms apply were equal to ensure the

This was to ensure that there were no differences in the test scoring, merely the method of administration differed.

The candidates taking the non-CAT tests were from a 2014 applicant group while those taking the CAT tests were from a 2015 applicant group. They were not the same candidates but had applied for the same roles within the same organization. The qualifications, educational establishments and general demographics for each group were almost identical (this is in terms of total group composition). The items in each item bank were the same and the item calibration as well as the norms used were the same.

FINDINGS
Study 1: Comparing non-CAT and CAT (Gender)

Logical Reasoning Test (LRT): There was a small increase (+0.9 T-scores for the total group on the LRT. This is expected as the CAT administration tends to maximise performance, as the often artificial time restraint has been removed.
The increase for Females was +1.2 T-scores and the increase for Males was +0.6 T-scores. Whilst there was a larger increase for Females (which formed the lower scoring group in 2014), the increase was not significant.

Numerical Reasoning Test (NRT): There was a small increase (+1.3 T-scores) for the total group on the NRT.

The increase for Females was +1.4 T-scores and the increase for Males was +1.3 T-scores. Whilst there was a larger increase for Females (which formed the lower scoring group in 2014), the increase was not significant. The increase for NRT was larger than for the LRT which may reflect the more speeded nature of the NRT in comparison to the LRT.

Verbal Reasoning Test (NRT): There was a small increase (+0.6 T-scores) for the total group on the NRT.

The increase for Females was +0.5 T-scores and the increase for Males was +0.7 T-scores. Whilst there was a larger increase for Males (which formed the lower scoring group in 2014), the increase was not significant. The increase for NRT was larger than for the LRT which may reflect the more speeded nature of the NRT in comparison to the LRT.

Study 2: Comparing non-CAT and CAT (Ethnicity – ‘White’ vs ‘Non-White’)

Logical Reasoning Test (LRT): There was a small increase (+0.9 T-scores) for the total group on the LRT. This is expected as the CAT administration tends to maximise performance, as the often artificial time restraint has been removed.

The increase for ‘White’ was +0.8 T-scores and the increase for ‘Non-White’ was +1.1 T-scores. Whilst there was a larger increase for ‘Non-White’ (which formed the lower scoring group in 2014), the increase was not significant.

Numerical Reasoning Test (NRT): There was a small increase (+1.3 T-scores) for the total group on the NRT.

The increase for ‘White’ was +0.9 T-scores and the increase for ‘Non-White’ was +1.6 T-scores. Whilst there was a larger increase for ‘Non-White’ (which formed the lower scoring group in 2014), the increase was not significant. The increase for NRT was larger than for the LRT which may reflect the more speeded nature of the NRT in comparison to the LRT.

Verbal Reasoning Test (NRT): There was a small increase (+0.6 T-scores) for the total group on the NRT.

The increase for ‘White’ was +0.2 T-scores and the increase for ‘Non-White’ was +1.3 T-scores. Whilst there was a larger increase for ‘Non-White’ (which formed the lower scoring group in 2014), the increase was not statistically significant although the 1.1 T-score difference is notable.


Logical Reasoning Test (LRT): The increase for ‘White’ was +0.8 T-scores and the increase for ‘Non-White’ was +1.1 T-scores. When broken down further, the largest increase was for the ‘Black’ subgroup was +2.4 T-scores (which formed the lowest scoring group in 2014). The difference between the ‘White’ and ‘Black’ subgroups was still significant.

Numerical Reasoning Test (NRT): The increase for ‘White’ was +0.9 T-scores and the increase for ‘Non-White’ was +1.6 T-scores. When broken down further, the largest increase was for the ‘Black’ subgroup was +2.9 T-scores (which
formed the lowest scoring group in 2014). The difference between the ‘White’ and ‘Black’ subgroups was still significant.

Verbal Reasoning Test (NRT): The increase for ‘White’ was +0.2 T-scores and the increase for ‘Non-White’ was +1.3 T-scores. When broken down further, the largest increase was for the ‘Black’ subgroup was + 3.5 T-scores (which formed the lowest scoring group in 2014). Other large increases were experienced by the ‘Chinese’ group (+3.2). The difference between the ‘White’ and ‘Black’ subgroups was still significant.

COMMENTS
Study 1
The findings for Study 1 do not suggest that the CAT version has a significant effect on test scores based on gender. This is possibly due to the fact that there were only minor, insignificant differences in the test scores based on gender differences. Minor variations in test scores are as likely to be due to cohort differences (i.e. differences in the applicant pool across the years).

Study 2
The findings for Study 2 do not suggest that the CAT version has a significant effect on test scores based on ethnicity when considering a ‘White’/’Non-White’ dichotomy. This may be due to the fact that there were only minor, insignificant differences in the test scores based on ethnicity, possibly due to the composition of the ‘Non-White’ group (i.e. a large percentage of ‘Asian’ candidates).
Nevertheless the increases for the ‘Black’ subgroup are notable. For each test, the increase in score for ‘Black’ subgroup was the largest and was +2.4 T-scores for LRT, +2.9 for NRT, and + 3.5 for VRT.
The differences between the ‘White’ and ‘Black’ subgroups are still significant but are reduced to a notable extent. The timed nature of most conventional psychometric ability testing in the UK may make the differences in test performance more significantly and whilst CAT administration did not remove the differences, it did reduce these differences for the ‘Black’ subgroup in particular.
Further analysis showed that the UK Census ‘Black-African’ category improved most but this had a very small sample size.

REFERENCES


DOP03 Social Mobility and Social Class - what is it and what are its implications in assessment?
Sean Keeley, IBM
Category: Psychological Assessment at Work

INTRODUCTION
Social Mobility is defined as ‘movements of individuals, families, households, or other categories of people within or between layers or tiers in an open system of social stratification. Open stratification systems are those in which at least some value is given to achieved status characteristics in a society’.

It is about shifting from one social class or status to another, commonly to a status that is higher. Social Mobility has become a very important part of the UK’s government strategy for creating a more equal society and developing a true meritocracy. This paper looks at how ‘social class’ is measured, and uses two of these measures to look at differences in performance on the ability tests based on these measures.

BACKGROUND
We may start with how socio-economic status (SES) is conceptualised. There has already been investigation in this respect (Wilson, 2012). In the UK, The Social Mobility and Child Poverty Commission was set up in 2010. They outlined the measures of social class that most UK governmental organisations used, starting with low birth weight, school readiness, free school meal (FSM) eligibility, Disadvantaged Pupils Attainment Gap Index, participation in education (aged 18 to 24), participation in employment (18 to 24), higher education participation, graduate destinations, and access to the professions.

In their June 2015 report ‘A qualitative evaluation of non-educational barriers to the elite professions”, the Commission set out to examine the barriers to entry for people from less privileged socioeconomic backgrounds to elite law and accountancy firms. It looked at their efforts to improve social inclusion and social mobility but if social mobility is about changing social class, a major issue is to establish how to measure social class. Unfortunately there is no consensus although the Commission suggest three proxy measures of economic and social status: whether the individual received Free School Meals, whether they were the first generation in their immediate family to attend university, whether they were educated at a non-selective state school, a selective state school, and a fee-paying school (which account for 88%, 4% and 7% of the population respectively). These are commonly used by organisations who monitor for reasons of social mobility/social inclusion.

Russell Group universities have high entry requirements and there is little doubt that their students are for the most part talented according to the traditional measure of academic credentials. However, research by Boliver (2013) shows that on average, in order to be admitted to a Russell Group university, a state school student would need to achieve one grade higher in their A-levels (e.g. AAB rather than ABB) than a privately educated student.

However for groups to increase in socio-economic status there may be the suggestion that some others will ‘lose out’ as a result. Richard Reeves, a former adviser to Nick Clegg, calls the ‘glass floor’ – the resistance of successful professional parents to their children falling below their own level of achievement, regardless of ability. In one paper, Reeves (Reeves and Howard, 2013) identified a group raised in higher earning families who went on to become higher earning adults although 43% had teenage test scores which were indicative of average or below average performance. A report by the Sutton Trust showed that children of professionals are three times as likely to attend an elite university as working class children are, and that a large proportion of this disparity could not be explained by academic performance.

A multi-dimensional approach to diversity interventions has been asserted by looking holistically at background, race, gender, age, and other attributes (Calvard, 2013). The assertion is that differences in SES may be accounted for by reference to other demographic variables such as gender, age, disability, ethnicity, educational achievement etc.

THE STUDY
The study in terms of this paper involves two separate measures of social mobility or social class: eligibility for Free School meals, and whether the candidate was the first member of their family to attend university. This was not an experimental situation so the study uses real-life data and the measures of social class used were pre-chosen by the client involvement.

Part 1: Comparison of performance by two groups on two CAT ability tests (Eligible for Free School Meals vs Non-Eligible for Free School Meals).
Part 2: Comparison of performance by two groups on two CAT ability tests (First in Family to Attend University vs Parent previously had Attended University).

The general hypothesis is that the differences between the two groups in Part 1, should be similar to the differences between the two groups in Part 2, if they are true measures of social class.

METHOD
The candidates were real-life graduate applicants to high-stake roles in a public sector organisation, and had taken a CAT version of two ability tests in English. The candidates were predominantly applying from the UK for roles in the UK.

The tests used were:
IBM CAT Numerical Reasoning (CAT NRT)
IBM CAT Verbal Reasoning (CAT VRT)

The differences between the groups in Part 1 were analysed using simple independent t-tests.

FINDINGS
Part 1: Comparing ‘Eligible for Free School Meals’ to ‘Not Eligible for Free School Meals’
Those candidates ‘Not Eligible for Free School Meals’ scored significantly higher on the Numerical Tests (Sig. at 0.026, mean difference of 0.807) although the Cohen’s d score for effect size (d = 0.12) show only small differences.
Those candidates ‘Not Eligible for Free School Meals’ scored significantly higher on the Verbal Tests (Sig. at 0.000, mean difference of 1.750) although the Cohen’s d score for effect size (d = 0.24) show only small differences.

<table>
<thead>
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<th></th>
<th>N</th>
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<th>Std. Deviation</th>
<th>Std. Error Mean</th>
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<tr>
<td>Numerical Test: T-Score</td>
<td></td>
<td></td>
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<tr>
<td>Not Eligible</td>
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<td>54.26</td>
<td>6.683</td>
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<td>7.458</td>
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<tr>
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<td>52.06</td>
<td>7.277</td>
<td>.138</td>
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<tr>
<td>Eligible</td>
<td>485</td>
<td>50.31</td>
<td>7.542</td>
<td>.342</td>
</tr>
</tbody>
</table>

Part 2: Comparing three categories of ‘Are you the first member of your family to attend university?’
Those candidates who had a parent attend university previously scored significantly higher on the Numerical Test over those who were the first in their family to attend university (mean difference of 1.41).
Those candidates who had a parent attend university previously scored significantly higher on the Verbal Test over those who were the first in their family to attend university (mean difference of 1.79).

Numerical Test: T-Score
Tukey Ba,b
First to university  N  Subset for alpha = 0.05
Yes                   1284 53.36 3
No, Sibling           738  53.76 53.76
There seem to be slightly larger differences for the ‘University attendance’ measure of social class (no real differences between ‘No, Sibling’ and ‘Yes’ scores).

DISCUSSION AND IMPLICATIONS
The size and consistency of the differences is surprising. Further investigation of the demographics of each group shows that the ‘average’ degree class is almost identical. Gender, age, and ethnicity did show differences which may account for the differences in test scores. Are these test score differences due to social class differences or other demographic variables? As mentioned previously, Calvard (2013) suggested that differences in SES may be accounted for by reference to other demographic variables such as gender, age, disability, or ethnicity. There are minor variations between the two measures but they do seem to point in the same direction, and may imply that either measure could be used interchangeable. Further investigation of these findings will be carried out before the DOP conference in January, and check for the possible effect of demographic differences other than the ‘social class’ measures.

REFERENCES

DOP04 Adult personality change: Fact or fiction?
Hugh McCredie, Independent
Category: Psychological Assessment at Work
The starting point
William James (1890), asserted that by age 30 character was "set like plaster." Drawing on longitudinal data, McCrae and Costa (1994) concluded that James’ dictum was empirically supported: Stability coefficients (test-retest correlations over substantial time intervals) are typically in the range of .60 to .80...Given that most personality scales have short-term retest reliabilities in the range from .70 to .90, it is clear that by far the greatest part of the reliable variance...in personality traits is stable. (p.173)

The first challenge
Roberts & DelVecchio, (2000) argued that if the stability of personality increased after the age of 30, then meta-analytical test-retest rank-order correlations should be greater than for younger age groups. They found (p. 15) that ‘Overall, trait consistency increased in a linear, step-like pattern until the ages 50 to 59’. They concluded (p. 20) ‘the results...support the inference that traits are quite consistent over the life course [but not]...that traits reach a plateau early in the life course.’

The next round
Roberts et al. (2006) conducted further meta-analyses to explore standardised mean-level differences (d) in Big five scores within different age categories. Following Helson and Kwan (2000), they split extraversion into two components: ‘social dominance’ and ‘social vitality’, expecting different trajectories. They found statistically significant changes (pp. 7-11):

- The social vitality domain showed small increases in the 18 to 22 period (d .06) and significant decreases in the age 22 to 30 period (d -.14) as well as the age 60 to 70 period (d -.16).
- Successive increases in social dominance in the 10-18 (d.20), 18-22 (d..41), 22-30 (d.28) and 30-40 (d.18) periods.
- An increase in agreeableness in the age 50 to 60 period (d.30).
- Successive increases in conscientiousness from age 22 to 30 (d.22), 30 to 40 (d.26), and 40 to 50 (d 10) then again during the age 60 to 70 (d.22).
- Successive increases in emotional stability from ages 10-18 (d.16), 18-22 (d .12,), 22-30 (d.23) and 30-40 (d.26) with a further small increase in the age 50 to 60 period (d.06).
- Increases in openness in the 18-22 age group (d.37) with a decline (d-.19) in old age (60-70).

Roberts et al. concluded:

All six trait domains demonstrated statistically significant changes past the age of 30, and four of the six trait domains demonstrated statistically significant changes in middle or old age. (p.12)

So, is the plaster crumbling around the age-30 watershed? Not very much, given that a difference (d) of .5 would represent, at most, a shift of only a single sten.

Roberts et al. explained that:
most personality change occurs through the press of contingencies found in age-graded social roles... role expectations...[which] facilitate personality change by serving as guides for how one should act and...how one should change (p. 18).

Costa & McCrae (2006) accepted the data but noted the very modest level of post-30 changes and challenged (1) the importance of environmental influences (2) the validity of the extraversion sub-divisions and (3) the variable quality of studies included in meta-analyses. Contemporaneously, McCrae & Costa (2006) reprised data from their 1988 study, abridged as Table 1, below:

Table 1. Stability of NEO-PI scales for younger and older men and women

<table>
<thead>
<tr>
<th>NEO-PI dimension</th>
<th>Age 25-56 years</th>
<th>Age 57-84 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.78</td>
<td>.85</td>
</tr>
<tr>
<td>Extraversion</td>
<td>.84</td>
<td>.75</td>
</tr>
<tr>
<td>Openness</td>
<td>.87</td>
<td>.84</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>.64</td>
<td>.60</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.82</td>
<td>.84</td>
</tr>
</tbody>
</table>

Retest interval was 6 years for N, E and O; 3 years for short A and C scales

After Costa & McCrae (1988, p. 113)

They commented:

NEO-PI...correlations, ranging from .55 to .87, are all significant and all testify to extraordinary stability of personality, in men and women, in early and late adulthood... Consider what that means. In the course of 30 years,
most adults will have undergone radical changes in their life structures... And yet, most will not have changed appreciably in their standing on any of the five dimensions of personality. (p.112, emphasis in the original)

The debate continued

Roberts & Mroczek (2008) perceived the average lifetime personality change trajectory optimistically: change is clearly in the positive direction...people become more confident, warm, responsible, and calm—or what some have described as socially mature... those who develop...psychological maturity earliest are more effective in their relationships and work and lead healthier and longer lives (p. 33).

They clarified the dynamics of adult personality development, as follows: the...trend to invest in the social roles tied to...career, family, and community in young adulthood—a process described as social investment—serves as a catalyst for personality-trait change...stable marriage and committed career track are associated with increases in social dominance, conscientiousness, and emotional stability... traits are considered outcomes, not predictors (as they are typically viewed) (p. 34)

They also exemplified some origins of individual differences:

people who experience more successful and satisfying careers in young adulthood increase disproportionately on measures of emotional stability and conscientiousness... Men... remarried in middle age show decreases in neuroticism (p. 34)

In short, they stressed the importance of environment, in contrast with the categorisation by McCrae & Costa (e.g. 1996) of Big Five factors as biologically-determined ‘basic tendencies’.

Bleidorn et al. (2009) explored the nature-nurture debate analysing data from the Bielefeld Longitudinal Study of Adult Twins. They concluded:

change is not simply a function of the environment nor is stability just the product of genetic processes. In fact, depending on the specific trait, stability and change are more or less mediated by both genetic and environmental processes that might correlate or interact with each other (p. 153)

A recent evaluation

The December 2014 issue of the European Journal of Personality was dedicated to a review of personality development. Its key findings were:

• Both the biological/heritable Five Factor Theory of Costa/McCrae and the sociogenic theory of Roberts and associates are empirically supported and not mutually exclusive.
• There is little support for the distinction between basic traits as more stable/heritable core characteristics of personality and other characteristics as less stable/more environmental surface manifestations.
• Studies with long time lags between occasions might not detect the shape of the trajectories (e.g. abrupt vs. gradual changes) or detect any change at all if the change is subsequently reversed.
• In ‘old-old’ adulthood (80+ years) when losses start to outnumber gains in most life domains, many Big Five traits start to decline.
• Both group and dyadic peer relationships can impact on personality development over the lifetime.
• More longitudinal data are required to assess the proximal influences on development; rather than the broader experiences (e.g. divorce) that are easier to assess and interpret.
• Successful self-regulated personality change is rare as it must be (1) desired by the individual, (2) feasible/achievable and (3) its associated behaviours practised until they become habitual.

Personality change interventions

The record of attempts to change Big Five responses by planned interventions is modest:

• Spence & Grant (2005) studied NEO FFI responses (N=64) before and after 10 weekly coaching interventions, concluding (p. 155) ‘The current data set does not permit any strong claim to be made about the ability of coaching to influence personality per se.’
• Martin et al. (2015) (N=54) claimed a significant improvement (circa 1 SD) in targeted NEO PI-R facet scores following a 10 week personality coaching plan. Since the questionnaire responses were self-reports and the targeted facets were chosen by the respondent, the credibility of the findings is questionable.
• Tang, at al. (2009) in a study of 240 Major Depressive Disorder patients found that both Cognitive Therapy and an anti-depression drug related to a decrease in NEO FFI neuroticism (-.54 and -.80 of SD respectively) and an increase in extraversion (.49 and .64 of SD respectively). However, after discounting for depression reduction, whilst CT patients still reported significantly higher extraversion (p .05), the decrease in neuroticism was no longer significant (p.14).
• Jackson et al. (2012) studied the effects of a 16-week inductive reasoning training program on the IPIP-AB5C Big Five measure scores from 183 volunteers ranging in age from 60 to 94 years. They found a moderate increase (.39 of SD) in Openness to experience.

**Personality, resilience and how to intervene**

Nakaya et al. (2006) found that resilience scores correlated with neuroticism (-.59), extraversion (.37), openness (.40) and conscientiousness (.48). Given these substantial correlations with essentially stable constructs, do we best seek to improve individual or organisational client resilience by:

1. selecting those with more robust Big Five personality profiles?
2. exploring personality change at a narrower, facet or sub-facet, level?
3. changing behaviours/symptoms? e.g. cognitive-behavioural resilience coaching (Grant et al. 2009)
4. reducing occupational stressors?

**References**


DOP05 Poster Withdrawn

DOP06 The relationship between personality traits and vocational interests of Turkish undergraduate students: A longitudinal study
Ufuk Barmanpek, PhD Candidate in school of Psychology, Leicester University
Category: Learning, Training and Development

1. Introduction
1.1 Underpinned Research Models
• The Big Five Personality Traits
• The Dark Triad Personality Traits
• Holland’s Vocational Interests
• Schwartz’s Personal Value Taxonomy
• Super’s Work Value Inventory

1.2 Objectives
The main purpose of this study is to explore the relationship between personality traits (The Big Five, Dark Triad Traits) and Holland’s vocational interests. Secondly, indirect effect of values (personal and work) on this relationship will be investigated. Thirdly, relationship among personality traits, vocational interests, and values will be examined. Finally, this will be a longitudinal study and the last objective is to examine how these relationships change over time and through exposure to higher education.

1.3 Practical Implications and Contributions
In many studies, the direct relationship between personality traits and vocational interests have explored but in this study, besides this relationship, interrelationship between personal and work values, and personality traits and vocational interests will fill the gap in the empirical and theoretical literature. In terms of the practical perspective, students will have chance to identify their fields through the relationship among work satisfaction and personality traits, vocational interests and values for their future career. In the Turkish education, especially undergraduate students’ already take a step for their future occupations and their work satisfaction about their field is essential for the psychological career counselling in the level of undergraduate. Thus, this study will be a resource that helps and supports career counsellors for giving rationale advice to students for their future career.

2. Literature Review

2.1 Personality Traits and Vocational Interests
There are many developments in the vocational guidance and career preference in terms of the link between people’s personality traits and vocational interests (Ferreira, Rodrigues, & Ferreira, 2015). In the Industrial and Organisational Psychology field, many researches have provided comprehensive evidence that vocational interests...
have changed after childhood to adulthood and it results in making personality traits become more and more important component in the selection of field due to have significant perspective changes in interests during life (Roberts, Wood, & Smith, 2005). Based upon these, in many cultures, students tend to choose their specific areas after finishing high school, and after getting undergraduate degree, they are expected to have certain kinds of jobs. For this reason, the personality of undergraduate students has been explored in many studies and in these studies, researchers have mainly tended to focus on the direct relationship between personality and work satisfaction, however, there are fewer studies that have investigated the prediction of the personality on career preferences. Additionally, there are just limited studies that concern the students’ vocational choices regarding to be in the university level. Also, certain kinds of values gravitate the one`s certain kinds of interests with personality

2.2 Personality Traits, Vocational Interests, and Values
In the literature, there are some studies that focus on the direct relationship of values with personality traits and vocational interests (Smith & Campbell, 2009). Specifically, in terms of the personality traits and personal values, there has been a wide range of studies in different studies. Even though they have some similarities regarding to content, they have taken as separate variables empirically and theoretically. However, the recent studies try to figure out the relationship and differences between them (Olver & Mooradian, 2003). In terms of the relationship between personality and work values, just few studies pay more attention to the relationship between work-related values and personality. In these studies, it was assumed that personality predict work values through affecting the view and perspective of individuals to the world it is stated that this relationship is more modest (Furnham et al., 2005).

In terms of the relationship between vocational interests and values, many past studies usually focused on how these two can be distinguished. It is assumed that vocational interests and values share common components that lead them highly inter-correlated relationship (Thorndike, Weiss, & Dawis, 1968). However, they have specific differences. For example, in terms of the skills and abilities, vocational interests refer the activities that reflect the certain kind of ones. Also, it is based upon the basic motivations, while, values represent the goals and objectives which reflect the independency of original skills and abilities. Thus, vocational interests and values share the common origins in some cases, originally, they are different and the relationship is between them is worth looking (Sagiv, 2002).

3. Methodology

3.1 Sampling, Data Collection Methods and Procedure
This study will be longitudinal. The reason for chosen the longitudinal procedure that it is depending on the observations like cross-sectional and through longitudinal study, variety of observations of the same subject can be carried out in a long period of time (Walliman, 2006). Also, a quantitative research method will be conducted to carry on the defining, identifying, analysing and finding relationship between personality traits and vocational interests and also the indirect effect of values on this relationship (Brayman & Bell, 2007). In order to collect data, adopted self-report survey will be created. After that the questionnaire will be translated to the Turkish from English and translated back English to Turkish. This procedure will be applied two times reciprocatively with obeying comparativeness and equivalence of the translation rules (Van de Vijver & Leung, 1997) and the survey will be paper-based. In terms of the participants, they will be first and third year undergraduate students from Turkish Universities. Regarding to the amount of participants, it is expected to find around 2,000 participants during time. Data will be collected from these students three times during project in three years. October 2015, data will be collected from specifically chosen students who are in the first year and third year students at that time. In October of 2016, data will be collected second times from same students. Finally, April of 2017, data will be collected third times from same students. As a consequence, this study will be conducted in three years of period.

3.2 Research Questions:
1. Is there a relationship between personality traits and vocational interests?
2. Do values mediate the relationship between personality traits and vocational interests of students?
3. Does interrelationship among personality traits, vocational interests and values enhance the work satisfaction?
4. How these relationships change over time and through exposure to higher education?

3.3 Data Analysis Techniques

For this study, SPSS 20. will be conducted for the analyses. As distinct from the main research questions, first of all, each scale’s internal reliability will be examined because it defines the consistency of the measures. Secondly, for the research question one, zero order correlation matrix will be carried out in order to evaluate the relationship between personality traits and vocational interests and the reason of chosen zero-order correlation rather than others, it refers that there is not any controlled variables in the analysis. For the second research question, mediated regression analysis will be conducted for examining the indirect effect of values on the relationship between personality traits and vocational interests. The main reason for chosen for this analysis is that personality traits and vocational interests has direct relationship and mediation represents the particular portion of this relationship. Also, in this research question, sobel test will be conducted for the required last step of mediation analysis technique. For the third research question, interrelationship between values, personality traits and vocational interests and how this relationship leads enhancing career satisfaction and performance will be examined. For this, Hierarchical multiple regression analysis will be carried out because it includes analysing the interrelationship between the main variables and the effect of it on the work satisfaction. Also, gender and age will be controlled in the first step of the analysis, so it was chosen for the third research question. For the last research question, 2-WAY ANOVA repeated measures will be conducted because of the examining the changes in three different times in three years with findings that are collected from same participants and survey.

3.4 Ethical Issues

In this study, ethical issues will be taken into account and participants will be asked to participate in the research voluntarily. Additionally, the rights of participants and the main goal of this study will be informed to the participants in the consent form and also contact details will be added to the consent form for explaining participants’ prospective questions (Saunders et al, 2007). What is more, all information will be obtained from participants and they will be informed about keeping this information carefully. Besides these, they will be assured about not sharing these information with anybody except supervisors (Bickman & Rong, 2009). Scales of survey will be chosen carefully in terms of relatedness of the study and expectancies of participants will be considered in order to minimise any trouble about the study (Punch, 2005). Acquired data will be kept in my private computer and they will be protected during this study. At the end, this information will be deleted. Ethical approval will be gained from the University of Leicester Ethics Committee.

4. Results and Discussion

Results will be available in time for the conference and what they are likely to be. For the discussion I can say the results will be discussed in relation to current literature and will be available by the time of the conference.

5. Summary

In conclusion, this study will provide a comprehensive view of the different personality traits and also the relationship between personality traits and occupational interests. Additionally, the indirect effect of values on the relationship between personality traits and vocational interests will be examined and it supports to the literature. Finally, the effect of interrelationship between personality traits, vocational interests and values on work satisfaction and performance will be investigated.

5. Addressing the Main Concept of Conference
World has changed in terms of work-life and there are some new perspectives and ideas are needed for meeting demands of the work-life’s expectations. This study will give a wide range of information for people regarding to career preferences. Also, the certain kinds of personalities gravitate the certain kinds of occupations and values facilitate enhancing the relationship between personality and interests. This study focuses on the undergraduate students who take the first step for the career. From this point of view, this study is supportive for both people and organisations and suitable for the conference in terms of guiding students for the future career in a challenging world.

This study is also interesting for all people in terms of representing real work and life. All participants will have a chance to find themselves and express their view through poster presentation because poster presentation will be exhibited throughout the conference.

In terms of the innovativeness of this study, even though there are some studies regarding to direct relationship between personality traits and values, and vocational interests and values, interrelationship between values, personality traits and vocational interests has not been examined yet. Thus, the present study is useful and worth representing to all people.

Besides the people, who are in an academic world, this study is interesting for people in general because it gives a comprehensive knowledge in terms of career and they might take advantage of this. Personality, occupations and values are not only the related and represented in the scientific world; in the general world, everyone has their own concerns about values and occupations and also has own personal characteristics.

**DOP07 Systematicity as a tool to reduce discrimination in selection**  
Sima Wolgast, Lunds University  
**Category:** Psychological Assessment at Work  

**Theoretical Overview**  

**Discrimination**  
Using corresponding testing method, ethnic discrimination in recruitment has been detected in several countries in Europe (Andriessen, Nievers, Dagevos, & Faulk, 2012; Bovenkerk, Gras, & Ramsoedh, 1994; Carlsson & Rooth 2007; Rooth, 2010).

Social psychological research emphasizes that selection situations where immigrants are involved are susceptible to negative biases. Mere categorization can create negative biases towards an outgroup (Hogg & Abrams, 2003), promote ingroup favoritism and result in the exclusion of outgroup members (Brewer, 1999.). Furthermore, perceived interference with the dominant groups’ goals and competition for resources such as jobs or equivalent assets is seen as promoting a more active and motivationally based discrimination against members of the outgroup, when compared to discrimination based on perceived economic rationality as suggested by the theories on statistical discrimination (Sidanius, Pratto, van Laar, & Levin, 2004).

Employment discrimination can also be a compliance phenomenon, where business justifications provided by an authority figure (Brief, Dietz, Cohen, Pugh, & Vaslow, 2000) or manifested as company norms (Björklund, Bäckström & Wolgast, 2012) may induce discrimination against minorities. In this context, rational argumentation is used to justify discriminatory behaviors, e.g. by referring to reasonable organizational needs and defensible managing practice. This modern form of discrimination is more subtle, indirect and rationalized, and thereby more difficult to expose than discrimination based in more traditional racism (Brief et al., 2000).

Discriminatory practices might also be understood from an individual difference perspective, where differences in attitudes towards group inequalities (Social Dominance Orientation; Sidanus & Pratto, 1993) has been proposed as an important factor.
Bias in Personnel Selection

There is a consensus among researchers that we should strive for a systematic recruitment processes (Kuncel, Klieger, Connelly, & Ones, 2013). Systematicity should encompass: defining specific criteria related to job content by means of a job-analysis, gathering and evaluating information and decision making.

Despite the extensive evidence that more structured forms of selection in a recruitment process are more valid, recruiters choose the more intuitive, impressionistic and unstructured ones more frequently (Kuncel et al, 2013). This may allow biases and subjective preferences to influence the process (Huffcutt & Arthur, 1994) and therefore increase the risk of discrimination on the labor market. Our aim with the performed studies is therefore to investigate experimentally whether increased systematicity (by means of systematic job analysis and tools for rating and ranking applicants) is a promising way to reduce discrimination against outgroup members.

Overview of the Studies

A systematic process where all phases, from job-analysis, the application of validated psychometric tests and structured interviews to the systematic evaluation of job candidates, will most likely decrease discrimination against outgroup members. Our main purpose was to investigated how well participants succeeded with their recruitment and predicted that there would be a difference in job-candidate preferences between those who had worked systematically (experimental condition) and those who had not (control condition). We used a fictive job setting where male job-candidates, both Swedes (ingroup) and immigrants from the Middle East (outgroup), applied for a sales manager position. Males originating from the Middle East were chosen due to the fact that research has shown that they are subjected to extensive discrimination on the labor market (Rooth, 2010). In addition to holding more general implicit negative attitudes towards Arab-Muslim men, both employers and students have been shown to implicitly and explicitly associate Arab-Muslim men with lower work performance (Agerström, & Rooth, 2009). Arabs are stereotyped as lacking both competence and warmth (Cuddy, Fiske, Kwan, Glick, Demoulin & Leyens, 2009), in comparison to Caucasian Americans which are seen as high on both dimensions.

Furthermore, in all four studies the average competence level of the ingroup and outgroup differed from each other, allowing for investigation of whether the participants reacted differently depending on whether ingroup members or outgroup members were the most competent, and if systematic recruitment procedures would have similar effects under these different conditions. In addition, across the series of experiments, we modified the experimental paradigm based on specific findings, with the aim of better understanding the processes under investigation.

Results

In studies 1 and 2 we had manipulated on the one hand the recruitment setting by offering tools for systematicity in the experimental condition, and on the other hand job-candidate résumés by making the ingroup candidates most competent in study 1 and the outgroup candidates most competent in study 2. In both study 1 and 2 recruiters that worked systematically were better at selecting the most competent job-applicants. However, we also learned that participants in the systematic condition in study 2 did not select more outgroup candidates than recruiters in the control condition, even when the outgroup candidates were more competent. Instead, in study 2 recruiters in the experimental condition seemed to favor the “average competent” ingroup candidates and select these at the expense of the outgroup candidates that were more even more competent. This caused a significant difference between experimental condition and control condition on the competence variable even though they selected outgroup candidates to the same degree. We can also conclude from study 2 that persons high on SDO are more biased in their selection of job-applicants by discriminating against outgroup members, and that systematicity failed to counteract this tendency.

In both study 1 and 2 we used 12 résumés where four were of “average competence”. By doing so we created a less clearly differentiated set of candidate-résumés, since it was more difficult to distinguish the most competent candidates from the average ones than from the low competence ones. The difficulty to distinguish the most
competent candidates from the rest of the candidates could explain why participants in the experimental condition in study 2, despite working systematically, also discriminated against candidates from the outgroup. This effect may in part be due to information overload causing participants to make their choices on the basis of stereotypes, instead of on data driven processing strategies (Bodenhausen & Lichtenstein, 1987). In light of this, in study 3, we tackled the possible information overload by discarding the “average competent” résumés, hence making outgroup candidates clearly strong and ingroup candidates clearly weaker.

By reducing the complexity of the situation proved successful in increasing the effect of the systematic procedure employed in the present studies. In addition to reduced information load however, there are other factors that may reinforce the effect of systematicity. More specifically, introducing a motivation manipulation that provides a response cost to working carelessly should make recruiters more prone to increase their effort to go about the recruitment task in the intended way. This was tested in study 4. In comparison with study 2, where no significant differences between the experiment group and control group were found, our “response cost” manipulation appeared to induce a change in performance and increase the effect of systematicity. Social dominance orientation was related to discriminatory behavior, but this relationship was reduced when increased systematicity was introduced in the recruitment process.

**Addressed questions**

1) The main psychological theories that underpins my poster are theories concerning systematicity in a recruitment context and discrimination in the labor market. I’m also interested in investigating how SDO –high persons behave in a recruitment situation (please see the summary included above).

2) Refugees, workers and migrants from the entire world are in large-scale immigrating to different countries in Europe. A majority of them are facing challenges (such as entering the labor market) that are difficult to handle. If not managing to integrate in the new countries there will be a risk for alienation for generations to come, which by extension is a challenge for all countries that are accepting immigrants. A fast way to integrate (learn language, adapt to new culture and practices, self-sufficiency etc.) is to find a job and to work. Unfortunately there is extensive evidence for discrimination on the labor market. Foreigners are not treated the same when applying for a job and they are discriminated against. If we succeed to find tools and methods to decrease discrimination we might facilitate integration.

3) We have evaluated a psychological assessment procedure, namely job-analysis and systematicity in recruitment process, that we believe can to some degree help organizations counteract discrimination, and instead increase diversity and inclusion.

4) Papers have appeared independently on either the subject of labor discrimination or on the subject of systematic recruitment, to our knowledge none has investigated whether increasing systematicity in the recruitment process decreases discrimination when selecting candidates.

5) If a company is accused for discrimination it is in a legal contention of interest to account for the recruitment procedure and come forward with contrary evidence. Thus from legal aspects there should be an interest for organizations to report for a fair recruitment. Evidence for a fair recruitment procedure should be useful for both organizations and civic law.

6) We are offering studies that consolidate tools needed to counteract discrimination. If a society strives to counteract discrimination on the labor market, our studies are worth to consider. To pursue a just and fair society, where individual rights are cherished, is in coherence with democratic values.

7) I will provide three copies of my articel, to read on the conference by those who are interested.
Key points in my 60 second opening ‘pitch’ for the poster are: personnel selection, recruitment, job analysis, social dominance, discrimination

References
Modern racism and obedience to authority as explanations for employment discrimination. Organizational Behavior and Human Decision Processes, 81(1), 72 – 97.

DOP08 Can you predict job satisfaction?
Gillian Hyde, Geoff Trickey and Simon Toms, Psychological Consultancy Ltd
Category: Wellbeing and Work

What are the main psychological theories, models and research underpinning your session?
Prediction of the match between job satisfaction and job performance has been an area of intense study since the first examination in the 1930s by Roethlisberger & Dickson and has continued with research papers published periodically to the present day.
The theory is that if we can understand the relationship between job satisfaction and performance, we could more effectively recruit, promote and develop our people. This relationship has been described as the “Holy Grail” of industrial psychologists. The session will draw upon psychological theories and research that focus upon job satisfaction, and most notably, the role that personality plays in the formulation of job satisfaction.

Over the past number of years, a significant amount of literature has argued that job satisfaction is at least in part based upon individual dispositions (House, Shane, & Herold, 1996). Indeed, an abundance of evidence has revealed that the Emotional Stability facet of the Five Factor Model consistently appears as one of the strongest correlates of job satisfaction (Judge, Heller, & Mount, 2002). Furthermore, it has often been suggested that Emotional Stability and Extraversion together are key aspects of the ‘Happy Personality’ (DeNeve & Cooper, 1998). It appears that certain elements of both these characteristics allow individuals who are emotionally stable and extraverted to be both happy in life and therefore happier in their jobs.

As well as drawing upon these key theories, the session will also tie in strongly with the concept of the happy employee. This has been explored in depth by Locke, McClear, and Knight (1996), who wrote: “A person with a high self-esteem will view a challenging job as a deserved opportunity which he can master and benefit from, whereas a person with low self-esteem is more likely to view it as an undeserved opportunity or a chance to fail” (Locke et al, 1996). The paper will explore this concept by considering the influence that job-specific competencies and underlying personality factors can have upon perceptions of job satisfaction. A ten-item scale developed by MacDonald and MacIntyre (1997) was used to assess participants’ levels of job satisfaction.

**How do you see your proposal linking with the main conference theme of resilience in a challenging world?**

The competency of ‘Resilience’ represented the strongest correlate with job satisfaction in our sample of 629 participants (see Table 1. below). These findings indicate the significant value and insight that resilience represents in the field of job satisfaction, and this serves to warrant further scrutiny of the concept in the discipline of occupational psychology.

**Why is the submission appropriate for the particular category you have chosen?**

Job satisfaction is undoubtedly a key component and strong antecedent to well-being and work, and contributing evidence to its prediction is a highly relevant endeavour by extension. The current submission will outline research into the competencies and personality factors that correlate with, and potentially predict, levels of job satisfaction for individuals representing a range of job roles, making it highly relevant to delegates with a strong interest in the topic of well-being and work.

**What do you consider to be the most novel or innovative aspects of the ideas being presented?**

Perhaps the most novel aspect of the presentation results from the recurring patterns that have been witnessed for particular competencies relating to job satisfaction across different roles. In contrast to certain expectations of the study, these were not always represented by competencies considered relevant to the role. For example, the key competency of ‘Interpersonal Skills’ did indeed lead to greater job satisfaction for the nurses in the sample, yet the same effect was not witnessed for the IT professionals in the sample in relation to the ‘Analytic’ competency, despite the fact that the role itself required the ability to work with complex data.

**Why do you think the conference delegates will find the paper or session stimulating and useful?**

Perhaps the most useful aspect of the paper relates to the relationships between competencies and job satisfaction indicated by the research. An analysis looking at the relationship between job satisfaction and a whole range of competencies was conducted with 629 participants across the five job roles was conducted (Nurses, IT, Recruitment Consultants, Accountants, and Marketing), with the results presented in Table 1 below.

**Table 1. Competencies related to job satisfaction across all job roles (n = 629)**
<table>
<thead>
<tr>
<th>Competency</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>0.33**</td>
</tr>
<tr>
<td>Self-Confidence</td>
<td>0.29**</td>
</tr>
<tr>
<td>Results Orientation</td>
<td>0.26**</td>
</tr>
<tr>
<td>Project Management</td>
<td>0.25**</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>0.24**</td>
</tr>
<tr>
<td>Customer Focus</td>
<td>0.24**</td>
</tr>
<tr>
<td>Developing Others</td>
<td>0.23**</td>
</tr>
<tr>
<td>People Management</td>
<td>0.23**</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.23**</td>
</tr>
</tbody>
</table>

**Significant at the 0.01 level

While reviewing this data, it became clear that there was a recurring pattern for some competencies related to job satisfaction across jobs – all these competencies had at least one contributing personality scale related to Emotional Stability or Extroversion. It would therefore appear that our findings are consistent with the previous research outlined in the section above, and were manifested in three main trends:

1. Competencies related to self-esteem, optimism and stress tolerance all contribute to job satisfaction.
2. It appears that individuals who are socially skilled, enjoy being around others and offering help and support are more likely to experience job satisfaction.
3. Finally, individuals who are goal focused and motivated to achieve are likely to experience heightened job satisfaction.

These findings could result in a range of applications for conference delegates, and help guide academics and practitioners in various areas that are dependent upon understanding of job satisfaction.

What might the public find interesting about your paper or session?

Findings from the study chime with previous research into the concept of the ‘happy employee’, whereby certain elements of both Emotional Stability and Extraversion combine to create individuals who are happier in life generally and therefore happier in their jobs. This was supported across each of the five professional groups encompassed by the research, which highlights the potential application of this insight across various industries and job roles.

This ensures the research remains accessible and relevant to members of the public from a wide range of industries, enabling them to apply the insight of the research to a range of contexts and situations. Utilising psychometric tests enables organisations to look for those recurring competencies that equate to higher job satisfaction. We know and understand that if a person is happy and fulfilled, their engagement, productivity and performance will increase.

If any, what materials do you intend to make available to attendees and in what format? (e.g. printed handouts, electronic copies of slides)

We will provide a PDF copy of the slides (printed and electronic). A copy of the Profile:Match2® research report (a spiral-bound 46 page booklet) will also be provided to delegates on request.

References


What are the main psychological theories, models and research underpinning your session?

The primary focus of the submission is to explore the intermediary role that personality plays in the relationship between job-related risk and employee levels of stress and engagement.

The term stress has been commonly used to describe a range of physiological and psychological experiences that accompany challenging situations in a person’s life (Ogden, 2004). It is now widely accepted as serving the adaptive function of preparing the body to meet threatening or challenging situations, though it is prolonged or chronic stress in particular which has been shown to affect both physical and psychological health adversely (Sapolsky, 1996).

The importance of gaining a greater understanding of the sources of stress is evidenced by research that has consistently reported the relationship between leading a hectic life and a variety of psychological disorders (e.g. Miner & Dowd, 1996; Thoits, 1983). Stress is often attributed to a person’s working life due to the continual demands employees face on a daily basis. Studies have clearly shown that chronic stress at work results in greater absenteeism, job dissatisfaction, greater turnover intentions, poor motivation and job performance, and ultimately burnout (Sullivan & Bhagat, 1992). According to the CIPD (2010), work related stress in a significant cause of employee absence, and the organisational costs that result.

After identifying the significant issues associated with stress, the session will continue by exploring the influence that personality may have upon an individual’s exposure to stress. Lazarus and Folkman (1984) emphasised cognitive appraisal in the experience of stressful situations, indicating that whilst a group of people might encounter similar workloads and similar stressful situations at work, not all of those people will experience stress to the same degree. Research on stress resiliency and personality (with reference to the Five Factor Model) has clearly shown that people are predisposed to experiencing different levels of stress. Neuroticism, for example, is an aspect of personality that refers to the tendency to experience negative emotions such as anxiety, depression, anger, and fear, whilst Extraversion refers to the tendency to experience cheerfulness, sociability and high-activity (Costa & McCrae, 1980). These findings indicated that burned-out employees were significantly more likely to be high in Neuroticism and low in Extraversion. This trend was reversed when assessing employee engagement.

The theory of employee engagement is also significant to the session, and this concept has been defined by Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002, p74) as a “positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.” Its popularity amongst both practitioners and researchers is due to the well-established assertion that engagement is highly beneficial to both the employee and the organisation. The literature clearly shows that work engagement has been linked to the variables of work performance, productivity, organisational profitability, customer satisfaction, employee turnover, employee safety and employee satisfaction (e.g. Harter, Schmidt and Hayes, 2002; Bakker, Schaufeli, Leiter & Taris, 2008).

As with stress, personality can play a significant role in an individual’s perceptions of engagement. Personality styles such as general optimism or proactivity are largely dependent upon how we perceive and interpret our world. Personality acts as the unique frame of reference that guides how we behave and interpret events, influencing discretionary effort at work, adaptability, job satisfaction and engagement. The importance of understanding stress...
and engagement will be clear to delegates, and this will be furthered by the session’s focus upon the role that personality plays in relation to risk.

Our research into the Five Factor Model of personality has allowed us to create the ‘Risk Type Compass’ psychometric, and this has enabled us to identify eight main ‘Risk Types’ in our sample of thousands. Additional research into a sample of 84 Auditors indicates that when viewed in this framework, individual differences can be highly influential in the relationship between risk, stress, and engagement. Our findings in this area will be discussed in detail with delegates.

How do you see your proposal linking with the main conference theme of resilience in a challenging world?
The central purpose of the paper is integral to the topic of resilience, as the research was tasked with providing deeper insight into how different ‘Risk Types’ are predictive of resilience to stress and optimal performance at work. This focus also draws upon an individual’s interaction with the external environment, as the challenges we face will often result in actions and behaviours that encompass an element of risk. The submission helps us generate understanding as to how an individual’s personality can influence their reaction to such risks in the workplace, most notably in relation to their engagement, satisfaction, and psychological well-being.

Why is the submission appropriate for the particular category you have chosen?
The submission is highly relevant to the topic of Psychological Assessment at Work, as it concerns the application of a bespoke psychometric tool to assess the impact that risk-related demands may have upon employees’ levels of stress, engagement, and satisfaction within their job roles. Tasks and experiences with varying elements of risk are unavoidable in any professional situation, which makes understanding an individual’s personality in relation to these situations absolutely vital when predicting and determining their resulting impact. Using the Risk Type Compass will enable practitioners in the field of individual differences to predict the adverse impact of risk with greater accuracy, allowing negative outcomes for employees to be effectively addressed, or even avoided altogether.

What do you consider to be the most novel or innovative aspects of the ideas being presented?
Whilst broad research into the Five Factor Model has been used to provide significant insight into the influence an individual’s personality can have upon employee perceptions of stress, engagement, and satisfaction, far less focus has been given to the role that risk can play in this relationship. The Risk Type Compass helps to address this limitation, as it has been developed within the framework of the Five Factor Model of personality, yet focuses upon the impact that risk can have in the work environment. The result is an innovative and targeted tool that addresses the consequences of perceived risks at an individual level.

Why do you think the conference delegates will find the paper or session stimulating and useful?
In many cases, delegates will have a background in, or understanding of, personality and individual differences. This will typically relate to popular and well-recognised concepts like the Five Factor Model, as well as the range of personality assessments that stem from this concept. By drawing upon our understanding or the FFM, we have been able to create a well-evidenced psychometric tool that focuses upon the area of risk. As a result, the proposed paper will serve to facilitate delegates’ pre-existing understanding of these concepts into a useful and applicable assessment of personality in the area of risk. This understanding will not only reference the underlying research used to create the tool, but the evidence of effective utilisation in relation to the engagement, stress, and job satisfaction of the study’s participants.

What might the public find interesting about your paper or session?
Risk can take many forms, and is therefore highly relevant to individuals from a broad range of industries, as well as a variety of specific roles these industries encompass. In many cases, the sources of risk may be well known to management, but less will be known about how these risks may influence individual employees in different ways. The session will clearly demonstrate to members of the public how practitioners are able to adopt a psychological assessment tool in order to provide a bespoke and research-driven insight into how individual employees interact with, and react to, the risks that they encounter in their job-related tasks.
If any, what materials do you intend to make available to attendees and in what format? (e.g. printed handouts, electronic copies of slides)

We will provide PDF copies of the slides, as well as an electronic PDF copy of the research upon which the presentation is based (upon request).

References


**DOP10 Individual values as predictors of workplace engagement**

**Rebecca Brighty** and **Vicki Elsey**, Northumbria University

**Category Leadership, Engagement and Motivation**

**Introduction/background**

Within U.K. organisations, the levels of employee engagement are worryingly low. Increasing employee engagement has been cited as one of the top priorities by business leaders across various sectors. The employee engagement literature (which is mainly provided by practitioners and consulting firms) indicates that there are a wealth of benefits associated with individuals being engaged with their job, including increased productivity, reduced turnover, increased revenue growth and greater job satisfaction to name but a few. It is the role of human resource (H.R) personnel and organisational practitioners to advise organisations on methods of increasing workplace engagement, yet the empirical evidence on the topic remains scarce.
The person-organisation fit (PO-fit) literature also outlines numerous organisational and individual benefits to employing individuals who fit in with the organisation and that the best measure of PO-fit is values. Many of these benefits are the same as those experienced by an engaged workforce.

There is evidence to suggest that individuals with certain personality traits tend to be more engaged at work. A number of psychologists have found evidence to suggest that traits and values are linked. So, it is possible that certain values are also linked to engagement. Also, from a theoretical point of view, it is logical to suppose there may be a link between engagement and individual values. An individual’s values influence their decision making processes, as people make decisions based on which of their values it will allow them to express. It has been claimed that individuals can choose whether or not to engage with their role, and if this is the case then the decision whether or not to engage is likely to be influenced by their values. If the individual’s role or the organisation they are working for does not allow them to fulfil their values, it may be the case that the individual may chose not to engage with their work, thus, it is possible that individual-organisation values congruence is important for workplace engagement.

According to the job-demands resource (JD-R) model, occupational stress is a reaction to an imbalance between the demands of the job and an individual’s personal resources. It may be the case that when an individual’s values are congruent with those of their organisation this reduces the strain on the individual in a number of ways and also provides them with both job and personal resources.

The aims of the current paper are:
- To investigate whether individual-organisation values congruence can predict workplace engagement.
- To add to the stark empirical evidence base on workplace engagement.

Method
To take part in the study participants needed to be 18 and employed. Participants were asked to complete three online questionnaires, one assessing personality (The International Personality Item Pool, Goldberg et al., 2006), one assessing perceived congruence between their own and their workplace’s values (Judge and Cable, 1996) and one assessing their level of workplace engagement (Utrecht Work Engagement Scale Short Form, UWES-SF; Schaufeli & Bakker, 2003).

Results
A hierarchical multiple regression analysis was conducted, with the big five personality factors entered at Step 1 and values-congruence entered at Step 2, with workplace engagement as the predicted variable. Results of the present study indicate that personality has little predictive power in terms of workplace engagement, whereas values-congruence predicted 14.3% of the variance in engagement scores.

Discussion
This paper is the first to consider whether individual- organisational values congruence can predict workplace engagement. Findings suggest that values-congruence can predict workplace engagement and more effectively than personality factors can. Findings will be discussed in terms of how these findings may be beneficial to organisational practitioners and in recruitment.

Main psychological theories, models and research underpinning my session
- JD-R
- P-O Fit
- Workplace engagement

How this research links to the theme Resilience in a changing world
If an individual is more engaged with their role as a result of their values being congruent with their organisation’s values, this will mean that the individual is less likely to feel strained by what is being asked of them by their organisation. Although engaged employees tend to be more resilient and able to adapt to their changing environment, if an individual’s values are not being compromised they are less likely to feel the need to demonstrate resilience and more able to focus on the priorities of the business.

**How the research is appropriate for the category leadership, engagement and motivation**
The topic of the paper is workplace engagement and how considering individual values may increase workplace engagement. The results of the research suggest it is important for those involved in devising engagement programs and interventions, including leaders to consider an individual’s values.

**The most novel/innovative aspects of the ideas being presented**
Prior to this paper, there has been no research focusing on the link between individual values and workplace engagement.

**Why delegates will find the paper/presentation stimulating and useful**
As occupational psychologists and organisational practitioners it is our job to assist organisations in getting the best from their employees by utilising our knowledge of psychology. This paper provides evidence for the importance of considering individual values within the workplace. Test developers may be interested in the findings as they may wish to consider developing commercial tests for assessing individual and organisational values.

**What might the public find interesting about the paper/session**
There may be people who feel unhappy in their job, but do not know why. They may like many aspects of their role, their colleagues and customers, but still not feel engaged with their job and it could be because their individual values and those of their organisation are incongruent. This information would then arm the individual with self-insight and allow them to decide whether or not they want to leave the organisation to find one whose values align with their own or whether they wish to discuss their situation with management and/or craft their role to allow them to express more of their individual values.

**References**
References can be provided upon request and will be included in the presentation.

**DOP11 Conceptual model for well-being among police custody personnel**

*Robert Werner-de-Sondberg*, Nottingham Trent University, *Maria Karanika-Murray*, *Nicholas Blagden* and *Thom Baguley*, Nottingham Trent University

**Category: Wellbeing and Work**
This proposed study is presented as having both a strong scientific and applied focus. With data collection commencing August 2015, full results are unlikely to be available until 2017, although preliminary support the model’s utility was established in a pilot study undertaken in [...] (2013).

**Introduction**
The pluralised image of British police custody, with units of public and private sector personnel working alongside each other, has become universal since 2006 (UNISON, 2010, including Northern Ireland). In England and Wales, this sees police Custody Officers (aka Custody Sergeants) – in charge overall – generally (though not exclusively) assisted by contracted civilian Detention Officers (aka Detention Escort Officers). This situation not only invites the possibility of different organisational cultures occupying the same work environment, but also of the two sectors impacting personnel well-being differently due to the differential mediating effects of their respective organisational climates (Glisson & James, 2002) – a situation first studied in [...] (2013) as a cross-sectional pilot to this current research,
demonstrating utility for the model as a work in progress.

Two study objectives reflect contributions to original knowledge. First addresses the 'call' in Ehrhart, Schneider, and Macey (2014) for greater integration of organisational culture and climate to avoid confound where one is measured without the other (Glisson & James, 2002); something the applicant has been researching since [...] (2008). This sees the theory of planned behaviour (TPB; Ajzen, 1991, 2005) applied to simultaneously model organisational culture and climate, with various research lessons and subsequent literature providing a basis for the latest revisions, reflected in Figure 1 (see emboldened italics).

This largely quantitative focus is supplemented by a qualitative ‘case study’ (Yin, 2014), which asks the additional research question, “How and why police custody personnel well-being between the two sectors compare and contrast?” The second study objective addresses the ‘call’ in Fallah (2011) for field studies to explore leadership as a shared community of practice. This conceptualises leadership as a distributed process in which everyone actively participates. It asks the research question “Is the mechanism for engagement and leadership between Custody and Detention Officers a ‘community of practice’ in which everyone shares a sense of common purpose and direction despite their pluralised mix?”

Methodology
The study targets the same four police services piloted in [...] (2013) for their mix of Custody and Detention Officers (public) and Detention Officers (private) including, on this occasion, Custody Inspectors for their unique managerial perspective. Four other police services which share the same mix are also added, making a total of eight in all. A longitudinal, multi-strategy design, self-report surveys combine quantitative and qualitative methodologies. Quantitatively, each of the surveys at 0, 8 and 16 months provide statistical controls for past-intermediate-future organisational culture, climate and behaviour relationships, while also inviting open comments from participants for qualitative analysis. These are aimed at providing triangulation and the opportunity to compare and contrast sector roles from a qualitative ‘case study’ perspective (Yin, 2014).
Data collection also parallels Action Research (Coghlan & Brannick, 2014), with results fed back to all personnel at every stage, whether participants or not, so that there is constant validation of results and the opportunity to provide additional comments should anyone wish to do so. This is to be supplemented by use of an Advisory Group, hoped to represent the Independent Custody Volunteer Association, Health and Safety Managers, Custody Department Heads, Police Federation, Private Contractors and UNISON, to whom results will also be fed back for comment at every stage.

There are data collection peculiarities to the theory of planned behaviour, as applied by the authors, which ought to be explained. First is the need for items to be compatible with the behaviours of interest in terms of target, action, context and time (TACT; Ajzen, 2005), achieved by having the World Health Organizations (2011) definition of mental well-being repeated throughout the survey (together with minor additions to assist clarify understanding). Second, concerns the salience of indirect beliefs. These would ideally use ‘expectancy x value’ cross-products, except that a need for parsimony necessitates only one arm is used, as recommended by Gagné and Godin (2000), i.e. ‘expectations’ for behavioural and normative beliefs and ‘values’ for control beliefs. Third, is that ‘self-reports’ use familiarity assessments (Millstein, 1996), rather than conventional modally applied beliefs which have been criticised for their lack of salience in Sutton et al. (2003), as well as making them more difficult and costly.

Data analysis
Quantitatively, this will mostly be regression-based, including the use of Multi-level Structural Equation Modelling using ‘R’ (e.g. Bliese, 2013). Qualitatively, it will employ thematic analysis (Braun & Clarke, 2006) regarding its embedded case study.

Ethics
These concern two issues: firstly, informed consent of participants; secondly, possible risks to health and well-being. While the first is straightforward and addressed using well established procedures, the second concerns the fact that the surveys touch on issues of health and well-being (including stress & burnout), any one (or all) of which could exacerbate already heightened levels of arousal and distress. It is for this reason constant engagement with results is seen to provide its own self-monitoring tool, with the last survey also containing a self-help guide for participant use (its appearance at the end of the study intended to avoid it being viewed as a potentially confounding intervention, while recognising completing a survey can bring about its own changes).

Results
With the current study in its first year, no results are available. However, pilot results from [...] (2013; N = 81), using the same methodology, do provide utility for the approach, as follows. Quantitatively, in terms of cross-level analyses, Station was the highest level across the four forces, with work groups and individuals nested within them. Analyses progressed using three models which employed restricted maximum likelihood estimates using HLM7 for each of the three outcomes. These were applied hierarchically beginning with the null model (absent of individual or shared-level constructs; added by subsequent models). However, for the sake of parsimony only the third model results, concerning the individual and shared-level constructs, are shown.

For low work stress positive control beliefs climate \( (B = 0.23, p<.01) \) was the sole statistically significant predictor, supportive of lower psychosocial stressors overall. For burnout \( {\text{emotional exhaustion}} \) low perceived well-being control \( (B = -5.29, p<.05) \) was the sole statistically significant predictor. For burnout \( {\text{personal accomplishment}} \) there was no statistically significant predictor.

Qualitatively (from a thematic ‘case study’ perspective; \( N = 77 \) comments), results differentiate between the roles such that Custody Officers (across three forces) focus primarily on the Demands of the role, followed by need for personal resilience; Detention Officers (public; one force only) focus mostly on Demands of the role, followed by absence of management support; contrasting Detention Officers (private; one force only) who see absence of
management support in terms of high turnover, conditions of service and disenchantment as key (also supported by one Custody Officer), followed by Demands of the role.

Discussion
This continuing research links with the main conference theme of Resilience in a Challenging World, for the fact that police custody is one of the most challenging of work environments, needful of considerable personal resilience if it is not to impact well-being negatively. Novel and innovative, the research applies the theory of planned behaviour (in the simplest way possible), for the cross-level analyses of Custody and Detention Officers (public) and Detention Officers (private), which no-one else is currently researching (with recent efforts focused solely on Custody Officers). That it adds consideration of leadership between the roles is also unusual, as is the combined action research/ case study focus it employs. For all of these reasons it is thought conference delegates will find the poster stimulating and useful, especially since it focuses on an area of police work which attracts immense public and media attention, not least concerning quality staff and staff-prisoner relations (of which staff well-being is seen as axiomatic). This will see attendees provided with: 1) a handout detailing 2013 pilot results in full; 2) an update concerning current research progress; 3) insider knowledge by a presenter who himself worked as a Custody Officer for many years; all of which should help augment and enliven the presentation considerably. What of the key points concerning a 60 second opening ‘pitch’ for this poster? They would be the call in Ehrhart et al., (2014) for greater integration of organisational culture and climate. A call answered by this cross-level adaptation of the theory of planned behaviour concerning police custody staff well-being as it applies to both public and private sector roles.

Theoretical implications
Quantitatively, it shows the theory of planned behaviour to have utility in terms of the simultaneous cross-level analysis of organisational culture and climate (indirect, direct & behavioural). Qualitatively, the case study provides various triangulation i.e. data, levels of and method (Tindal, 1994), especially from a role differences perspective.

Practical implications
The outsourcing and commissioning of occupational roles to sectors (community, private & voluntary) is now so commonplace within the public sector, e.g. armed forces, criminal justice and policing, education, health and the prison service that any or all could benefit from the approach offered by this study. Nor are outcome behaviours limited to effective communication and well-being, since its scope has the potential to explain/predict any number of work-related behaviours in all but the smallest of organisations (although benefitting larger organisations in terms of cross-level analysis).

Study limitations
The pilot ([...], 2013), provided valuable lessons which the current study and subsequent literature addresses.

Conclusion
Providing new possibilities for organisational research, this study integrates organisational culture, climate and the theory of planned behaviour to provide several levels of analysis as a means to more fully understand the performance of behaviours in almost any kind of workplace setting.

References
DOP12 Withdrawn

DOP13 Facebook elements and their effect on self-esteem: With application to the workforce

Matthew Jellis, University of Worcester

Category: Wellbeing and Work

The use of Facebook is identified in the past literature to have an association with self-esteem levels. With some studies suggesting that there is a positive effect of Facebook use on a user’s self-esteem and some studies suggesting the opposite this study suggested that it is possible that Facebook use is seen as too general and that different elements of its use may have different effects on self-esteem. Based on the past literature’s findings, and using utilising the Self-Affirmation theory, the study chose Facebook Intensity, Self-Presentation on Facebook, Quantity of Friends, Quality of Friends and Facebook Addiction as the elements that would be used to investigate how they interacted with a Facebook user’s self-esteem levels.

The method used several scales from the Facebook literature to establish a quantitative score and the Rosenberg’s Self-Esteem scale was used in order to get the participant’s self-esteem scores. 359 participants were recruited in total and were surveyed using an internet based questionnaire design. A multiple linear regression was performed on the data produced and the results supported two of the study’s hypotheses:

1) Facebook Addiction had a negative relationship with a Facebook user’s self-esteem.
2) There is no significant relationship between the number of Facebook friends an individual has and their self-esteem levels.

The study discusses the results with regards to how Facebook can affect an individual’s life; consideration is also made to the influence of the media on how perception is formed around social networking sites. Further research suggested is directed toward the availability of social network sites with the rise of mobile devices and how this can
affect individuals. Finally, implications for employees are considered with availability of social networking sites and procrastination at work and how it may affect them personally and their job performance.

Introduction
With 1.23 billion monthly Facebook users (BBC News, 2012) it is obvious why the social networking site has drawn such interest to researchers. Furthermore there are now reported at least 250 million individuals who use Facebook on a mobile device (Visual.ly, 2015) which could make the argument that a significant amount of the population are never truly logged out of Facebook. With the rise in Facebook’s popularity research has developed and sought to identify how this social networking site affects the behaviour of individuals.

Using Self-Affirmation theory Toma and Hancock (2013) illustrated how Facebook can affect an individual’s behaviour and self of wellbeing. They argue that Facebook is a safe haven that individuals can go to once their ego has been damaged, by doing so they can review a webpage that usually highlights their positive attributes. Self-Affirmation theory argues that by focusing on other qualities an individual has it can distract, and protect, them from the threat to their ego. If this theory is to be believed about Facebook this can imply both negative and positive implications on an individual. For example Gonzales and Hancock (2011) found that in a time controlled setting individuals will show an increase in self-esteem after viewing their Facebook page; however, Kross, Verduyn, Demiralp, Park, Lee, Lin, Shablack, Jonides and Ybarra (2013) found that the over exposure, implying reliance, to Facebook could weaken the individual’s natural defences to attacks to their self-esteem.

Ellison, Steinfield and Lampe (2007) were one of the first pieces to initiate the implication that Facebook use is associated with self-esteem. While they argue that there is a positive link there are pieces of research that suggest otherwise (e.g. Kross et al., 2013; Didelot, Hollingsworth & Buckenmeyer, 2012). Facebook is a new, complex and ever-growing phenomenon, for example with the rise in smartphones Facebook became ever more popular and available (Visual.ly, 2015). Therefore, there is the possibility that individual’s self-esteem is affected negatively by some aspects of Facebook and positively by other aspects.

In order to investigate the possibility of Facebook’s multi-element influence five different elements were determined by the literature that may be linked to a Facebook user’s self-esteem levels. Johnston, Tanner, Lalla and Kawalski (2013) provided results showing that the intensity in which Facebook is used improved social capital and therefore improved self-esteem. It has been identified that Facebook intensity has a significant correlation with individual’s self-presentation on Facebook (Sun & Wu, 2012) and with Nadkarni and Hofmann’s (2012) finding that individual’s gravitate towards Facebook for a need to present themselves it seems reasonable that self-presentation on Facebook could be a factor. Due to Facebook being a social networking site, in which the main purpose is to interact with others, the amount of friends and individual has should be considered. However, while significant relationships have shown to have a positive influence on self-esteem (Saslow, Muise, Impett & Dubin (2013) the higher the number of Facebook friends an individual has shown to have a negative influence (Lonnqvist & Itkonen, 2014), therefore this factor shall be split into two elements of quality and quantity of Facebook friends. Finally, with the rise of internet addiction a Facebook Addiction Scale was developed by Andreassen, Torsheim, Brunborg and Pallensen (2012) to investigate how it can affect behaviour, this investigation shall continue by reporting Facebook addiction’s influence on an individual’s self-esteem.

It is worth noting that there is a significate body of research documenting these elements and their suggested influence on an individual’s self-esteem through Facebook. However, due to constraints this body of work has highlighted the key pieces of research that can act as the forerunners of the suggested elements.

Hypotheses
Based on the current literature presented this study will perform a multiple linear regression in order to determine the elements of Facebook that predicts any influence on the user’s self-esteem. The research presented prior has
made the case for the following to be possible predictors; Facebook Intensity, Self-Presentation on Facebook, Development of Interaction with Facebook Friends, Number of Facebook Friends and Facebook Addiction. The study shall now make the following hypotheses as to how each of these predictors do, or don’t, influence self-esteem in Facebook users.

1) Facebook Intensity shall show some significant effect on self-esteem.
2) Self-Presentation shall show a positive significant effect on self-esteem.
3) The Quality of Friendship relationships Facebook users have shall show a positive significant effect on self-esteem.
4) Number of Facebook Friends shall show no significant effect on self-esteem.
5) Facebook Addiction shall show a negative significant effect on self-esteem.

By investigating predictors with possible positive, negative, both and no effect on self-esteem it should hopefully bring a wider understanding to Facebook’s interaction with user self-esteem; furthering the understanding of Facebook’s effect on an individual’s life.

Methodology

Design
A closed questionnaire design was employed via an online survey that was an embodiment of several questionnaire scales selected to identify the different elements of Facebook use. The dependent variable was the Self-Esteem level of the participant; the independent variables were Facebook Intensity of the user, the Self-Presentation on Facebook of the user, Development of Interaction with Facebook Friends, Quantity of Facebook Friends and the Facebook Addiction level of the user.

Participants
359 participants (265 females, 92 males, 1 ‘other’ & 1 ‘preferred not to say’) contributed to the study, average age was 27.2. The one requirement was that participants possess a Facebook account for their own private use. The participants were of an opportunistic sample gathered through social networks individuals.

Materials
The Rosenberg’s Self-Esteem Scale was used to get a self-esteem level from participants, being supported as a reliable measurement in the modern literature (Boduszek, Hyland, Dhingra & Mallett, 2013). The Facebook Intensity Scale taken from Ellison et al.’s (2007) research shall be used for the first independent variable. The scale also asks the amount of Facebook friends an individual has and therefore shall be used for the fourth independent variable as well. Furthermore in their research Ellison et al. (2007) also produced a scale which measures the development of offline to online friends on Facebook which shall be used for independent variable three. The Self-Presentation Scale was taken from Wong’s (2012) research and the Bergen Facebook Addiction Scale was taken from Andreassen et al.’s (2012) research. No modifications were needed to these scales in order to use them as a questionnaire for this research.

Procedure
Participants were invited via online link to participate in the research. All information about the research and their participation was provided for them on the first page, below that was a statement saying they were 18 years old or older, that they owned a private Facebook account and that they gave consent to participating in this research. The second page asked the participants for their age and gender and below that would be the questionnaire itself formatted in a Likert scale. Participants could only continue once they had answered all questions. After completion of the survey the participant would then continue to the third and final page which would contain the debriefing sheet thanking them for their contribution; they could amend or destroy their data if they contacted the researcher. There was no time constraint on the survey itself but took around 5 minutes.
Ethics
There are no ethical conflicts that this research raises as confirmed by the University of Worcester.

Results
The online questionnaire gathered 359 participants, identified their self-esteem levels and compared them to their levels of Facebook interaction. A multiple linear regression was performed on the data in order to establish whether any of the hypotheses of this report holds merit. A standard entry method was employed as the data was attempting to fit within existing hypotheses. All assumptions were met by the data set for a multiple linear regression.

The regression accounted for 6% of the variance in the Facebook predictive variables that were found to be statistically significant with the dependent variable of self-esteem (F (5, 353) =5.135, p<.001).

Facebook Addiction (t (353) =-3.513, p<.001) was the only predictive variable that was found to be statistically significant to self-esteem. While Facebook Intensity (t (353) =.043, p=.965), Self-Presentation (t (353) =.604, p=.546), Quantity of Friends (t (353) =498, p=.619) and Quality of Friends (t (353) =-1.779, p=.076) were the predictive variables that were not found to be statistically significant to self-esteem.

Facebook Addiction had a negative relationship with self-esteem (β= -.24) which suggests that an increase of one unit on the Facebook Addiction scale would result in a 0.27 unit decrease in an individual’s self-esteem (b= -0.27), this would be if all other variables were accounted for as well.

It is acknowledged that while Quality of Friends was not found to be statistically significant it was close to the significance (p=.076), this lack of significance was seen when the premature analysis done when only 180 participants had responded to the survey. The results also highlights that the hypotheses predicted the lack of significance reported on the variable Quantity of Friends.

Discussion & Implications
The findings from this study provided evidence that Facebook addiction has a negative effect on a user’s self-esteem as suggested by Didelot et al. (2012). This is in support of Self-Affirmations theory that reliance will lower the individual’s own ability to combat threats to their ego. Church (2013) found that addictive disorders can be based on the over use of defence mechanisms with negative consequences for self-esteem, this provides full support for the theory’s projection.

No other significant influence was found between the Facebook elements and the self-esteem of an individual; however, in regards to quantity of friends a user has this supports the study’s hypothesis that there is no significant association with self-esteem. Quality of friends did provide indication of such an association but from this study no such suggestion can be made, although it is possible that the measure could be adapted to clarify such a finding.

The study reported 6% variance of accountability for this; while this may be considered small it has to be considered that something that didn’t exist just over a decade ago has this influence over an individual’s self-esteem, albeit just over a twentieth. This study was particularly interested in how these results could be interpreted in regards to an employee’s wellbeing. The rise in computer based workstations and the popularity of mobile devices (Goggin, 2014) means that Facebook is now more available than ever to the workforce in which they can utilise to procrastinate. To clarify procrastination behaviour is not inherently unhealthy (Perlmutter, 2012); however, if this procrastination is feeding addictive behaviour, through Facebook, it can have a negative effect on an employee’s self-esteem. Not only is this then a concern for the individual’s personal wellbeing but research indicates that when self-esteem drops so does worker performance (Ostrowski, 2009). Therefore an organisation should be concerned in how Facebook is monitored at work, However, thought should be given as to how Facebook is restricted as addiction to such technologies as mobile phones has been shown to be similar to being addicted to drug substances (Pedrero Perez,
Further research could be committed to how Facebook can integrate appropriately in an organisation's workforce.

References (All used in the full body of research)


**DOP14 Assessment centres: when 'groups' go bad**

Jo Parkes, IBM

**Category:** Psychological Assessment at Work

**INTRODUCTION**

Group exercises provide an opportunity for candidates to demonstrate competencies such as influence and persuasion, communication and teamwork along with a number of other core skills required in the real world but just how effective are they? and how easy is it for one candidate to derail the whole group?
Whilst there have been a number of investigations into exercise versus dimension variance in Assessment Centres, this paper summarises research of group scores gathered over 18 months to identify if competency scores most strongly correlate with those attained in other exercises or those of fellow candidates in the group.

**METHODOLOGY**

**Background to the Assessment Centre**

The organisation the assessment centre was run for operates through nine regional teams in England. It is one part of an overall selection process designed to select consultants who offer advice to businesses on international trade. Under the direction of their directors, these 200+ locally based consultants offer a range of in house services as well as support and guidance to their clients.

The assessment centre has been designed to ensure consistency and quality of the successful candidates who will go on to work across the large number of delivery partners.

**Exercises**

**Group discussion**: Candidates have up to 15 minutes to study a brief privately and summarise their thoughts before working for a further 30 minutes with the rest of the candidates in a group meeting to produce an agreed upon response to a number of tasks whilst being observed by the assessment team. All candidates receive the same brief which affords some flexibility as to the number of candidates required.

**Case study**: Candidates have 40 minutes to work through a brief and identify the strengths, weaknesses and relative unknowns of a potential client, review capability and readiness to successfully infiltrate a given target market and prepare an action plan to progress the business. This is followed by a 25 minute meeting with a member of the assessment team who interviews the candidate as to their findings.

**Role play**: Candidates are provided with a brief ahead of the assessment centre and are asked to come prepared for a 35 minute meeting with a potential client. The objectives of this meeting include establishing credibility, gaining the confidence and trust of the client, exploring any business issues and agreeing specific ways in which the candidate can help the role players business. After the meeting, candidates have a further 15 minutes to produce an accurate visit report.

**Presentation**: Candidates are given 30 minutes to prepare a 10 minute presentation promoting the benefits to potential clients of using their services. The presentation should include potential opportunities, issues and risks for the given client sector and is followed by a 15 minute question and answer session from the ‘audience’ played by an assessor.

**Personality based interview**: Candidates are asked to complete an occupationally relevant personality preference questionnaire before attending the assessment centre. They are then interviewed for up to an hour in order for an assessor to explore those traits where the candidate’s preferences are not typically aligned to the role. The outcome is an indication of the candidates personality ‘fit’ based on a competency based discussion rather than the output from the questionnaire taken in isolation.

**Competencies Measured**

**International Business Awareness**: Understands and communicates the key international business issues affecting the profitability and growth of an enterprise, along with the factors leading to success in doing international business. Has sufficient knowledge of the strategic choices, practical process and current issues to be credible with clients.

**Client Focus and Service**: Exceeds client expectations and delivers to the highest standard. Client-centred, does not compromise the real client need in order to achieve a ‘sale’ or output. Manages expectations, acts as a sounding board for clients, encourages them and provides clarity and direction when uncertain.

**Developing and Maintain Relationships**: Actively builds professional and effective working relationships and maintains them over time. Takes actions that demonstrate consideration of feelings and needs. Actively participates as a full member of a team, effectively contributing and sharing information even when it is of no direct personal interest. Has cross-cultural awareness.
**Communicating:** Able to express ideas clearly and concisely, orally, face-to-face, by telephone and in written communications, and actively listen to others

**Influencing and Selling:** Aims for a win-win outcome and is able to convince others of their own point of view. Actively influences others rather than passively accepting them, sees opportunities, acts on them and originates action

**Planning and Organisation:** Able to accomplish the goal by efficiently establishing an appropriate course of action making efficient use of resources

**Analytical Thinking and Problem Solving:** Effective in identifying problems, seeking pertinent data and recognising important information to solve complex problems and deal with new issues. Chooses the best course of action by considering all available information, strategy and stakeholders.

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<tr>
<td>Developing and Maintaining Relationships</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Communicating</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Influencing and Selling</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Planning and Organisation</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Analytical Thinking and Problem Solving</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Personality Preference Fit</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

**Scoring**

Assessors are provided with a marking guide outlining a number of positive and negative indicators against each competency for each given exercise. A 6 point rating scale is used based on the following criteria:

<table>
<thead>
<tr>
<th>Rating Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td><strong>Strong:</strong> positive evidence displayed to a very high standard with no negatives.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Good:</strong> mostly positive evidence displayed, with only minor negative evidence demonstrated</td>
</tr>
<tr>
<td>4</td>
<td><strong>Benchmark:</strong> more positive than negative evidence was demonstrated</td>
</tr>
<tr>
<td>3</td>
<td><strong>Some development required:</strong> positive evidence weak or outweighed by negative evidence</td>
</tr>
<tr>
<td>2</td>
<td><strong>Significant development required:</strong> mostly negative, with only minor positive evidence demonstrated</td>
</tr>
<tr>
<td>1</td>
<td><strong>Poor performance:</strong> few redeeming features – no/very few positives displayed</td>
</tr>
</tbody>
</table>

Candidates were assessed by each member of an experienced assessment team using the Observe, Record, Classify and Evaluate (ORCE) approach in order to reduce the potential for bias.

**Candidates**

The assessment centre outcomes for 150 candidates attending between March 4th 2014 and July 30th 2015 have been analysed. Assessment centre attendance varied from a minimum of 3 candidates to a maximum of 6. The candidates represented a cross section of nationalities and varied greatly in age with almost all having at least several years working experience in a related field to the role. The gender ratio was approximately 2/3rd Male to 1/3rd Female.

**Analysis Approach**
Correlations were established between every candidates competency rating (totals as well as individual) and exercise total as well as assessment centre totals for every competency rating in order to identify where correlations may be stronger between competency sub ratings, exercise sub ratings or candidates. To compensate the variation in candidate numbers, total scores for each competency were based on a multiple of 6x the average score achieved at that assessment centre.

Correlations were classified as:

<table>
<thead>
<tr>
<th>Measure (±)</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 to &lt;0.1</td>
<td>None to Weak</td>
</tr>
<tr>
<td>0.1 to &lt;0.3</td>
<td>Modest</td>
</tr>
<tr>
<td>0.3 to &lt;0.5</td>
<td>Moderate</td>
</tr>
<tr>
<td>0.5 to &lt;0.8</td>
<td>Strong</td>
</tr>
<tr>
<td>0.8 to &lt;0.9</td>
<td>Very Strong</td>
</tr>
<tr>
<td>0.9 or above</td>
<td>Extremely Strong to Perfect</td>
</tr>
</tbody>
</table>

Correlations were also clustered and averaged at an exercise level so that higher level comparisons could be made between candidates individual scores and assessment centre scores as a whole.

Note

Whilst every effort is taken to remove bias, it should be noted that depending on timetables which vary to account for attendance of between 3 and 6 candidates at any given assessment centre, assessors will have on occasion assessed candidates more than once and exercises will have been marked by more than 1 assessor during some of the assessment centres. The group exercise is the only exercise where we can be confident that all assessors are involved.

OUTCOME

The following table summarises 4 correlation comparisons on an exercise by exercise basis, these are:

<table>
<thead>
<tr>
<th>Cluster Averages</th>
<th>CASE STUDY</th>
<th>GROUP</th>
<th>PRESENTATION</th>
<th>ROLE PLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>C</td>
<td>Indiv</td>
<td>A</td>
</tr>
<tr>
<td>CASE STUDY</td>
<td>0.42</td>
<td>0.23</td>
<td>0.30</td>
<td>0.15</td>
</tr>
<tr>
<td>Indiv dual</td>
<td>0.23</td>
<td>0.71</td>
<td>0.14</td>
<td>0.33</td>
</tr>
<tr>
<td>GROUP</td>
<td>0.30</td>
<td>0.14</td>
<td>0.67</td>
<td>0.35</td>
</tr>
<tr>
<td>Indiv dual</td>
<td>0.15</td>
<td>0.33</td>
<td>0.35</td>
<td>0.71</td>
</tr>
<tr>
<td>PRESENTATION</td>
<td>0.25</td>
<td>0.12</td>
<td>0.12</td>
<td>0.06</td>
</tr>
<tr>
<td>Indiv dual</td>
<td>0.10</td>
<td>0.31</td>
<td>0.04</td>
<td>0.20</td>
</tr>
<tr>
<td>ROLE PLAY</td>
<td>0.21</td>
<td>0.09</td>
<td>0.15</td>
<td>0.07</td>
</tr>
<tr>
<td>Indiv dual</td>
<td>0.08</td>
<td>0.31</td>
<td>0.07</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Key

AC: refers to total scores (pro-rata’d for 6 candidates) achieved by all candidates at an assessment centre for a given
Individual: refers to the scores a particular individual achieves for a given competency in a given exercise.

What is indicated by this table is that the exercise returning the greatest internal consistency of an individual’s scores is the role play. This also returns the greatest internal consistency of scores in terms of assessment centre totals. The lowest internal consistency at an individual level is seen in the case study.

In all exercises, there is greater correlation between the individual’s scores across the other competencies in that exercise than between the equivalent scores from the other candidates at their assessment centre.

There is a moderate correlation between an individual’s group score and that of the assessment centre as a whole but this is also seen in the presentation and the role play. As such, it would appear that there is no significant difference at an exercise level to suggest that the group exercise goes well or poorly for all candidates as a whole.

The group exercise appears to correlate least well with the other exercises whilst the case study correlates with the rest the most. This may be due to the group exercise having the greatest degree in variance as the number and nature of candidates will differ between assessment centres whilst the other exercises have controls in place to ensure a greater level of consistency.

The only exercise that does return a moderate level of correlation with the group is the role play, as the group and role play exercises share the greatest number of competencies (4 of the 6 reviewed across these two exercises), it may be this that goes some way to compensate for the variance in the candidate experience of the group exercise.

This table summarises the group exercise ratings at a more granular level:

<table>
<thead>
<tr>
<th>Assessment Centre</th>
<th>Analytical Thinking/Problem Solving</th>
<th>Group Score</th>
<th>Group Consistency</th>
<th>Group Discrepancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Play</td>
<td>0.68</td>
<td>0.86</td>
<td>0.71</td>
<td>0.77</td>
</tr>
<tr>
<td>Communication</td>
<td>0.73</td>
<td>0.67</td>
<td>0.66</td>
<td>0.66</td>
</tr>
<tr>
<td>Exercise</td>
<td>0.71</td>
<td>0.66</td>
<td>0.79</td>
<td>0.79</td>
</tr>
<tr>
<td>Case Study</td>
<td>0.77</td>
<td>0.66</td>
<td>0.79</td>
<td>0.79</td>
</tr>
<tr>
<td>International Business Awareness</td>
<td>4.50</td>
<td>4.36</td>
<td>4.19</td>
<td>4.57</td>
</tr>
</tbody>
</table>

When reviewing the data at a more granular level, there was not a single rating where a greater correlation was seen between that rating and the assessment centre average for that rating over the individual’s exercise or competency rating as a whole. (note, the same level of analysis was conducted for all exercises).

Further analysis showed the greatest correlation between competencies (across all exercises) was 0.86 (between International Business Awareness and Analytical Thinking), the lowest correlation was 0.56 (between International Business Awareness and Developing and Maintaining Relationships) and the competency which correlated least well with all others was Planning and Organising.
The results from the Personality Preference Fit showed almost no to modest (0.03 to 0.22) correlations with any individual competency rating, competency or exercise total. This would benefit from a further study which reviews the individual traits rather than the overall fit rating.

**Conclusion**

This study demonstrates that whilst the group exercise (at this assessment centre at least) is the exercise which correlates least well with the other exercises and competencies, it does not appear to demonstrate a greater level of exercise effect than any other. As such, it is the conclusion of this study that whilst participating in a group environment, it is the individual who will have the greatest impact on their competency ratings rather than the others in their group.

DOP15 Assessment of how titles are protected across the world, and the implications for the DOP

Simon Toms, Psychological Consultancy Ltd, Ian Bushnell, University of Glasgow

*Category: Research Design, Analytical Techniques and Practical Applications*

**What are the main psychological theories, models and research underpinning your session?**

Whilst the underpinning research methodology is not psychological in nature, it does include several frameworks and guidelines that inform the effective identification, collection, and collation of information that is relevant to the future of the DOP. The research will involve the identification of comparable industries, governing bodies, and individuals of influence from various countries across the globe. This will enable the researchers to build a model of knowledge for specific countries of interest, which will then feed into an accessible data resource for the DOP. The benefits of this data source will be numerous, and will help inform the actions of the DOP in the future.

**How do you see your proposal linking with the main conference theme of resilience in a challenging world?**

The proposal will address several key challenges facing the DOP by initiating an assessment of how titles and related disciplines are protected and regulated by governing bodies and industry across the world. Adopting an international perspective will enable the Division of Occupational Psychology to better understand the implications of its increased regulation, and how these implications will influence the discipline’s relevance and reputation in the UK and abroad. The ultimate aim will be to make the DOP more resilient to the challenges it faces, both now and in the future.

**Why is the submission appropriate for the particular category you have chosen?**

The submission concerns the protection and regulation of guidelines and ethics inherent to the discipline of Occupational Psychology. Insight into this area will be achieved through identifying and evaluating the methods of protection enforced by related disciplines, and the industries they operate in, across the world. Conducting this assessment will lead to the creation of a centralised and accessible data source of information that will help inform the discipline’s future direction in relation to the guidelines and ethics adhered to by the Division. Regulation-orientated decisions will play a significant role in this direction, and assessing the choices, and resulting consequences, of comparable industries will serve to better-inform the decision-making processes of the DOP.

**What do you consider to be the most novel or innovative aspects of the ideas being presented?**

This will be the first time a sustained and large-scale collation of data concerning the regulations and guidelines for related disciplines in other countries has been undertaken. The centralised dataset resulting from the process will therefore represent a novel and unique pool of information that will help to advise the discipline of Occupational Psychology in the UK, and inform future policies with greater insight. Findings may also facilitate the creation of innovative practices that are informed by evidence derived from the analysis of alternative countries. The submission will be innovative in its approach, as it will aim to generate discussion and engagement amongst delegates from different national, disciplinary, and industrial backgrounds. This will exploit the forum provided by the conference in a manner that will prove highly beneficial to the DOP.
Why do you think the conference delegates will find the paper or session stimulating and useful?
The poster will have a broad and international appeal, as it will directly call for, and encourage, international collaboration in the collation of valuable data. The interactive nature of the poster and accompanying display is central to the submission, and will therefore represent an interesting and accessible resource that will have appeal to any delegate from any discipline and any country. The primary aim of the poster is to create a forum that will encourage cross-delegate contribution and discourse, and the resulting insight will be invaluable for delegates and the DOP. Including details of an inclusive forum, as well as contact details for the project leader, will generate a significant level of stimulating discussion, and this will be encouraged both throughout the conference, and after its completion. A key objective is to create an international hub of data sharing, and delegates will be well placed to benefit from, and contribute to, this centralised and accessible electronic facility.

What might the public find interesting about your paper or session?
The poster reflects a project that will have a considerable impact upon the public, as it will address the role that Occupational Psychology plays in the UK. It will do this by exploring comparable international equivalents, and examine the influence, or lack of, that guidelines and regulations have had upon the disciplines image, exposure, and reputation in relation to the general public. Public uncertainty relating to the role of the discipline and its practitioners is a significant problem for the DOP, and the current project’s aim is to address this uncertainty with the collection and collation of data. The resulting comparisons and subsequent lessons will provide greater understanding, both within the discipline, and amongst public perception. Understanding may also be garnered by assessing how related disciplines in varying countries have addressed the same issue of public uncertainty, allowing successful programmes and approaches from other nations to be learned from, and potentially mirrored, in the UK by the DOP.

If any, what materials do you intend to make available to attendees and in what format? (e.g. printed handouts, electronic copies of slides)
The submission will give considerable thought to methods that will generate contacts and encourage future collaboration with academics and practitioners from national and international backgrounds based in occupational psychology and its related disciplines. This will include printed hand-outs that provide information on how other countries regulate and monitor occupational psychology, or comparable disciplines, as well as details on how delegates can get in touch with, and contribute towards, the continued collection and collation of data. The primary goal of the submission is to generate interactive discussion by using various methods of engagement, both during and after the conference.

What key points would you put into a 60 second opening ‘pitch for your poster?’
The key points of the poster revolve around contribution and collaboration. The project represents a concerted effort on behalf of the DOP to explore how titles and related disciplines are protected and regulated by industries and governing bodies. Collation of these details will then be used to inform the Division, and provide insight into the current and future practices around these topics. In order for well-evidenced practice to occur, the project must build a collection of informed individuals from various backgrounds who are happy to contribute their time and understanding towards the main aim of the project.

What proposals if any do you have to augment or enliven the basic poster display?
The poster will incorporate a clear, bold, and colourful message calling for the interaction and contribution of delegates. The main aims of the project will be summarised, and information on the discussion forum and project leader’s contact details will also be provided. Access will also be provided to the steadily growing centralised source of data, enabling delegates to assess the progress of the project, amend potentially incorrect details, or contribute further to countries and disciplines that have yet to be explored.
Around half a dozen distinct accompanying leaflet dispensers, with national flags to signify the nation of focus within, will be placed with the poster. This will provide a clear indication of the methodological approach of the project, as well as the resulting findings derived from assessing the specific country. This will also highlight the growing nature of the data, and encourage discourse with delegates who may have additional insight into the countries in the display. Not only will this give an outward looking and visually appealing international flavour to the exhibit, but it will also inform delegates upon national and inter-discipline variations, as well as encourage further interaction and contribution in relation to other countries of note that have yet to be addressed by the project.

DOP16 How can employability skills help employees to be career resilient?
Nina Williams, Kingston Business School
Category: Learning, Training and Development

Introduction
The concept of ‘employability’ has become a hot topic. Employability places an emphasis on the individual to remain in a state of being able to find, and retain employment (Gowan 2012.) The concept has largely been created due to the changing nature of career paths and the gradual disappearance of the ‘job for life.’ Employers can no longer secure long term employment, therefore the employee needs the tools and skills to survive in an ever changing employment market. One area of employment which has seen a huge shift is that of the aviation industry. Competition from low cost carriers as well as global consolidation across airlines has created unprecedented challenges to the cost base of traditional, flag ship carriers like British Airways. These challenges led to BA introducing a new business model for its cabin crew which offered new recruits (Mixed Fleet {MF}) a revised set of terms and conditions more aligned with market rate. The impact of this on existing employees was to reduce any opportunities for progression or promotion and has led to many longer tenure employees (Worldwide {WW} and Eurofleet {EF}) reporting that they feel stuck and trapped in their current role. To address these concerns the business was keen to develop an employability programme.

Employability is an area of Occupational Psychology and HRM practice where it could be said that practice has led research. Much of the research that has been conducted focuses on the skills and personal attributes required by an individual to be employable including propensity to learn and personal adaptability.

In 2004, Fugate, Kinicki and Ashworth introduced a model of employability as a set of person centred constructs. These constructs combine to enable employees to adapt to the plethora of occupational changes they experience in today’s world. Fugate et al 2004 describe the 3 dimensions of their employability model as follows:

- Career identity (goals, hopes, fears, personality traits, values, beliefs and norms)
- Personal adaptability (optimism, propensity to learn, openness, Locus of control)
- Social and human capital (Network, education, experience)

Several studies have found support for the model (McArdle et al 2007, Eby, Butts and Lockwood 2003, Fugate and Kinicki 2008.) However, there are limitations of the research in this area. Primarily, it tends to focus on employees with academic, graduate level background and less on those who work in skilled clerical or trade roles. Therefore, this study seeks to identify if the model is valid to a population of cabin crew as well as identifying the barriers and facilitators of an employability programme.

The aims and objectives of this research project were as follows:

- To investigate the perceptions of employability of British Airways cabin crew
- To establish how well their perceptions of employability map onto Fugate’s model.
- To provide recommendations for the design of an employability programme

Method
**Participants**

<table>
<thead>
<tr>
<th></th>
<th>Worldwide/Eurofleet (10)</th>
<th>Mixed Fleet (10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average length of service</td>
<td>17.5 years</td>
<td>2.7 years</td>
</tr>
<tr>
<td>Average age</td>
<td>45.3 years</td>
<td>32.7</td>
</tr>
<tr>
<td>Sex</td>
<td>5 male, 5 female</td>
<td>9 female, 1 male</td>
</tr>
<tr>
<td>Education level</td>
<td>4 graduates, 5 college, 1 school</td>
<td>4 graduates, 6 college</td>
</tr>
</tbody>
</table>

All participants are cabin crew with British Airways. They were not a random sample but were identified via the author’s network as people who had the relevant information for the project. They were then individually emailed explaining the background to the research and requesting their participation in the study.

**Interview proforma**

The interview questions were open ended questions and based on Fugate’s et al (2004) model. The participants were asked questions covering the key constructs of the model.

- How they had initially come into the role of cabin crew
- Their intentions to stay in the role
- Anything stopping them from moving on to other roles
- How they dealt with setbacks at work
- Whether they have undertaken or would consider opportunities to learn new skills
- How important they believe education to be in career development
- Who they perceive to be in control of their career
- How much they believe their career is successful now and is likely to be in the future
- How transferable their skills would be to other roles or organisations.
- How important they think networks are to career development, and have they, or would they consider using them

Thematic analysis (Howitt 2013) was used to analyse the data and it was coded using NVIVO.

**Ethical considerations**

The ethical guidelines as laid down by the BPS were followed. The background to the interviews was fully explained to each participant and written consent was obtained.

**Results**

| Fugate’s model          | The majority of participants said they loved their job and working for BA:  
|                         | ‘I love my job. I say it’s the best job in the world.’  
|                         | ‘I think most companies probably aspire to be like BA. I’m very proud to work here.’  
|                         | Other identified elements of the role they disliked:  
|                         | ‘It does take a toll on your body.’  
| Social/Human Capital    | Participants struggled to identify transferable skills:  
|                         | ‘I think we underestimate, as crew, how many skills we have and how transferable they are....but don’t ask me which.’  
|                         | ‘I think one of the biggest frustrations, as cabin crew, is that it’s really hard to identify what transferrable skills you’ve got.’ |
Some participants did not see the value of networking and viewed it as a corrupt way of getting new jobs:
‘If you went on the golf holidays and you were one of the lads, you’d be promoted when you came back. It was horrendous, when I look back now it was just ridiculous.’

Personal Adaptability

Some crew showed examples of dual careers:
‘I haven’t given up my nursing. I still nurse now and I always did agency nursing along with my flying. I’ve gone part-time (as cabin crew), so I’m able to carry on my nursing.’

‘I have a qualification as a chef. I do some cooking for a company in central London.’

Some strong themes emerged from the data in terms of the participants’ perceptions of their employability. These centred around how much the participants identify with the cabin crew role and the BA brand, transferable skills, perceptions of social networks and adaptability. While all of these themes sit within Fugate’s model, the final theme to emerge from this data falls outside of the model and is that of employee engagement, focusing particularly on the breach of the psychological contract for longer tenure employees. The implications of this will be particularly important for BA to consider when it looks to develop an employability programme.

Discussion

Career Identity

Participants who were older and/or those who had more experience of roles outside of cabin crew, appeared to have a strong sense of career identity, in that they could say with conviction that they loved their job because they could compare it to other experiences which they did not enjoy. Fugate et al (2004) describes career identity as inherently longitudinal as it involves making sense of the past and providing direction for the future.

Social/Human capital

Some cabin crew found it difficult to explain what their transferable skills were. In addition, some of the transferable skills described may not have been in demand by another employer. One of the most important aspects of career management skills is the ability to evaluate one’s own skills and abilities (Clarke and Patrickson 2008.) Another consideration is that transferable skills will need to be market driven. Many of the participants here pointed out that one of their key skills is around dealing with people. However, in a world which is becoming increasingly automated and ‘virtual’ it is questionable whether these skills on their own will be in great demand outside of the cabin crew environment.

There were mixed views on the importance of social networks amongst those interviewed. Those with negative perceptions viewed it as something quite corrupt which led to a ‘jobs for the boys’ culture. According to Fugate et al (2004) and Higgins (2001) it is advantageous to develop one’s social capital.

Personal adaptability

The participants here demonstrated many examples of adaptability throughout their lives moving across different roles and organisations, including some who currently lead dual careers. Others have acquired skills, knowledge and professional qualifications.

The psychological contract

Another theme which emerged from the data but which sits outside of Fugate’s model is that of the psychological contract. In the past, people expected to work for an organisation for the whole of their working life (Baruch 2003) but now organisations no longer encourage this. Clarke and Patrickson (2008) point out that employees will expect to see the promises made in the past continue to be fulfilled. However, they also point out that mental models and
schemas change very slowly, therefore longer serving cabin crew will not adapt to this new psychological contract very quickly. Atkinson (2002) explains that when an organisation creates a new contract, employees may continue to seek the old contract and when they find it to be unavailable, this can lead to low morale. From the findings in this study, longer tenure cabin crew are still expecting the old contract while BA has revised what it is prepared to offer. In the cabin crew’s eyes, this is a breach of the psychological contract and BA has shifted the goal posts.

Implications for practice
This study reveals a number of important implications for organisational practice and in particular for the development of an employability programme within British Airways. From the findings presented here, a programme which provides a logically sequenced number of stages seems preferable. Enabling people to build up their skills and capabilities before jumping into the job search process will most likely lead to a greater chance of success. This should include providing development opportunities which enable people to identify their marketable transferable skills. In addition, providing opportunities for networking and later job search skills will be essential.

BA will also need to consider how it deals with the psychological contract for longer tenure crew and how it can improve morale for these employees.

Additional submission information
This submission is particularly relevant for the career development category as it deals directly with a key challenge facing one of the UK’s biggest and most complex organisations – British Airways. It is also of interest given the uniqueness of the cabin crew role where employees work across the globe and in the air 365 days a year. Therefore any employee engagement, communication, development or training is particularly challenging. The most interesting aspect of this research is that it takes place in the context of employees who have a seemingly linear, traditional career path when the environment around them is moving towards much more dynamic, fluid career paths. Given that BA cabin crew were the subject of the longest running industrial dispute in the UK since the miner’s strike, this study also offers an insight into why they felt so strongly about the changes the company implemented.

Similar challenges may well be faced by other organisations who have had similar re-structures and are having to reconsider or change employees’ terms and conditions. Therefore, the implications for practice will be useful for a range of employers.

I will be able to make slides available for the delegates attending the conference.

References
Introduction
In the current economic climate, cuts have meant that we have fewer employees doing the same amount of work, with the expectations that high standards are maintained. With research finding that work overload is one of the main causes of burnout, it is important for employees to maintain good psychological health. Burnout typically refers to a state of physical, mental, and emotional exhaustion (Pines & Aronson, 1988). At work, it can be caused by multiple factors including, lack of control, work overload, insufficient reward and a conflict of values. Research also shows certain personality types are more likely to experience burnout. For example, research on burnout and the Five Factor model found that people with high emotional stability experience less burnout (Alarcon, Eschleman & Bowling, 2009). The symptoms are primarily emotional, and can include disengagement, exhaustion, loss of motivation, feelings of helplessness and depression. Moreover, Kwag and Kim (2009) found that burnout was related to lower levels of job performance.

What Is Resilience and Why Is It Important at Work?
Resilience has been defined as ‘An individual’s capacity to adapt positively to pressure, setbacks, challenge and change in order to achieve peak performance’ (a&dc, 2010). It can be viewed as a multi-dimensional construct consisting of different attitudes and behaviours which can be developed and improved.

Research studies have found that resilience is related to a number of occupational outcomes:

- It can act as a potential buffer against experienced stress and ‘burnout’ (Kobasa, 1979).
- It can moderate the relationship between stress and job performance, with those who are higher in resilience being more likely to maintain their levels of performance better than those with lower levels of resilience (Westman, 1990).
- It has been related to workplace happiness, job satisfaction and job performance (Youssef & Luthans, 2007).
- It has also been related to work engagement (Shalfrooshan, 2013) and psychological health (Moncur, Hughes & Loe, 2014).

Resilience is therefore an important construct to study in an occupational setting as it can help employees deal more effectively with stress and is also associated with more positive work attitudes and behaviour.

Research Question
Previous research has suggested that resilience can moderate the effects of burnout (eg Dunn et al 2008). The aim of this study was to confirm the link between resilience and burnout, and then look more specifically into which components of resilience relate most to burnout. It was hypothesised that higher levels of reported resilient attitudes and behaviours would relate to lower levels of burnout.

Sample
The sample consisted of 131 working adults, obtained from an online research panel of volunteers. Of the sample, 49.6% were female and 50.4% were female. Over 25 industry sectors were represented.
Measures
The first measure used for this study was The Resilience Questionnaire (a&dc, 2010). This questionnaire comprises eight key components of resilience which were identified through a review of research literature and other existing models of resilience. The review incorporated Maddi and Kobasa’s (1984) 3Cs model, Neenan’s (2009) strengths underpinning resilience, and Reivich and Shatte’s (2002) skills for resilience, as well as a review of the constructs assessed in a number of different psychometric tools which measure resilience.

The Resilience Questionnaire has acceptable internal consistency reliability, with alpha coefficients ranging from .74 to .86 for the eight dimensions, and construct validity with other related psychometric instruments, including other measures of resilience, positive and negative affect, work engagement and psychological health (a&dc, 2014). All of the dimensions were designed to be intuitive and can be developed through training or coaching interventions.

The second measure used was the Maslach Burnout Inventory – General Survey (Schaufeli, Leiter, Maslach & Jackson, 1996). The MBI-GS measures respondents’ relationships with their work on a continuum from engagement to burnout. Engagement is described as an energetic state where the person is committed to excellent performance. In contrast, burnout is a state of exhaustion where the person is cynical about the value of their work and doubtful about their capacity to perform. The MBI-GS has three subscales, which are: Professional Efficacy, Exhaustion and Cynicism.

Data Collection Procedure
Participants were invited to complete the questionnaires online. Participants completed the questionnaires sequentially in a single session.

<table>
<thead>
<tr>
<th>Resilience Questionnaire Dimension</th>
<th>Maslach Burnout Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Efficacy</td>
<td>Exhaustion</td>
</tr>
<tr>
<td>Self Belief</td>
<td>0.337**</td>
</tr>
<tr>
<td>Optimism</td>
<td>-0.382**</td>
</tr>
<tr>
<td>Purposeful Direction</td>
<td>-0.317**</td>
</tr>
<tr>
<td>Adaptability</td>
<td>0.116</td>
</tr>
<tr>
<td>Ingenuity</td>
<td>-0.479**</td>
</tr>
<tr>
<td>Challenge Orientation</td>
<td>-0.415**</td>
</tr>
<tr>
<td>Emotion Regulation</td>
<td>0.183*</td>
</tr>
<tr>
<td>Ingenuity</td>
<td>-0.383**</td>
</tr>
<tr>
<td>Challenge Orientation</td>
<td>-0.337**</td>
</tr>
<tr>
<td>Support Seeking</td>
<td>0.324**</td>
</tr>
<tr>
<td>Exhustion</td>
<td>-0.303**</td>
</tr>
<tr>
<td>Cynicism</td>
<td>-0.274**</td>
</tr>
</tbody>
</table>

Results
The relationship between the two measures was investigated using correlations and multiple regression. The results are shown in Table 1.
Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
Correlations greater than 0.3 are highlighted in bold.

Table 1: Correlations between The Resilience Questionnaire and Maslach Burnout Inventory (N=131)

21 out of 24 correlations were statistically significant at the p<0.05 level or below. The strongest correlations with Professional Efficacy were observed for Self Belief and Ingenuity. All of the resilience dimensions correlated with Exhaustion and Cynicism. The strongest correlations with Exhaustion were observed for Optimism, Emotion Regulation, Challenge Orientation and Purposeful Direction. The strongest correlations with Cynicism were observed for Purposeful Direction and Challenge Orientation.

A multiple regression analysis was also conducted to determine the overall extent to which the dimensions on The Resilience Questionnaire predict variance in burnout as measured by the Maslach Burnout Inventory. For the Professional Efficacy scale, the Multiple R = .44, explaining 19% of the variance, and Self Belief and Ingenuity emerged as significant predictors. For the Exhaustion scale, the Multiple R = .49, explaining 24% of the variance, with Optimism being the significant predictor. For the Cynicism scale, the Multiple R = .55, explaining 30% of the variance, with Purposeful Direction being the significant predictor. All three multiple regressions were significant at the p=0.001 level or below.

Discussion and Implications

The results indicate that higher scores on the eight dimensions measured in The Resilience Questionnaire are associated with lower levels of burnout. Broadly, resilience has an effect on each of the three constructs measured in the MBI-GS, but particularly Exhaustion and Cynicism. Resilience accounted for almost a quarter of the variance in Exhaustion and a third of the variance in Cynicism, based on these questionnaires. Additionally Self Belief, Optimism, Purposeful Direction and Ingenuity are the aspects of resilience that appear particularly related to burnout according to the results from the multiple regression analyses.

This outcome is in line with expectations that resilience is related to burnout. In particular, individuals reporting lower levels of burnout tended to be:

- More optimistic about their life in general and that they will experience good outcomes (Optimism)
- More confident in their own ability to overcome problems and obstacles (Self Belief)
- More confident in their ability to generate solutions and solve problems they encounter (Ingenuity)
- Have clear goals that they are committed to achieving (Purposeful Direction)

These findings support previous research. For example, Chang, Rand and Strunk (2000) found optimism to be a significant predictor of burnout at work. Additionally, setting goals (Purposeful Direction), can help employees to feel in control of their work which in turn can help prevent burnout, especially as a perceived lack of control over work and workload is one of the biggest predictors of burnout (Potter, 2005).

Overall, these findings could have positive implications for the workplace as reduced levels of burnout could lead to reductions in psychological health problems and an increase in employee engagement and job performance. Based on this study, it would be valuable to explore further research whether taking action to improve levels of individual resilience through an intervention (eg a resilience development programme and/or individual coaching) can reduce levels of burnout.

References

Submission Notes
1. Why is the submission appropriate for the particular strand you have chosen?

   This is a research study exploring specific aspects of well-being and work (burnout) and how this relates to resilience, a construct focused on positive adaptation to challenge and change.

2. What do you consider to be the most novel or innovative aspects of the ideas being presented?

   This study investigates which specific resilient attitudes and behaviours have the strongest relationship to burnout rather than just the overall construct of resilience. It also uses a measure of resilience which has been specifically designed for use in work contexts.

3. Why do you think conference delegates will find the paper or session stimulating and useful?

   The study provides useful data which could inform further research around resilience and burnout, and could also inform practical interventions designed to reduce the risk of burnout in employees.

4. What might the public find interesting about your paper or session?

   Individuals who have a more resilient mindset tend to report lower levels of burnout at work.

5. If any, what materials do you intend to make available to attendees and in what format (e.g., printed hand-outs, electronic copies of slides)?
We would provide A4 copies of the poster for conference delegates to take away with them.

6. What proposals if any do you have to augment or enliven the basic poster display?

We will display the relevant Resilience Questionnaire and MBI-GS models in visual format on the poster so they are quick and easy to understand for readers.

DOP19 Poster Withdrawn

DOP20 The use of a competency-based psychometric tool to identify high-performing staff in the hospitality industry with particular focus on a London 4 star hotel

Anastasiya Rashkina, University of Westminster

Category: Psychological Assessment at Work

The use of a competency-based psychometric tool to identify high-performing staff in the hospitality industry with particular focus on a London 4 star hotel.

What are the main psychological theories, models and research underpinning your session?

In the current business environment of hospitality, organisations are striving to sustain their competitive advantage due to the impact of globalisation, severe competition and dynamic markets. It is suggested that competitive advantage could be maintained by various factors, including the strategic use of internal resources and capabilities (Carless, 2009). Due to the recent shift from the product-focused to customer-focused incentives, hospitality industry highlighting the importance of performance of its employees, particularly frontline positions, who are in the constant contact with the customers responsible to drive customer loyalty, company reputation etc. Therefore, it is highly important to select competent employees that can sustain better performance and gain a competitive advantage. The discipline of psychology has conducted considerable research into competencies, and the resulting theoretical models ensure this research is integral to the current submission.

Competences may be seen in combination of skills, abilities, generic knowledge and willingness to perform a task (Hayes, 1979). The recognised set of such competences may be integrated in the organisational strategy and have an impact on all the horizontal and vertical HRM activities (Soderquist, Papalexandris, Ioannou, & Prastacos, 2010). It may also be a helpful tool for an organisation to find a suitable candidate for a particular position or to sustain and develop the existing employees to achieve better performers and therefore gain a competitive advantage among the company competitors (Sutton & Watson, 2013) as organisational performance tend to prove if job requirements are matching the competences of employees.

The quantitative research was carried out using an innovative psychological assessment tool – PROFILE:MATCH2® based on 10 competencies identified by the author together with the HR Managers of the hotels which took part in the research. These competencies included: Motivation, Decision Making, Problem Solving, Communication Skills, Customer Focus, Team Orientation, Attention to Detail, Planning and Organising, Commitment, Self-Competence. Moreover, the chosen 10 competencies are built upon the Five Factor Model of personality (FFM). This model illustrates individual difference on the basis of five broad factors of personality trait (Vernon, Villani, Vickers, & Harris, 2008). Also, prior to the research, the performance appraisal was conducted internally by the HR Department in the both companies, which took part in the study, and collected for the purpose of correlating it with the results of the PROFILE:MATCH2® in order to find a pattern of high-preforming employees.

In order to create relevant inferences for the reader and consequently as an outcomes of the following study, the author adopted a number of analysis in order to examine how the competencies are linked with the performance. All the analysis used fall under the umbrella of factor analysis which focuses on the relation of one variable – ‘a
factor’ with others looking on the previous experiments in order to create a framework for future prediction (Brown, 2015). Regression analysis has been used for many years as a powerful tool to understand the relevance of independent variables in simple or multiple investigations. A regression is normally conducted by examining the scatter plot of a bi-axil diagram (Miles & Shevlin, 2001) and an equation that produces a line of best fit can be created in order to reduce the error term and verify it for any transgression such as multicollinearity or serial correlation. This type of analysis allowed the researcher to verify the relevance of independent variables in the outcome of the dependent variable and to evaluate its significance.

Another insightful examination of data may be achieved through the use of correlation analysis, which evaluates the relation between the presence of one variable and the likelihood second variable. A high correlation of close to 1 allowed the researcher to occlude with the significant assurance that the presents of one variable may be linked with another one whether a low result or close to 0 might prove the lack of connection between two variables (Kotz & Mari, 2001). Other areas that have to be verified are the analysis of frequency and variance. Both are related with the number of times scores occurred and the variation between the prediction and the empirically verified result (Scheffe, 1999). As per Scheffe, 1999, there are no results that can be predicted for 100%, therefore, a good model of analysis would aim to minimise the variance of the error term to its lowest. Thus, the examination of variances is very important in order to identify the reliability of outcome of the model based on the expectations. Finally, the author believed that frequency analysis could be used to achieve meaningful inferences. Frequency analysis is verifying the relevance of the model by examining the number of occurrences where a model may be used to predict a possible outcome (Sutton & Watson, 2013).

How do you see your proposal linking with the main conference theme of resilience in a challenging world?
The following research is intended to study, investigate and correlate competences of frontline employees in the UK hospitality, which will enable the related organisations to predict those that demonstrate higher performance. Thus, the following submission considered being relevant to the ‘Resilience in a challenging world’, as identifying individual competencies, will enable companies to match an appropriate individual with the job role, and therefore improve company performance, aid resilience in particular role and company as a result.

Why is the submission appropriate for the particular category you have chosen?
The submission is highly relevant to the category of ‘Psychological Assessment at Work’, as it uses a well-evidenced consultancy-based psychometric tool that utilises personality measures to assess competencies, as well as data from an established staff appraisal system developed by a major hotel branch. Combining these two datasets enables the paper to draw a series of correlations and inferences between personality and the demonstration of job-related competencies.

What do you consider to be the most novel or innovative aspects of the ideas being presented?
The most innovative aspect of the submission results from the incorporation of data from individuals’ personality, competencies, and resulting performance. The resulting findings are therefore of significant interest to a range of individuals and organisations, as analysis will draw upon a combination of well-established and highly innovative forms of psychological assessment.

Why do you think the conference delegates will find the paper or session stimulating and useful?
The paper’s primary focus is to highlight the significant influence that personality can play upon the competencies demonstrated by staff in the hospitality industry. This is achieved by using a well-validated psychometric tool in conjunction with internal performance appraisals. The combination of theoretically established individual differences methodology with commercially validated company-led appraisals ensures that the submission will be of considerable interest to academics, practitioners, and industry representatives.
What might the public find interesting about your paper or session?
The poster’s most significant strength in relation to the general public is reflected by its focus upon the hospitality. As one of the largest growing industries in the world, hospitality generates £46 billion to the UK economy, and generates 2.7 million jobs, representing almost 9% of total UK employment. The potentially significant benefits this submission will provide to this huge industry will ensure poster will be of substantial interest to many members of the public.

If any, what materials do you intend to make available to attendees and in what format? (e.g. printed handouts, electronic copies of slides)
The printed materials will include A4 copies of the poster, and A4 booklets that will expand upon the findings of the research. Additional literature that expands upon the psychometric tool used by the research will also be provided to delegates.

What key points would you put into a 60 second opening ‘pitch for your poster?’
The key strength of the submission lies in the incorporation of data from a verified psychometric personality tool and a well-established staff appraisal scheme from a large chain of hotels. These two tools have been used to assess many thousands of staff members, and their incorporation into the current research enables it to highlight a range of insightful findings that could guide the future selection and development procedures of companies belonging to this major global industry.

What proposals if any do you have to augment or enliven the basic poster display?
Accompanying literature will encourage interactivity and help to limit the amount of text on the poster, allowing it to focus upon a visually appealing presentation of the theoretical concepts and correlational data that represent the project.

References


DOP21 What makes a satisfied mobile teleworker, extraversion or introversion?

Anette Morris, University of Gloucestershire

Category: Leadership, Engagement and Motivation

Introduction

The aim of this research was to identify whether personality type is an indicator of job satisfaction for mobile teleworkers versus home teleworkers and office-based workers and if the extent of communication is different.

Telework has been defined as a form of work organisation where the work is done partially or completely outside the conventional company workplace with the aid of information and telecommunication services (Konradt, Schmoik & Malecke, 2001).

Telework can be differentiated further into home-based telework, where work is done exclusively at home, and also into various forms of alternating or mobile telework, where employees spend at least some regular time working outside the conventional workplace. The important aspect of teleworking versus conventional homeworking is the extensive use of electronic media to interact with others inside and outside the organisation (Baruch, 2001).

Mobile working has been made possible by the rapid uptake and widespread use of electronic communications in organizations, such as video calling, text messaging, teleconferencing, and e-mail (O’Neill, Hambley & Chatellier, 2014). Of the nearly 3,000 worldwide workers polled in the PGi survey (2015), 79% work outside the office. The most prevalent telework setup is working remotely one day per week. For the purpose of this study the classifications of office worker, home teleworker and mobile teleworker will be used, the latter meaning multi-locational work as described by Vartiainen & Hyrkkänen, (2010) where employees spend some paid working time away from their home and away from their main place of work. With mobile technologies making it possible to work in and from multiple places and also when moving between them, these places could be in the field, on business trips, travelling, or on a customer site.

According to Konradt, Schmoik & Malencke (2001) there has been a general belief that the suitability of certain personality types to carry out telework is to be rather introverted with little need for social contact and exchange. Extraverted employees by having a stronger need for social relations would in contrast be expected to suffer more from the feeling of alienation that is anticipated as a consequence of telework. However from their interviews the study actually offered evidence that extraverted employees were more likely to cope with the social consequences of home-based work as in general they have enough self-confidence to adjust the intensity of their social relations according to their personal needs. Mobile teleworkers use their time in the office for social and interactive tasks whereas home is preferred for mental tasks. Expanding on this as the mobile teleworker not only spends time working from home when not in the office, but also from other locations like a client site, their opportunity for social interaction is even greater. This was confirmed by a more recent study for Cisco by Pearn Kandola (2007) which identified effective mobile workers to be more extraverted than their office bound colleagues as they get their energy and motivation from keeping in touch with people and going out and meeting with clients whereas introverts were less likely to be successful in these roles as they were less likely to keep in touch with their team members.

This study has used job satisfaction as the measure of success of mobile teleworking. Moorhead & Griffin (2010) defined job satisfaction as the extent to which a person is gratified or fulfilled by his or her work. Some studies have suggested that teleworking leads to greater job satisfaction (McCloskey & Igbaria, 1998) whereas others indicate that teleworking can reduce job satisfaction (Cooper & Kurland, 2002). A large study of IBM employees comparing mobile and home-based teleworkers, (Hill et al, 2003) found that home-based teleworkers reported higher levels of job satisfaction.
In the Duxbury & Neufeld (1999) study of teleworkers and communication, they found that teleworkers reported one of the main communication challenges associated with teleworking was an inability to attend spontaneous meetings. Similarly Turner (1999) found that design teams working at different sites still travelled long distances for face-to-face meetings, although they had access to video-conferencing facilities. Likewise Webster-Trotman, (2010) found that teleworkers’ concerns centered on a perceived desire for increased face-to-face communication with managers and coworkers. In addition the study by Thomsin & Tremblay (2008) found that clients’ offices and offices other than the head office were the most important places of work, after home, in a mobile work program.

To satisfy the aim of this research the hypothesis were centred around identifying whether personality type is an indicator of job satisfaction for mobile teleworkers versus home teleworkers and office-based workers and if the extent of communication is different for these worker types.

Method

An opportunistic sample of employees within a multinational IT company was obtained via a web-based survey tool. The survey consisted of an introductory e-mail giving the key details of the survey, contact points for the research and the active link for the on-line survey. In accordance with the BPS Code of Ethics and the Data Protection Act a Consent form confirmed that participation was entirely voluntary and all data anonymous and to be held in accordance with the Data Protection Act as per the guidance from the BPS Code of Ethics. At the bottom of the first screen it stated that consent was assumed if the ‘Continue’ button is pressed. At the end of the survey a Debrief form was presented to the participants outlining again the purpose and nature of the research and providing contact details for further support in case of any issues or if an individual wanted to withdraw from the survey.

The main part of the survey consists of three distinct sections including two existing psychometric questionnaires, multiple choice demographic questions and additional free text questions. The demographic questions including age, gender and worker type (office, home, mobile) as well as communication questions regarding the amount of face-to-face time and with whom. The two existing psychometric questionnaires chosen for this research are the JCA Personality Type Profile (PTP) to identify extraversion and introversion in each participant and the Hackman and Oldman Job Diagnostic Survey (JDS) to measure job satisfaction.

The JCA Personality Type Profile has been developed using Jungian typology theory. Jung proposed that people adopt different attitudes towards life and utilise different psychological processes or functions to make sense out of their experiences (Ryckman, 2008). Jung described these basic attitudes extraversion with an “a” and introversion in his theory of psychological types. Although each participant was asked to complete the JCA PTP questions in its entirety, the focus of this study was only on the extraversion and introversion aspects.

The Job Diagnostic Survey (JDS; Hackman & Oldham, 1975) is an instrument that was developed to study the effects of different job characteristics on people. The JDS is a facet measure as it covers several areas of job satisfaction such as growth, pay, security, social, and supervision, as well as global satisfaction. Therefore this study should fit well into the DOP Conference ‘Leadership, Engagement and Motivation’ category. For the purpose of this study three of the nine facets were used, these being general job satisfaction, satisfaction with growth and satisfaction with security. Both questionnaires have been found to have good level of reliability and validity.

This cross-sectional study used the extraversion and introversion aspects of the JCA Personality Type Profile as the categorical independent variable. The participants were further subdivided into 3 levels – office worker, mobile teleworker and home teleworker, this was deemed to be the categorical dependent variable. Lastly the job satisfaction ratings were deemed to be the continuous dependent variable for the analysis. Although the study was limited to only one organisation, it did span several different departments.
Preliminary Results

The total number of people who completed the on-line survey was 126, it is unknown as to how many people the survey link was sent to as the circulation was via a third party (their managers). Although there were a higher percentage of females (n=76) to males (n=50) in this study sample, the research hypothesis did not include any gender-based scenarios and this was therefore deemed to be not important.

The study firstly needed to identify each participant as being either Introvert (N=72) versus Extraverts (N=54). Unfortunately the first Hypothesis was not supported, however when including the job satisfaction facets, several of the hypothesis showed a significant difference in mean scores between extraverts and introverts. An important aspect of this study was to investigate teleworking and thereby differentiate between three types of workers, office worker (n=39), home teleworker (n=32) and mobile teleworker (n=55). In this study sample mobile teleworkers were the highest percentage of worker type (43.7%) which is equivalent to other studies by PGI (59%), CBI (66%) and IBM (40%). The hypothesis asking: ‘Is there a difference between extravert/introvert mobile workers and office workers with respect to job satisfaction?’ was also supported for the job security facet. There was a statistically significant main effect for personality F (1, 120) = 5, p=0.03, however the effect size was small (partial eta squared =0.04). Subsequent hypothesis also supported both a general job satisfaction and satisfaction with security facet.

In addition the study investigated the amount of communication time for the different worker types. Extravert Mobile workers, versus their other colleagues, showed to spend significantly more face-to-face time with their clients/customers, the differences in mean scores for Extravert_Mobile (M=15.19, SD=13.01) and Others (M=4.41, SD=7.99) was significant, t (116) = -3.64, p<0.05, two-tailed. Along side this the study also asked the participants to indicate how much time was spent at each of four locations: ‘in the office’, ‘at home’, ‘at client site’ and ‘while travelling’. As the distinction between mobile teleworkers and home teleworkers was their ability to work from any location not just the office and at home, it was not surprising that extravert mobile workers spent significantly less hours at home versus their office and home based colleagues. Conversely Extravert mobile workers spent significantly more time on client site versus their office and home based colleagues.

Conclusion and Discussion

The purpose of this study was to identify whether personality type is an indicator of job satisfaction for mobile teleworkers versus home teleworkers and office-based workers and if the extent of communication is different. The study found that there was a significant difference in higher satisfaction with security in their job for workers with a preference for extraversion versus those with a preference for introversion. This supports Staw and Ross (1985, cited in Spector, 2007) conclusion that job satisfaction is in part due to personality, some people are predisposed to like their jobs, whereas others are not.

When the sample was further subdivided by worker type, it was found that extravert workers who classified themselves as mobile teleworkers were not only more satisfied with security in their job versus their office or home working colleagues, but were also more generally satisfied with the kind of work that they did on the job.

As the newest concept of mobile teleworker not only spends time working from home when not in the office, but also from other locations like a client site, it was significant to find that the extravert mobile workers spent the most amount of time communicating with clients or customers and also the most amount of time at the client or customer sites, thereby creating opportunity for supplementing social interaction.

Although this was a quantitative study, in addition to the questionnaires and demographic questions participants were also given the opportunity to give comment on the positives and negatives of mobile working in a free text format, which can be further discussed during the conference.

References:


**PGi GLOBAL TELEWORK SURVEY 2015** - Trends around the world shaping the future of work. Downloaded from [http://img03.en25.com/Web/PremiereGlobalServices/%7B1079ed04-81d0-4f45-bbc6-4953755fe9e3%7D_2015_PGi_Global_Telework_Survey.pdf](http://img03.en25.com/Web/PremiereGlobalServices/%7B1079ed04-81d0-4f45-bbc6-4953755fe9e3%7D_2015_PGi_Global_Telework_Survey.pdf)


DOP22 Poster Withdrawn

DOP23 ‘Morning Campus!’ - Waking-up higher education institutions to safety leadership
Sara Guediri, The University of Manchester
Category: Work Design, Organisational Change and Development

Introduction
This study identifies how university leaders’ engagement in safety can be enhanced and what practices university leaders can adopt to increase their research team’s and institution’s safety culture. The study focuses on Principal Investigators (PI) as a group that so far has received little attention in Higher Education’s efforts to create safer institutions. Safety within academic institutions is dependent on proactive safety leadership at all levels, and PIs’ play an important role for positively impacting on safety performance and shaping the local safety culture. The study takes a novel approach as it focuses on understanding how PIs’ engagement in safety can be fostered. This goes beyond traditional Higher Education Institutions’ (HEIs) safety initiatives, which have commonly been more concerned with safety compliance.

Recent incidents involving explosives in UK university labs and safety incidents at US universities, which included fatal accidents (e.g., Texas Tech incident in 2010), have highlighted the need to pay greater attention to the status of safety within research settings. These events have triggered awareness amongst the Higher Education sector to enhance the understanding how to effectively manage safety within a research setting and improve university safety culture. Research teams have unique power dynamics, where graduate students’ and research staff’s academic future is greatly depended on their PI. Hence, PIs are essential in challenging and overcoming old assumptions and in moving universities towards a strong, positive safety culture. However, little is understood about how to develop PIs’ engagement in safety leadership. The present research provides insights into what effective PI safety leadership entails and factors that foster and hinder PIs’ engagement in safety leadership. The research holds important implications for PI development and safety policy making within the Higher Education sector. Thus, our research contributes towards advancing the understanding how to build a positive, strong safety culture within research teams and HEIs.

PIs are in a unique leadership position as they are often responsible for leading research teams of considerable size, but usually have progressed to their PI position through academic achievements and with little or no previous management experience or training in leadership competencies. In addition, their role is often temporarily constrained to the duration of a research project. Once a research grant has been successful, they are required to step into their PI position ‘ad hoc’, often with little time to support them in taking up such leadership position. Moreover, with regards to safety, PIs are not in a formal safety role (e.g., such as Health and Safety Managers or Safety Advisors), yet are required to put their institutions safety policy into action and implement a safety culture. Safety research in other sectors such as construction and oil and gas has identified front-line leaders as critical to shaping an organisation’s safety values and norms (Zohar & Luria, 2010; O’Dea & Flin, 2003). Drawing on social learning theory (Bandura, 1977), front-line leaders convey the value of safety through their repeated interactions with employees. Thus, in a research context this highlights PIs as front-line leaders who shape the safety perceptions of graduate students and research staff. However, within the Higher Education sector safety leadership initiatives tend to focus on senior-level management groups such as Vice-Presidents, Deans or Heads of Schools, with little attention paid at the level of PIs. The present study is innovative as it explores PIs as a previously untapped source for improving safety. PIs are in a pertinent position, having close proximity to individuals working in safety-critical situations (e.g., graduate students and research staff) and act as intermediary in the upward flow of safety information. Thus, our study makes an important contribution by investigating what constitutes effective leadership at the PI-level to enhance the safety culture of HEIs.
The study also makes an important theoretical contribution to the scientific leadership literature by integrating conceptualisations from the work engagement literature with the leadership literature. Amongst safety researchers there is growing interest in understanding how to create engagement in safety matters beyond a ‘tick box’ attitude towards safety. We draw on work engagement research (e.g., Bakker, Schaufeli, Leiter, & Taris, 2004) to gain insights into factors that facilitate and hinder PIs’ engagement in safety leadership. Whilst existing research has focused on identifying effective safety leadership practices, much less is known about the factors that impact on leaders’ engagement in safety leadership behaviours in the first place. As outlined above, the PI’s role does not specifically focus on safety so that there is considerable latitude to what extent PIs choose to engage in leadership activities that are safety-related and how they integrate safety into their broader leadership objectives. Thus, it is important to understand how PIs can incorporate safety leadership as an integral part of their wider leadership efforts. A core objective of our research is to understand factors that hinder and foster PIs’ engagement in safety leadership activities.

In summary, the study aims:
1) To explore PIs’ and research staff’s perceptions about PIs’ role as safety leaders
2) To understand factors that facilitate or hinder PIs’ engagement in safety leadership
3) To identify specific leadership practices that PIs can use to enhance safety culture

Figure 1 illustrates the conceptual framework that guides the research.

**Figure 1.** Research framework on PI engagement in safety leadership.

### Method

The study uses a qualitative approach with focus groups as a method that allows to uncover understandings of PI engagement in safety leadership. Data collection is currently underway and we are conducting focus groups with PIs as well as research team staff from different universities. The two participant groups were selected to explore the role of PIs as safety leaders, not only from a leader perspective, but also from the perspective of the ‘follower’ group.

The study has gained ethical approval from the authors’ affiliated University’s Ethics Committee. Prior to deciding whether to taking part and giving informed consent, participants are provided with an information sheet that explains that their contributions will be treated with strictest confidentiality with all quotes to be used in dissemination being anonymised.

Focus groups are being conducted with PIs (four focus groups) and with research staff who report to a PI (four focus groups) from different universities. Each focus group starts with a card sorting exercise that asks participants to identify the most important practices for good PI leadership. Focus groups continue with asking participants to
discuss questions around good practices of ‘responsible leadership’ and factors that help and hinder PIs to engage in ‘responsible leadership’. Focus groups close by asking participants to discuss questions directly on engagement in PI safety leadership. Framing questions in the first half of the focus groups around ‘responsible leadership’ has two key reasons: The research aims to investigate how PIs can integrate safety leadership efforts into their overall, wider leadership role. Asking participants straight away about ‘safety leadership’ might narrow their approach to the focus group discussion. Secondly, safety is a concept that is highly socially desirable and asking participants directly about their efforts to lead on safety is likely to distort responses.

Data will be analysed using thematic coding to identify core themes in participants’ understanding of what defines effective PI leadership and factors that facilitate and hinder engagement in safety leadership. Data collection will be completed in November 2015, so that full results will be available for the BPS DOP conference in January 2016.

**Conclusions**

The current research advances the understanding of effective safety leadership at the PI-level. The study makes a contribution to the wider safety leadership literature by focusing on engagement in safety leadership. Safety research often takes a ‘prevention perspective’ that is concerned with the avoidance of errors or mistakes. Most existing research has investigated safety leadership as a formally expected aspect of an individual’s job. However, many supervisors and managers, including PIs, operate autonomously and exercise considerable scope in the extent to which they decide to engage in safety-oriented leadership. The present research is innovative as it adopts a ‘pro-active perspective’ from the work engagement literature (Bakker et al., 2004) to identify factors that catalyse PIs engagement in safety leadership. The results of the study will advance knowledge on how leaders’ willingness, persistence and dedication to safety leadership can be fostered.

**Practical Implications**

The findings will offer recommendations relevant to PIs themselves, staff developers, and HEIs safety policy makers on how to develop PI safety leadership engagement and promote their institution's safety culture. The study will identify key factors that help and hinder PIs to engage in safety leadership, which will provide a useful guidance for HEIs where to target their efforts in enhancing PI safety leadership.

**Relevance to the Conference Theme: Resilience in a Challenging World**

This study explores how PIs’ engagement in safety leadership can be developed in the context of the challenges that HEIs face. In the UK, education budgets have been cut and are continuing to face further budget constraints in future years. Moreover, worldwide HEIs are challenged to sustain a safe research and learning environment, whilst surviving in an increasingly competitive education market with growing pressures for publications and funding. To tackle this challenge, it is critical to understand how building a strong safety culture can be synthesised with the overall goal to deliver research excellence. The present research contributes to this understanding by exploring PIs’ engagement in safety leadership.

In addition, there is growing evidence that effective management of health and safety is linked to business performance. Organisations in other sectors are increasingly recognising that as well as causing human and financial losses, poor workplace safety has adverse effects such as damage to corporate reputation and decreased workforce morale. Thus, understanding how to promote safety represents an additional avenue for universities to add value to their institution.

**Developing an Engaging Poster Display**

The conference poster will be designed to provide the audience with an overview of the study’s objectives, method, key findings and contributions in a clear and stimulating way. We will use illustrations to communicate the conceptual framework and core research questions. The poster will also include photos of the card sorting exercise from the focus group (i.e., photos of the cards as sorted into leadership priorities) to make the research process
accessible. We will use speech bubbles with participant quotes to support the key themes identified in the analysis in an engaging way. In addition to the poster display, A4 print-outs of the poster will be available for delegates and a ‘FAQ-style’ hand-out that guides the reader through the research, and will supplement the interested reader with more detail.

Key Points for the ‘60 Second Pitch’
- Recent safety incidents and accident statistics have highlighted a need to examine the status of safety in Higher Education
- There is little attention on PIs’ safety leadership, but we know from other sectors that front-line leadership is critical for promoting safety
- The study is innovative as it focuses on engagement in safety leadership, which goes beyond a ‘tick-box’ attitude and mere safety compliance
- The analysis based on focus group data provides insight into what defines effective PI safety leadership and what factors foster and hinder PIs engagement in safety leadership
- The findings are relevant because Higher Education Institutions are facing the challenge to sustain a safe research environment whilst meeting pressures of an increasingly competitive education market.

References

DOP24 Overcoming barriers to management involvement in multidisciplinary wellbeing interventions
Toni Pearce, Kingston Business School
Category: Wellbeing and Work

Introduction
Sickness absence is a large and important issue facing organisations today. The costs to organisations are both financial and humanistic. In 2013, statistics show 131 million working days were lost due to sickness absence in the UK alone (Labour Market Force Survey, 2014) with a financial cost of £609 per employee (CIPD Absence Management Survey, 2014). There are numerous workplace wellbeing interventions available to address these issues and they are led variously by those working within Health and Safety, Occupational Health and Human Resources.

It is widely recognised that managers play an important role in health and wellbeing interventions. They have both a strong positive and negative influence on employee health and wellbeing (Skakon et al., 2010), managers hold power over strategy implementation (Guth and Macmillan, 1986) (Donaldson-Feilder et al., 2010), management development would enhance employee health and wellbeing (Nyberg et al, 2009), and their involvement improves the efficacy of health and wellbeing interventions (Nielsen and Randall, 2009). However, research also shows that often managers are not involved (CIPD Absence Management Survey, 2014). The aim of this study was therefore to explore the barriers to management involvement in multidisciplinary working for employee health and wellbeing interventions, within an organisational context, and identify how they may be overcome, and once in place, how multidisciplinary working can be sustained over time.
Research Question 1: What are the barriers to enabling management involvement in multidisciplinary working in health and wellbeing interventions for members of their team and how can they be overcome?

Research Question 2: How can multidisciplinary working (in terms of supporting managers being able to deal with health and wellbeing issues in their teams) be sustained over time?

Method

Participants: The practitioners were carefully selected from the pool of wellbeing practitioners participating in a wider study through a matching process that ensured they had all previously experienced multidisciplinary working, represented a variety of roles, professions, organisations and industries, and not all of which were based in the UK.

Table I: A Summary of Practitioners’ Occupational Areas and Gender

<table>
<thead>
<tr>
<th>Department/Gender</th>
<th>Occupational Health</th>
<th>Health and Safety</th>
<th>Human Resources</th>
<th>External Consultant</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

Design and analysis: A qualitative design using semi-structured interviews was used to allow for a rich detailed and complex account of the factors that affect policies and procedures from the people that they affect (Srivastava and Thomson, 2009). Using a qualitative design has allowed an in-depth and practitioner led exploration of the facilitators, barriers and appropriate conditions that have been considered in terms of what happened and what has worked or didn’t work. Ten semi-structured interviews were conducted and transcribed. Data was analysed in Nvivo using an inductive and framework approach to thematic analysis. Inter-rater reliability of the thematic framework produced was checked using an independent analyst who repeated the first two analytical stages using one complete transcription. The thematic frameworks were then compared in terms of themes and discussed before the framework was applied to the remaining nine transcriptions. It was found, though the themes had received different labels, the content and meaning was the same with the exception of one additional sub-theme that had been included (ownership and drive as part of multidisciplinary working). As there is no mechanical process for the development of a thematic framework for analysis, only that the themes identified are considered meaningful and relevant by the researchers. After discussion it was agreed to be meaningful and relevant, and so remained.

Results:

Research Question 1: What are the barriers to enabling management involvement in multidisciplinary working in health and wellbeing interventions for members of their staff and how can they be overcome?

All ten practitioners agreed support for managers was of great importance and that multidisciplinary working improved the success of support for managers in dealing with health and wellbeing issues for members of their team as it allows access to a range of specialist expertise.

“... I think you require that sort of multidisciplinary input to cover the kind of key aspects ...where the managers are dealing with individuals it’s very common for them to come with more than one health and well-being issue so in order for in order for a manager to deal with that scenario effectively I think we need access to usually a range of specialists input.”

Transcript 2 Occupational Health
The barriers that were identified comprised three themes and ten sub-themes. The three themes were labelled people, process and communication. These are presented in Figure 1.

**Figure 1: Mind map of three themes and ten sub-themes identified as barriers to enabling management involvement in multidisciplinary wellbeing interventions for members of their staff**

**People**
The theme people included three sub-themes as barriers to enabling management involvement in multidisciplinary working for health and wellbeing interventions for members of their staff. These were attitudes and interpersonal skills of managers, priority reactions to workload pressures and finally the insufficiency of management training.

“It’s about targeting the managers that need it rather than the ones that are wanting to have it. As often the managers that come on the courses are good at their job anyway ….. it’s the poor managers that we need to be targeting that don’t come on the training courses and don’t manage their staff well, don’t have good behaviours and targeting that.”

*Transcript 3 Health and Safety*

“We can assume or hope that man that the front line staff will pick it up but managers may not pass it on so they say they haven’t got enough time for that I can’t relieve staff anyway so what’s the point they don’t tell anybody anything.”

*Transcript 3 Health and Safety*

**Process**
The theme process included three sub-themes, management involvement being historically overlooked, formalisation of procedures and poor procedures.

“Policies and procedures can get in the way of it working well. Because managers are something that they have to follow policies and procedures and sometimes they’re so busy thinking that and going down that
Communication
Within the theme communication as a barrier to management involvement in multidisciplinary working for the health and wellbeing of their staff there were three sub-themes: language barriers, reliance on managers to cascade information and cohesiveness of communication.

“For us for occupation health worker, occupational therapists lack of knowledge and confidence about dealing with erm employers can be a barrier to so we’re not quite sure how to communicate with each other and how to enter into each others’ worlds, and do it properly, so that can be a barrier as well.”

Transcript 8 Occupational Therapist

“We encourage managers to cascade things so managers to managers down the chain of command .. and in some areas ... we don’t actually know whether it’s happening.”

Transcript 3 Health and Safety.

Research Question 2: How can multidisciplinary working (in terms of supporting managers being able to deal with health and wellbeing issues in their teams) be sustained over time?

The themes people, process and communication continued to be of importance. The central message underlying all themes was to view multidisciplinary working for health and wellbeing as something continuous that is never actually achieved.

Figure II: Mind map of three themes and seven sub-themes identified as ways multidisciplinary working can be sustained over time
Communication

Seven out of ten interviewees talked about the need for good communication and keeping people in the loop regarding the benefits of multidisciplinary working for health and wellbeing interventions. Indeed one practitioner noted marketing skills may be useful to keep people interested and aware of the benefits.

“it’s just informal because we all sit within corporate services within the same office we tend to talk a lot whether it’s, you bump into somebody at the tea point, or whether you physically go across to their desk to talk to them I suppose it its really keeping up communication is the biggest one.”

Transcript 6 Health and Safety

Process

Two sub-themes were identified. The need to constantly utilise multidisciplinary working including practice on projects that cut across specialism’s to improve ways of working and understanding of each other’s departments and contributions; and momentum both in terms of keeping momentum by refreshing the information and communication and also by raising awareness on the benefits of multidisciplinary working so it can be seen as effective and become self sustaining as an accepted way of working.

People

Practitioners described how management involvement in multidisciplinary working means it becomes an accepted way to work the more you do it but what stood out most was a sub-theme around ownership. A lack of ownership of multidisciplinary working where it is assumed to be the remit of a department such as human resources rather than everyone involved may pose a barrier to this so there is a need for senior ownership for traction, a need for central owners for integration, but certainly someone to lead and drive it.

Of note is that if any one of these three elements was missing, or ineffective, it could pose a significant barrier to management involvement in multidisciplinary working in health and wellbeing interventions for members of their staff.

Discussion

The themes identified as barriers to management involvement in multidisciplinary interventions for the wellbeing of members of their staff included people, processes and communication. The barriers identified as sub-themes included the managers own beliefs and attitudes towards the health and wellbeing of their staff that may prevent them utilising training and support; the tendency to become task oriented during times of workload pressure thereby placing health and wellbeing of staff at the bottom of their agenda and finally a lack of training on responsibilities and support that is available to access regarding the health and wellbeing issues of their staff.

Potential solutions were identified and future directions for research are suggested. The work of Sicotte, D’amour and Moreault (2002) suggests within a medical health care context a clear set of concrete rules or guidelines could facilitate a cohesive approach to collaborative working, and in this way could provide further insights to enhance the cohesiveness involved in multidisciplinary working for health and wellbeing interventions within an organisational context. Hence future research could build on the findings of this study through contrast with the views and experiences of line managers and employees to provide a more comprehensive view.

References

Organisational politics has been the subject of both empirical and conceptual research attention over the last few decades and the construct of perceptions of politics has been negatively associated with behaviours that are linked to individual and organisational effectiveness. Furthermore, a recent practitioner study found that the major drain on resilience in the workplace was office politics and managing difficult relationships and the reported frequency of the significance of this drain increased with seniority (Bond and Shapiro 2014). The majority of the existing research into organisational politics has been quantitative and no studies have been located that involved a UK Civil Service population.

This research will provide an in depth exploration of the ways in which members of the Senior Civil Service (SCS) experience and manage organisational politics and deploy political behaviour in order to fulfill their leadership and organisational roles. It will do so with reference to the construct of psychological flexibility which has been shown to have significant benefits in both clinical and workplace settings. Psychological flexibility is a measure of how people adapt to fluctuating situations and environments, shift perspective, reconfigure mental resources and balance competing desires and life domains; all of which are considered to be highly appropriate to the current complex and challenging Civil Service context.
Key features of the short paper/presentation
This is an MSc dissertation and the data collection interviews are currently underway (July/August 2015). Eighteen semi-structured interviews have been scheduled. It is intended that the short presentation will cover a brief overview of the research and the hierarchical themes derived from template analysis of the data, alongside a range of key quotes to illustrate the outcomes. It is anticipated that the themes will cover both organisational politics and the components of psychological flexibility. Attendees will be presented with a summary diagram of the hierarchical themes and encouraged to take part in an open debate on the impact of organisational politics and the presence of psychological flexibility in the workplace.

Introduction
In considering organisational politics within the Civil Service it is first necessary to explore the climate in which members of the SCS are operating. The research on the perceptions of organisational politics will then be explored and the review will conclude with a summary of some relevant research into psychological flexibility.

The Institute for Government have identified the enormous challenge presented by the significant cuts and reforms in the Civil Service since 2010 and highlight the requirements for further cuts in the current Parliament, whilst delivering the Government’s agenda (www.instituteforgovernment.org.uk, 2014). In addition the SCS been subject to a two year pay freeze over 2013-14 and 2014-15 (www.gov.uk, 2015a) and the Civil Service People Survey for 2014 shows a general dissatisfaction across the Civil Service with pay and total reward (www.gov.uk, 2014). A recent report from the Public Administration Select Committee identified a priority demand for the current government to demonstrate how it will better educate Civil Servants to consider risk and manage uncertainty and future challenges (www.parliament.uk, 2015). The SCS are required to deliver more efficiently with fewer resources in a complex and uncertain environment and Spending Review 2015 is now underway (www.gov.uk, 2015b). This study will explore the ways in which the SCS navigate and manage organisational politics in their leadership roles.

There are three focal constructs in the literature - political behaviour, political perceptions and political skill (Doldor, 2006). In a systematic review of the literature on organisational politics it was also noted that qualitative approaches were found to be less frequent than qualitative ones (6 out of 51) (Doldor, 2006). As this study is a qualitative piece of research, the conceptual definition will not be imposed on the participants and it will be guided by an open interpretation which characterises organisational politics as a ‘two-edged sword’ (Madison et al, 1980) and be mindful of a review which identified antecedents, behaviour and consequences of organisational politics that could be functional or dysfunctional (Buchanan, 2008).

The results of research into perceptions of politics (PoP) has been equivocal. However, a meta-analysis of the PoP research found a strong negative relationship between PoP and job satisfaction and also between PoP and organisational commitment (Miller, Rutherford & Kolodinsky, 2008). The meta-analysis also found a moderately positive relationship between PoP and the outcomes of job stress and turnover intentions and there was a non-significant relationship between PoP and in-job performance. A scale developed to measure PoP requires respondents to rate their agreements with statements about politics based upon three themes (Kacmar & Carlson, 1997):

- General Political Behaviour, e.g. “people in this organisation attempt to build themselves up by tearing others down.”
- Go along to get ahead, e.g. “agreeing with the powerful ones is the best alternative in this organization.”
- Pay and Promotion Policies, e.g. “I can’t remember when a person received a pay increase or promotion that was inconsistent with published policies.”

These distinctions provide a useful reference for a range of potential interpretations of organisational politics and it will be interesting to discover if any corresponding dysfunctional themes emerge from the current research. In line with the broad definition adopted earlier the data will also be analysed for the presence of functional themes. The results will also explore the concept of political will, where research has proposed three attitudinal ambivalences.
where organizational politics is considered to be at the same time i) functional and dysfunctional; ii) ethical and unethical and iii) pleasant and stressful (Doldor, Anderson & Vinnicombe, 2013).

This study also aims to explore whether individuals fulfill their leadership roles with reference to the construct of psychological flexibility which could enable them to both respond and deploy political behaviour effectively. The reasons for the selection of this construct will now be discussed.

The construct of psychological flexibility has been considered in the clinical domain as a key component in the understanding of psychological health that captures “many of the fluctuating, conflicting forces that are readily apparent when people navigate the environment and social world.” (Kashdan & Rottenberg, 2010; p865). Psychological flexibility is a broad construct which encapsulates the ability to: recognise and adapt to a range of situational demands; shift behaviour or mindset to facilitate social or personal functioning; maintain equilibrium among life domains and be aware and committed to behaviours which serve deeply held values (Kashdan & Rottenberg, 2010). The implicit processes in this definition are derived from Acceptance and Commitment Therapy and include experiential avoidance, cognitive defusion, mindfulness and acceptance (Hayes et al. 2006). The definition, processes and ability descriptions of psychological flexibility appear to provide an ideal framework for effective leadership abilities and behaviours, particularly when navigating an environment where organisational politics takes place.

There is also empirical research on psychological flexibility in the workplace. For example, psychological flexibility has been shown to longitudinally predict employee mental health, performance and learning (Bond & Bunce, 2003; Flaxman & Bond, 2006). PF has also been shown to enhance the beneficial effects of high job control (Bond, Flaxman & Bunce, 2008). The latter study is of particular interest as one might expect the SCS to have high job control which may not be fully appreciated or utilised if the cognitive resources deployed to manage organisational politics are significant, or if psychological flexibility is low or diminished.

This study will explore whether the SCS manage organisational politics and their leadership role with reference to psychological flexibility. Through an in depth exploration of how organisational politics is managed by the SCS this study could form the basis of recommendations for future research and provide focus for leadership development.

Methodology
This research proposes to offer a detailed insight into the management of organisational politics by the SCS by using a flexible form of Thematic Analysis known as Template Analysis which has been widely used in organisational and management research (Brooks, McCluskey, Turley & King, 2015). In template analysis it is permissible to develop some a priori themes which was done in this study based upon existing research on both organisational politics and psychological flexibility. Through an analysis of interview transcripts the researcher will identify themes in the data which will be grouped into meaningful clusters. The a priori template will be adjusted and modified accordingly in the light of the data (Brooks et al, 2015).

It is being stressed to each participant that the research will abide by the British Psychological Society Code of Ethics and that the research proposal has been cleared by the University Ethics Committee. The transcripts from each interview will be anonymised and stored in accordance with Data Protection Regulations.

References

DOP26 Poster Withdrawn

DOP27 The role of self, reciprocity and social identity in burnout
Emmeline Elliott and Kim Bradley-Cole, University of Surrey
Category: Wellbeing and Work

Introduction
Despite the significant research on burnout, there has been a failure to translate this evidence into successful intervention programmes. In the Editorial in the journal Burnout Research in 2015, Maslach and Leiter called for more in-depth information of actual attempts to ameliorate burnout and described how “case histories of individuals who have experienced and recovered from severe burnout without necessarily the assistance of a structured intervention program” might be of interest (Maslach & Leiter, 2015; p. v). They also added that a
qualitative approach that explored in depth the personal initiatives or life experiences might be associated with this recovery.

**Social Identity Theory and Burnout**

Haslam, Jetten, and Waghorn (2009) completed a five year study looking at the role of social identity in burnout in a theatre production team. They found that those with high identification with the production team were less likely to experience burnout during the most stressful phases of the production in comparison to the team members who had low identification with the production analysis. Haslam et al (2009a) suggested that there was a strong case for seeing social identity as central to the phenomenology and trajectory of the stress process. Folkman and Moskowitz (2004, p758) describe the literature on coping as being dominated by “individualist approaches” with personal control, personal agency and direct action being a core tenet in most models. They describe that these approaches are couched in terms of personality factors such as resilience, hardiness or coping style to explain stress-related outcomes. Haslam (2009) suggests that the study shows that identification with the group provides individuals with the motivation to contribute to the shared goal but also shields them from the stress that might be involved in achieving the goal. Haslam et al (2009) states “we believe that there will be considerable value in further research that explores these dynamics in more detail and thereby helps refine our theoretical and practical understanding of this important topic”. Qualitative research based on social context is an ideal way to gain a deeper understanding of the role and social identity in the stress experience.

Burnout is known to be prevalent in IT. Although a significant number of quantitative studies have been completed looking at burnout using quantitative measures very few studies have taken a qualitative approach. An exception is Pawlowski et al (2007), who completed qualitative research on the burnout in IT. However they simply asked their participants about their experience or awareness of the experience of others and did not differentiate in their write up as they were looking at social representations rather than the personal experience. They conducted 30 minute telephone interviews and used the data to map out the perceived antecedents and outcomes.

**Research Objectives**

The purpose of this research was therefore to explore the experience of burnout in IT professionals with a specific focus on the role of relationships.

The eco-map approach is a way of mapping out support networks that has been adopted from social work practices into business coaching. Baumgartner, Burnett, DiCarlo and Buchanan (2012) describe how it is a graphic representation of a social support network and that they are a way of communicating complex information quickly. As the interviewees would be recalling their burnout experience historically and specifically in relation to their relationships at the time, the eco-map was thought to be an ideal tool for recalling their burnout experience.

Interpretative Phenomenological Analysis was used because of its commitment to the lived personal experience (phenomenology) and to the particular in both depth and how particular experiential phenomena, such as the experience of burnout have been understood from the perspective of particular people in a particular context (idiography). IPA also acknowledges the double hermeneutic. See Smith, Flowers and Larkin (2009).

**Methodology**

**Design**

Following a favourable ethical opinion from the Faculty of Arts and Human Sciences (FAHS) Ethics Committee at the University of Surrey, potential participants were approached via email. Participants were recruited on the basis that they were IT professionals that had previously experienced emotional stress at work, to the point that they had needed to take time away from work. Four interviewees were recruited, a junior and senior project manager, a programme director and a business analyst.
The interviews were conducted face-to-face in a time and location that was suitable for the interviewee. The interviews took a semi-structured format lasting between one and a half to two hours. They were recorded using a Dictaphone and were later transcribed. The interviewees read the information sheet and then signed the consent form. The interview took the format of a brief discussion around the background of the experience. They were then provided with an A3 sheet of paper and coloured pens plus a key for the meaning of the relationship lines. A single line indicated that the relationship was as expected, a dotted line that the relationship was weak, a double line indicated that the relationship was strong and a zig-zag line that the relationship was difficult or involved conflict. The interviewee was encouraged to talk aloud as they completed the eco-map and then the interviewer asked questions around the relationships on the map or any relationships that were not on the map but might be relevant.

**Analysis**

The interview transcriptions were read and re-read and then loaded into NVivo where they were coded, initially at a high level and then sub-themes were introduced. The eco-maps were not coded but were used as a prompt during the interview.

**Findings: A Diagram of the Themes and Sub-Themes from the Semi-structured Interview**

- **Perceptions of others of self**
- **Performance Management**
- **Emotion**
- **Ego & Ego Damage**
- **Pressure & taking responsibility**
- **Who am I**
- **Controller**
- **Protector**
- **People Person**
- **CCPEP**
- **Permeable boundaries**
- **Group & Social identity**
- **Old school working**
- **Old vs Young**
- **Contractors**
- **Sub-Contractors**
- **Ex-military**
- **Old vs Young**
- **Chaos**
- **Triggers into burnout**
- **Making Sense of the Experience**
- **Perceptions of others of self**
- **Performance Management**
- **Emotion**
- **Ego & Ego Damage**
- **Pressure & taking responsibility**
- **Who am I**
- **Controller**
- **Protector**
- **People Person**
- **CCPEP**
- **Permeable boundaries**
- **Group & Social identity**
- **Old school working**
- **Old vs Young**
- **Contractors**
- **Sub-Contractors**
- **Ex-military**
- **Old vs Young**
- **Chaos**
- **Triggers into burnout**
- **Making Sense of the Experience**

Unfortunately I have only just completed the coding of my transcripts, I expect the key findings to be:

1. **Personal Identity & Burnout**

   The role of personal identity and an aspect of the burnout situation preventing the individual from acting in line with their personal identity. A key sub-theme is Who I am – Protector (please see below for an extract). The Protector Sub-Theme was prevalent in three of the four participants. Individuals described a source of stress as the inability to act in relation to this aspect of their identity, they also protected the team from bullying behaviour which again was a source of stress and their role in protecting the team from the bullying behaviour was a reason for staying on the programme for Sarah and Steven. Finally within this theme individuals described how they did not lean on others because they did not feel that they could take it. I believe all these aspects are new to the literature and I plan to explore them further.

**Sub-Theme: Who I am – Protector**
The Protector sub-theme described the individual trying to protect the team or company or team or not leaning on sources of support because they felt that they could not cope. This is closely linked to the Coper sub-theme. Sarah described how she called in the company turnaround team as she thought they would relieve the situation.

“they just trampled over us. They just they just took the people there because they could see that they were capable and knowledgeable and they pushed them even harder and it was the absolute opposite of what I thought would be done. So that I find that so upsetting and conflicting that I couldn’t stay on the project so after a period of time.. I er.. I said “I just can’t stay””

Sarah is describing how she found this situation that she had inadvertently created so difficult that she had to leave. The Protector theme was prevalent for Sarah, Caroline and Steven but not Zoe. The Protector theme also recurred in relation to conflict on the programme in descriptions of standing up to the bully to protect the team and was also described as one of the reasons that made it difficult for the individual to leave. Sarah describes her leaving the programme:

“I can offer help and I can offer support but ultimately if they are not capable of making that decision... with the support and so on and so forth there was nothing more I could do for them... you know I had growing men cry on me, I said “are you okay” and the response, someone cried, that’s that’s really distressing and I was just saying to them as a friend er more than as a manager “leave, what what’s worth this?””

2. Mapping the timelines of each individual and comparing it to the sequences described in the literature with a focus on triggers to stay and triggers to leave to see if this can inform burnout intervention programmes. See below for an example timeline.

3. Zoe was actually still experiencing burnout. I did not know this prior to the interview as I had referred to previous experiences, however I asked if she would like to stop the interview and she said that she would like to continue. The language that she uses is significantly different to the other interviewees and her account is fairly chaotic and misses the frequent use of metaphor in the other three interviews. I therefore plan to explore this further.

4. The impact of the complex organisational design will also be explored in relation to social identity theory. Many different groups are working together and the team in which the individual works is transitory. The impact on social identity and stress will be explored.

Relevance and additional questions

2. This research is relevant to Resilience in a Challenging World because it will explore what it is to be resilient – is it staying in the burnout situation or is it leaving? Also the impact of the complex working relationships will be explored and how this impacts the interviewees and what this might inform us in relation to social identity and work.
3. Burnout relates to wellbeing.
4. The use of the eco-map to my knowledge has not been used before and some of the findings are novel.
5 & 6. Burnout is an issue for many and new interventions are required.
7. Handouts will include example eco-maps and timelines.

References

Introduction/Background

Interviews have been found to be the most preferred method of assessing candidates by supervisors and managers (Longhammer, 2013). Most interviews are still conducted face to face, although video interviews and telephone interviews are becoming more common.

The main purpose of an interview is to gain an accurate impression of the candidate and how well they would fit in to the organisation. Therefore it is important to understand any factors which might impact perceived hireability. Previous research has found that the anxiety of the candidate can negatively impact hiring decisions (Huffcutt et al, 2011). This may pose less of an issue in face to face interviews as visual cues (attraction and body language) have been found to influence interviewer’s perceptions of candidates (Barrick et al, 2012). These visual cues are not present in telephone interviews. Therefore it is important that interviewers are able to develop accurate perceptions of candidates based solely on audio cues. Ambady et al (1995) found that people were fairly accurate in perceiving visual and auditory emotional cues in zero acquaintance situations. However, this study did not involve telephone interview situations. Therefore whether interviewers can accurately identify emotional cues, specifically anxiety cues, in these types of situations is still uncertain. Considering the impact interview anxiety can have on hiring decisions it is important to test this further. Therefore the present study will investigate whether participants can accurately perceive the anxiety of an interviewee after listening to a telephone interview and how this relates to perceived hireability.

In addition, it is necessary to understand the extent to which interviewers’ characteristics (personality and previous interview experience) may also influence their ability to perceive these cues in others. A number of personality factors have been found to impact on an individual’s ability to accurately perceive emotional cues (Hall et al, 2015). Previous interview experience has been found to increase interviewer’s sensitivity to identify impression management in candidates (Lievens and Peeters, 2008). Therefore, the present study further investigates how participant characteristics impact competence ratings.

Rationale and Hypotheses

Although, there has been an increase in the use of telephone interviews there is still limited research which focuses on candidate anxiety and impact on hireability. Most previous research has been focused on face to face interviews.

Hypothesis 1a: Perceived interviewee anxiety negatively predicts hireability ratings.
Hypothesis 1b: The relationship between perceived interviewee anxiety and their hireability is moderated by participant anxiety. Participants with high interview anxiety will rate the anxious interviewee as more hireable than participants with lower anxiety.

Hypothesis 2: Participants with more interview experience will rate the anxious candidate as more anxious than those with less interview experience.

Hypothesis 3a: Participants who are more perspective taking will rate the anxious candidate as more anxious than those who are less perspective taking.

Hypothesis 3b: The relationship between the personality traits of the participants (sociability, shyness, conscientiousness) and their ratings of the interviewee’s perceived anxiety is mediated by participants’ perspective taking.

Method
Design and materials: Participants were allocated to one of two independent groups. The first group listened to a confident telephone interview and the second group listened to an anxious telephone interview. The two audio recordings were based on the same transcript and conducted with two trained actors. The script was based on a real interview, and job vacancy. A list of anxiety cues was also used to instruct the actor playing the interviewee. In order to assess how effectively participants were listening to the audio, they were also asked to indicate which programmes were required for the job (so-called attention check). The independent variables were participants’ scores on personality questionnaires and the dependent variables were the perceived anxiety of the interviewee and their perceived hireability. The covariate was participant’s previous interview experience.

Participants: Overall, there were 82 participants with 41 in each of the two groups. Data collection was closely monitored to ensure the number of participants in each group was equal. Of the 82, 68 were female, 14 were male and there was an age range of 18-49.

Procedure: The study was conducted as an online survey through the web application Qualtrics (http://www.qualtrics.com/). Participants were recruited through an opportunity sample. The only exclusion criterion was that participants had to be over 18 and have no pre-existing anxiety disorders. Participants were shown an information page and asked to give informed consent. They were then asked to click the link and listen to the recording of the telephone interview (either confident or anxious). The telephone interviews lasted approximately 20 minutes. Once participants had listened to the audio file they were asked to complete the attention check questionnaire along with the hireability scale. On the next pages, participants rated the interviewee on their level of anxiety, provided details regarding their own previous interview experience and were asked to rate their own interview anxiety. Participants were further asked to complete questionnaires assessing their conscientiousness, shyness perspective taking and sociability, followed by a demographics section (gender, age, student status, job status). The survey concluded with a debrief page about the purpose of the study.

Measures: A number of personality scales were also used which measured perceived anxiety of the interviewee (McCarthy & Goffin, 2004), participant interview anxiety (McCarthy & Goffin, 2004), shyness (Cheek & Buss, 1983; Crozier, 2005), sociability (Aluja, Kuhlman & Zuckerman, 2010), conscientiousness (Costa & McCrae, 1987; IPIP) and perspective taking (Davis, 1980). A hireability scale (Howard & Ferris, 1996) was also used to measure the interviewee’s perceived hireability. The participants were also asked questions, developed by the researchers, pertaining to their previous interview experience.

Results
A multiple regression analysis was used to examine hypothesis 1a. Perceived interviewee anxiety was the most significant predictor of hireability ratings ($b = -.799, \beta = -.655, t= -5.729, p < .001$) explaining 47.7% ($R^2 = .477$) of the variance in hireability ratings. Therefore, hypothesis 1a was supported.

Another multiple regression analysis was used to assess hypothesis 1b. The overall model found that the variables explained a significant amount of variance in hireability ($R^2 = .500, R^2_{adj} = .458, F(6,73) = 12.144, p < .001$). However, when the interaction term of participant interview anxiety and perceived interviewee anxiety was added the amount of variance explained decreased ($R^2\Delta = .000, p = .962$). Therefore, hypothesis 1b was unsupported.

To analyse hypothesis 2 the data were split into four groups: those with more and less previous interview experience and those in either the anxious or confident condition. An ANOVA demonstrated that the two groups who listened to the anxious interviewee did not differ in terms of how anxious they rated the participant.

To analyse hypothesis 3a a multiple regression was used. Perspective taking was not found to be a significant predictor of interview anxiety ($b = -.031, \beta = -.035, t= -.309, p = .758$). Therefore, hypothesis 3 was not supported.

Hypothesis 3b was examined using the Baron and Kenny (1986) Mediation analysis. None of the analyses with perspective taking as the mediating variable were found to be significant and further analysis suggested no relationships between the variables.

**Discussion**

One aim of the present study was to gain an insight into the effect of candidate interview anxiety on perceived competency. The other aim of this study was to identify the extent that interviewer characteristics (such as personality and past experience) may influence this perceived competency. The preliminary findings showed that perceived interviewee anxiety was found to lead to lower competency ratings. This provided support for previous research by (Huffcutt, 2011). Interestingly, previous interview experience was found to influence perceived interviewee anxiety ratings but not perceived hireability. This suggests that experience makes interviewers potentially more attentive to anxiety cues, but less likely to let this bias their hireability ratings. However, there was no support found to suggest that participant’s personality (anxiety, sociability, shyness, perspective taking and conscientiousness) had any impact on perceived interview anxiety or hireability.

Future research could focus on the effect of accent in telephone interviews, both interviewee and interviewer, as this was not assessed in this study. Also along with this gender could be investigated as this study involved only male actors playing both the interviewer and interviewee. An implication of this research and an area of further research could be into effective ways for interviewers to reduce the effects of anxiety on hireability decisions in telephone interviews.

**Link to Conference Theme**

Resilience has been defined as “the process of adapting well in the face of adversity, trauma, threats or significant sources of stress – such as family and relationship problems, serious health problems or workplace and financial stressors” (American Psychological Association, [http://www.apa.org/helpcenter/road-resilience.aspx](http://www.apa.org/helpcenter/road-resilience.aspx)). Previous research has shown that resilience and anxiety are closely related in that as resilience increases anxiety tends to decrease (Grant et al, 2009). Therefore, it could be suggested that interviewee’s who are low in interview anxiety are perceived as more resilient due to their ability to adapt to the stressful situation. Furthermore, interviewers may perceive candidates with high interview anxiety as low in resilience and this could potentially explain why they are rated as less competent.

**References**


**DOP29 Comparing the psychometric properties of forced choice and Likert scale versions of a motivation assessment**

*Noma Khabo*, CEB, Talent Measurement

**Category:** Leadership, Engagement and Motivation

**1. What are the main psychological theories, models and research underpinning your session?**
This study will examine the psychometric properties of a Motivational Questionnaire (MQ, SHL, 2011), which is an 18 scale Likert assessment, and compare it to a forced choice version of the instrument. The MQ is a self-report measure that assesses motivational patterns and strengths between individuals at work. It assesses motivational differences on factors which energise, direct and sustain behaviour in the workplace. The MQ has shown good construct validity and has been validated against other established measures of motivation which include relevant scales of the OPQ CM5.2 (SHL, 1992), a self-report questionnaire that was developed specifically for occupational use. The MQ has also shown a good level of reliability and good construct equivalence has been found across cultures.

Whilst the MQ has shown an overall high level of accuracy, however, research on specific language versions of the MQ has shown that some of the scales show lower levels of reliability and differential item functioning compared to the English version of the MQ, for example, a Chinese version of the MQ was found to have lower reliability for the Flexibility, Commercial Outlook and Personal Principles aspects of motivation. It has been suggested that inconsistencies could be as a result of cultural differences, with cultural values affecting how motivation is expressed. Other possible explanations could be due to the fact that assessments in organisations can be affected by response bias. Research has shown that candidates can sometimes distort their responses on measures that rely on Likert rating scales (Heggestad, Morrison, Reeve, & McCloy, 2006).

It has been suggested that forced choice formats are less prone to response bias because it is impossible for the respondents to endorse every option (Brown & Maydeu-Olivares, 2013). As a result, researchers have attempted to reduce the response biases that are found with Likert-type rating scales through the alternative use of forced choice assessments (Christiansen, Burns & Montgomery, 2005).

This study will build further on previous research by examining the psychometric properties of the English version of the Likert scale Motivational Questionnaire (MQ) in comparison to the scaling properties of a forced choice version of the same assessment. It is expected that the forced choice version of the will be more robust to response bias and as a result will have improved scaling properties and better item functioning compared to the normative version of the assessment.

2. How do you see your proposal linking with the main conference theme of Resilience in a Challenging World?
This proposal relates well with the theme of ‘Resilience in a Challenging World’ because research has highlighted the importance of motivation in achieving positive organisational outcomes and with motivation of the workforce being a key determinant of organisational effectiveness it is necessary for organisations to be able to measure and understand motivation, in order to effectively influence motivation outcomes at work. As society is evolving and changing at a fast rate, there is likelihood that individual drivers of motivation in the workplace will also shift and change and it would serve organisations well to have an understanding of motivational factors that affect their employees, it can be argued that motivation might be best understood through scientific measurement.

3. Why is the submission appropriate for the particular category you have chosen?
The submission is appropriate for the ‘Leadership, Engagement and Motivation’ category because it explores methods of improving the effectiveness of a measure of motivation. An improved understanding of motivation at work would facilitate decision making and better people management, which would in turn lead to better organisational outcomes.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
So far research has examined the use of forced choice measures as a method of reducing response distortion on personality assessments (Heggestad, Morrison, Reeve, & McCloy, 2006). This study goes further and seeks to examine whether the use of forced choice items can improve the measurement and effectiveness of motivation assessments such as the MQ.
Further research following on from this study might involve further exploration of psychometric properties of various language versions of the MQ assessment. This would involve comparing the scaling properties of the normative MQ assessment to forced choice versions of the instrument. This is quite pertinent, considering the direction society is moving, with organisations becoming more globalised. It therefore becomes important for organisations to be able to measure motivation effectively, without the barrier of culture.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
Conference delegates might find this session useful because Industrial and Organisational Psychologists always strive to find ways to better understand the world of work and improve organisational outcomes, refining the measurement of organisational variables such as motivation is an important aspect of this. Improving the way in which motivation at work is measured can also go a long way towards helping organisations engage employees, thereby positively impacting on various organisational outcomes.

6. What might the public find interesting about your paper or session?
The public might find this session interesting because motivation not only affects the organisation, but also affects individuals at work, thus, motivation is important to organisations and individuals alike. People are able to be motivated and achieve better outcomes when they find work activities to be engaging and stimulating therefore, might be interested in gaining better insight into factors that motivate and demotivate them at work.

7. If any, what materials do you intend to make available to attendees and in what format (e.g., printed hand-outs, electronic copies of slides)?
Electronic slides of the presentation will be made available to the delegates.

References


DOP30 Poster Withdrawn

DOP31 Poster Withdrawn
Division of Occupational Psychology
Annual Conference 2016
6–8 January, East Midlands Conference Centre

Resilience in a challenging world

Book of Abstracts

www.bps.org.uk/dop2016