Division of Occupational Psychology
Annual Conference 2017
4–6 January: Hilton Hotel, Liverpool

RESEARCH INTO PRACTICE:
RELEVANCE & RIGOUR

Abstracts
<table>
<thead>
<tr>
<th></th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wednesday 4 January</td>
</tr>
<tr>
<td>60</td>
<td>Thursday 5 January</td>
</tr>
<tr>
<td>190</td>
<td>Friday 6 January</td>
</tr>
<tr>
<td>263</td>
<td>Posters</td>
</tr>
</tbody>
</table>
Timetable Abstracts
Wednesday 4 January

W01 Keynote Session
Professor Susan Fiske, Eugene Higgins Professor, Psychology and Public Affairs, Princeton University USA

Category: Plenary Session in the Grace Suite
Inequality and power dynamics between people are not going away any time soon. Drawing on three theoretical and empirical foundations – interpersonal positivity biases, stereotype content emphasizing perceived warmth and competence, and the compensation effect (trading off warmth and competence) – we study how people communicate, understand, and present themselves and others, especially across status divides. First, polite communicators omit negativity in describing individuals, especially stereotyped ones. Negativity omission creates innuendo (its absence implies the negative information), which allows stereotype to stagnate. Listeners understand the innuendo and infer the negativity from its omission. Impression-managers understand this dynamic and use positive innuendo: They downplay one aspect (e.g., warmth or competence) to convey the other. Status determines which strategy people use: High-status speakers talk down (warmly), and low-status speakers talk up (competently). Cross-race interactions also show this dynamic. This creates dysfunctional inter-status interactions, the two people operating at crossed purposes.

W02 Professional Leaders Panel Discussion
Nancy Tippins, SIOP, CIPD representative, Peter Kinderman, BPS President and Roxane L. Gervais, Chair, Division of Occupational Psychology

Category: Plenary Session in the Grace Suite
Psychology continues to be one of the fastest growing professions in the United Kingdom and the United States of America. Despite this growth, in some respects it seems to be a closed club, and one with a greater focus on its discipline than the wider profession. In this session, the British Psychological Society’s President and representatives from the Society for Industrial and Organizational Psychology (SIOP) and the Chartered Institute of Personnel and Development (CIPD) discuss if psychology gains more by communicating as ‘one’ profession or by each discipline continuing to emphasise its own area and research.

W02a
Lecture on the History of CS Myers
Richard Kwiatkowski

Category: Professional Affairs and Awards
Richard Kwiatkowski will be introducing the life and legacy of C S Myers as a precursor to launching the prestigious inaugural C S Myers Award, our newest addition to the Divisional Awards that we make annual to recognise and celebrate the finest contributors of our profession.

W03 Stage 2 Qualification for Candidates
Getting Started on the Stage 2 Qualification
Angie Ingman, Chair of the Qualification in Occupational Psychology Board & Mollie Williams, BPS - Qualification Administrator

Category: Learning, Training and Development
This session will provide information on the structure of the current qualifications – the UK and International - 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.

This session will be repeated on Thursday at 16.15, for those who cannot attend this session.

W04 Extended Paper
The Daddy Track: Are UK organisations culturally prepared for active fathers?
Nadia Nagamootoo, Avenir Consulting Ltd/Henley Business School
Category: Work Design, Organisational Change and Development

Introduction
The UK workforce has changed significantly over the past 40 years with more women in work and 2.2 million of those women being the breadwinner (Ben-Galim & Thompson, 2013). This has contributed towards a societal movement in what men and women both want and are able to offer to their work and family life. Research by Gatrell et al (2014) indicates contemporary fathers want to take on an ‘involved’ fathering role compared to previous generations who were more focused on their role as the provider and breadwinner. However, despite these trends, the imbalance both in the workplace and with respect to childcare is still stark. Miller (2012) reported that even though mothers are more active in the workforce, they also continue to be primary caregivers in the home. The UK shared parental leave policy changes providing new rights for fathers “have not translated into significant increases in the ‘take-up’ of parental leave, and women continue to be expected to take responsibility for reconciling their employment and family life”.
Interactive: has anyone father in this room shared the parental leave with their partner, or anyone in this room know anyone how has? [quick discussion]

What is Flexible Working?
The CIPD (2015) describes flexible working as “a type of working arrangement which gives a degree of flexibility on how long, where, when and at what times employees work”. This can include practices such as compressed hours, part time working, job sharing, working from home, zero hours contracts (Teasdale, 2013).
Interactive: show of hands, how many mothers and fathers do we have in the room? Mothers, how many of you work flexibly? Fathers, how many of your work flexibly?

The Flexibility Stigma and Ideal Worker
There is a negative perception of anyone working flexibly, which is known as the flexibility stigma - “a type of discrimination triggered whenever an employee signals a need for workplace flexibility due to family responsibilities” (Rudman and Mescher, 2013). The concept of an ‘ideal worker’ describes the organisational view that the highest performers will have minimal interference from childcare or other family obligations (Lewis & Humbert, 2010). People will get higher salaries and more chance of promotion if they are devoted purely to their job (Williams, 2001). Coltrane et al (2013) explain that historically the ‘ideal worker’ norm helped shape cultural norms of the ideal man and woman. Women were assumed to take on the caregiver role, focused on caring for children, family and the home. Men were assumed to take on the breadwinner role, directed towards paid work and being the providers for their family.

The Daddy Track
In their study, Coltrane et al (2013) found that men who choose the ‘daddy track’ by taking time off work for family reasons or work part time, suffer lower long term earnings - they estimate a 26.4% earnings penalty. Rudman and Mescher (2013) suggest that this is because decreasing their work time rather than increasing it subjects them to negative judgements about their potential as ‘ideal workers’. In addition, the flexibility stigma can be worse for men than women.
So men are currently in a dilemma. They are being encouraged to rethink their identities as fathers and take more responsibilities at home and spending more time with their children to
allow their female partner to pursue a career of her own. But, at the same time, they need to demonstrate they are still highly committed to their job, devoted and able to work long hours in order to be an ‘ideal worker’.

The Study
This study focused purely on fathers’ perspectives. It had two main areas of investigation:

- Firstly, to understand the aspects of organisational culture that influence fathers’ decision to work flexibly and be more involved in their parenting role.
- Secondly, it takes a systemic view of the barriers faced by women in their career progression. Assuming a dual-income family living together, with the father taking a more involved parenting role the woman’s opportunity to progress her career could be increased. The organisational culture related to men working flexibly could therefore indirectly be impacting women’s ability to break the glass ceiling.

All men participating in the study were employed by an organisation, worked in the UK in any sector, had at least one child of primary school age or below, and was in a relationship with the mother of the child.

Two focus groups (one public and one private sector) were firstly conducted to inform the design of an online questionnaire. Responses were collected and analysed from a sample of 773 fathers.

Results
Figure 1 shows the distribution of responses for the question “To what extent do you work flexibly?” (1 = I don’t work flexibly, 5 = Significantly).

Figure 1

![Figure 1](image1.png)

Figure 2 shows how respondents rated on the question “To what extent do you play an active role in childcare?” (1 = Not at all, 5 = Extremely)

Figure 2

![Figure 2](image2.png)
**H1**: Organisational culture will influence fathers’ decision to work flexibly

A logistic regression was carried out (N = 686), χ² (10) = 127.34, p<.001. The model correctly classified 89.1% of cases overall (see Figure 3).

**Figure 3**

<table>
<thead>
<tr>
<th>Variables in the Equation</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Org_Support</td>
<td>.668</td>
<td>.259</td>
<td>13.902</td>
<td>1</td>
<td>.000</td>
<td>2.606</td>
<td>1.672 - 4.319</td>
</tr>
<tr>
<td>Mgr_Support</td>
<td>.395</td>
<td>.152</td>
<td>6.776</td>
<td>1</td>
<td>.009</td>
<td>1.495</td>
<td>1.103 - 2.000</td>
</tr>
<tr>
<td>O36_3</td>
<td>.606</td>
<td>.141</td>
<td>18.514</td>
<td>1</td>
<td>.000</td>
<td>1.832</td>
<td>1.391 - 2.414</td>
</tr>
<tr>
<td>O22_5</td>
<td>.957</td>
<td>.338</td>
<td>6.293</td>
<td>1</td>
<td>.012</td>
<td>2.594</td>
<td>1.140 - 2.899</td>
</tr>
<tr>
<td>Personal_Impact</td>
<td>.353</td>
<td>.156</td>
<td>5.127</td>
<td>1</td>
<td>.024</td>
<td>.978</td>
<td>.918 - .954</td>
</tr>
<tr>
<td>Over5001_1650</td>
<td>.345</td>
<td>.363</td>
<td>0.272</td>
<td>1</td>
<td>.602</td>
<td>1.006</td>
<td>0.993 - 1.009</td>
</tr>
<tr>
<td>Over5001_510250</td>
<td>.475</td>
<td>.520</td>
<td>.836</td>
<td>1</td>
<td>.360</td>
<td>.622</td>
<td>.522 - 1.224</td>
</tr>
<tr>
<td>Over5001_251000</td>
<td>.146</td>
<td>.562</td>
<td>0.085</td>
<td>1</td>
<td>.771</td>
<td>.864</td>
<td>.532 - 1.313</td>
</tr>
<tr>
<td>Over5001_100115000</td>
<td>.797</td>
<td>.299</td>
<td>7.102</td>
<td>1</td>
<td>.008</td>
<td>5.012</td>
<td>1.387 - 18.10</td>
</tr>
<tr>
<td>O1</td>
<td>.377</td>
<td>.158</td>
<td>3.619</td>
<td>1</td>
<td>.057</td>
<td>.486</td>
<td>.345 - 1.101</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.417</td>
<td>1.329</td>
<td>3.877</td>
<td>1</td>
<td>.049</td>
<td>.073</td>
<td></td>
</tr>
</tbody>
</table>

*a. Variable(s) entered on step 1: Org_Support, Mgr_Support, O36_3, O22_5, Personal_Impact, Over5001_1650, Over5001_510250, Over5001_251000, Over5001_100115000, O1.*

The results found the following variables will predict whether a father works flexibly (in order, with the highest contribution first):

- If team members work flexibly themselves
- Organisational support for flexible working
- Line manager’s support for flexible working
- Access to training on combining work and parenthood
- If he believes it will impact his career

All these variables are aspects of organisational culture and therefore support was found for hypothesis 1.

**H2**: The decision a man takes to work flexibly will impact his female partner/wife’s ability to progress her career.

A multiple regression was carried out with the single item “Since having out child(ren), my partner/wife has progress her career” as the dependent variable (N = 513), R² = .08, p<.001 (see Figure 4).

**Figure 4**

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
<th>95.0% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.228</td>
<td>.476</td>
<td></td>
<td></td>
<td>.294</td>
<td>2.163</td>
</tr>
<tr>
<td>To what extent do you play an active role in childcare?</td>
<td>.297</td>
<td>.372</td>
<td>.182</td>
<td>4.098</td>
<td>.000</td>
<td>.155</td>
</tr>
<tr>
<td>To what extent do you work flexibly?</td>
<td>.111</td>
<td>.054</td>
<td>.064</td>
<td>2.057</td>
<td>.040</td>
<td>.005</td>
</tr>
<tr>
<td>Composite: If men working flexibly is seen as the norm</td>
<td>-.146</td>
<td>.058</td>
<td>-.110</td>
<td>-2.493</td>
<td>.013</td>
<td>-.261</td>
</tr>
<tr>
<td>Practices in your organization: There is access to coaching/mentoring on combining work with parenthood</td>
<td>.117</td>
<td>.058</td>
<td>.054</td>
<td>2.190</td>
<td>.031</td>
<td>.076</td>
</tr>
<tr>
<td>Practices in your organization: There is an organizational ‘no meetings day’ to allow for remote working</td>
<td>.175</td>
<td>.184</td>
<td>.043</td>
<td>0.950</td>
<td>.342</td>
<td>-.187</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Partner/wife has progress her career since child(ren)*
Results show that the extent a father works flexibly was a significant predictor of his partner/wife’s career progression ($\beta = .09$, $p<.05$). Therefore some support was found for hypothesis 2, although the Beta value was small suggesting it doesn’t account for much of the variance in the model. The extent he played an active role in childcare was the most significant predictor to partner/wife career progression ($\beta = .18$, $p<.001$).

**What does this mean?**

*Organisational culture influences fathers decision to work flexibly.*

Team members working flexibly themselves were found to be most influential in fathers working flexibly. So if the local culture within the father’s team is that its common practice for team members to work flexibly, it’s likely that the risk of the Flexibility Stigma is reduced which then positively influences a father’s decision.

Line manager support was also found to influence fathers working flexibly. This includes how vocal the line manager is that flexible working is important, the extent they actively encourage it and if they work flexibly themselves.

Findings related to a culture of presenteeism and perceived impact on the fathers’ career influencing his decision to work flexibly supports the ‘ideal worker’ literature. It implies that if fathers work in a culture where visibility is important and putting organisational needs over family ones is more likely to lead to career progression, fathers will be less likely to allow their family obligations to interfere with work and therefore less likely to work flexibly. 

*The decision a man takes to work flexibly as a degree of impact his partner/wife’s ability to progress her career.*

Whilst the model only accounts for 8% of the variance in female career progression, it points to some accountability of fathers’ choices and behaviour on their female partners’ career. The unique finding in this research is that it highlights a relationship between an organisational culture that supports flexible working with fathers decision to work flexibly, and this in turn together with how active they are in childcare has some influence on their female partner/wife’s career progression. There may of course be other variables that influence this relationship which have not been tested and a causal inference is not being made. However this research simply highlights a relationship that has never before been considered.

**Recommendations**

1. **CEO and senior leadership role modelling and being vocal in their support:**
   
   This research shows the impact of senior leadership working flexibly themselves and being vocal about the importance of flexible working on fathers’ job satisfaction and their intention to leave the organisation. This signals to us the importance of values alignment between the organisation (represented by the CEO and leadership team) and the fathers who work there. Most importantly, the CEO and senior leaders must walk the talk and be overtly demonstrating flexible working themselves and their full support for others wanting to work in this way.

2. **Embed the values and behaviours for flexible working across the organisation:**

   Whilst Board level behaviour and support for flexible working is a good start, it isn’t enough to internalise or embed a new organisational culture for flexible working, particularly one that is engrained in a traditional ‘ideal worker’ mentality. This research highlights the importance of the local culture i.e. set by line managers and team members. It is important to try and establish as much consistency across the organisation as possible through clarifying the organisational values and behavioural expectations.

*Interactive: in pairs or threes, discuss the gender-related issue most relevant in your organisation.*

- **To what extent do these findings resonate with what you have experienced or conversations you have had with fathers?**
• Given the research findings, how might the recommendations help create a more gender-inclusive culture in your organisation?
• What would be the biggest challenges in making this shift?

References

W05 Workshop
Getting Published
Category: Learning, Training and Development
Fiona Beddoes-Jones, Cognitive Fitness Consultancy and Robert Goate, Psychology Matters
Whether we are Researchers, Practitioners, Academics, Consultants or a combination of these, getting our work out there and our voices heard has never been more important. Its important because the work we do is important; arguably, the world has never needed to understand psychology and in particular, occupational psychology, more. The work we do makes a difference. It makes a difference to individuals, it makes a difference to groups, it makes a difference to organisations and it makes a difference to society. Getting published is increasingly difficult. Its increasingly difficult because we are acting on a global stage. Standards are higher and readers expectations higher still. Elegant, effective and informative writing is a craft. It takes practice and it takes skill. This workshop, with its expert panel of speakers: the Editors of OP Matters, JOOP and The Psychologist will help you develop your skills by discussing what they look for in submissions, the review process and the common mistakes writers make.

W06 Standard Paper
Ethnicity and organisational politics: Making sense of the game, learning its rules and being willing to play
Madeleine Wyatt & Fatima Tresh, University of Kent
Category: Psychological Assessment at Work
The number of Black, Asian and Minority Ethnic (BAME) employees in the UK workforce continues to rise, yet representation in senior positions remains disproportionately low. Despite the urgent need to understand why this disparity exists ethnicity has been rather neglected in organisational psychology research (Kenny & Briner, 2007).
Researchers and practitioners who have examined ethnicity have largely focussed on the role of formal workplace processes (e.g. reducing bias in selection and assessment). While this is important, much less attention has been paid to the parallel informal and political workplace processes (i.e. those that are not regulated, influenced by informal relationships and open to bias).

Research on white groups suggests that understanding this ‘political arena’ is related to a number of important work outcomes, including career progression (Kimura, 2015). But minority groups may find learning about organisational politics more challenging, suggesting they may be less willing to engage in politics at work and thus progress more slowly (Ferris, Frink, & Galang, 1993), although this has yet to be empirically studied. Drawing on attribution theory, this study has the following research objectives:

- To address a gap in the literature by conducting research exploring how BAME employees a) learn about and b) make sense of the informal and political workplace and c) whether sensemaking influences their willingness to engage in politics at work (political will).
- To develop an evidence base to inform practical interventions to enhance BAME workplace experiences.

Method

Participants and Procedure
Participants were 45 BAME employees, 21 were male and they had career histories in both public and private sectors. A mixed methods design was used involving semi-structured interviews and a follow-up questionnaire three weeks later.

Interviews were semi-structured and lasted approximately 60 minutes. Questions focused on participants’ career histories and then on their understanding of politics and the positive and negative role it played in their workplace experiences.

Three weeks later a questionnaire was completed by all participants which measured their political will (Kapoutsis, Papalexandris, Treadway & Bentley, 2015).

Analysis
Analysis is ongoing but will be complete by October 2016. Data is being analysed in two ways. First, a thematic analysis to identify the barriers, facilitators or catalysts to political learning (e.g. mentors). Secondly, attributional analysis to understand how individuals make sense of political incidents, where each causal statement is coded on three dimensions (Locus, stability, controllability: Stratton et al. 1988). Following this, regression analyses will determine whether there is a relationship between the pattern of attributions and individuals’ political will.

Findings and Discussion
Findings inform academic literature and practice. Preliminary analyses suggest that minority groups are disadvantaged because they lack information on how politics works and have little support in developing the skills to navigate it effectively. While the provision of formal training of political skills may raise ethical concerns amongst practitioners, ultimately, being shut out of the political loop disadvantages BAME employees. Consequently, the research has produced an Employer Toolkit which summarises the predicament of organisational politics for minority groups and provides practical tips for employers and OP practitioners to better support individuals to navigate political situations.
Ethical Considerations
This research has been conducted in line with the British Psychological Society’s code of ethics and has been given approval by the researchers’ university ethics committee. All participants were assured confidentiality and anonymity, provided their informed consent and were informed of their right to withdraw from the study at any time.

1. What are the main psychological theories, models and research underpinning your session?
   This session draws on theory and research from the organisational politics and attribution literatures.

2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
   This session informs the academic literature on social cognition and organisational politics but also provides practical advice for practitioners to support BAME employees in the workplace by means of an Employer Toolkit.

3. Why is the submission appropriate for the particular category you have chosen?
   This submission is submitted under category ‘Psychological Assessment at Work’ as it fits with the ‘diversity and inclusion’ theme, however it could also sit within the Leadership, Engagement and Motivation as it pertains to journeys into leadership positions.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
   This study presents the first attempt to understand the political experiences of BAME employees and identify methods to better support them in the workplace.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
   It involves two topics that have been overlooked by many practitioners in OP: ethnicity and organisational politics. The latter in particular is juxtaposed to OP’s agenda to formalise processes so should generate an interesting debate.

6. What might the public find interesting about your paper or session?
   The important role politics plays in careers and the ethical question about whether organisations should provide training in how to engage in politics 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)?
   Copies of the employer toolkit will be made available for delegates

References

W07 Standard Paper
Attachment Theory as an Antecedent of Leader-Member Exchange and Organisational Commitment
Pritesh Patel, University of Nottingham
Category: Leadership, Engagement and Motivation
Commitment to the organisation is a key component needed within employees in order to successfully achieve goals and objectives, both personally and for the organisation as a
whole. Relationships also involve commitment, and are commonplace in organisations. A key relationship in particular is that of a leader and his/her subordinates. A leader is a symbolic representation of the organisation, and thus the relationship held between a subordinate and their leader is a potential relationship held with the organisation. This paper proposed to examine a potential antecedent of both the quality of the leader-subordinate relationship and the resulting commitment to the organisation, one that is particularly underutilised in occupational psychology research, but rising in prominence, that of Attachment theory. Attachment theory describes how individuals view themselves and others, how they think about and behave towards other people (Richards and Schat, 2011). It can therefore be used to explore individual differences in interpersonal relationships in a variety of contexts, such as the workplace. Attachment styles (both secure attachment and insecure attachment styles) are individual characteristics which may be directly related to how individuals relate to others and can therefore improve understanding of relationships and behaviour at work.

The main theory behind this proposal, and its potential novelty, is the inclusion of attachment theory, an idea rooted in developmental psychology. Attachment theory, first proposed by Bowlby (1973), theorises that all individuals are born with an innate system of behaviours which serve to protect against threats by motivating the individual to seek proximity to their primary caregiver in times of need and distress. The primary caregiver’s availability and level of responsiveness, and subsequent interactions with the infant, form an internal working model of an individual’s concept of self and others. This model shapes and influences the attachment relationship the individual has, not only with their primary caregiver, but with all subsequent relationships developed in the future. Once developed and internalised, attachment styles are relatively stable across the lifespan (Mikulincer & Shaver, 2005). Within the attachment theory literature, a promising sub-strand is developing relating to adults’ attachment style and respective impacts upon workplace functioning (Neustadt et al. 2011). To highlight a few examples, there have been significant associations found between a secure attachment style and positive co-worker relations (Hazan & Shaver, 1990), higher reported job satisfaction (Ryan, 2014), higher workplace engagement (Hudson, 2010) and greater trust between an employee and their supervisor (Simmons et al. 2009). On the other hand, significant associations have been found for an insecure attachment style and increased exhaustion and workplace incivility (Leitner et al. 2015), decreased prosocial actions and lower levels of organisational commitment (Mikulincer and Shaver, 2007). Thus, there is existing empirical evidence to suggest that attachment theory may have a significant place within occupational psychological research.

Furthermore, parallels can be drawn between the caregiver-infant relationship, where security and protection is offered, and the leader-subordinate relationship, with the leader often tasked with providing security, support and direction to employees (Scrima et al. 2015). If attachment theory can be found to be a potential antecedent of the quality of a leader-subordinate relationship, it may also contribute to an individual’s level of organisational commitment which has a direct relationship with leader-subordinate relations.

One of the reasons why conference delegates, and indeed the public, may find this session particularly useful and interesting is that it is an uncommon theory being utilised in the occupational psychology field, but one that has intuitive appeal when being assessed against current theory. For example, the parallels that can be drawn between a caregiver-infant relationship and leader-subordinate relationship are clear when exploring both theories. Leaders are often tasked with fulfilling the two primary functions of attachment figures (1) acting as a secure base, providing security and fostering exploration and growth and (2) acting as a safe haven, providing support and encouragement in times of distress (Mayseless, 2010). High and low-quality relationships are also evident in leader-subordinate relations, and the quality is often dependent upon individual difference mechanisms, for which attachment theory can help to shed light on.
Link to Conference Theme
Linking to the 2017 conference theme ‘Research into Practice: Relevance and Rigour’ this paper aims to offer practical insight into an area and theory only expanded upon theoretically and thus lacking in practical relevance. In reviewing research on attachment theory in the workplace, Harms (2011) noted a distinct lack of empirical research on attachment styles and leaderfollower relationships. He also found that, of the existing research, much is dedicated to the attachment style of the leader and respective effects, as opposed to the follower and related outcomes. Therefore, this paper attempts to fill the gap by applying the existing theory in a practical manner and within an area unexplored but potentially promising for advancing knowledge and understanding. This research contributes to advancing knowledge and understanding of unexplored mechanisms involved in the formation of leader-subordinate relations. If attachment styles can be found to be significant predictors of effective (high-quality) or ineffective (low-quality) relations, this can both aid with understanding of components involved and with interventions designed to improve relationships at work. Attachment styles could be used as supporting information in understanding the relationship as well as improving its quality and effectiveness, which will also impact upon organisational variables such as job satisfaction and organisational commitment, amongst others.

Methods and Ethical Considerations
The research utilised a quantitative methods design, which was cross-sectional in nature, and consisted of three questionnaires to be completed online by participants. As the topic area is still developing and in its infancy, this approach was considered to be suitable to allow for broader findings and analysis. Participants were recruited via online convenience sampling. At the time of writing, data gathering is ongoing and results are yet to be analysed. The conference session will however shed light on the findings as well as any derived implications for future research and practice. The proposed statistical method is a structural equation modelling technique, involving mediation analysis. The study was guided by the University of Nottingham’s code of research conduct and research ethics and full ethical approval was received from the Division of Psychiatry and Applied Psychology’s Research Ethics Committee operating within the University of Nottingham.

W08 Extended Paper
Performance management as an organisational design failure: the relevance of psychosocial knowledge to support a critical workplace redesign
Joanna Wilde, Joanna Wilde Advisory & Work Psychology-Aston Business School
Category: Work Design, Organisational Change and Development
This paper builds upon the work of a senior organizational psychologist practitioner in large FTSE 100/Fortune 500 companies to generate a redesign of performance management that is grounded in psychosocial evidence. It will draw on material from wide ranging examples of evidence based practice, integrating the four strands of evidence: research evidence, contextual factors, experiences of those impacted (Barends et al 2014) and practitioner expertise, to address the psychosocial imperative to redesign performance management processes in the workplace.

The initial design principles underpinning current approaches to performance management
It will give an overview of how current approaches to workplace performance management were designed, broadly based upon the theory that economic rationality was the underlying driver of human behavior and that individual performance in any organization would be normally distributed (Grote 2005). The argument was that by comparing individuals and removing ‘the bottom 10% of people each year’ from an organization and replacing them with new ones, this would improve organisational performance (Scullen et al 2005).
The evidence about psychosocial problems it generates
This economic rationality model generates high levels of competitiveness in the workplace which puts high performers off joining an organization (Blume et al 2009), increases intentions to leave among high performers, particularly in conditions where pay in secret (Belogolovsky & Bamberger 2014) and leads to within team sabotage (Berger et al 2013).

We have extensive relevant research that points to the negative consequences of social comparison on workplace productivity. Upwards feedback can lead to hubris and strategic persistence, as it tends to be ingratiating (Park & Westphal 2011). More generally it is evidenced to lead to overt and covert victimization (Jensen et al 2014), and counteracts any benefits of pay for performance (Larkin et al 2012).


There is also evidence that team performance is enhanced by individuals doing ‘prosocial’ things which compromise their individual performance (Conway and Briner 2012) and that good relationships have a productive impact on overall collaborative performance (Losada and Heaphy 2004) which suggest that individual performance may not be the most helpful unit of analysis.

The evidence from the workplace
The research evidence shared will be coupled with experiential reports from people in the workplace with qualitative accounts of participating as both manager or managed in the existing processes. This will be coupled with an exploration of the contextual realities of goal setting and its limitations in the workplace. This will point to how an increased need for flexibility means that job crafting (Tims et al 2014) rather than the use of tightly bound annual goals becomes critical to organisational resilience and individual performance (Shoss et al 2012).

In addition, a couple of vignettes of changes being made by large organisations will also be covered (e.g.Buckingham & Goodall 2015) to illustrate how workplaces are approaching this as a strategic issue.

Activating psychosocial evidence into the necessary redesign
The approaches that workplaces have built on these principles are being questioned and challenged and it is now time for psychosocial understanding of how people collaborate effectively to drive the redesign of these organizational approaches (Wilde 2016). To contribute to our evidence based approach and to activate the ‘professional judgment and expertise’ aspect of evidence-based practice (and meet the requirements for discussion in the extended paper format) a 15 minute discussion will be run, centred on the design challenge (so using design thinking methodology) to make performance management fit for people. This will start with the framing the design challenge as a psychosocial issue rather than the economic one that currently dominates. Handouts from the initial presentation will be shared and ideas from the participants captured. This evidence from professional expertise from those participating, enabled by the conference will be integrated into evidence based output suggestions for how we need to redesign approaches to manage contribution in the workplace.

References
And The Incentive And Sorting Effects Of Pay Secrecy. Academy of Management Journal 57(6), 1706-1733.
Parker, et al. (2013) Making the most of structural support: moderating influence of employees’ clarity and negative affect. Academy of Management Journal; 56(3), 867-892
W09 Standard Paper
Exploring the Growth and Loss of Trust at Work
Jeff Salter, City University London
Category: Leadership, Engagement and Motivation
Research into practice: relevance
This paper will explore the growth and loss of trust between line managers and employees in
UK universities. At the heart of a recent research report entitled ‘Where has all the trust
gone?’(CIPD, 2012), the suggestion is made that trust in organisational life is hard won but
easily lost; it concludes that heightened trust has a direct impact on whether employees
would recommend their organisation, their own level of motivation and whether they intend
to stay or leave their jobs.
This piece of qualitative research aims to improve the knowledge of trust in organisations by
focusing explicitly on the growth and loss of trust between the employee and his/her
immediate line manager. Twenty semi-structured interviews have been conducted with
employees about their experience of being managed in the context of UK universities, an
under-researched setting for investigating these issues.
Three research themes predominate:
• the knowledge, abilities and personal qualities of line managers and how these are
  perceived and valued by employees (Atkinson, 2007; Dietz and Den Hartog, 2006;
  Nienaber, Romeike, Searle, & Schewe, 2015);
• the exploration of leader/member exchange and how this balance (or lack of it) serves the
  trust relationship (Blau, 1964; Fulmer and Gelfand, 2012; Khazanchi and Masterson,
  2011);
• how a breach or loss of trust is addressed particularly in relation to the trust and
  psychological contract literature (Conway and Briner, 2005; Morrison & Robinson, 1997;
  Robinson,1996).
The main theories which will underpin these three themes and the content of the session are
briefly explored below:

Line managers play a critical role in the trust dynamic with employees. Firstly, by virtue of
their position alone, trust levels can be enhanced because their knowledge can initially
assume more importance to employees than other more personal qualities (Spector and
Jones, 2004). This initial perception of their abilities and effectiveness affects the employee’s
responses and feelings about the trust relationship as well as any personal qualities that
may be later taken into account (Dirks and Ferrin, 2002; Dirks, 2006). Atkinson (2007)
names these differentiations of trust cognitive and affective; the former and the transactional
obligations that go with it must be satisfactory before the relationship moves towards a more
affective, relational level.

Dietz and Den Hartog (2006) explore drivers of trustworthiness through the areas of ability,
benevolence, integrity and predictability. They establish that beyond ability and predictability
as hygiene factors (Hertzberg, 1959), in times of difficulty, managers are able to draw on a
bank of trust which comprises the benevolence and integrity shown to employees in
previous good times. This enables managers to steer a path through difficulties and remain
supported by their employees.

The two-way process between manager and employee offers a framework for exploring how
trust ebbs and flows. This echoes the leader/member exchange element of social exchange
theory (Blau, 1964; Saks, 2006). Trust might grow or reduce based on what is put into and
what is received from the relationship (Fulmer and Gelfand, 2012). When individuals
perceive an imbalance in the exchange, trust decreases and they feel less inclined to invest
in positive organisational behaviours or emotions (Khazanchi and Masterson, 2011; Conway
and Briner, 2005). However, exchange balance leads to employees becoming more productive, working beyond requirements and wanting to stay in the organisation (CIPD, 2012; Chiburu, Bal & Jansen, 2010).

The danger of establishing an affective trust with managers is that there can be further to fall should that trust be abused. If agreed obligations are broken within the context of a relational, emotional bond between the parties (Atkinson, 2007), the breach can be experienced as a violation. The response to this is likely to much more visceral therefore limiting the chances of repair (Morrison and Robinson, 1997).

This research aims to further explore how trust relationships move towards breach or violation either through the steady accumulation of ‘non-significant effects’ (Neinaber et al, 2015) or a particular and larger event or circumstance (Conway and Briner, 2005) that might either enhance or detract from the trust relationship.

The following research questions will therefore be addressed by this study:
1. Why do employees trust or not trust their line managers?
2. How has trust grown or reduced between the employee and their line manager?
3. How have employees responded to any loss of, or increase in, trust between themselves and their line manager?

The purpose of the study will be to outline my findings in these areas and facilitate discussion about the relevance of these to delegate’s experience and any potential learning and research direction.

Research into practice: rigour

Twenty senior managers, academics and professional employees across four UK universities have been interviewed and these were conducted in person, one-to-one, in appropriate settings selected by the participant and recorded with their permission. All participants were assured of anonymity and confidentiality, and offered the right to withdraw from the study although none have requested this. Template analysis will follow the transcription, offering enough structure to enable systematic analysis of the data and to extract key themes.

I am submitting under the Leadership, Engagement and Motivation category as leaders and employees seek to better understand trust as a factor in how staff connect or disconnect with the organisation as a result of their interactions. However, it could be alternatively located under Well-being and Work; the effect on workplace stress and emotions are repeating themes in the analysis of interviews thus far.

Trust (or lack of it) in the workplace has aroused curiosity within and beyond this research project, particularly the relationships others have within their own work hierarchies. I consider that the subject and research behind defining trust and resultant processes of trusting and non-trusting relationships has value within the conference and outside it.

I would intend to make electronic and hard copies of my powerpoint slides available to attendees. References are available on request.

W10 Standard Paper
Why should we consider developing high quality leader-follower relationships?
Sarah Lavin, Impact Consulting Psychologists

Category: Leadership, Engagement and Motivation

Introduction
There is a well-established link in the academic literature between high quality Leader-Member Exchange (LMX) relationships and numerous positive employee and organisational outcomes (Dulebohn, Bommer, Liden, Brover, & Ferris, 2012). However, less is known about the potential mediating factors that help to explain why LMX is associated with such outcomes, with studies suggesting that motivation could mediate this effect (Martin, Guillaume, Thomas, Lee, & Epitropaki, 2015).

This research sought to build on the small body of existing literature to explain the positive effects of high quality LMX in the context of Self-Determination Theory (SDT) (Deci & Ryan, 2000). SDT suggests that we have innate needs for autonomy, competence and relatedness and when satisfied, this results in greater intrinsic motivation i.e. doing something out of interest and engagement, rather than for external rewards (Deci & Ryan, 2000). There is evidence that autonomous motivation (a form of intrinsic motivation) is linked with the same positive outcomes as LMX (Graves & Luciano, 2003). Furthermore, SDT suggests that managers have the capability to behave in ways that satisfies these needs and promotes autonomous motivation at work (Baard, Deci, & Ryan, 2004).

The aim of the study was to explore the role of autonomous motivation (a form of intrinsic motivation relevant to the workplace) and employee innate need satisfaction as mediators in the relationship between LMX and job satisfaction, affective organisational commitment, turnover intentions and job performance. The present study also sought to provide empirical evidence of the link between LMX and autonomy supportive managerial behaviours. See figure 1 for theoretical model.

Figure 1. Theoretical model of the effect of LMX on follower attitudinal and behavioural outcomes, mediated by follower need satisfaction and autonomous motivation.
Design
A cross-sectional, quantitative survey design was used. 181 employees of a contact centre took part. Participants were asked for their informed consent for the researcher to request their KPI performance data from the HR department. Data was then matched to their survey responses and anonymised to maintain confidentiality. Measures used included LMX, innate need satisfaction, autonomous motivation, job satisfaction, affective organisational commitment, turnover intentions and job performance (KPI data e.g. call times, sales). Structural equation modelling revealed that satisfaction of both autonomy and relatedness and autonomous motivation mediated the relationship between LMX and employee job satisfaction, affective organisational commitment and turnover intentions (figure 2). No effects were found for the mediating role of competence satisfaction or for job performance.

![Diagram of theoretical model](image)

Figure 2. Hypothesised model
Hierarchical regression revealed that LMX was significantly and positively associated with employee perceptions of autonomy supportive managerial behaviours and that such behaviours predicted satisfaction of the innate need for autonomy and relatedness, required to promote autonomous motivation.

Discussion
The results show that the relationship between LMX and the outcomes of interest in this study are fully mediated by need satisfaction and autonomous motivation. This means that followers who perceive that they have a high quality relationship with their supervisor are more likely to perceive that they can self-organise their experience at work and that work is integrated with their sense of self (satisfaction of autonomy) and feel connected to others (satisfaction of relatedness). This innate need satisfaction promotes autonomous motivation which drives behaviour due to greater inherent interest rather than externally motivators, such as pay. The effect of this self-determined behaviour is that of increased job satisfaction, affective commitment towards the organisation and less intention to leave. In sum, the relationship with the supervisor motivates employees in a way that external rewards cannot because it satisfies employee’s innate needs, which results in more positive outcomes for both the individual and the organisation.

Main theories
Leader-Member Exchange (LMX) (Graen & Uhl-Bien, 1995; Liden & Maslyn, 1998)
Self-determination theory (SDT) (Deci & Ryan, 2000)
Links with conference theme and category
The paper uses robust methodology and analysis e.g. the use of structural equation modelling, accounting for measurement error of latent variables. The main theories fit into the Leadership, Engagement and Motivation category and highlight the importance of relationship quality between employees and managers on employee motivation and positive individual and organisational outcomes.

Originality
The research contributes towards explaining why high quality leader-follower relationships at work result in a range of positive outcomes, using SDT. The design used multi source data, including objective performance data. The research was also, to the author’s knowledge, the first empirical test of the link between LMX and autonomy supportive manager behaviour. It puts a spotlight on relationship-based approaches to leadership.

Interest to conference delegates and the public
The theoretical significance of these findings is that it helps explain the long established link between high quality LMX and positive employee attitudes and organisational outcomes. The findings could be used to inform management development programmes that encourage managers to create high quality relationships with all their direct reports e.g. how to build trust, respect and mutual obligation and learn about the type of supportive behaviours that they can use, which will satisfy employee needs and promote autonomous motivation e.g. how to create a supportive environment, to promote autonomy, competence and relatedness. The presentation will be engaging, with both academic and practical application.

Materials
Electronic copies of the slides can be made available.

References

W11 Keynote Session
An updated model for enabling evidence based practice for all
Dr Rachel Lewis, Associate Professor in Occupational Psychology, Kingston Business School & co-director of Affinity Health at Work

Category: Plenary Session in the Grace Suite
In the last five years, the Evidence Based Management and Practice movement has gained a large following with high profile researchers such as Rob Briner spearheading the associated models as a way to improve practice within our Profession. In this presentation I will share our research using an Evidence Based Practice Approach. This research suggests that taking a broader, more inclusive approach, where both academic and practitioner inputs are recognised, will ensure that solutions for practitioners are evidence based, whilst also providing practical and usable solutions. I will challenge academics to broaden their perspective on both the questions that form the focus of their research, and their analytical
stance, in order to help address the issues facing organisations. In the second part of my presentation I will give a series of tips and signposts to enable both practitioners and academics to access rigorous evidence that will save both time and money.

W12 BPS President and BPS Divisions & Special Groups Chairs Session
Social Justice in the United Kingdom: The role of psychologists in supporting a ‘just’ perspective
Category: Learning, Training and Development

Individuals are using increasingly the term Social Justice, with their use of the term not restricted by profession, discipline, vocation, nor country. The growing emphasis on the topic could be due to prevailing uncertainties of economies across the world, inclusive of wars, religious conflicts, the restrictions of choice, and the injustices that wars and poverty bring. However, despite the term’s global use, there are various interpretations and definitions of it; but none of these seems to be definitive. Moreover, there is no one definition that seems to detail fully what it means. In 1863, John Stuart Mill wrote “…that society should treat all equally well who have deserved equally well of it, that is, who have deserved equally well absolutely. This is the highest abstract standard of social and distributive justice; towards which all institutions, and the efforts of all virtuous citizens, should be made in the utmost degree to converge.” (Mill, p. 91) This is a very laudable definition, with the Vatican (1928) providing a similar perspective in outlining that, “Society ensures social justice when it provides the conditions that allow associations or individuals to obtain what is their due, according to their nature and their vocation. Social justice is linked to the common good and the exercise of authority.” A more recent overview shows an interpretation that is more grounded in some of the issues that are prevailing in today’s societies. Although the present author cannot substantiated fully the original source, it allows the reader a good understanding of what we should seek to do as we improve on social justice at the community, local, national, and international levels. Social justice is in place when we are “...promoting a just society by challenging injustice and valuing diversity. It exists when ‘all people share a common humanity and therefore have a right to equitable treatment, support for their human rights, and a fair allocation of community resources.’ In conditions of social justice, people will ‘not be discriminated against, nor their welfare and well-being constrained or prejudiced on the basis of gender, sexuality, religion, political affiliations, age, race, belief, disability, location, social class, socioeconomic circumstances, or other characteristic of background or group membership.” (Toowoomba Catholic Education, 2006, as cited in Robinson, 2016). This last definition details those characteristics against which discrimination commonly occurs and ones that psychologists have to take account of as part of their role and in following their respective code of conduct (BPS, 2009) or knowing and acting on the Equality Act 2010. We have to ask the question, are we doing enough as a Society to address inequalities and improve on social justice at the levels listed above? Is there anything else that we can and should do? This is, as psychologists we operate across all areas in society: in the workplace, in schools and universities, in hospitals, in the communities, and we work with peoples of different cultures, races, religions, ages, and gender.

This session will explore how we as psychologists can engage in research and professional action to initiate and support a change in societal values, structures, policies, and practices, to reduce the inequalities in work and life that give rise to disadvantaged and / or marginalised groups. As change may not necessarily be quick and effective, we have to ask also how can we sustain these changes over the short and long term, while we are cognisant that any changes to effect social justice will require resources, i.e., time, money, and people. Finally, how can we gain and keep a cross-discipline perspective, driving actions as required now and in the future.
References

W13 Workshop
Psychological assessment - An overview of theoretical, practical and industry trends. A CPD workshop for qualified practitioners
Almuth McDowall & Alan Redman
Category: Psychological Assessment at Work
If you are a current holder of the society's test user qualifications, and/ or debating whether to add these to your portfolio, then this workshop is for you. It will provide an opportunity to obtain a 'state of the art' summary of recent theoretical and methodological developments, insight into industry trends; the opportunity to work through case studies, share best practice and debate potential controversies with experts in the field. All delegates will be provided with optional pre-reading and a list of literature to follow up on in their own practice. We will write up the session for submission to a practitioner journal to ensure a legacy from the conference.

Learning goals:
• knowledge of current theoretical developments and debates
• impact of the above on assessment practice
• understanding of industry trends and their relevance for current practice

W14 Extended Paper
Who is your harshest critic? Unconscious gender bias in 360 ratings
Gillian Hyde, Geoff Trickey & Simon Toms, Psychological Consultancy Ltd
Category: Learning, Training and Development
Introduction
There are more women in prominent positions on the world stage than ever before. There are now female heads of state in the UK, Germany and possibly soon the US as well. The success of females in the political arena throws into sharp relief the relative lack of progression for women to senior positions in business. In December 2015, The Guardian newspaper reported findings from the executive search firm 'MWM Consulting', which found that women made up just 9.6% of UK Executive Directors in FTSE-100 firms, and 5.2% of FTSE-250 firms (Kollewe, 2015).

This begs the question - are there differences in how men and women are perceived within their organisations, and if so, what are the implications for employee advancement? Whilst focussing at the highest level generates a useful 'yardstick' to draw gender comparisons, it should also be acknowledged that this approach represents a relatively superficial viewpoint that may only scratch the surface of a potentially deep-rooted problem
affecting each stage of the organisational hierarchy. To address this limitation, the current researchers explored data collected at various levels of seniority for several dozen companies.

An individual’s progression through the company will be considerably influenced by how others perceive them, so exploring these perceptions will provide significant insight into the barriers that workers may face in their careers. This focus was facilitated by analysing data collected from 360 assessment techniques, which enable participants to rate themselves on numerous competencies chosen by the employer. This allows the user to compare participants’ ratings against those provided by their colleagues. The technique is especially useful to the current research, as it provides a breakdown of gender for both participant and raters, allowing any gender differences between perceptions and self-perceptions to be identified.

The adoption of 360 feedback methods has become central to the performance appraisals and development processes of the workforce, as conducting them provides managers with a well-rounded and better informed understanding of an employee’s strengths and areas for development. When conducted effectively, they can represent a rigorous and robust process for identifying personal development goals.

The greatest strength of a 360 assessment is its ability to provide participants with a resource that encompasses a range of viewpoints on their performance and potential, as it represents a platform that includes perspectives not just from managers, but peers, direct reports, and even clients. The findings that result can provide participants with a bird’s eye view of their position in the organisation, and a better understanding of how they are perceived by their colleagues in comparison to their own self-perceptions.

This understanding is further guided by a systematic approach to employee appraisal that defines clear competencies, before using the statements they encompass to focus resulting feedback from raters. This series of competency-based statements is also given to the participants, enabling the assessment to compare the self-ratings of participants against the ratings of their colleagues. The incorporation of specific statements encompassed by clearly-defined competencies provides researchers with data that is well-protected, but not immune, from issues including unconscious biases or gender stereotypes.

**Method**
The current research utilises data generating from a 360 assessment called Profile:Match360 (PM360), which draws upon a bank of 27 distinctive competencies to collect self-ratings from participants and ratings from their colleagues. The data focusses on 422 participants whose performance had been rated on 24 competencies by 3,799 raters.

The number and selection of competencies varied between participants, and the final dataset encompassed 3,883 self-ratings and 33,261 ratings from colleagues. Participants resided in several dozen different companies.

The genders of all 360 participants and their raters were recorded. This not only enabled the research to categorise every individual taking part in the process, but also enabled researchers to categorise the participant-rater interactions into four categories – male participant/male rater, male participant/female rater, female participant/male rater, and female participant/female rater. This data was analysed using several statistical techniques, including T-tests, ANOVA tests, and Tukey’s HSD tests.

**Results**
There were 3 main findings:
1. Initial analyses focussed upon the self-ratings of participants on each of the 24 competencies, with findings indicating that women on average rated themselves lower than their male counterparts on 16 of the 24 competencies. Independent T-test analyses
on the data found the largest and statistically significant differences were reported in the competencies of communication skills, developing others, and strategic awareness.

2. These contrasts become more apparent when participants' self-ratings are compared against the ratings assigned to them by peers, managers, and direct reports. Comparing these 2 sets of data using numerous T-tests enabled researchers to identify when participants had over-rated or under-rated their strength in comparison to their raters for each of the 24 competencies. Analysis of the findings indicated that, when compared to male counterparts, women were proportionately more likely to under-rate their own performance in 20 of the 24 competencies, suggesting that gender plays a significant role in individuals' self-perceptions of performance.

3. As well as collecting the gender of participants, the PM360 process also identifies the gender of participants' raters. A breakdown of the participant/rater groups resulting from a broad ANOVA followed by an inter-group breakdown using Tukey's HSD tests enabled the researchers to identify which of the four groups (M/M, M/F, F/M, and F/F) were rated the highest and lowest relative to the other groups for each of the 24 competencies. As well as identifying statistically significant inter-group differences, this approach also enabled the four groups to be ranked in order of mean scores for each competency. The results of ranking these four participant/rater groups for the 24 competencies are presented in the table below:

<table>
<thead>
<tr>
<th>Participant/Rater Gender</th>
<th>Highest</th>
<th>Lowest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Participant/Male Rater</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Male Participant/Female Rater</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Female Participant/Male Rater</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Female Participant/Female Rater</td>
<td>0</td>
<td>12</td>
</tr>
</tbody>
</table>

These findings indicate a clear disparity between the four participant/rater groups identified by the research. The male participant/male rater group received a 50/50 split for the number of times they were ranked the highest or lowest of the 4 groups for each of the 24 competencies. In contrast, the female participant/female rater group were never ranked the highest of the 4 in any of the 24 competencies, yet were ranked lowest of the 4 groups in half of the 24 competencies. The male participant/female rater and female participant/male rater group received a similar frequency of rankings, suggesting that participants are potentially more likely to be rated higher if their raters are members of the opposite sex.

Conclusion
The findings presented in the submission are a snapshot of intriguing data that can be explored in greater depth with conference delegates. Several notable conclusions can be drawn regarding the role that a 360 assessment can play and the potential influence that can result from the interaction between the genders of participants and their raters. The most significant finding was represented by the female participant/female rater group, as this combination had the most negative ratings, frequently presenting the lowest ratings of all 4 groups.

The findings of the research generate several open questions for delegates to discuss: What is driving these findings? Are women more forgiving of men? Could evolutionary psychology provide answers? Do women feel the need to compete with other women and not with men? Would less systematic approaches to assessment be more open to bias? How could practitioners address these potential concerns?
References

1. What are the main psychological theories, models and research underpinning your session?
The submission is based upon research conducted on data collected during numerous applications of a 360 assessment process. This data focussed upon 422 participants whose performance had been rated by 3,799 raters. The number and selection of competencies varied between participants, and the final dataset encompassed 3,883 self-ratings and 33,261 ratings from colleagues.

This data was analysed using various techniques that included T-tests, ANOVA tests, and Tukey’s HSD tests. The researchers were then able to use this data to build a psychological model that was structured using the genders of participants and raters.

2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
The current submission directly addresses the conference theme, as it represents findings from in-depth research into data that has been gathered during practice. The result is a paper that is able to compare theory-driven concepts (in the form of defined competencies) against employee-generated data (in the form of participant and rater appraisals). By not only categorising the gender of participants, but also the gender of the raters, the analysis is able to identify potential issues that are of particular relevance to how such assessments are utilised in the staff appraisal and development process.

3. Why is the submission appropriate for the particular category you have chosen?
The submission is particularly relevant to the ‘Learning, Training and Development’ category, as 360 assessments are becoming increasingly popular in informing an employee’s development. By using a systematic process that incorporates various points of view on an employee’s strengths and areas for development, the practitioner will be better placed when designing a more bespoke development programme. The paper will be of particular interest to practitioners who provide careers guidance, employee coaching, and continuing professional development to individuals and organisations.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
The research’s capacity for innovation is drawn from its ability to explore over 30,000 data points collected exclusively from ‘real-world’ applications of an established psychological tool in the workplace. Rigorous analysis of these highly-relevant findings provides the study with a unique and innovative picture into how staff are perceived and appraised by each level of colleague, whilst the data’s ability to discern the gender of participants and raters also enables the findings to explore potential bias that exists in a workplace setting.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
As potential designers and/or administrators of 360 degree appraisals, delegates will regard the findings as particularly useful, as it will demonstrate the influence of possible gender biases on the data that is collected during the process. The findings could help to inform the future practice of delegates who are involved in the administration of these forms of assessment, as it will raise awareness of potential pitfalls or adverse impact that may influence the findings of appraisals.
6. What might the public find interesting about your paper or session?
Members of the public are likely to be drawn to the paper’s interesting perspective on recent global events relating to the orient to, and possession of, positions of power experienced by several high-profile women. With Angela Merkel’s prominent position in EU politics, Theresa May’s recent assent to UK Prime Minister, and Hilary Clinton’s potential appointment as US president, understanding the impact of gender bias to the advancement of women in organisations has become a priority for companies using assessments to identify the performance and development issues of their staff. As potential recipients of 360 assessments, members of the public will benefit from the insightful perspective into the validity and reliability that they possess, alongside the potential impact that gender may have upon the findings they generate.

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)?
All delegates will be provided with the slides and accompanying notes of the presentation upon request. A full breakdown of the data, including the findings of the various analyses employed, can also be provided upon request.

W15 Symposium
How Occupational Psychology is supporting the UK achieve its ambition of Full Employment
Alyson Hollway, DWP
Category: Wellbeing and Work
This symposium contextualises the UK government’s vision of full employment and illustrates the relevance and contribution of Occupational Psychologists. Key messages from the work, health and wellbeing literature as they apply to practice will be shared, encompassing three priority groups who Occupational Psychologists are supporting to move into appropriate, meaningful and sustainable work: older people; people with health conditions or disabilities and specifically people with mental health needs. Through outcome evidence and case study examples, we aim to demonstrate the positive impact Occupational Psychologists working in government are having in lifting people out of poverty and transforming people’s lives.

The UK government has a vision of achieving the highest employment rate in the G7 by 2020. The Department for Work and Pensions (DWP), employs the largest number of Occupational Psychologists across government. It views work as the best route out of poverty and is harnessing the skills of Work Psychologists, to support and enable vulnerable, disabled and disadvantaged people find meaningful and sustainable work; work that is suited to their individual skills and ambitions; work that matches their individual needs and circumstances; work that when chosen appropriately will not only improve their health and wellbeing but truly transform their lives.

Our practitioner led symposium aims to share messages from the work, health and wellbeing literature as they apply to three priority aspects of our work. Firstly under the banner of Fuller Working Lives, we will share what works with groups of unemployed older workers when supporting them into work. Secondly, focusing on people with mental health issues, we will explain how we apply the principles of positive psychology inspire people to attain meaningful work by sharing our approach to brief employment interventions. Thirdly, we will demonstrate how we support people with health problems and disabilities progress into work by describing our “Confidence and Motivation for Work” program and presenting our evaluation data which demonstrates the impact these have on employment outcomes.

This symposium submission addresses the Work and Wellbeing category and will cover wellbeing, unemployment and positive psychology.
The public may be interested to learn of the contribution of public service occupational psychologists working to reduce unemployment and transform individual lives.

In Papers 1 and 2

We will cover:
- An overview of the relevant research
- An outline of the context in which the work was conducted
- A description of the interventions, their content and their impact using case study examples
- Lessons Learned, Key Messages and Ethical Considerations

Usefulness to delegates:
- Research relating to fuller working lives, and ageing population, mental health and wellbeing will be presented.
- Real world techniques to bring about behaviour change and develop resilience and wellbeing for employment will be shared.

W15a Paper 1
Unemployed and over 50: How Group Employment Intervention Sessions can help Older Claimants Move Towards Work
Helen Brewis, Victoria Graham & Helen Hughes, DWP

Category: Wellbeing and Work
There are approximately 2.9 million unemployed people, between the ages of 50 and State Pension age. Of these less than 15% are looking for work. However, from an economic perspective, there is a case for fuller working lives. If over 50s worked one additional year, it would lead to a 1% increase in GDP. Older workers claiming benefits, can feel less confident in an employer offering them an interview. They are are less likely to feel that work is achievable and once unemployed they are more likely to stay unemployed long term.

A report looking at over 60 claimants, identified that it would be beneficial for older claimants to broaden their job search criteria, gain further insight into their particular skillset and see how these could transfer to a new setting. The same report recommended single age group sessions, to reduce the risk of older claimants feeling alienated from groups. Individuals out of work may experience reduced social networks as a result. A function of group interventions is to provide the opportunity for social relatedness. In group interventions using a solution focused approach, it is suggested that the role of the group is to provide a safe environment in which the group members can explore how they want their lives to be.

A meta-analysis found that interventions with the unemployed with a strong component of goal setting were 5 times more likely to lead to employment. By facilitating discussions and interactions between group members we suggest that change and movement to work can be accelerated. By tailoring our group interventions to help individuals to identify a future when they are in work, explore how close they are to this reality and the progress they are making, and to then set individual goals to further build on this progress, gives a structured way for individuals to move closer to work with the support of each other.

The work undertaken uses the research above and applies this in a practical setting, through the delivery of group employment interventions for unemployed, older workers. We will describe the elements of the intervention, covering locus of control, motivational interviewing, strengths based approaches, goals, beliefs, age positive employers, resilience and action planning.
Kirkpatrick, A. (2012), How ready is Jobcentre Plus to help people in their 60s find work?
In-House Research No 11.

W15b Paper2
Applying Positive Psychology for better Mental Health and Employment Outcomes
Jane Viljoen, DWP

Category: Wellbeing and Work
People who are out of work and managing poor mental health is a significant issue for government. 44% of people claiming Employment Support Allowance disclose a mental health problem and 23% of those claiming Job Seekers Allowance also report issues with their mental health. To put this in context, the employment rate for people with mental health issues is just 37% and for people who have a disability and mental health issues, this rate of employment falls to just 18%. Additionally, as well as worklessness being a risk factor for the onset of poor mental health, being out of or away from work can sustain the symptoms for individuals and reinforce negative views about their capability and prospects for the future. Furthermore, poor mental health is associated with lower confidence in job seeking abilities.

The challenge in all this is that despite appropriate work being good for health and wellbeing, including the wellbeing of people with mental health issues; feeling negative about change, ability to work and therefore being less likely to seek work can be a characteristic of having a mental health condition. When people are unwell they may have varying degrees of self-awareness, self-efficacy and energy to consider work. As Occupational Psychologists working in public service psychology we endeavour to empower, encourage and enable those in this group, to overcome the commonly held stigmas of poor mental health, reduced self-belief and low expectations. One of the approaches taken in this context is grounded in positive psychology (PP) research and is taken from the application of solution focused (SF) principles.

A SF approach invites conversations about what’s wanted, what’s working and what would constitute progress in the eyes of the individual. It is an approach to change based on the individual’s ‘best hopes’ for the future. This positive, future focused approach helps people to look at what is already going well (no matter how small), to notice positive steps and to feel empowered about taking their lives in a direction of their choice. Many people with mental health issues may feel ‘stuck’ because they perceive that they have few personal strengths, few choices and little good in their lives. Positive psychology uses scientific understanding and effective intervention to aid in the achievement of a satisfactory life, rather than treating mental illness. It minimises negative perceptions in a supportive, non-judgemental way of creating a range of possibilities for the future.

Using SF and PP approaches, we support individuals to explore the potential positive outcomes that meaningful employment could bring to their current situation; specifically on their mental health. We support claimant to focus on their strengths and resources and to identify small steps they might take to explore their current capability. It is widely accepted
that self-confidence and empowerment grow by acknowledging achievements and that an increased perception of these achievements leads to increased striving for positive change. We have a range of case study examples that would like to share in this context and our follow up evaluation demonstrates that 92% of those using our service report an increase in confidence and work readiness as a result of their intervention.

Work and Pensions Longitudinal Study, February 2013

W15c Paper 3
Measuring Impact along with Delivery: Effectiveness of a Group Programme in moving Unemployed People with Health Problems into work.
David Winspear & Hoda Hussein, DWP
Category: Wellbeing and Work
Aims
The aims of this piece of work were twofold:
• To deliver a group intervention to help unemployed people with health problems progress into employment
• Establish the effectiveness of the intervention

Introduction
A main focus of the Government agenda is to help and support unemployed people with health problems find and sustain employment. The Confidence and Motivation for Work group programme aims to build peoples self-efficacy in obtaining and sustaining employment and it has at its foundation the application of the Solution Focused approach. The research is very much focused on building up an evidence base for Solution Focused approaches applied to helping people find and sustain employment.

Method
A Cohort waiting list control design was used with participants randomly assigned to one of two groups, that is, the experimental group (n=36) and control group (n=38). The main outcome measured was whether or not participants found employment at a three month follow-up period. Odds ratio analysis and risk analysis was conducted to determine the impact of the group work intervention over the control group.

Other Measures used were a Job Search Self Efficacy Scale and the General Health Questionnaire. Measures were administered prior to the intervention, post intervention and at 3-month follow-up. Repeated-measures mixed between-within subjects analysis was conducted for this part of the study to determine changes in job search self-efficacy and well-being.

Results
Positive associations were found between the group intervention and finding employment, as well as exploring whether or not benefit type or length of unemployment were confounding factors.
Fisher’s exact test, $p=0.013$ and the odds ratio and confidence interval were $\hat{OR} = 7.06$ with 95% confidence interval $(1.43, 34.78).$

The repeated measures mixed between-within analysis for changes in job-search self-efficacy and wellbeing were not significant at this stage, although the project is on-going and efforts are underway to increase the sample size.

The audience may be particularly interested in the content of the group programme and challenges faced in delivering it within an organisation, e.g. dealing with the unexpected when no delegates attend a session and low response rates for questionnaire returns.

**Discussion**

Some evidence is provided for the effectiveness of the Solution Focused Group programme in helping people return to work, although it is limited at present. The project is on-going and will continue building the evidence over-time.

An approach borrowed from medical statistics – risk analysis and odds ratio analysis was found to be particularly productive. The audience may find this approach a manageable way of dealing with the uncertainties of service evaluation in providing robust evidence as to the effectiveness of interventions.

Conference delegates will find the paper stimulating because it addresses ways of overcoming organisational constraints when conducting research, as well as outlining different analytical approaches.

**W16 Symposium**

**Diversity and Widening Access in Selection**

**Fiona Patterson,** Work Psychology Group

**Category:** Psychological Assessment at Work

**Abstract Summary**

In this symposium we present three research papers on the topic of diversity, equality and widening access in selection, specifically in a healthcare context. The concept of “widening access” is crucial so that more people from different backgrounds may enter the professions, and relates to recent government policy to improve social mobility in the UK. Practical solutions are few and far between and yet evidence shows that a more diverse healthcare workforce, which is more population-representative, can improve patient satisfaction and patient outcomes. The approaches taken in these papers are both novel and innovative, and are clearly related to the conference theme of linking research with policy and practice. We have applied rigorous research techniques on these important topics in order to have relevance in practical settings, and the findings are applicable beyond the healthcare context. Anyone involved in diversity and inclusion or interested in widening participation will be interested in this symposium.

The symposium will last for 2 hours. The key learning objectives from the session will be to gain insight into the issues of diversity and widening access in selection, increase understanding of how these issues can be addressed through practice, and identification of potential next steps for promoting widening access further, within both research and practice. The convener will start with an introduction outlining the context and aims of the symposium and encouraging open discussion throughout the session. Each of the three papers will be presented in turn (lasting approximately 20 minutes), with opportunities for questions and discussions following each presentation, to encourage active participation. Finally, the session will close with a discussion led by the convener, focusing on the key
messages from the symposium and a discussion around how the findings can be utilised to provide solutions in practice for promoting widening access.

W16a Paper 1
Breaking the class ceiling: Using situational judgement tests
Fiona Patterson, Work Psychology Group
Category: Psychological Assessment at Work
Introduction: It is vital in today’s workplace to ensure widening access so that more people from different backgrounds are able to enter the medical/dental profession. The present study explored the benefits that using a situational judgement test (SJT) and the UK Clinical Aptitude Test (UKCAT) had in terms of the diversity of applicants relating to: (1) Socio-economic status, (2) Ethnicity, and (3) Gender.

Method: Data from two cohorts of student applicants into medical and dental schools were explored in this study. (1) A first cohort from 2012 of N=24,359 applicants (43.7% male and average age 19.4 years) completed the UKCAT, and the SJT was included for piloting; (2) a second cohort from 2013 of 25,680 applicants (42.0% male and average age 19.1 years) completed the UKCAT, with the SJT as an integral part of the test.

The SJT was designed using a best practice approach (Patterson, Zibarras, & Ashworth, 2015) that involved subject matter experts in designing the scenarios, items and scoring key. The SJT measured three constructs relevant to clinicians (e.g. Patterson et al., 2013): integrity; perspective taking and team involvement.

SJT: The final SJT consisted of 66 items associated with 16 scenarios, set in a healthcare (medical or dental) or educational context. Response instructions asked candidates to rate the appropriateness or importance of each option on a 4-point scale from 1 = very appropriate/important to 4 = very inappropriate/not at all important.
Cognitive ability test: The cognitive ability tests as part of the UKCAT measured four mental abilities relevant for medical/dental education: verbal reasoning, quantitative reasoning, abstract reasoning and decision analysis. For the present study, a composite of the four ability tests were used for the analyses since there was a strong correlation amongst the tests.
Ethnicity: Candidates were asked to provide information on their ethnicity which created six ethnic groups: White, Asian, Chinese, Black, Mixed Race, Other. This was coded into a dichotomous variable representing White or Black and Minority Ethnic (BME) groups.
Socio-economic status: Based on parents’ SES, consistent with previous research on medical/dental school admissions. Information about parents’ work (including job role, type, and employment status) helped identify Higher versus Lower SES groups.

Results: SES: The higher SES group scored better than the lower SES group on both the SJT and the cognitive ability tests; however the effect size for SES was bigger for the cognitive ability tests (d = 0.38–0.35) than for the SJT (d = 0.13–0.20), which showed a negligible effect.
Ethnicity: White candidates scored higher than BME candidates on both the SJT and the cognitive ability tests, and the effect size was similar for both tests (d = ~ 0.50).
Gender: Males scored better than females on cognitive ability tests, whereas the opposite was true for SJTs.

Conclusions: In medical and dental school admissions, an SJT can be used to complement cognitive tests in selection and potentially level the field in relation to SES. The SJT method is likely to widen participation of students based on gender and SES and will in turn diversify the student intake. The SJT method offers a practical solution for widening participation and will also help to broaden the characteristics measured during selection, for example
assessing specific attributes known to be important in healthcare professionals (such as empathy and integrity). Importantly, the SJT selection methodology can be applied to any organisation where widening access is an important consideration.

References

W16b Paper 2
The Dark Matter of Differential Attainment
Lara Zibarras, Work Psychology Group; Rachel Driver, City University of London

Category: Psychological Assessment at Work

Introduction: In UK General Practice (GP), research has shown (McManus & Wakeford, 2014) that there is a significant difference in pass rate between UK trained graduates, as compared to international medical graduates (IMGs). In addition, Black and Minority Ethnic (BME) candidates perform lower than comparable White candidates, although the effect is confounded by place of medical qualification, with differences more apparent for IMGs, the majority of whom are from ethnic minorities (Wakeford, Denney, Ludka-Stepien, Dacre, & McManus, 2015). This finding was the subject of a judicial review to investigate claims of potential racial discrimination and so research here has important implications for practice.

Although differences between UK and IMG trained doctors have been repeatedly found, currently there is no causal explanation to help address the issue. In this study we explore the mechanisms through which language may predict performance in the clinical skills assessment (CSA) which is part of the licensing examinations that doctors must complete to “pass” their GP training and be deemed fit for independent practice.

Theories of knowledge attainment suggest that broader knowledge (i.e. language) influences the development of other types of knowledge, such as procedural and declarative knowledge. These in turn may impact performance in the CSA. Our study provides a detailed analysis of how language is mediated by aspects of knowledge to influence performance in the CSA (highlighted in Figure 1).

Method:
Predictor variables:
a. *Procedural Knowledge*: Measured by the situational judgement test (SJT) that was completed as part of initial selection into GP specialty training (data obtained from 2008-2012).
b. *Declarative knowledge*: Measured by the Job Knowledge Test (i.e. Clinical Problem Solving Test, CPST) also completed as part of GP specialty training (data obtained from 2008-2012).
c. Trainees’ overall IELTS scores also acquired during selection.
The outcome variable:
d. Scores on the CSA, from first attempt.

In total, 3750 participants had IELTS scores, 50.4% were male and 49.6% were female. In terms of ethnicity, 58.3% classified themselves as ‘Asian’, 10.3% as ‘Black’, 4.7% as ‘White’, 4.3% as ‘Mixed & Other’ (missing data from 0.7%). The average age was 34 years old (SD = 4.61 years).
Figure 1. Proposed measurement model examining effects of language and knowledge on CSA performance.

Results:
Initial results are promising and show good fit for the model – findings are highlighted in Figure 2.

Figure 2. Final measurement model examining effects of language ability and knowledge on CSA performance (N=1689).

Conclusions:
Language has been considered one of the underlying reasons for underperformance for IMGs in GP. The model supports theories of knowledge attainment since broader knowledge (i.e. language) influences the development of procedural and declarative knowledge, which in turn impacts performance in the CSA. Although the issue of language has previously been highlighted (e.g. McManus & Wakeford, 2014), our study provides a more detailed analysis, which shows how language is mediated by aspects of knowledge to influence performance in the high fidelity simulation of clinical practice.

Importantly, our findings show that the selection methods are useful tools for identifying trainees most at risk of failing so that supportive action can be taken before trainees fall into difficulty, which has major implications for practice.

References

**W16c Paper 3**

**Using Contextual Data in Selection Decisions**

**Stuart Martin**, Work Psychology Group

*Category: Psychological Assessment at Work*

**Introduction:** The use of contextual data or contextual admissions (CA) in medical admissions is to “level the playing field”, recognising that the link between potential and prior achievement is more complex than looking at A-level performance, since other social and educational factors may impact attainment. However, questions remain about the use of CA in medical schools, with more evidence-based guidance needed.

**Method:** We took a mixed methods approach to examine the available evidence on CA markers and develop guidance for best practice in the use of CA in medical selection. These aims were addressed via a realist review, a telephone survey of UK Admissions Deans and central admissions staff (19 participants), two visioning groups (69 participants), and a database feasibility analysis.

**Results:** We summarise our results into three key areas:

1. **Widening participation versus retaining individuality.**
   - Medical schools want clarity over widening participation (WP) to identify those from lower socio-economic groups; yet they want to retain their individuality in using CA. However, this individuality limits the consistency of approaches and perpetuates the lack of good quality research evidence.

2. **CA is typically seen as “letting in” non-traditional applicants.**
   - There is little acknowledgement that WP may identify people who can bring something to the practice of medicine. This is at odds with the discourse internationally that argues high academic achievement is not the only factor that predicts longer-term success in medicine (Ferguson, James, & Madeley, 2002). Therefore medical school selection should reflect this.

However our findings suggest that lowering entry grades would be seen as lowering standards. This is important because findings clearly show that state school applicants outperform their independent school peers at university on a like-for-like basis; and that those who do better than school average, then outperform at university. It is possible to cross reference school name with school type; and also to identify school performance average: the ability to select on potential rather than attainment is relatively easy, however, this often not currently done during medical admissions.

3. **The “basket approach” of CA in selection.**
   - There is yet no evidence that triangulation of CA markers works; and crucially a combination of several weak CA markers will not improve overall reliability. Furthermore, it is currently difficult to identify an evidence base, given that different schools are using different combinations of CA markers, at different times in the selection process, with different weightings.

**Conclusions:** There is currently a significant gap between research and practice in using contextual data in selection; yet it is also clear that practitioners often experience difficulty seeing alternative ways forward. We suggest this blinkeredness is because of the tensions between medical schools being asked to widen participation, yet being penalised for doing...
so in the press and University league tables. Unless WP and using CA are rewarded, change in practice is highly unlikely.

References

W17 Standard Paper
Identification of the key drivers of retention and turnover in adult social care workers
John Barratt & Ann Davis, Aston University and Stephen Woods, Surrey University

Category: Wellbeing and Work

Introduction
By 2022 the number of over 75s will rise to 6.6 million from 5 million in 2012 (Hunter, 2015). The sector is therefore faced with the challenge of recruiting a further one million workers by 2025 (Imison & Bohmer, 2013; Eborall et al., 2010). However, such work is characterised by high turnover with estimates ranging form 20%- 40% against an industry average of 15% (Guardian, 2015; Skills for Care on behalf of the Department of Health, 2014; Ekosgen for Skills for Care, 2013; Hussein et al., 2015; Donoghue, 2009; NAO, 2014). Indeed the National Care Forum found over 40% of front-line care home staff left within a year (National Care Forum, 2011).

The research reported here forms part of a larger project seeking to identify and refine the selection processes to mitigate some of these retention challenges. Specifically this phase seeks to identify the key drivers for retention and attrition in adult social care.

It has been reported that the rewarding nature of care worker, making a difference, and working with people have been identified as key drivers to entering the profession (McCliment and Grove, 2004; Skills for Care (TNS) 2007; Rubery et al., 2011; Eborall, 2003). Beyond that, job satisfaction is influenced by relationships with service-users, training, flexibility and chances to progress their career. (McCliment and Grove, 2004; Eborall, 2003; Skills for Care (TNS) 2007; Butler et al., 2013; Ekosgen, for Skills for Care, 2013; Rubery et al., 2011). Furthermore, liking the rewarding nature of care work, making a difference, and working with people have been identified as also key to entering and remaining in the role.

In contrast, the unpredictability of work scheduling, long and unsociable hours, and the undervalued stressful nature serve to drive people from the sector (Rubery et al., 2011; Skills for Care (TNS), 2007; Cunningham 2005; McCliment and Grove, 2004). Dissatisfaction often pertains to employer not the job role, for example poor management and a lack of support in understaffed conditions (McCliment and Grove, 2004; Skills for Care survey (TNS, 2007)). The absence of career progression opportunities has also been shown to lead to dissatisfaction (Rubery et al. 2011; McCliment and Grove, 2004). With opportunities to progress to a senior care worker position or higher and a clearly defined career path considered essential (McCliment and Grove, 2004).

In light of this, the current paper aims to articulate more directly the key likes and dislikes of care workers, and unearth the forces driving turnover with a view to identifying steps to minimise or alleviate their impacts. In the longer term, the project seeks to identify routes to improve retention through both improved selection metrics and targeted interventions on staff management.
Method & analysis

Approach and research design
A series of one-to-one semi-structured interviews was conducted with care workers with 5 or more years sector tenure. Participants from seven care providers and a variety of social care types were included. Of the 13 interviewees, seven were current workers and six had recently left either recent employment (remained in sector) or the entire sector. Interviews were conducted until saturation (Krueger & Casey, 2015; Glaser & Strauss, 1967). Interview structure entailed introductory questions before focusing on likes and dislikes about the role and factors that motivate them to stay and leave. Furthermore, more precise questions concerned worker experience with supervisors, management and work teams. This approach was scrutinised and approved by the university ethics committee. Thematic analysis and coding based on the indicative paradigm of grounded theory analysis (Glaser & Strauss, 1967) and cross-case comparison were used, including both within case and cross-case comparison. Text extracts from across the participant range were isolated and recurrent data patterns grouped into conceptual categories.

Findings and discussion
The analysis revealed a range of themes around the likes and dislikes, and reasons to stay and drivers to leave. Here we summarise the tenure prompting and turnover prompting factors separately.

Likes and reasons to stay
The main likes about the role included enjoying care, it being a meaningful role where the worker could make a difference. Care work was intrinsically rewarding through the personal interaction with service-users. The service-users themselves were also a source of contentment. Less frequently cited satisfiers included the day-to-day variety, the self-development offered and the convenience of location.

Reasons to remain in the care worker role mirrored these findings. It was often a role workers had always wanted to do. The service-users and the challenging and changing day-to-day nature of the role coupled with the training offered led to feelings of competence and satisfaction.

Dislikes and reasons to leave
In contrast, poor communication at the provider and a lack of management or supervisor support, left carers feeling isolated and uneasy. Poor pay was both a driver to seeking alternative employment outside the sector and care work not being seen as a career option. Even those who remained were dissatisfied with pay. Other dislikes included not being able to switch off from the job when they returned home, leading to poor work-life balance and being unable to make plans (Poor HR). They felt unappreciated with public perceptions of the role being generally negative.

Stemming from this, the most frequently cited reasons that would cause workers to leave (or consider doing so) were burnout, career prospects, management not listening, and a poor team. Less common reasons were the changing nature of care, the physical nature of the job role, the specific provider they work for and staffing levels.

With both the positives and negatives and reasons to stay and (consider) leaving, often the themes are inter-linked and seemingly related. For example low staffing levels cause a higher workload, which in turn enhances risk of burnout.

The positives and reasons to stay findings have supported and extended the previous research outlined above (McClinton and Grove, 2004; Skills for Care (TNS) 2007; Rubery et al., 2011; Eborall, 2003) by uncovering new aspects such as the care worker having completed all the training, and the challenging day-to-day nature of the role. This is a selling
point of the role and one the sector should promote to encourage new and retain current staff over alternative jobs.

The present research also supports and extends the dislikes of the role and reasons to leave detailed above (Rubery et al., 2011; Skills for Care (TNS), 2007; Cunningham 2005; McLimon and Grove, 2004). A crucial way in which this has been done is through interviewing leavers of the role and sector, as well as sampling from different provider types. This adds validity to the aspects uncovered and builds on the previous research.

Specifically this research adds to the previous research by identifying career prospects as the prominent reason behind turnover in care workers. Furthermore, despite previous research acknowledging workers leave for other roles, this research identifies workers will even take pay cuts to change entire careers to enhance their career prospects. This demonstrates workers consider long-term gains when changing career, and that their current pay is not the sole driver of turnover. Beyond this a crucial extension of this research was confirmation that the key causes of turnover are provider-related (e.g. career prospects, communication, support, and inattentive management) and therefore are preventable. A crucial finding was the associated aspects of under-staffing, workload and burnout. Burnout, a core driver of turnover could be prevented in some cases with adequate staffing levels. However, spend on social care services has fallen nationally by £1.1 billion (14.4%) since 2010/11, and £1.4 billion (17.7%) since 2005/6 (Age UK, 2015).

Service-users are core attractions to the role; highlight the need to enhance contact time for staff with them. This strong pull factor has not been clearly identified before, to the extent workers cited staying as service-users would be worse off if they left. This ties in with staff citing interaction as highly important. Similarly this links to the rewarding nature of the job. Again these themes are inter-related, preventing one will impact on the other.

Conclusion
The present research has uncovered an array of themes driving tenure and turnover. It has extended previous research by interviewing those with long tenure as a care worker, those who have left and remained in the sector, and those who have left the sector altogether, and extension on much previously reported research. This affects practice by producing recommendations of aspects to address through directly exploring the lived experience of both current and former care workers. Furthermore, it covers a range of different care settings, although the overall drivers seem common across the sector.

The findings reveal areas to look to address and further investigate in order to alleviate, or at least minimise their impacts on staff turnover. Future research can draw on these findings by for example addressing management practices to enhance support for care workers, and showing them appreciation. Developing clear career paths for workers, maximising service-user contact time, and ensuring clear communication networks exists. The research programme of which this forms a part will examine the relative impact of these findings longitudinally to ascertain their impact on turnover, and to explore recruitment practice to seek to achieve a better person-job fit within care work. It will therefore feed into a recruitment and retention model for care workers.

References


Cunningham, I. (2005). Struggling to Care: employee attitudes to work at the sharp service


W18 Workshop

Working with Virtual Technologies to Assist Learning
Tammy Tawadros, Independent Organisational Consultant

Category: Learning, Training and Development

Our always-on society and the digitisation of most aspects of our lives mean that we are increasingly living in a state of ‘cyberbeing’ (Polt, 2015). The rise of e-learning and e-coaching and our understanding of neuroscience, brain plasticity and adult learning (e.g. Bavelier et al 2010; Cozolino & Sproak, 2006) mean that technology is beginning to transform workplace learning. The digitalisation of our culture and arguably our psyches, provides new challenges for occupational psychologists, learning and development practitioners and HR professionals, who must all not only re-think traditional methods but also gather much needed evidence on which to base their practice.

We suggest that practitioners must embrace the paradigm shift and the growing demand for technology mediated learning, first by doing some experiential learning of their own, and second by conducting much needed, highly relevant research. Existing research on the effectiveness of technology mediated learning and coaching in the workplace is sparse. Whilst there is much that remains unknown about the efficacy and indeed the psychological and social mechanisms involved in e-learning and e-coaching in organisations, the growing field of cyberpsychology research (Kirwan, 2016; Suler, 2015) does offer some pointers on the potential benefits of online environments for individual growth and development, as do recent clinical studies looking at the efficacy of using virtual reality wearables and avatar based virtual reality software applications.

This workshop will begin by exploring what the psychological research to date can tell us about the processes, potential and promise of virtual reality and collaborative technologies for learning and coaching in the workplace. It will focus attention on three contrasting technologies employed in e-learning and e-coaching that are available and increasingly used within organisations, namely: avatar-based software in coaching; 3D virtual environments for learning; and virtual meetings for collaborative learning. We will demonstrate how the technology applications work in practice and offer hands on experience of these. Finally, we will, in the spirit of experiential learning and action research, invite participants to share their perspectives on the practical benefits and limitations of the applications, as they experienced them and ask them put forward suggestions for fruitful lines of inquiry and research to advance psychological understanding of this exciting and fast moving field of practice.

Join us for this workshop which will provide insights into relevant psychological research into e-learning and e-coaching methodologies, and offer a practical demonstration of an avatar based virtual reality software and a virtual collaboration meeting environment.

The 3-hour workshop will cover the following:

• Digitalisation in the world of learning and coaching
• Insights from research in cyberpsychology, clinical settings, neuroscience and adult learning
• Potential benefits and pitfalls of virtual environment learning and coaching
• Scoping and closing the gap between pragmatic practice and a rigorous evidence base
• A practical demonstration of virtual reality software tools
• An opportunity for experiential learning
• A mini collaborative inquiry inviting delegates to share their reflections and contribute ideas and suggestions for future inquiry and practice

By attending the workshop you will gain a better understanding of some of the potential psychological underpinnings and practical uses for virtual coaching and learning environments. You will also have an opportunity to experience the use of virtual reality
software tools, to give feedback on your experience and to suggest your ideas for future research to advance a relevant and rigorous evidence base for practice.

**The relative proportions of theory, research and practical application contained in the session:**

We will spend approximately half of the session reviewing relevant theories and research findings and on the practical application of ideas to practice, including practical demonstration of software and experiential learning through live participation.

**The main psychological theories, models and research underpinning the session:**

- The Psychology of e-learning: key messages from research
- Neuroscience and Adult Learning: the role of arousal, empathy and social interaction in facilitating meaningful learning (Cozolino & Sprokay, 2006)
- Implications of adult brain plasticity and behavioural change (Bavelier et al 2010; Kolb et al, 2003 & Kolb et al, 2011)
- Cyberpsychology and the 6-factor model of the online disinhibition effect (ODE) (Suler, 2004)
- The phenomenon of presence in virtual learning environments (Kirwan, 2016)
- Implications of recent clinical research studies on the impact and efficacy of virtual reality and avatar based therapeutic interventions.

**How the proposal links with the main conference theme of Research into practice: Relevance and rigour:**

Our session will explore and critique existing psychological research on how and whether virtual learning environments work, and invite delegates to reflect on how we might close the gap between e-learning practices gaining greater currency and popularity in the workplace largely uninformed by a relevant evidence base.

**Why the submission appropriate for the chosen category- Learning, Training and Development:**

This session will be explore the current methods of how individuals in organisations are learning using new advances in technology. In particular the use of virtual reality, avatar and collaborative forum solutions

**What we consider to be the most novel or innovative aspects of the ideas being presented:**

The technology solutions being discussed are quite novel in their own right, whilst the use of these technologies are growing, they are yet to be in common use in organisations. Therefore we will be bringing new thinking and a fresh approach to how learning will be approached in the coming future.

**Why we think conference delegates will find the session stimulating and useful:**

Virtual learning environments are increasing in popularity, yet many may feel at a disadvantage in comparison to younger, digital natives. They are curious about the digitalisation revolution happening in the workplace and about what psychological research can tell us about the actual and potential value of virtual learning. Practitioners will gain valuable insights and practical experience of virtual reality software and they will also be offered an opportunity to articulate their views about what should be on the research agenda.

**What the public might find interesting about the session:** The pitfalls and promise of virtual reality in learning and other activities is a subject that has captured the media and popular interest alike. As ever, it can be difficult for people to disentangle myth from reality.
Our session is not only topical, but will provide some insights based on psychological research.

The specific content is to be taught in the workshop:
- Defining the scope of the session and identifying the extent of use of virtual learning environments in the workplace
- Introduction of key terms and psychological concepts associated with online and virtual learning
- Insights from cyberpsychology and neuroscience research
- Potentials and pitfalls of e-learning, e-coaching and virtual learning
- What can we learn/extrapolate from research on virtual reality in clinical settings?
- Live demonstration and practice using virtual reality software
- Conduct of a short collaborative inquiry session

The teaching and learning methods that will be used:
- Taught inputs and presentation
- Interactive exercises e.g. delegate ‘opinion polling’
- Large and small group discussions
- Demonstration of virtual reality software
- Experiential use of a virtual reality meeting environment software
- Individual and group reflection of experience and learning
- Facilitation of participation in a ‘mini’ collaborative inquiry to generate lines of inquiry for future research

The proposed structure for the session:
- Introduction and warm up (10 mins)
- Scope and outcomes of the workshop session (10 mins)
- Key terms and concepts (15 mins)
- Presentation of research from cyberpsychology and neuroscience (25 mins)
- Case examples of virtual reality in use in the workplace (25 mins)
- Discussion of potentials and pitfalls (15 mins)
- Demonstration and participation using virtual reality software (40 mins)
- Individual reflection and group debate (10 mins)
- Facilitated ‘mini’ collaborative inquiry (25 mins)
- Recap and conclusion (5 mins)

The target audience: practitioners including psychologists, HR and learning and development professionals

The level of expertise, which the workshop will be aimed:
Basic to intermediate.

The materials we intend to make available to attendees: we will provide electronic copies of slides and full references, together with a list of recommended reading, also in electronic format.

Our preferred duration for the session: 3 hours.

The minimum, optimum and maximum number of attendees: we would suggest a minimum of 10 delegates and a maximum of 25, the optimum being 12-16.

The physical requirements for the session:
Preferred room layout- cafeteria style, i.e.
Equipment required – Internet access and presentation screen, as well as flipchart stands (x2)

**Ethical considerations:**
We will address a number of important ethical issues that may arise when engaging learners in virtual reality environments, seeking to explore and underline best practice in relation to a number of well-established phenomena, and standards including:

1. Managing the phenomenon of online disinhibition and the potential for this to be toxic leading to negative behaviours or benign, facilitating development and growth (Suler, 2004), and the steps that practitioners need to take to be aware of these behaviours, make their clients aware, and take appropriate action to resolve instances of toxic disinhibition behaviour online.
2. The nature of the immersive experience of virtual reality requires practitioners to take full account of the impact and sequelae (e.g. feelings of disorientation or depersonalization) on clients and the consequent duty to debrief clients after the use of avatar/3D technology and to identify and discuss any unforeseen distress, harm, boredom, fear and suffering from the use of such technology.
3. The role of expert facilitation (trust, relationship building) and emotional intelligence (affect attunement) to facilitate and maximize learning in virtual environment.
4. Standards of privacy and confidentiality must be maintained with the use of the data from social collaboration tools. The awareness of ethical standards and data protection need to be borne in mind.

**Conflict of interest:**
1. The virtual reality software to be demonstrated is not necessarily representative of entire spectrum of available products in the marketplace, session presenters are focusing on software they are familiar, so there is an inevitable availability bias at work in the choice of tools presenters will focus on. However, we will acknowledge this and give an overview of the wide type and range of software that is available, by way of context.
2. With regard to one software to be demonstrated, one of the presenters has an interest, being a pro bono consultant for the company which licenses it. There is no commercial intent and care will be taken to avoid promoting the particular software. Again, it is a matter of expediency and convenience: the presenter is accredited and licensed to use and demonstrate this particular software tool.
3. Both the lead author and co-author are members of a DoP working group (not the Conference one).

**W19 Workshop**
**Training Interventions that deliver learning and wellbeing impacts: What works for wellbeing**

*Olga Tregaskis,* University of East Anglia, Norwich Business School

**Category: Wellbeing and Work**

**Introduction**
Wellbeing is increasingly seen as an alternative indicator to gross national product as a measure of how well a nation is performing (OECD, 2015; Stiglitz et al, 2009; World Happiness Report, 2015). The UK Office for National Statistics uses indicators of psychological wellbeing as the most direct indicators of wellbeing. O’Donnell, Deaton, Durand, Halpern and Layard (2014) argue that psychological wellbeing is a suitable concept for evaluating the success of policies. Psychological wellbeing has two major components (Waterman, 1993): a) Subjective wellbeing largely refers to hedonic experience; and b) eudaimonic wellbeing, with its roots connected to notions of a ‘life well lived’. Subjective wellbeing comprises of subjective assessments of life satisfaction, positive affect (e.g., joy, enthusiasm) and the relative
absence of negative affect (e.g., lack of anxiety, feeling calm) (Diener, 1984). One of the most popular taxonomies of eudaimonic wellbeing (Ryff & Keyes, 1995) includes feelings of autonomy, mastery, personal growth, positive relations with others, purpose in life and self-acceptance. In our public engagement exercises, we found that different stakeholders also consider aspects of mental health and physical health to be important elements of well-being (Daniels et al., 2016).

There is considerable evidence of an association between indicators of the wellbeing of workers in an organisation and that organisation’s performance. For example, Bryson and colleagues (2014) report that well-being in an organisation is associated with organisational performance in their analysis of the UK’s Workplace Employment Relations Survey, which covers 22,451 employees from 1733 workplaces across a broad range of sectors. In their meta-analysis of 60 studies with a combined sample of 5,849 business units and over 230,000 workers, Whitman and colleagues (2010) report an association between job satisfaction in an organisation and organisational productivity. The UK Health & Safety Executive report that 9.9 million working days were lost to absence caused by stress, anxiety and depression in 2014/15 in the UK, and that stress, anxiety and depression accounted for 43% of all working days lost due to ill health (http://www.hse.gov.uk/statistics/causdis/stress/index.htm).

In our public consultation activities (Daniels et al., 2016), we asked a range of stakeholders for their views on important factors that would improve the wellbeing of UK workers and adult learners. Across the range of people we consulted (e.g., learners, general public, business leaders, trades unionists, occupational health and human resource management professionals,), learning was identified as having an important role to play in how individuals coped with the stress and strains in their work environment; and enabled or hindered attainment of psychological wellbeing and security (financial and emotional) both in working life and beyond. Thus learning capabilities as a set of personal self-regulatory resources for managing emotional, cognitive and behavioural responses to life events emerged as salient to individuals (i.e. transformative learning). In addition, learning directed at mastery of knowledge or skill to enhance specific employment or career goals was perceived to be an integral part of positive wellbeing outcomes (i.e. instrumental learning). Finally, the context in which learning took place was seen to have a profound influence on the individual’s sense of wellbeing. Specifically, the organisational environment, relationships with managers, and the quality of the learning delivery process were identified as impacting (either as barriers or facilitators) individual level learning outcomes (i.e. in terms of the application, acquisition or accumulation of personal self-regulation resources or mastery capabilities). Bringing together the economic importance of work for wellbeing (All Parliamentary Work Group on Wellbeing Economics, 2014) and the central role of training and learning in progressive high performance employment practices (Appelbaum et al., 2000), the present review is focused on work-based learning.

Systematic reviews or meta-analysis of interventions have focused on personal level resources, also referred to as self-regulatory resources or resilience resources. These reviews have found that interventions aimed at developing of self-regulatory personal level resources generally have a positive impact on enhancing psychological wellbeing (Van der Klink et al, 2001; Robertson et al 2015) and in achievement of formal educational outcomes (Broadbent and Poon 2015). The evidence emphasises the close alignment between ability of individuals to accumulate personal level resources through learning and wellbeing outcomes: This close alignment suggests a two-way reciprocal dynamic in which the more personal resources available the greater the positive outcomes gained which in turn reinforces and further builds personal level resources. But equally this positive dynamic can
work in reverse (see Hobfoll 1999/2001 Conservation of Resources), in which a deterioration in wellbeing or learning ability can lead to self-reinforcing negative spirals.

The set of skills or capabilities grouped as personal resources are multiple and wide ranging: cognitive flexibility, problem solving, self-efficacy, inter-personal skills (e.g. communication and relations with others), relaxation (e.g. mindfulness) (see, Jones and Johnston, 2000 (stress management); Keng, Smoski and Robins, 2011 (focused on face-to-face mindfulness); Robertson et al 2015 (resilience); Spijkerman, Pots, Bohlmeijer, 2016 (meta-analysis of online mindfulness training); Van der Klink et al 2001 (stress management)). Some studies have grouped intervention approaches according to the different types of personal resources being developed as follows: active which include cognitive-behaviour approaches to change cognitions and reinforce active coping behaviours; passive which include physical or mental relaxation resources; and multimodal which promote both active and passive personal resources. Interventions focused on developing personal resources are highly varied in their content as a result Robertson et al (2015) were unable to draw any conclusions regarding the relative effectiveness of training content on wellbeing outcomes; Van der Klink et al, (2001) found stress management training based cognitive-behavioural approaches, which developed health workers personal resources for coping, were more effective than those focused on relaxation resources or those using a combination of the two. Spijkerman et al (2016) found guided online mindfulness training to have larger effect sizes for stress reduction than unguided training.

However, while many of the systematic reviews of interventions have focused on personal level resources they have also identified inconsistent effects on wellbeing outcomes: see Van der Klink et al (2001) find the effectiveness of cognitive-behaviour interventions was not consistent and the authors speculated that this was due to a lack of attention to contextual issues e.g. no risk assessment to establish the need or relevance of the learning. The effectiveness of interventions focused on personal level resources is also variable when there are wider organisational changes ongoing: Van der Klink et al (2001) found stress management training to have no effect when adopted as part of an organisational change, which they suggest may be due to lack of tailoring of individual learning to the specific demands of the organisational change. Equally, a systematic review of stress management interventions aimed at nursing professionals concluded that a lack of effectiveness of the intervention to lower employee distress may be explained by the lack of attention to the factors in the work environment that may hinder the creation, application or relevance of the resources developed by individuals (Jones and Johnston, 2000).

Previous reviews and systematic reviews show an individual's ability to learn how to cope with demanding life contexts is closely aligned to wellbeing, and that learning associated with personal mastery (sometimes taken as indicative of accreditation or career status) enhances wellbeing. However, the evidence on the effectiveness of interventions is equivocal due to lack of attention to the contextual factors at play. Moreover, existing reviews of work-based learning and wellbeing have tended to focus on personal self-regulatory resources or mastery, thus neglecting other work-based learning interventions and their potential role in enhancing well-being. To address these gaps, the current systematic review sought to address the general question:

Within the context of work, to what extent are wellbeing outcomes influenced by learning outcomes and the characteristics of the learning process?
Key messages from the systematic review:
1 Training and development programmes that increase the individual’s personal skills to cope with stress are effective in also delivering enhanced wellbeing to the learner; this positive effect happens irrespective of whether the training uses cognitive techniques or relaxation techniques or a combination.
2 Training and development that enhances the individual’s professional capability (i.e. mastery of job specific skill) may also have positive benefits for the wellbeing of the learner.
3 Leadership training which improves leadership skills can also improve the wellbeing of the leader and those they manage; group based learning which is more interactive is more likely to be effective.
4 Training and development that uses on line learning methods is less effective than more extensive forms of learning in producing positive wellbeing outcomes for the learner or the organisation.
5 It remains unclear how training and development that takes place within the context of wider organisational change programs impacts on the wellbeing of learners or other organisational members.

W20 Extended Paper
Building emotional resilience in the children and families social care workforce
Gail Kinman, University of Bedfordshire and Louise Grant, Frontline

Category: Wellbeing and Work
People working in social care, especially those who support children and families, are at greater risk of work-related stress and burnout than other occupational groups (Baginsky, 2013; HSE, 2014). There are also serious concerns about absenteeism and retention in the sector (Community Care, 2012). It should nonetheless be recognised that many frontline practitioners find their work intensely satisfying and flourish in supportive organisational cultures (Stalker et al. 2007). Emotional resilience is now acknowledged as a key quality in helping employees provide high quality care to service users, while enabling them to manage the emotional demands of practice effectively without threatening their wellbeing (Grant & Kinman 2014; McFadden et al. 2014).

Emotional resilience is the ability to maintain personal and professional wellbeing in the face of ongoing work stress and adversity (McCann et al. 2013). More specifically, it is the capacity to utilise internal and external resources to respond to life challenges positively and flexibly, adjust to change effectively, and maintain a sense of control over the environment (Grant & Kinman, 2014). Although employees are required to take some responsibility to maintain their personal wellbeing, employers have a legal and moral duty of care to protect their health of their staff (Donaldson-Felder et al. 2014). The risks of adopting an overly individualised concept of resilience in health and social care have been recognised, whereby employees who ‘fail to cope’ with high demand and reduced resources can be pathologised (Considine et al. 2015). Clearly, multi-level, systemic initiatives will have a more far-reaching impact on the wellbeing of the workforce than interventions that merely seek to develop individual competencies.

In order to enhance the resilience of social care practitioners over the long-term, insight is needed into the characteristics of organisations, as well as individuals, that support this key quality. This session provides delegates with an overview of a briefing that was recently commissioned by Research in Practice to provide strategic managers with evidence-informed guidance on the contextual factors and individual competencies that build emotional resilience in frontline staff working with children and families. (Research in Practice is an independent organisation that aims to bring together research and practitioner expertise to promote evidence-informed practice in working with children and families – see
A systemic model of resilience is introduced, whereby resilient practitioners are supported by effective national policies and initiatives at the organisational and team level. Drawing on research conducted by the authors and other researchers (see Grant & Kinman, 2014), ways in which emotional resilience and wellbeing can be enhanced at each of these levels using carefully-targeted interventions will be highlighted.

At the public policy level, the need to introduce an ‘emotional’ curriculum that provides research-informed training initiatives at all career stages will be emphasised. The need to monitor the wellbeing of staff over time and the challenges inherent in undertaking this will be considered. The importance of developing multi-disciplinary professional networks to share information and innovative practice will also be discussed. At the organisational level, supervisors have a crucial role to play in protecting the wellbeing of their staff (Donaldson-Feilder et al. 2014). A framework that identifies the knowledge, skills and attributes that can help those who manage the children and families’ workforce build emotional resilience will be outlined. The competencies that underpin resilience at the individual level and how they can be fostered will also be reviewed. A range of evidence-informed interventions will be presented with strong potential to build these capacities, with wide-ranging benefits for wellbeing and professional practice. Two mini-case studies will be provided to illustrate the effectiveness of: a) an introductory ‘tool-box’ approach that encompasses several strategies and b) mindfulness techniques. The session will conclude with an interactive question and answer session that will consider the opportunities and constraints associated with implementing the recommendations of the briefing in frontline services. Particular focus will be placed on how occupational psychologists can translate research findings into practice within an ecological framework in order to build a resilient social care workforce.

References

W21 Standard Paper
Decisions, Decisions? Gender differences in decision-making style and self-confidence
John Hackston, OPP Ltd
Category: Psychological Assessment at Work
Women head several governments and a woman may be the next US president, yet women still make up less than 10% of executive directorships in FTSE100 companies (Sealy et al, 2016). Women may be less confident about their abilities than men and are more likely to
have an interpersonally focussed, values-driven decision-making style (Eagly and Johnson, 1990; Powell and Ansic, 1997). This transformational approach may lead to more effective leadership (Bass and Avolio, 1994; Eagly and Johannesen-Schmidt, 2003), but people-orientated leaders may be seen as less competent (Gartzia and Baniandres, 2016). Such perceptions may contribute to the “glass ceiling” and account in part for the “glass cliff” (Ryan and Haslam, 2005), where businesses in crisis are more likely to appoint a female CEO.

This study made use of two samples taking online tests or personality questionnaires as part of real-life development or selection situations, to test the following hypotheses:

- Women would be more likely than men to use a values-based and people-focused decision-making style, rather than a logic-based and task-focused style
- This gender difference would diminish for higher levels within organisations
- Men would be more confident, and also more overconfident, in their abilities.

Methodology

Study 1

This comprised 600,859 individuals who had completed the Myers-Briggs Type Indicator (MBTI) questionnaire (Myers et al, 1998) as part of a wide range of development programmes. 45% were female; mean age was 39 years; a wide range of organisations, occupational levels, job types and nationalities were represented.

The MBTI looks at four areas of personality, including the Thinking-Feeling dimension. Those with a Thinking preference typically make task-focused decisions on the basis of impersonal criteria; those with a Feeling preference are more likely to make people-focused, values-driven decisions. Previous research (e.g. OPP, 2011) demonstrated that men are more likely to have a Thinking preference and women a Feeling preference.

Study 2

315 candidates applying for different roles across several organisations completed a cognitive ability test, the Mental Agility Series. After each question they were asked how confident they were that their answer was correct, giving an overall measure of their confidence in their abilities (“cognitive confidence”) and, by comparison with their actual score, a measure of their over- or under-confidence (“self monitoring”). They also completed the 16PF personality questionnaire. This included two measures particularly relevant to this study:

- Reasoning, an independent measure of cognitive ability
- Sensitivity, the extent to which an individual will tend to make decisions on the basis of their subjective values and intuitions.

25% were female; mean age was 37 years.

Results

Full results will be presented at the conference. However, in summary:

Study 1

- Women were significantly more likely than men to prefer the values-driven Feeling approach to decision-making
- Women were significantly under-represented at higher levels in organisations and significantly over-represented at lower levels, as were all those with a Feeling preference
- For men, the proportion of those with a Feeling preference varied little between levels. For women, the proportion varied from 46% at employee level down to 30% at top level.
- A univariate analysis of variance revealed that both gender and Thinking-Feeling had a significant impact on occupational level, though gender had the greater effect size. There was a significant interaction effect.
Study 2

- Men were, on average, more confident and more overconfident; there was no significant gender difference in actual ability
- For any level of ability, women were on average less confident in their ability and (compared to test results) more underconfident than men
- On average, women were more likely to make values-based decisions than men (higher on Sensitivity)
- Irrespective of gender, those who were more Sensitive were less confident and more underconfident, but for any given level of Sensitivity, women were on average less confident and more underconfident.
- There was evidence of the Dunning-Kruger effect; those with a lower level of ability were relatively more likely to over-estimate their performance.

Discussion and conclusions

Women are more likely than men to take a values-based approach to decision-making, but this difference reduces at higher levels. If organisations see this decision-making approach as less valuable, this may contribute to less women being promoted to higher levels. Women are on average less confident in their abilities than men; this is likely to further exacerbate gender disparity. Psychologists and other professionals have a role to play in helping their clients see why the values-based approach to decision-making can be a useful and valid approach; an awareness of gender discrepancies in confidence may mean that women hold back less from seeking advancement. The presentation will explore these issues in detail and recommend practical ways forward.

References


OPP Ltd, 2011. *MBTI Step I instrument European Data Supplement*


W22 Standard Paper

**Do Ability Tests Enable Equal Opportunities**

**Samantha Allen**, Goldsmiths, University of London

**Category: Psychological Assessment at Work**
What are the main psychological theories, models and research underpinning your session?

Dyslexia is widely recognised as a developmental disorder although its specific causes and subtypes are debated. It is classified as a Specific Learning Difficulty (SpLD) involving impairments in phonological and auditory awareness/discrimination, attention, or processing (Heim et al, 2008).

Although dyslexia is widely recognised and detected with assessments, dyslexics can be disadvantaged by existing workplace systems. Specifically, it is common practice to use a variety of psychometric tests in recruitment and promotion selection. Due to their cognitive processing impairments dyslexics may be disadvantaged at performing these tests and be discriminated against during recruitment independent of their competency level. This could relate to the relatively high proportion of dyslexic entrepreneurs (Logan, 2009).

Then again, ability tests are a useful and important tool in recruitment because they are highly predictive of performance in selection and training contexts (Robertson & Smith, 2001). Yet, previous research shows IQ tests are not as predictive of dyslexics’ success as in the general population (Finucci, Gottfredson & Childs, 1985). Thus, dyslexia could interfere with the predictive validity of ability tests by impacting the difficulty of the test independent of candidate’s intelligence.

This dilemma has partially been recognised because the UK Equality Act (2010) says that where a disabled individual would be disadvantaged by taking an assessment, employers must make a ‘reasonable adjustment’. However, this means that reasonable adjustments are dependent upon dependent upon candidate disclosure. Research indicates that often individuals with disabilities are averse to disclosing their disability to avoid negative consequences (von Schrader, Malzer & Bruyère, 2014). Hence, the provision of reasonable adjustments may be insufficient to ensure ability tests are fair for people with disabilities. Consequently, in the present state the potential fairness concerns and limit to predictive validity of ability tests for dyslexics undermines the value of using the assessments. Furthermore, many dyslexics may not be disclosing their dyslexia and as such, steps should be taken to ensure that the ability tests account for this. The present paper hopes to begin addressing these concerns through identifying whether ability tests distinguish between dyslexics and non-dyslexics. This knowledge can be used to take steps towards the development of ability tests that ensure fairness and validity irrespective of disclosure.

How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?

As Occupational Psychologists it up to us to ensure organisational practices are based upon rigorous and relevant research. At present our understanding of ability tests in relation to dyslexic candidates is limited. Thus, the present paper is relevant, addressing the knowledge gap by investigating whether online ability tests distinguish between dyslexic and non-dyslexic candidates. This paper aims to provide a rigorous scientific basis for practice. Furthermore, this paper hopes to stimulate further work to address the research gap and ensure the practice of ability testing is fair and effective ensuring the best candidate is selected irrespective of disability.

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

The category applied to is Psychological Assessment at Work and more specifically Diversity and Inclusion. This submission is appropriate for this category as the study investigated whether online ability tests used in recruitment distinguish between dyslexic and non-dyslexic applicants. The UK Equality Act (2010) states that where a disabled individual would be disadvantaged by taking the assessment employers must make a ‘reasonable adjustment’. However, candidates may be unwilling to disclose their dyslexia. As such, the provision of reasonable adjustments following disclosure may be insufficient to ensure ability
tests are fair for people with disabilities. Thus, this submission is appropriate to the category applied for as it assesses the potential impact of psychological assessments upon a neuro-diverse populace.

**What do you consider to be the most novel or innovative aspects of the ideas being presented?**
At present the perception that ability tests unfairly distinguish between dyslexics and non-dyslexics is based upon anecdotes from dyslexics. This study seeks to empirically ascertain whether this perception is correct and draws on different areas of ability assessment (verbal meaning, numerical speed and accuracy, spatial visualisation, perceptual speed, reasoning) to ensure the broadest scope for understanding this issue. Furthermore, dyslexics and non-dyslexics are directly compared as well as controlling for dyspraxia (often co-occurs with dyslexia) to obtain the clearest picture of ability testing and dyslexia.

**Why do you think conference delegates will find the paper or session stimulating and useful?**
I believe the conference delegates will find the paper stimulating and useful because:

1. It is important to Occupational Psychologists broadly and psychometric test developers specifically that the tools we recommend and use have high levels of validity. This paper pertains to the predictive and face validity of such tools for dyslexics. Thus, understanding the impact of ability tests upon dyslexics and the ramifications for the tools themselves is important to conference delegates.

2. The findings of this paper will hopefully stimulate the development of ability tests that are accessible to working adults with dyslexia and potentially reduce concern around applying to companies using such tests. Such developments will be relevant to conference delegates as they are likely to be involved in the development of these tests and/or their recommendation.

**What might the public find interesting about your paper or session?**
This paper will be interesting to members of the public with or related to someone with dyslexia. Additionally, this paper will be interesting to anyone in the employment sector as they may use ability tests to recruit and are likely to recruit dyslexics (potentially undisclosed) throughout their careers. This paper will be interesting to the mentioned groups because they will be motivated to ensure the selection process is as fair and accessible as possible. Employers will be keen to know the tools at their disposal can reasonably predict the potential performance of all candidates rather than select groups.

**If any, what materials do you intend to make available to attendees and in what format?**
An electronic version of the slides.

**W23 Discussion**
“**To PhD or not to PhD”, that is the Question…Is there a Doctor in the house…?**
**Fiona Beddoes-Jones**, 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 how to get a PhD and possibly as importantly, how to manage not to get one in this interactive discussion. Our panel of Keynotes, experienced Supervisors, current students and PhD graduates will be available to answer all of your questions regarding going down the PhD route. So whether Doctoral study is something you are considering, (as there are a number of routes, not just one), or have already committed to, don’t miss this interactive and practical outlook from those in the know.
W24 Standard Paper
An investigation into the performance and experience of Dyslexic users in a Verbal Ability test
Rachel Owens, CEB
Category: Psychological Assessment at Work
1. What are the main psychological theories, models and research underpinning your session?
Dyslexia is a very common disability, affecting approximately 10% of the population (British Dyslexia Association). It affects the way that information is processed, stored and retrieved and memory, processing speed, and time perception may all be impacted.

The impact of dyslexia on performance in an ability assessment can be extensive. The format and process of online tests, such as the written format and their frequently having a timed component, may increase their difficulty for dyslexic users. Given online ability tests are frequently used in the recruitment processes of a large number of organisations here in the UK, this has consequences for both the dyslexic candidate and the potential employer.

The UK Equality Act (2010) requires employers and recruiters to make ‘reasonable adjustments’ where a disabled person would be at a substantial disadvantage in undertaking an assessment. Dyslexic candidates who request a reasonable adjustment will often request an increase in the time limits for timed assessments. Removing time altogether can minimise differences between those with and without dyslexia in ability tests when using Computer Adaptive Testing methods (Keeley & Parkes, 2014). However, this may lead to concerns with test security, something that does concern CEB.

To receive a reasonable adjustment, the candidate must contact the recruiting organisation and explain their requirements. 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, given the large proportion of the population with a disability more broadly (up to 20%), only 2-3% of candidates or employees generally disclose a disability (Nishii, Bruyère, & von Schrader, 2014; O ’Connell & Rutigliano, 2014). One of the factors that affect disclosure is the apparentness of the disability (Nishii et al., 2014) meaning dyslexia, as a less apparent disability, is less likely to be disclosed than a more physical disability such as a mobility impairment. 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. If a candidate is less likely to contact a recruiter and negotiate for a reasonable adjustment, it is important for test publishers to improve ability tests to ensure we are creating the most accessible version for the proportion of disabled candidates who may not be comfortable disclosing their disabilities to potential employers.

2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
Our investigation into the impact of dyslexia on timed ability tests over the past couple of years has had a profound effect on the way we operate within the research department of CEB. Since starting our investigation into the experience of dyslexic users in online ability tests, we have made changes to the process in which we produce assessment content, based on insights we’ve received from those users. These changes include adding guidance to our writing instructions, as well as including a specific review stage to identify potential issues for individuals with reading difficulties. We are committed to this ongoing
improvement to the way we produce test content. When we consider that up to 20% of the population has some kind of disability, and up to 10% of the population may have dyslexia, these changes indicate how much of an impact research can be to best practice.

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 a common online ability test. The BDA estimates 10% of the population has some form of dyslexia, which means in the UK anywhere up to 6.4 million people, or just over 4 million people of working age, live with dyslexia.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented? We chose originally to begin our long running investigation into the influence of dyslexia on performance in online ability tests using two of our common tests, Deductive Reasoning and Numerical Ability. We were often asked why we chose to study these two tests, rather than Verbal Ability. At the time this was due to these tests being considered the first choice when it came to deciding appropriate tests for use in graduate recruitment. However, there is no denying that a Verbal Ability test would be seen by many as representing the biggest hurdle to someone with dyslexia. The content of the test is particularly wordy and this represents a major challenge for individuals with dyslexia. 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 already collected feedback from participants on two of our online ability tests, Numerical Ability and Deductive Reasoning, and provided suggestions for greater accessibility. We now introduce the feedback from Verbal Ability and investigate how this feedback differs across the tests.

5. Why do you think conference delegates will find the paper or session stimulating and useful? Delegates will find the paper useful as they will learn how psychometric tests, many of which have been developed without much thought of inclusivity, are experienced by dyslexic users. Searching for ways to make online ability tests more accessible is important to the delegates at this conference. This paper adds to a small but growing body of work by UK and US test publishers which will establish guidance to on how to create 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 following 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.

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

References
W25 Standard Paper
The Influence of Personal Resources on Work Engagement
Martina (Tina) Kotzé, University of the Free State, South Africa
Category: Leadership, Engagement and Motivation

Introduction
The Gallup studies (Mann & Harter, 2016) show that worldwide only 13% of employees working for an organisation are engaged in their work. Previous research reveals that work engagement results from both job and personal resources (Bakker & Demerouti, 2008). Personal resources refer to individuals’ positive self-evaluations of their ability to impact successfully upon and control their environment (Hobfoll, et al., 2003). The role of personal resources, such as Psychological Capital (PsyCap), mindfulness and self-leadership in enhancing work engagement has been empirically investigated to a certain degree. These constructs are regarded as state-like and therefore open to development (Luthans et al., 2007; Luthans, Luthans & Luthans, 2004).

Work engagement is defined as “a positive fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption” (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002, p. 74). PsyCap is a higher order construct consisting of hope, optimism, self-efficacy and resilience (Luthans, Norman, Avolio & Avey, 2008). The relationship between PsyCap and work engagement has been supported empirically in various organisational contexts (Youssef & Luthans, 2007), although not by all studies (de Waal & Pienaar, 2013).

In psychological terms, mindfulness is described as “an awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 145). The mindful state of consciousness is proposed to be positively related to work engagement, as it is considered to help employees to obtain, retain and protect resources needed to be energetic, enthusiastic and immersed at work (Depenbrock, n.d.). Workplace mindfulness differs from work engagement and its dimensions because work engagement implicates affective qualities (Dane & Brummel, 2013), while mindfulness is regarded as “a cognitive construct” and relates to “the degree to which one’s attention tends to be focused on a wide breadth of events unfolding in one’s work context” (Dane & Brummel, 2013, pp. 7, 8). Mindfulness can foster engagement by promoting heightened states of involvement and wakefulness (Leroy, Anseel, Dimitrova & Sels, 2013) and by assisting individuals to view existing activities in innovative and more interesting ways (Langer & Modoveanu, 2000).

The self-leadership concept suggests that an individual engaging in self-evaluation, replacing ineffective behaviours and negative thought processes with more effective behaviours and positive thought processes can enhance personal accountability and improve professional performance. In short, self-leadership is a process through which people influence themselves to achieve self-direction and self-motivation necessary to perform (DiLiello & Houghton, 2006). Research on the relationship between self-leadership and work engagement is scarce, yet, there is empirical evidence indicating a significant positive relationship between self-leadership and work engagement (Shaoping, Huachun & Yongheng, 2015; Gomes, Curral & Caetano, 2015).

Although PsyCap, mindfulness and self-leadership have been individually investigated in terms of their influence on employee engagement, the relationship among these variables have not been tested. There is some empirical evidence that PsyCap mediates the relationship between different individual variables such as mindfulness and well-being (Roche,
Haar & Luthans, 2014), occupational stress and depressive symptoms (Liu, Chang, Fu, Wang & Wang, 2012) and occupational stress and job burnout (Li et al., 2015), which may indicate that PsyCap may play a mediating role between mindfulness and work engagement and self-leadership and work engagement. No studies were found on the relationship between PsyCap and self-leadership. Therefore the role of PsyCap as a mediator between these relationships need to be investigated.

**Study Objective**
Against this background, the study aimed to examine the relationships between self-leadership, mindfulness, PsyCap and engagement.

**Main psychological theories, models and research underpinning the paper**
The study draws on the foundation of positive psychology (Seligman & Csikszentmihalyi, 2000) and the field of positive organisational behaviour (POB) (Luthans, 2002, p. 59; Youssef & Luthans, 2000) and focuses on personal resources of employees (Hobfoll, et al., 2003). It is based on research on the role of PsyCap (Luthans et al., 2004), mindfulness (Hyland, Lee & Mills, 2015; Dane & Brummel, 2013; Glomb, Duffy, Bono & Yang, 2011) and self-leadership (Manz & Neck, 2004; Manz, 2015) in creating positive workplace outcomes including employee engagement (Schaufeli, Salanova et al. 2002; Schaufeli, Martinez et al., 2002).

**Research design**

**Hypotheses:**
1a: PsyCap has a statistically significant positive influence on the Vigour dimension of work engagement.
1b: PsyCap has a statistically significant positive influence on the Dedication dimension of work engagement.
2: Self-leadership has a statistically significant positive influence on PsyCap.
3: Mindfulness has a statistically significant positive influence on the PsyCap.
4a: PsyCap mediates the relationship between Self-Leadership and Vigour.
4b: PsyCap mediates the relationship between Self-Leadership and Dedication.
5a: PsyCap mediates the relationship between Mindfulness and Vigour.
5b: PsyCap mediates the relationship between Mindfulness and Dedication.

![Conceptual model](image-url)

**Figure 1: Conceptual model**
Participants
A convenience sample of 407 full-time employees from various organisations applying to MBA and leadership programmes at a South African business school participated in the study. The majority were female (52%), between 26 and 45 years old (55.1%) and employed in the private sector (60.8%).

Ethical considerations
Research participants were asked to sign a consent form relating to their participation in the research. The form included written assurance that their anonymity would be ensured and that no individual results would be reported in any publications. Only aggregated data relating to the total group would be reported and discussed. The questionnaires were collected immediately after the applicants completed them.

Measurement Instruments
The Abbreviated Self-Leadership Questionnaire (ASLQ) (Houghton et al., 2012) was used to measure self-leadership, the 15-item Mindful Attention Awareness Scale (MAAS) (Brown & Ryan, 2003) to measure mindfulness, the PsyCap Questionnaire (PCQ-24) (Luthans et al., 2007) to measure PsyCap and items from the Utrecht Work Engagement Scale (short version) (Schaufel & Bakker, 2003) to measure two dimensions of work engagement (vigor and dedication).

Statistical Analysis
Before the measurement instruments’ psychometric properties were analysed, the null hypothesis was tested using the programme SAS 9.4 to ensure the data is from a multivariate normal population. The Mardia Skewness test-statistic was 56517 (p<.0001) and Mardia Kurtosis test-statistic was 85.56 (p<.0001). The two test-statistics confirm that the data do not meet the criterion of multivariate normality. Thus, the hypotheses were tested using the variance-based structural equations modelling program SmartPLS 3 recommended by Hair, Ringle and Sarstedt (2011). The measurement model’s psychometric properties were assessed by conducting a confirmatory factor analysis (CFA) using SmartPLS 3. Construct validity was examined by assessing the measurement model for convergent and discriminant validity (Hair, Black, Babin & Anderson, 2010). The two-stage approach was used to estimate the structural model (Becker, Klein, & Wetzels, 2012). Mediation hypotheses testing was conducted according to the process described in Kenny (2016).

Results and discussion
Testing of hypotheses H1 to H3
H1 to H3 were tested and the results are presented in Figure 2. Regarding predictive validity of the model, PsyCap explains 24.6% of the variance in vigour and 24.4% of dedication. The two determinants of PsyCap explained 32.6% of the PsyCap variance.
Figure 2: Results of H1 to H3

The influence of PsyCap on vigour and dedication was positive and significant. Thus, H1a and H1b were accepted. PsyCap had a slightly stronger positive influence on vigour than on dedication (compare 0.499 vs. 0.497). H2 and H3 were also accepted. Self-leadership and mindfulness’ influence on PsyCap was 0.385 and 0.320 respectively and thus significant. Therefore self-leadership is the stronger PsyCap determinant.

Testing of the mediation hypotheses (H4-H5)
To test H4 and H5, the relationship between the predictor and outcome variables was estimated to confirm that there is a relationship to be mediated. As shown in Table 1, self-leadership and mindfulness have a positive significant influence on vigour and dedication. Thus, the testing of H4 and H5 could continue.

Table 1: Assessment of predictor variable-outcome variable relationship (step 1)

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>Effect</th>
<th>95% bias-corrected confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>LLCI</td>
</tr>
<tr>
<td>H4a</td>
<td>SL→VIG</td>
<td>0.348</td>
<td>0.247</td>
</tr>
<tr>
<td>H4b</td>
<td>M→VIG</td>
<td>0.352</td>
<td>0.241</td>
</tr>
<tr>
<td>H5a</td>
<td>SL→DED</td>
<td>0.331</td>
<td>0.263</td>
</tr>
<tr>
<td>H5b</td>
<td>M→DED</td>
<td>0.319</td>
<td>0.277</td>
</tr>
</tbody>
</table>

The results in Table 2 show that only the influence of self-leadership on dedication is fully mediated by PsyCap. By controlling for the mediator, the direct influence of self-leadership on dedication is zero (the bias-corrected confidence interval includes zero), while the indirect influence that includes the mediator is positive and significant. The influence of self-leadership on vigour is partially mediated by PsyCap, while the influence of mindfulness on both vigour and dedication are partially mediated by PsyCap. H4 and H5 were therefore accepted.
### Table 2: Direct and indirect effects (step 2-4)

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>Effect</th>
<th>95% bias-corrected confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>LLCI</td>
</tr>
<tr>
<td>H4a</td>
<td>SL → VIG</td>
<td>0.141</td>
<td>0.036</td>
</tr>
<tr>
<td></td>
<td>SL → PC</td>
<td>0.481</td>
<td>0.385</td>
</tr>
<tr>
<td></td>
<td>PC → VIG</td>
<td>0.432</td>
<td>0.323</td>
</tr>
<tr>
<td></td>
<td>SL → PS → VIG</td>
<td>0.207</td>
<td>0.139</td>
</tr>
<tr>
<td>H4b</td>
<td>M → VIG</td>
<td>0.166</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>M → PC</td>
<td>0.435</td>
<td>0.352</td>
</tr>
<tr>
<td></td>
<td>PC → VIG</td>
<td>0.427</td>
<td>0.331</td>
</tr>
<tr>
<td></td>
<td>M → PS → VIG</td>
<td>0.186</td>
<td>0.132</td>
</tr>
<tr>
<td>H5a</td>
<td>SL → DED</td>
<td>0.120</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>SL → PC</td>
<td>0.481</td>
<td>0.409</td>
</tr>
<tr>
<td></td>
<td>PC → DED</td>
<td>0.440</td>
<td>0.357</td>
</tr>
<tr>
<td></td>
<td>SL → PS → DED</td>
<td>0.211</td>
<td>0.157</td>
</tr>
<tr>
<td>H5b</td>
<td>M → DED</td>
<td>0.169</td>
<td>0.065</td>
</tr>
<tr>
<td></td>
<td>M → PC</td>
<td>0.403</td>
<td>0.303</td>
</tr>
<tr>
<td></td>
<td>PC → DED</td>
<td>0.370</td>
<td>0.255</td>
</tr>
<tr>
<td></td>
<td>M → PS → DED</td>
<td>0.149</td>
<td>0.091</td>
</tr>
</tbody>
</table>

### Conclusion

The research findings indicate that self-leadership, mindfulness and PsyCap together make a difference in employees’ work engagement level. Therefore, using these personal resources more effectively is likely to result in increased employee work engagement and benefit both the individual and the organisation. Employees and organisations can gain value from implementing personal development strategies focussing on improving self-leadership, mindfulness and PsyCap. The evaluation of one’s internalised beliefs, purposeful control of one’s thoughts, soliciting feedback from others, and mindfulness skills are just a few examples of relevant strategies.

### How the paper links with main conference theme: research into practice: relevance and rigour

**Relevance:** The Gallup studies (2016) show that worldwide only 13% of employees are engaged and that manager and employee development is crucial for increasing engagement. This research emphasises the importance of developing employees’ personal resources, as part of a broader individual development focus in order to enhance work engagement.

**Rigour:** The research was executed in a rigorous manner. The conceptualisation of the model was based on previous literature and research.

### Category: Leadership, engagement and motivation

The research investigates the impact of positive psychological constructs and personal resources (PsyCap, mindfulness and self-leadership) on work engagement.

### What do you consider the most novel or innovative aspects of the ideas presented?

Although constructs tested here have been individually investigated in terms of their influence on employee engagement, this research conceptualised a model with two determinants of PsyCap and PsyCap’s influence on work engagement. The role of PsyCap as a mediator was investigated. The propositions underpinning the conceptual model and mediation hypotheses have not been empirically tested previously. Taking into consideration recent emphasis on workplace mindfulness, the research results, which show that self-leadership can be a stronger determinant of PsyCap than mindfulness, are pertinent.
Why do you think conference delegates will find the paper or session stimulating and useful?
Recent research relating to personal resources’ role in the workplace focusses mainly on mindfulness and PsyCap. Self-leadership has not been investigated in relation to these constructs. This study emphasises the contribution of enhancing self-leadership strategies in combination with other personal resources.

What might the public find interesting about your paper or session?
Workplace engagement (or a lack thereof) is currently a worldwide concern and these results show that employee engagement can be increased by investing in employees’ personal development, i.e., assisting in implementing strategies such as self-leadership to enhance personal resources. Examples of strategies will be provided.

W26 Standard Paper
Identification of Leadership Potential: Using a serious game to predict which executives will transition successfully through leadership passages
Inga Pioro, Synchronise Consulting Ltd
Category: Psychological Assessment at Work
Research shows that 46% of transitioning leaders underperform during the course of their transition to their new roles. Whilst much has been written about the different leadership transitions and what responsibilities leaders need to let go of and what they need to learn, there has been little research about what traits can underpin success. Meanwhile, research into high potential has centred around creating models of potential – outlining qualities required for transition to more senior roles in general. Such models have been poorly defined, and rarely outline what “potential” is for. This presentation will share preliminary results of a study that brings these two bodies of research together. Firstly, a model of potential will be shared that incorporates measurable traits. Secondly a new gamified tool, that directly measures these individual constructs, will be demonstrated. Last, the results of a validation study will be shared to show how the tool can predict successful transition through leadership passages.

1. What are the main psychological theories, models and research underpinning your session?
Research into leadership transitions outlines what individuals need to stop, start and continue to be successful (e.g. Freedman, 1998; Charan et al, 2001 and Goldsmith & Reiter, 2008). There is less research about what underlying qualities help individuals to make successful transitions. Research into high potential has centred around creating models of potential – outlining qualities required for transition to more senior roles in general (e.g. Dries and Pepermans, 2012; Church & Silzer, 2014). Such models have been poorly defined, and rarely outline what “potential” is for. Organisations and consultancies rely on assessment techniques such as assessment centres, manager ratings, 360 feedback, psychometrics and personality tools. Each of which can offer some indication of future potential, but each have risks and shortcomings, which will be summarised briefly in the presentation.

2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
98% of organisations surveyed by HBR (Ready et al, 2010) reported that they purposefully identify high potentials. However, research conducted by Faragher (cited in People Management, November 2013) indicated that employers waste £1.2 million a year on failed talent development programmes. One of the key issues cited is that only half of respondents have a systematic approach in place to identify high-potential staff, and only a third use valid assessment methods to back up their choices.

The presentation will offer a strong model of potential that is future-focused and rigid in its ability to describe an individual with the latent ability to progress through leadership
transitions. It will also demonstrate a new tool to measure potential: a ‘serious game’ that when played, can observe traits associated with high potential, and automatically interpret actions into the three dimensions of potential: Cognitive Capacity; Drive and Learning Agility.

This study is being supported by Edinburgh Business School as part of a Doctorate in Business Administration, therefore offers academic credence.

3. **Why is the submission appropriate for the particular category you have chosen?**  
The tool and validation are currently in progress. Preliminary results can be shared in a Standard Paper format.

4. **What do you consider to be the most novel or innovative aspects of the ideas being presented?**  
Gamification and serious games have become increasingly popular for a range of purposes including marketing and training purposes, with research indicating increases in engagement (Armier et al, 2016) and learning (Landers, 2014). Gamification is defined as “the use of elements of game design in non-game contexts” and serious games describe the “use of complete games for non-entertainment purposes” (Deterding et al 2011). There is well-developed literature on gaming for training purposes (e.g. Gee, 2007; Landers, 2016), but recent thought papers such as Winsborough & Chamorro-Premuzic (2016) and Handler (2014) claim that gamification is one of the key emerging opportunity for talent assessment and psychometrics. Serious games could be set to replace IQ, SJT and self-report tests, and measure both intelligence and personality traits (Winsborough & Chamorro-Premuzic, 2016).

Development of the tool to measure potential exploits the opportunities of gamification in predicting success through leadership passages.

5. **Why do you think conference delegates will find the paper or session stimulating and useful?**  
There is currently hot debate about whether serious games can be used to replace traditional assessment techniques. The discussion will create stimulating debate about whether such a tool can be valid.

Practitioners often struggle to differentiate potential and performance, therefore there will be the opportunity to discuss and gain clarity about this area.

6. **What might the public find interesting about your paper or session?**  
The trending topics of gamification and the measurement of potential.

**References**


**W27 Standard Paper**

**Career Transitions: Doctoral Graduates' Experiences**

**Rebecca Boyd & Stephanie McAlinden**, Queen's University Belfast

**Category: Learning, Training and Development**

**Introduction**

Although occupational psychology has much to contribute to career development literature and practice, with early career theory being built from the vocational psychology perspective (Arthur, Hall and Lawrence, 1996) current practice of career professionals is influenced by a range of disciplines. Career development is a niche but important area within learning and development. As an Occupational Psychologist working as a Senior Careers Consultant, the author of this paper aims to bring an occupational psychology perspective to the career practitioner field, bridging the gap between occupational psychology and career development practice. The paper applies a rigorous occupational psychology qualitative research approach to explore career transitions.

The paper explores experiences of transition of doctoral graduates into early stages of employment. Whilst numerous studies have looked at the transition of graduates, limited information is available on the experiences of doctoral graduates (Jackson, 2007). Reviews of the literature have identified a need to address the lack of information regarding research careers outside of academia (Thrift, 2008) and experiences of transition from study to employment both within and beyond academia (Radden and Sung, 2009). Where studies have looked at doctoral graduate employment, these have tended to be large-scale quantitative studies providing overviews of destinations and impact (HECSU, 2006; Vitae, 2013a). Case studies (Vitae 2013b, RCUK, 2014) that are available focus on the broad context of career paths and career choices, but do not include perspectives on experiences of transition and have not been subject to structured analysis. As highlighted by Cassell and
Symon (2011), there is a tendency towards quantitative research within occupational psychology but qualitative methodology provides opportunity for innovative research to enhance our insights.

The small number of studies that have included a qualitative element, tend to focus on graduates at a later stage in their careers, 3-6 years (Purcell and Elias, 2005) or 10 years after graduation (Innis and Feeney, 2012; CFE, 2014). Understanding of the early stages of transition is important (Radden and Sung, 2009) as this experience is central to successful career development for graduates. To address this gap, this study aims to explore experiences in the early stages (1-2 years immediately following graduation).

The aim of the project was to develop a better understanding of experiences of transition from PhD study to employment: providing insight into challenges faced, value of doctoral study in relation to employment and career management strategies to support a successful transition. The project aims to contribute to the research literature, inform practice of psychology and career development professionals as well as provide valuable insight for postgraduate researchers and graduates.

**Methodology**

12 in-depth semi-structured interviews were conducted with a targeted sample of doctoral graduates across disciplines and working in a range of roles, both within and mainly beyond academia. The sample was purposively selected to represent diversity in terms of discipline, industry and gender, in order to develop a deeper and fuller understanding of postgraduate researchers’ transitions. Interviews explored experiences of transition including factors influencing transition experiences, challenges faced, adaptations required, relevance of PhD study, application of skills and knowledge and utilisation of career management techniques. Full ethical approval was agreed prior to commencement of the project, addressing issues of data confidentiality, informed consent and right to withdraw. Interviews were conducted and recorded by a trained and experienced qualitative researcher. Data was transcribed and thematic analysis conducted, utilising Braun and Clarke’s (2006) phased approach, to explore and identify key themes in relation to the research questions. In addition, with prior permission of the participants, three of the interviews were video-recorded to provide content for video case studies. Video transcripts were edited and approved by participants prior to dissemination.

**Findings**

Doctoral graduates faced a number of challenges when moving from PhD to early employment. Many did not have a definite career path in mind at the start of their PhD and did not focus on career planning at an early stage. The increasing competitiveness of the academic job market also presented key challenges for those considering this as a potential pathway whilst the associated pressures of the academic environment influenced others’ decision to seek an alternative pathway. Other key challenges to be discussed include perceptions of employers outside of academia and adapting to a new work environment. In terms of preparation for employment, the central value of the PhD was felt to be through facilitating development of key transferable skills, most notably communication, presentation and project management. Our findings also identified the importance of proactive career management and development, with participants highlighting the importance of recognising and seizing opportunities, gaining practical experience and being able to articulate their skills in a competitive job market.

**Discussion and Practical Implications**

The findings provide a detailed insight into the experiences of recent doctoral graduates in today’s job market, with important implications for practice. Understanding the key challenges faced will help inform professionals working within the career development field,
as well as be of direct interest for current postgraduate researchers. The findings will also be discussed in relation to career transition and career management theory.

The presentation of the paper will include overview of the project and findings, consideration of contributions to understanding of early career transitions and practical implications. Presentation of findings will be enhanced through sharing of video case study excerpts and reference to the online project resource.

References
Timetable Abstracts
Thursday 5 January

T01 Keynote Session
Towards Agile Talent Assessment: The Key Role of Modularity
Professor Dr. Filip Lievens, Personnel Management and Work Psychology, Ghent University, Belgium
Category: Plenary Session in the Grace Suite
Given that the business world is characterized by volatility, uncertainty, complexity, and ambiguity (VUCA), there is increasing consensus that staffing approaches should also become more agile. One approach to accomplish agile talent assessment is to reconceptualize selection procedures as modular. This means that a selection procedure can be broken down into smaller components (aka building blocks). Examples of such building blocks are stimulus format, response format, scoring format, instructions, etc. In turn, these building blocks can then be flexibly recombined to construct a wide variety of new “hybrid” selection procedures. In this presentation, evidence regarding two such hybrid approaches will be presented: webcam assessment and speed assessment.

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 10:15-10:35 in Grace Suite. 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.

T04 Standard Paper
Responsive Recruitment: A Practitioner Case Study
Olivia Black & Rab MacIver, Saville Consulting, a Willis Towers Watson Company
Category: Psychological Assessment at Work
Introduction
A practitioner case study demonstrating the benefits of a responsive recruitment process providing a seamless candidate experience by offering a fast time to hire and feedback at every stage of a recruitment process.

A large multinational banking and financial corporation were seeking a partner to redesign their assessment process for their high potential international talent programme. The programme attracts thousands of applications every year and is designed to target young, talented individuals from across the globe. They wanted to introduce a new assessment process that would achieve the following:

- An engaging candidate experience that reflects the company brand
- An efficient process which reduces costs, resources and time to hire
- Robust and customised assessment of candidate alignment to the organisation’s core behaviours
- A standardised assessment process across all countries
- A clear and simple assessment process

While all critical objectives, the first point relating to candidate experience was of particular importance and something that linked to all aims. They wanted a recruitment process that had greater rigour, enabled them to make more informed decisions within a shorter
timeframe and clearly communicated outcomes to candidates at every stage. No matter what stage a candidate was rejected, the client wanted this to be a positive experience where candidates understood why they were not being progressed and could apply their learnings to future career searches. An article by KPMG states that 55% of candidates were not offered any feedback if they were unsuccessful, highlighting the need for feedback to be considered.

A leading media and telecoms provider found that, in an 18-month period, over 7,500 applicants terminated their subscription (Adams, 2016). This equated to over £4.4 million in unexpected lost revenue, approximately the same value as their entire HR budget. Findings from the 2014 Candidate Experience Report, which surveyed over 3,000 candidates and found 88% are more likely to buy from a company that gave them a positive candidate experience. The survey also found that 97% would refer others to the organization if they had a positive candidate experience. This research helps to demonstrate the direct impact poor rejection of candidates can have on the company and why enhancing the user experience and feedback was at the forefront of our assessment design and important ethical considerations.

The Solution
The assessment re-design focused on moving away from costly resource-intensive assessments currently used, to make better use of technology with the application of relevant and rigorous online tools and insightful feedback reports.

The first design phase involved creating a common set of competencies that aligned to their organisational behavioural code and leadership proficiencies as well as integrating the assessment competency model. The end competency model provided a standardised set of behaviours which were simple, measurable and applicable to the international talent programme as well as other talent processes.

For the next design phase, a multi-stage assessment approach was adopted for the international talent programme that utilised technology and minimised the time impact on recruiters. The new assessment stages included: local screening, a Situational Judgement Test (SJT), an Aptitude test and a Behavioural psychometric tool, a structured HR Interview powered by the Behavioural psychometric and finally a structured interview with the business panel.

For the SJT, realistic scenarios and responses were developed and presented in multimedia format with impactful animation based on the company’s brand principles, as research has shown this format improves criterion-related validity (Christian, Edwards & Bradley, 2010). The SJT was used as a screening tool early on in the process, as research conducted following the implementation of a bespoke SJT tool with the same format with a graduate recruiter has shown that in doing so, we found increased levels of candidate engagement with a dramatic reduction in applicant withdrawal rates (29% to 8%) with the new process. We also found increased sustained engagement throughout the remainder of the recruitment process with withdrawal rates reducing from 29% to just 6% after the next stage of completing an aptitude assessment. Faster decision making was also achieved from two to three weeks to just 24 hours.

Whether successful or not, all candidates received a feedback report, which was automatically generated online following completion of the SJT and based on their responses to this assessment. The content within the report was purposely designed to provide candidates with a positive message, offering them tips on how to leverage areas where they’ve placed greater emphasis and reflection points for areas where they’ve placed less emphasis. The same approach was also adopted for the next stage of the process, for those who were successfully progressed to this step where they had to complete an aptitude
assessment and behavioural screening questionnaire where the outputs of this were aligned to the organisation’s competency framework. Candidates were provided with feedback reports that gave them insight into their culture fit and the types of cultures that may impact negatively on their performance. At interview stages, candidates were given face-to-face or telephone feedback to maintain the positive rejection strategy.

To further enhance the user experience, candidates completed the psychometric assessment stages online, all through the applicant tracking system. Behind the scenes the assessment system was integrated with the client’s ATS to create a seamless experience for candidates. A candidate dashboard functionality was developed, which clearly showed candidates what assessments tasks were required and associated downloadable feedback reports. The benefits of the integration meant that the full end-to-end process was reduced with the online assessment stages reduced to just five days, candidates were kept fully informed about the process and they received instant feedback at every stage. For the recruiter the process was automated and they were shown whether a candidate was successful or not at each stage without having to manually progress them, therefore reducing the demand on internal resources.

Feedback is being gathered from candidates and those involved in the hiring process and the findings will be available for the conference.

**Key Messages**
Given anything from a third to over a half of graduates are dissatisfied with the assessment process, the cost of graduate recruitment processes which are too slow, don’t reflect the company brand, and fail to provide feedback in a timely manner, dwarves the recruitment costs.

Organisations need to recognise the financial and ethical impacts of a poor recruitment strategy and focus on ways to reduce time to hire, engage with candidates throughout the recruitment journey and provide timely insightful feedback.

**References**

KPOM revolutionises its approach to graduate recruitment. (2016). [Retrieved from
https://www.kpmgcareers.co.uk/smart-thinking/news/articles/kpmg-launch-pad?utm_source=linkedin&utm_campaign=Students17_gr_Launch_Pad_LinkedIn, 01.08.16]


**Questions**
1. What are the main psychological theories, models and research underpinning your session?
   Candidate experience survey data from a number of sources including own client data.

2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
   The paper is a practical case study showing how research into candidate experience and financial impacts has shaped our assessment methodology with clients.

3. Why is the submission appropriate for the particular category you have chosen?
This is an example of how we have designed and developed psychometric assessments for an organisations recruitment process.

4. **What do you consider to be the most novel or innovative aspects of the ideas being presented?**
   This paper helps to demonstrate the importance of reducing the time to hire and using automated feedback approaches. It shows the links between candidate experience and a company’s financials and how improving the candidate experience can actually cost an organisation less.

5. **Why do you think conference delegates will find the paper or session stimulating and useful?**
   It offers a strong argument for practitioners to use with clients as to why they should be recruiting at a fast pace and considering the first impression they give to applicants who might be potential future clients/customers.

6. **What might the public find interesting about your paper or session?**
   Understanding the negative impact, a poor recruitment strategy can have on a company’s financials.

7. **If any, what materials do you intend to make available to attendees and in what format?**
   Electronic copies of the presentation will be available on request after the session.

T05 Standard Paper

**Many rivers to cross: Professional identity in refugees’ career narratives**

Catherine Jones & Kate Mackenzie Davey, Birkbeck

**Category: Learning, Training and Development**

Despite achieving high status in professional careers in their own country, refugees may be in low skill, low status jobs for which they are over qualified (Bimrose and McNair 2011). Although employment status may improve over time, it is rarely to a level commensurable with qualifications or pre-migration work experience (Yaskusho et al 2008). This is especially important as employment is a major indicator of refugee integration and social inclusion (Smyth and Kum, 2010).

One barrier to adaptation is that professional identities are obscured by immigration status and replaced with a collective identity such as ‘refugee’ or ‘asylum seeker’ with negative associations that may further stigmatised and marginalise individuals (Morrice 2011). Resettlement is a disruptive process and the learning and relearning processes in adaptation involve complex negotiations of identity (Pietka-Nykaza 2015). Professional identity may provide a strand of continuity linking past experience in the culture of origin with current perception of self and future orientation in a different context (Ertorer 2014, p 268).

Fifteen education or medical professionals with a variety of experiences took part in focus groups or individual interviews lasting between one and two hours with a researcher with experience in career counselling. The material was audio recorded and transcribed. Initial thematic analysis identified core transitions and mapped the role of professional identity onto narratives.

Professional identity was prized by all participants but individuals varied in the ways it was maintained and negotiated in adaptation and in aspiration. The narratives are outlined exploring both the shared and idiosyncratic aspects of career stories. The medical professionals were all attached to organisations providing formal support and guidance for refugees to re-enter their profession. The doctors emphasised the importance and value of their medical work and experience. They identified themselves as doctors and regarded their current lack of employment as a waste of their valuable medical skills. Their narratives emphasised collective identity and shared skills as doctors over any differences. Responses to the Health Care Assistant work experience placement offered through the refugee project differed. They questioned whether taking a lower status but health related
role would reinforce or undermine professional identity as a doctor. This could be a positive step towards re-joining their profession, or a threat to previous professional status. Overall, the professional identity of doctor provided a powerful positive identity and struggles focussed on language and accreditation.

Other medical professionals (a dentist, a nurse and a pharmacist) however emphasised the difficulty of accessing routes to their profession and the waste of their qualifications. While they shared the doctors’ narrative of their skill value and desire to contribute, they acknowledged that they may lose status. The pharmacist uniquely, aimed to deny her previous profession to avoid being seen as overqualified and find work to support her family.

The three teachers had lived in the UK for 14 years and were settled with their families. However, their narratives speak of a lack of clear guidance and routes into the teaching profession. While they emphasised their original status, they had taken further qualifications including UK Masters’ degrees. Their work experience before arriving was not recognised by others, but they spoke of drawing upon their previous professional knowledge and experience in their current roles. Two retrained as Social Workers and felt they had regained their original status. The third had been a Head Teacher and was taking a further professional qualification to apply for a role as Assistant Head Teacher. Their narratives focussed on overcoming lack of recognition and maintaining professional identity by drawing on the determination, resilience and skills from their professionalism. Professional identity provided them a positive narrative that allowed them to overcome the lack of acknowledgement of their past achievements and to continue striving to maintain the status to which they felt entitled.

Professional identity provided inoculation from some of the dispiriting loss of status in becoming a refugee. However, lack of acknowledgement of their valuable skills reinforced frustration at not being recognised as a professional. Refugees were proud to claim their professional identity and to work to overcome barriers to rebuilding their careers. Continuity was reinforced by drawing on the same skills that led to their initial professional qualification. However professional identity may have to be put aside in order to earn enough to achieve autonomy for themselves and their families. This research demonstrates the value of professional identity in providing coherence in adaptation narratives of refugees.

References
T06 Standard Paper
Values Based Interviewing in an NHS Trust: 3 Years On
Joanna Cook & Nicola Toth, Northumbria Healthcare NHS Foundation Trust and Laura Neale, University of Sunderland

Category: Psychological Assessment at Work

Introduction/Background
Research into Values Based Recruitment (VBR) has gathered momentum within the area of Psychological Assessment at Work. Firstly, we define values as ‘a set of enduring beliefs which a person holds about what is good or desirable in life’ (Schwartz, 2012). Person-Organisation Fit or Values- Congruence research (Kirstof-Brown, 2002) suggest that individuals are more comfortable working in an environment which is in alignment with their own values (Finegan, 2000) and Schneider’s Attraction-Selection-Attraction theory asserts that ‘people make the place’ highlighting the tendencies for employees demonstrating consistent values-sets which leads to an attraction of others with similar values (Schneider, 1987). Furthermore, there is clear evidence that staff whose values are more clearly aligned with that of their employer, and whose roles allow them to live out these values, have higher levels of engagement, job satisfaction and performance (MacLeod and Clarke, 2009). The relationship between values and attitudes of staff and its impact on the quality of patient care and patient experience has been well documented (West & Dawson, 2011). While the research base is compelling, there has been little evidence to support the use of VBR within organisations.

Our work was completed within a large NHS Trust employing over 8,500 staff. Between 2012-13 the Trust developed organisational values (Patients First; Safe and High Quality Care, Responsibility and Accountability, Everyone’s Contribution Counts, and Respect) via a series of engagement events prior to this. The interview is still the most commonly used selection method, favoured by managers and candidates who tend to perceive them as a fair method of selection (Patterson et al., 2014). A structured past behavioural values based interview was devised comprising a bank of values based interview questions supplied at an organisation level measuring Person-Organisation Fit. Interviews were conducted by ‘Panels’ (more than one hiring manager). Managers were encouraged to devise their own role specific questions to add to this. This was based on the premise that managers are more successful at assessing person-job fit than person-organisation fit (Kristof-Brown, 2002).

Following a series of pilots, a full organisation wide roll out was implemented that involved changing all recruitment materials, processes and training 500+ recruiting managers (for further information see Cook, 2014). Strategically these values have also been incorporated into the appraisal process, probationary period, job descriptions, recruitment materials and embedded within the existing staffing groups.

Following roll-out an evaluation was conducted to measure the impact of VBR within the organisation. Organisational data suggested that in general staff experience had improved since VBR was introduced. Overall staff engagement in 2015 was rated 4.02 (above national average for Acute Trusts, 3.8), while in 2012 it was rated at 3.77 (national average was 3.68). In addition, the Trust received a rating of ‘Outstanding’ in a Care Quality Commission Inspection in 2016 remarking that ‘Staff consistently communicated with patients in a kind and compassionate way’ and ‘staff went above and beyond in the ways they cared for patients’.

Research Objectives
We aimed to build on previous evaluations and anecdotal evidence to analyse the impact VBR has had within the organisation and to measure the success of VBR as a selection
method on a larger scale, including both interview panels’ and candidates’ reactions, and how predictive it has been of job performance.

**Methodology**
The evaluation consisted of the following three stages:

1. **Interview Panels’ reactions**
   All interview panels between December 2015 and June 2016 were asked to complete a short paper based questionnaire immediately after the interviews had taken place. The questionnaire included overall reaction to VBR, the questions, information received and any recommendations. 195 questionnaires were analysed.

2. **Candidates’ reactions**
   All candidates who attended an interview between December 2015 and June 2016 were asked to complete a short paper based questionnaire immediately after the interview. The questionnaire covered overall reactions, information and the interview itself. 382 responses were analysed.

3. **Predictive validity**
   To examine predictive validity, we asked all successful candidates who had been interviewed in May, June and July 2016 to take part in the study. The managers of the successful candidates were asked to complete a rating of current performance for each of the five values with a rating scale of excellent, very good, good, just acceptable and unacceptable thus replicating the assessment at interview. Managers were also asked to rate the individual’s overall performance, overall contribution to the department and how quickly the individual settled into the department, using a five-point rating scale. The managers’ current ratings were analysed alongside the candidates’ scores at interview. 44 responses were analysed with successful candidates being in post for between 7 months and over 1 year when the manager completed the current ratings.

Ethical considerations were the need for informed consent from new recruits allowing us access to their interview scores and to contact their managers to make a confidential rating of their performance. Approval was provided by the Trust R&D lead and the option to opt out was given to all participants. All data was anonymised for analysis.

**Findings**
1. **Panel’s reactions**
   Key themes were that 82.5% of responses provided an overall rating of VBI as good or excellent and 77.7% of responses agreed or strongly agreed that the interview was fair thus replicating previous findings. Areas for development were highlighted including ease of use and including job specific questions. Full results will be presented at the conference.

2. **Candidates’ reactions**
   Key themes were that candidates felt informed about the process, candidates felt they were treated well and felt comfortable during the VBI and most felt the questions related to the job they applied for. Full results will be presented at the conference.

3. **Predictive validity**
   Six Pearson correlation analyses were carried out to investigate if significant positive relationships existed between the interview scores allocated for each of the values and the follow up score allocated by the manager for each of the values (N=44). This analysis was performed for each of the Trusts values; Patients First; Safe and High Quality Care, Responsibility and Accountability, Everyone’s Contribution Counts, and Respect and for the sum of the score allocated for the values per candidate. No significant relationships were found (all $p$’s >.100) however sample size was limited and all $r$ values were in the expected positive direction, replicating previous findings.
Discussion
This paper details the continuous evaluation of VBR to ensure rigour in the selection process. There was positive feedback from both panels and managers, which can be seen to support the use of VBR.

Areas for development were highlighted with regards to the ease of use and including job specific questions. With regards to ease of use, the feedback highlighted that the paperwork and in particular the question bank format needs to be simplified and more user friendly. We are currently refining this and subsequently this updated format will be piloted before rolling it out across the trust. With regards the inclusion of job-specific questions, the evaluation highlighted that this aspect needs to be reiterated to panels. The VBR question bank looks at person-organisation fit not technical, job-specific questions; these need to ensure we look at person-job fit. In addition, we plan to periodically refresh the question banks with the help of internal stakeholders to ensure the relevance of the questions.

The predictive validity evaluation presented challenges. The key challenge was a low response rate for this part of the evaluation. We tried to address this through email reminders to managers and plan to proactively collect data going forward overcoming significant issues with the extraction of data from paper files. We would welcome further suggestions and advice to improve this. In addition, we are looking at ways to improve the method and again would welcome advice and discussion in this area.

Conclusion
This evaluation highlights positive aspects of this process along with areas for development. The evaluation of VBR is on-going within the trust and we plan to continue to monitor the process. To do this we plan to continue collecting feedback from both panels and candidates via a short online survey. In addition, we plan to continue examining the predictive validity of VBR. As discussed, we would welcome the opportunity to discuss the method of this evaluation including the challenges faced with the audience, including any advice regarding this.

Practice points
The introduction of a values based approach at an organisational wide level presents significant design and implementation challenges.

VBR questions at an organisational level cannot assess job performance alone. The inclusion of technical job related measures are essential. For example, how do values integrate with technical competencies?

Originality/Value
Paper links: Research into practice: relevance and rigour. This work is relevant to the theme as it is an example of how practitioners have formulated and evaluated an effective model of selection. It demonstrates the unique skills psychologists can bring to organisations in order to add value and to deliver projects which meet the need of the organisation while remaining ethically and practically sound. The most novel aspects of this work are the implementation of a relatively new selection method and techniques to assess its success.

This work is of interest to conference delegates because it details an evaluation of an applied project including the challenges faced. There are currently few examples of evaluation of this model of selection therefore we believe this paper is of interest to practitioners in the field. We hope this paper will also help others to identify the possibilities for application of best practice in their own organisations.
T07 Standard Paper
How Do Business Values matter to Leadership in Commercial Healthcare?
Ratchaya Suriyaopha, MSc Student, Warwick, WMG and Ann Bicknell, Programme Director, Ashorne Hill Management College, WARKS
Category: Work Design, Organisational Change and Development

Introduction
A litmus test in Leadership Consultancy: observe the responses of employees to two questions:

What are your company values?

How do you demonstrate leadership on each of these?

It is still the case that some of the aspirational rhetoric (espoused values) struggles to make it into the conscious or overt behaviours of leaders and this produces the regularly bemoaned gap between what has been called ‘work as imagined’ and ‘work as done’ (Hollnagel, Wears & Braithwaite, 2015). This disconnect is more than conceptual as it has implications for safety in healthcare environments and demonstrates the need for transparency. This should therefore be seen as both the ‘job’ of leaders as a source of energy in the organisational system in addition to creators of brand value and competitive edge in a commercial context. The context in which leaders perform is significant, indeed Mintzberg (2011), suggests that in a context where you have highly trained and specialised ‘knowledge workers’, such as in healthcare, their loyalty to their own profession and craft may hold greater salience than demonstrating their loyalty to externalised values which are not of their own design. As such, Mintzberg recommends that when working with knowledge workers the leadership in-action needs to be coherent and consistent.

The meaningfulness with which company values are embedded in the day to day conscious practice of leaders is a contested issue (Ciulla, 1999). How these are reinforced through the architecture of the company e.g. appraised in development or audited in terms of quality standards is variable. This is disturbing as increasing research is showing the extent to which human resource practices are joined up through training, appraisal, leadership and human resource policy is a better predictor of mortality rates than an audit of the clinical staff (West, et al., 2006). These authors observed that the problems were organisational rather than clinical.

The notion that healthcare as a human system should be subject to such ‘corporate’ notions is challenged by some and yet increasing research across industries demonstrates that companies who have integrated people development strategy, policies and practices outperform those that do not (Holman, et. al., 2003). However, commercial healthcare has the additional challenges of being answerable to its shareholders as well as to other external government and regulatory bodies. These challenges are both intractable from a complexity perspective and predicated upon interrelatedness from a systems model (Pisek & Wilson, 2001). In this context, healthcare business values should function to govern and direct how work is done and with clarity. It is therefore appropriate to evaluate what a leader actually does to demonstrate business values (Ciulla, 1999, p. 166). Figure 1 illustrates this as a ‘black box’ in unclear practices of leadership towards business values.

![Diagram: Commercial Healthcare company in UK](image-url)
This research sought to explore a direct relationship between leadership and company values, operationalised by reported values behaviours against a robust measure of Transformational Leadership (TLQ, Alimo-Metcalfe & Alban-Metcalfe, 2005) which has demonstrated predictive validity against performance criteria and in healthcare contexts (Engaging Leadership CIPD, 2010).

**Design**
This applied and mixed method, cross-sectional research was carried out in partnership with a commercial healthcare company in the UK and issued to a targeted sample of 300 Team Leaders, Managers and Heads of Department. It was to gather a) their experience of leadership in their line manager and b) how their own personal behaviours contributed to leading on the company values. Data was gathered via an electronic survey issued with ethical approval and supporting endorsement from the organisational development team in company. Data collection will complete August 2016.

**Methodology**
The following activities will demonstrate rigor through mixed methods and triangulation of date type. They will characterise the current situation of leadership on company values and provide both a baseline for re-benchmarking to the company in addition to recommendations for increasing alignment between these concepts:

*Quantitative analysis:*
Correlation to explore the extent to which there is a significant and positive relationship between leadership behaviours and company values.

Factor analysis will explore the extent to which the factors of the TLQ are visible in the current sample.

Comparative analysis will explore which facets of the Transformational (Engaging) Leadership construct are represented within the data and how any gaps shed light on the current challenges for leaders.

*Qualitative, thematic analysis:*
Investigate current healthcare workforce attitudes towards their own leadership on company business values by assessing how ‘rich’ and plausible the presented examples are (King, 1998).

Explore their current experience of leadership from their line manager on company values.

**Discussion & Conclusions**
The DOOP conference will be the first dissemination of these findings and will contribute to assessing both the visibility of values in a UK commercial healthcare company and understanding the traction that these have in the context of ‘day to day’ leadership transmission in addition to furthering knowledge about whether and how contemporary theories of leadership are visible in-action.

This has implications for commercial and national healthcare environments to provide specific recommendations to healthcare leaders about appropriate practices in respect of implementing effective leadership on business values for highly trained and specialised knowledge workers. The impact of this leadership visibility or the ‘shadow of the leader’ on their direct reports will be shown and the implications for delivering alignment within an effective and commercially viable healthcare system will be discussed.
References
Hollnagel, E., Wears, R. L. and Braithwaite, J. (2015) From Safety-I to Safety-II: A White Paper. The Resilient Health Care Net. Published simultaneously by the University of Southern Denmark, University of Florida, USA, and Macquarie University, Australia

Answers to specific questions about this submission
1. Theories, models and research: Transformational leadership, engaging leadership, complexity and systems theory.
2. Link to conference theme: There is variable confidence in what happens at various levels in an organisational system to demonstrate leadership on company values. There is contention as to whether company values should ‘matter’ in healthcare: not necessarily on a human service level, but whether they should be managed and audited as a source of competitive advantage. This research applies mixed quantitative and qualitative approach to illuminate and interrogate the plausibility with which these constructs demonstrate a transparent relationship in a commercial UK healthcare company.
3. Category relevance: (WDOCD) This research draws together the contested notions of leadership and company values to explore if and how these demonstrate interrelatedness at a systems level. This interrelatedness is a mediating mechanism through which organisational design initiatives are expected to align the behaviour of large groups. Both of these notions of leadership and company values command significant investment of time and resources in organisations.
4. Innovation: There is currently a dearth of research that directly measures the relationship between a recognised ‘brand’ of leadership theory with a characterisation metric for company values in-action. In this way the research seeks to use the Transformational Leadership model as a lens to look through for the real world of one company.
5. Appeal to delegates: Occupational psychologists have a crucial role to play in facilitating commercial healthcare organisations to increase transparency between such important concepts. This has extensive and meaningful impact on the world of work for many individuals and for their companies.
6. Public appeal: Increasingly we are all potential users of commercial healthcare services either directly or as elements of the NHS contract their services. The extent to which these constructs of leadership and company values are ‘joined up’ has implications for levels of safety and effectivity from a healthcare Client perspective.
T08 Standard Paper

Love is The Answer: A New Model of Corporate Love in the Workplace.
Fiona Beddoes-Jones, Cognitive Fitness Consultancy

Category: Leadership, Engagement and Motivation

Love is The Answer: A New Model of Corporate Love in the Workplace.
The ancient Greeks had names for seven different kinds of love:
1. Agape, (universal love)
2. Eros, (romantic love)
3. Philia, (companionate love)
4. Philautia, (self love)
5. Pragma, pragmatic love)
6. Ludus, (playful love)
7. Storge, (familial love)

Despite very little having been written around the subject, a Literature Review reveals that manifestations of ‘love’ in the workplace as an emotional and affective construct do exist within organisational and corporate culture.

Recent research by Barsade & O’Neil, (2014), reveals that, “A culture of Companionate love positively relates to employee satisfaction and teamwork and negatively relates to employee absenteeism and emotional exhaustion”. However, no other longitudinal studies of ‘love’ from a cultural or individual level in the workplace appear to exist.

Our world has undeniably changed since the ancient Greeks conceptualised love 3,000 years ago. The other kinds of love which may manifest themselves within the culture of modern organisations remains largely unexplored with one notable exception. Barbara Fredrickson, (2013), redefines modern love as ‘Love 2.0’, “Moments of positive resonance” between individuals. However this conceptualisation of modern love in the workplace and the potential organisational implications for engagement, motivation, productivity and well-being have not yet been embraced or explored by psychologists.

This new study contributes to the field in 3 ways:
1. New research regarding the desire for ‘love’ in the workplace
2. Clarification around the different kinds of ‘love’ which exist within modern culture at work
3. By proposing a new model of ‘corporate love’ based around two axis: Masculine vs Feminine love and Conditional vs Unconditional Love.

References:

Answers to the specific questions in the guidelines:
1. What are the main psychological theories, models and research underpinning your session?
   Emotional culture, employee engagement and motivation theories, the psychological contract, positive psychology and also organisational behaviour with links to employee well-being and social identity theories.
2. How does your proposal linking with the main conference theme of Research into practice: Relevance and rigour?

The paper takes real, relevant research and makes the implications for Practice clear.

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

Emotional culture has been shown to impact on employee engagement and motivation.

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

Very little has been written in the area of emotional culture. The concept of corporate love and the Corporate Love Model are both innovative and novel.

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

It's an under-researched and under-represented topic which has relevance to many occupational psychology theories and constructs. (See 1).

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

The general public are always interested in the topic of ‘love’ and any research around it.

7. If any, what materials do you intend to make available to attendees and in what format?

Paper handouts on the day, and pdf copies of the slides post-delivery of the session.

References


T09 Standard Paper
Career progression expectations and aspirations of female police officers
Fran Boag-Munroe, Police Federation of England and Wales

Category: Psychological Assessment at Work

Introduction

One of the key principles of British policing, is that the “police are the public, and the public are the police”. However at present the Police Service of England and Wales is not yet fully representative of the public it serves. In terms of the gender of its police officers, only 31% of police constables are female. This underrepresentation is even starker amongst higher ranks, where just 22% of superintending ranks and 23% of chief officers are female (Home Office, 2016). Work is being undertaken within the police to recruit, develop and retain a diverse police workforce; however the most prominent examples of this at present are with
regards to the progression and retention of officers from an ethnic minority background (e.g. College of Policing, 2014). This work is undoubtedly important, yet there are also notable advantages of having a police service that is gender-representative at all levels, including critical societal benefits such as higher arrest rates for domestic violence and sexual assault (Andrews and Johnson Miller, 2013; Meier and Nicholson-Crotty, 2006).

Accordingly, in addition to taking steps to recruit and retain female officers, the police service also needs to ensure that female officers have the desire and opportunity to reach all ranks within the police. Whilst reasons for not seeking promotion are generally similar between female and male officers (e.g. Archbold et al. 2010), issues such as perceived tokenism (e.g. Archbold and Schultz, 2008) the linear nature of policing careers, the importance attached to time served in achieving promotion (e.g. Silvestri, 2006) and the potential incompatibility of promotion with family life (e.g. Wertsch 1998) have all been cited as reasons why female officers in particular are less likely to seek promotion to higher ranks than their male colleagues.

These reasons point to two important consideration when looking to understand female officers’ progression within the police service. Firstly, there is the desirability of promotion, and the likelihood that female officers actually aspire to reach the highest ranks in policing. Secondly, there is the expectation amongst female officers that progression to the highest ranks is realistic and achievable. Research from the United States has found that female officers were less likely to expect to enter management ranks, but they were also less likely to view promotion as important (e.g. Gau et al. 2013). This suggests that both lower rank expectations and lower rank aspirations amongst female officers might present a barrier to achieving a police service that is representative at all ranks.

What remains to be seen however is whether findings from the United States might also apply within the Police Service and England and Wales, given the different nature and context of policing in the United States and in the United Kingdom. Moreover, more fine-grained analysis of female officers’ expectations and aspirations to reach all ranks, rather than aspiration and expectation of promotion more generally, is needed to develop a clearer awareness of the challenges the police service may face if it is to become gender-representative at all levels. Addressing these issues provides a relevant, timely and practical insight into an issue that not only has organisational consequences, but ultimately impacts upon society at large. Accordingly, understanding the career expectations and aspirations of female officers in the police service can make a strong and impactful contribution to this year’s conference theme of “Research into Practice: Relevance and Rigour”.

Methodology

Participants and Procedure
Participants were 21,490 from the 43 Home Office police forces in England and Wales; representing a response rate of approximately 18% of all officers between the ranks of Constable and Chief Inspector. Respondents received a link to an online survey which measured the variables described below. Overall, 24% of respondents were female. Respondents had an average age of 41 and an average length of service of 16 years. 73% of respondents were constables, 20% were sergeants and 7% were members of the inspecting ranks.

Variables
To capture rank expectations respondents were asked to indicate the highest rank they realistically expected to occupy during their career. To capture rank aspirations respondents were asked to indicate the highest rank they would ideally like to occupy during their career. These rank categories reflected the current rank structure in the Police Service of England.
and Wales, notably: “Constable”, “Sergeant”, “Inspecting Rank” and “Superintending Rank” and “Chief Officer Rank”.

Gender was captured using a binary categorisation (Male = 0; Female = 1). Respondents’ age, tenure, degree qualification and carer responsibilities were included as control variables within the analysis. It was important to include these factors because they co-varied with officers’ gender but could also feasibly influence rank expectations and aspirations. For example analysis of descriptive statistics showed that female officers had shorter tenure and were more likely to be degree qualified than male police officers.

Results
Data were analysed using multinomial logistic regression, controlling for the covariates specified above. No interactive effects were identified between the variables; therefore only main effects are discussed below.

The inclusion of gender was found to significantly enhance the measurement model’s ability to predict constables’ rank expectations ($\chi^2(4) = 197.49, p < 0.001$). Analysis of odds ratios indicated that compared to respondents who expected to stay at constable rank throughout their career, constables who expected to reach the rank of sergeant were 35% less likely to be female; constables who expected to reach inspecting rank were 51% less likely to be female; constables who expected to reach superintending rank were 71% less likely to be female; and constables who expected to reach chief officer rank were 73% less likely to be female.

Gender also significantly enhanced prediction of constables’ rank aspirations ($\chi^2(4) = 371.74, p < 0.001$). Compared to respondents who ideally wanted to remain at constable rank throughout their careers, constables who wanted to reach sergeant rank were 35% less likely to be female; constables who wanted to reach inspecting rank were 55% less likely to be female; constables who wanted to reach superintending rank were 71% less likely to be female; and constables who wanted to reach chief officer rank were 75% less likely to be female.

Amongst sergeants’, gender did not significantly predict respondents’ realistic rank expectations ($\chi^2(3) = 3.23, p = 0.36$). Sergeants’ gender did make a significant contribution to the measurement model’s ability to predict rank aspirations ($\chi^2(3) = 21.22, p <0.001$). In particular, whilst sergeants who ideally wanted to reach inspecting rank were not significantly more or less likely to be female; sergeants who ideally wanted to reach superintending rank were 40% less likely to be female and sergeants who ideally wanted to reach chief officer rank were 56% less likely to be female. Amongst members of the inspecting ranks, gender did not significantly enhance the measurement model’s ability to predict rank expectations ($\chi^2(2) = 0.14, p = 0.94$) or rank aspirations ($\chi^2(2) = 1.93, p = 0.38$).

Discussion
The police service is currently not representative of the public it serves in terms of the gender of its police officers, particularly amongst the highest ranks within the police. Our analysis indicated that female officers’ expectations and aspirations regarding progression through the rank structure, particularly amongst the constables, may prove to be a barrier to increasing gender representativeness at all levels. We found that female constables were less likely than their male colleagues to expect to reach higher ranks within the police, even when controlling for factors such as age or length of service. Moreover, as well as lower expectations, we also found that female officers were less likely to want to reach the higher ranks within the police.

Perhaps more encouragingly, amongst first- and second-line supervisory ranks (i.e. sergeant and inspecting ranks), no differences were seen in expectation of reaching a higher rank. Furthermore, female inspectors were no more or less likely to aspire to the highest ranks
than their male counterparts. Differences were however still seen between female and male sergeants; where again officers who aspired to reach the highest ranks in the police were more likely to be male than female. In addition, whilst differences between male and female constables’ rank expectations and aspirations were most pronounced in terms of reaching superintending and chief officer ranks, differences also existed in expectations and aspirations regarding progression to first- and second-line supervisory ranks. As such, simply ensuring that gender-representativeness at any supervisor rank, and not simply the highest ranks within the police, could continue to be a challenge for the police service.

The police service therefore appears to face several challenges in increasing gender representativeness. Firstly, there is a need to understand why progression is currently a less attractive proposition for female officers compared to male officers. Amongst other things, this may reflect factors such as the incompatibility of family flexible practices with the long working hours of higher ranks (e.g. Turnbull and Wass, 2012). However there is also a need to ensure that female officers who seek promotion have the same expectation of achieving this as their male colleagues. This includes reducing unconscious bias within promotion processes (e.g. College of Policing, 2015), but also questioning the taken-for-granted practices and structures which facilitate progression, and in particular gendered assumptions about the activities and identities necessary to “get on” within the police (e.g. Dick and Hyde, 2006).

References
T10 Careers Surgery Live
David Carew, Chief Psychologist, Department for Work & Pensions
**Category: Learning, Training and Development**
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!

T11 Town Hall Meeting
**Why isn't organizational psychology practice becoming more evidence-based? What are the challenges and how can they be overcome?**
Rob Briner, Queen Mary, University of London & Centre for Evidence-Based Management
**Category: Professional Affairs and Awards**
Evidence-based practice (EBP) has been around for at least 25 years in many fields though has only recently been considered by organizational psychologists (OPs). Some OPs claim to be ‘evidence-based’ and many practices in our field are presented as strongly ‘evidence-based’. However, EBP has a precise meaning and involves a set of processes which are (in my view) very rarely seen in the work of OPs or in our practices. This Town Hall Meeting will first start with a brief presentation about what EBP is (and is not), how we can start to evaluate the extent to which OPs’ practice is evidence-based and present real examples of good and not so good EBP in our field. Participants will then be presented with key challenges facing the profession if it genuinely wants to become more evidence-based. We will discuss how such challenges can be overcome.

T12 Workshop
**Thrive or survive the DOP conference: a well-being board game**
Craig Tindall & Emily Pepin, Aimia
**Category: Research Design, Analytical Techniques and Practical Applications**
**The nature and purpose of the session**
This workshop is about the practical application of evidence based practice (EBP) in organisations. It introduces the main principles of EBP and explores the trials and tribulations of using EBP in an organisation via case studies and experiential exercises.

**Main psychological theories, models and research underpinning our session**
The session focusses on EBP. EBP was established in medicine and has been adopted in the fields of policy, education and policing (Barends & Briner, 2014). It is becoming more popular in organisational psychology, HR management and general management (Rousseau 2016, Dogherty et al 2013; Stevens 2013)

“Evidence-based management is about making decisions through the conscientious, explicit, and judicious use of four sources of information: practitioner expertise and judgment, evidence from the local context, a critical evaluation of the best available research evidence, and the perspectives of those people who might be affected by the decision”
(Briner, Denyer & Rousseau, 2009, pp. 19)
In practical terms, EBP comprises six activities:
1. Asking – translating a problem into a question;
2. Acquiring – searching for evidence;
3. Appraising – critically judging the relevance/trustworthiness of the evidence;
4. Aggregating – weighing up and pulling together the evidence
5. Applying – incorporating the evidence into the decision-making process
6. Assessing – evaluating the outcome of the decision

and uses four sources of evidence:
1. Scientific literature
2. Stakeholder (values and concerns)
3. Organisational (internal data)
4. Practitioner expertise

Decision and/or solutions are discussed that are expected to have the highest likelihood of success (Briner, Denyer, & Rousseau 2009)

Despite the importance of EBP, it can be difficult to get organisations to adopt it. Even in medicine, where EBP is well established there is often resistance. The reasons for resistance have been expressed as a lack of time and an unsupportive organisational culture, with people wanting to do things the way they always have done (Melnyk, Fineout-Overhold, Gallagher-Ford & Kaplan, 2012). There seems to be general agreement about the barriers to uptake including: lack of time to conduct research and lack of support and authority to implement any findings. In the nursing world, problems also arise over the perceived skills individuals have to collect and analyse academic evidence, relying instead on other sources of evidence e.g. policy manuals (Gerrish & Clayton, 2004).

Therefore, in order to increase the adoption of EBP it seems that there needs to be buy-in from senior leadership and time and training given to individuals charged with collecting evidence.

Despite having to be careful about the differences in work context between a hospital and an office, it is not unreasonable to believe that these same reasons could be holding other organisations back from adopting the EBP. If organisations are able to successfully build capabilities in EBP they should be able to improve the quality of their decision-making, application of theory, design and deployment of interventions and their evaluation all within the less than ideal experimental conditions of an organisation (Rosseau & Barends 2011)

The case study used in the session is based on application of EBP to a wellbeing related project carried out with a single team in an organisation. The main psychological theory that will be covered in the case study is the Job-Demand-Resources (JD-R) model (Bakker, Veldhoven, Xanthopoulou 2010). The experiential section will also cover: conservation of resources model (Hobfoll, 2011), psychological detachment and recovery (Sonnenfarg, 2012), self-determination theory, (Van den Broec, Vansteenkiste, De Witt, & Lens, 2008) and psychological capital (Luthans, Luthans, & Luthans, 2004)

The J D-R proposes that work performance, wellbeing and task enjoyment is likely to be the result of many combinations of resources and demands (Bakker, Veldhoven, Xanthopoulou 2010). Job demands are any factors that have a physical or psychological cost to the individual. Demands can be hindering, halting goal achievement, or challenging, helping individuals reach goals (Crawford, LePine, & Rich 2010, Tims, Bakker & Derks 2010, Van den Broeck, De Cuyper, De Witte, Vansteenkiste, 2010). Job-resources support the individual in achieving goals, whilst also increasing personal development. They can be personal, defined as individual’s internal capabilities e.g. intrinsic motivation, optimism, and resilience or organisational factors e.g. colleague support, manager feedback, decision or
decision latitude (Xanthopoulou, Bakker, Demerouti, Schaufeli 2008, Bakker & Demerouti 2006). The interaction of demands and resources influences positive organisational outcomes (wellbeing, engagement, organisational citizenship behaviours, and performance) or negative ones (burnout, decreased performance) (Bakker 2011, Demerouti & Bakker 2011). The JD-R model assumes that each organisational context/environment will have its own unique array of resources and demands, therefore different resources buffer different demands in different organisational contexts.

This session covers the practical application of research into organisations with actual examples. EBP, at its core, concerns gathering, evaluating and applying scientific evidence, organisational data, stakeholder information and practitioner expertise and judgement.

**Novel and Innovative aspects of the session and why delegates and the public will find this session interesting**

EBP is introduced and an example shown of how it was adapted successfully into a real organisation. The session includes different interactive elements that help the delegates explore EBP. Looking at a real life, practical example of an EBP intervention will encourage delegates own practical application, aiding both internal and external organisational/business psychologist’s and HR practitioner’s.

Finally the delegates have the opportunity to experience one innovative outcome of the case study - a wellbeing board game that can be personalised to any team/group of individuals. The version that will be played by delegates in the workshop will be personalised to the DOP conference, referencing possible events that could energise or de-energise them during their time here. This will serve two purposes. Firstly, it will help delegates consider how they can maximise their wellbeing during the three-day conference and get the most out of their time. Secondly, it will allow delegates to see how this approach could be applied to different contexts e.g. their own workplace.

The public may be interested in the core principles of EBP, which questions the rigour of HR practices and stresses the importance of looking at evidence and research before taking action. It redefines how to look at workplace issues and helps people consider whether a problem really is a problem e.g. by looking at the evidence from a multitude of sources. It could help people in any domain of life question how they choose solutions and consider how to look for the option with the highest probability of success.

**Specific Content and Structure of the Workshop**

Delegates will be introduced to a case study and hear about a common organisational change problem that was presented to us. They will consider what they might do in that situation. After more general discussion they will engage in an ‘assumptions’ exercise, looking at a particular piece of evidence and considering all the assumptions involved in it. This can then be linked back to the original case study problem.

The principles of EBP will then be explained. There will be the opportunity for delegates to consider one of their own workplace issues through this new lens. We will explain how we used EBP in the case study in more detail. There will then be further opportunity for delegates to discuss potential solutions, through the lens of EBP.

We will outline what we actually did, which included creating a well-being board game based on the JD-R model. Delegates will have the opportunity to play a revised edition of this board game, based on the current context of the DOP conference. This should give them things to consider over the conference with regards to maximising their wellbeing, and also show them how it is possible to apply psychological theory in a novel way. We will then sum up the session and answer any questions.
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)?
Hand-outs and slides will be available along with any other material used for the interactive parts of our session.

What are the learning objectives and outcomes for attendees?
Learning outcomes for the delegates are:
- Knowledge, understanding of EBP, the barriers to application and how to overcome them.
- First-hand experience of how to apply EBP
- Knowledge and understanding of wellbeing theory and actions to improve the probability to managing their wellbeing during the DOP conference and beyond.

Specific content of the session
- Principles of evidence based practice
  - Using the 4 sources of information
  - Biases& assumptions that influence appraisal of information
  - Critically appraising evidence and sources of evidence.
  - Defining a problem/opportunity
  - Designing an evidence based solution
  - Practical application examples in a real organisation

- Wellbeing board game (example of a wellbeing intervention designed via EBP project)
  - Job demands-resources model
  - Conservation of resources
  - Recovery & psychological detachment
  - Self-determination theory- Basic Psychological Needs
  - Psychological Capital

Teaching and learning methods to be used
EBP and DIA would be explained by the presenters, using slides. There will be plenty of opportunity for delegates to think about what they would do in the situations presented, and talk with the people around them, sharing ideas.
The following methods will be used:
- Use of case study- practical examples
- Group & interactive activities
  - Exploration, construction & discovery
  - Practice of using EBP
- Presenting information
- Self-testing
There is a case study that runs throughout the workshop and mini exercises to get delegates thinking in an EBP manner. At the end there is an interactive board game. We will also provide hand-outs outlining the overall key messages from the session.

Target audience and level of understanding pre-requisite
This workshop would be open to all, but targeted at those starting out in the field. It may be more useful to those who have little knowledge of EBP. The level of expertise is variable, but those with a basic understanding of psychology would be able to follow the session. No certificate or qualification will be awarded after this workshop, but participants will be equipped with new knowledge and ideas regarding how to apply research in their organisation.

T13 Standard Paper
An Investigation into the Socioanalytic Theory of GAH, GAL, FM. 
Angela Mansi, Westminter Business School and Reece Akhtar, UCL
Category: Psychological Assessment at Work
Socioanalytic theory (Hogan, 1976) explains personality in a social setting, and is based on three key drivers: 1) a need to get along with others (GAL); 2) a need to get ahead of others, (GAH) and 3) a need to find meaning and a sense of purpose (FM) (Hogan, 1976). This session explains recent research to investigate higher order factors within the HPI and MVPI, and shows that GAH and GAL, but not FM, were distinct, higher order factors within the Hogan measures. This talk explains my research and how a new short measure for GAH and GAL was developed.

Theory
Socioanalytic theory posits "that the purpose of personality theory is to explain social action" (Jones, Couch & Scott, 1997 p.466) and that this interaction manifests through key drivers: 1) the need to get along with others; 2) the need to get ahead and do well in terms of status and power and 3) the need to find a sense of meaning and purpose (Hogan, 1976). These three basic needs are seen as core drivers for success in an individual's personal and professional life, and crucial in determining how well someone will do in getting along with others and getting ahead in their careers, as well as finding a sense of meaning in what they do (Hogan & Hogan, 1997). Socioanalytic theory states that personality consists of two components: Identity, which explains our inner drives and motivations, and determines which roles we assume in a social setting, and Reputation, which is how others see, and judge us, in social situations (Hogan, 1982; Hogan & Smither, 2001; Hogan & Holland, 2003).

Further, it has long been argued that Adjustment is an individual difference of personality that significantly impacts on a variety of aspects of organisational effectiveness, including good interpersonal relationships and individual management styles (Barrick & Mount 2005; Hogan & Hogan,2009; Hogan & Ones, 1997; Kets de Vries,1989; author name removed, 2002, 2007, 2008; job satisfaction (Judge et al, 2002), personal relationships and career success (Furnham & Heaven, 1999; Judge & Kammeyer-Mueller, 2007; Van den Berg & Feij,1993). Adjustment is seen a key to GAH and GAL (Hogan & Hogan 1997).

Research
There has been much research into personality measurement over the last 30 years, with a continued search for fewer and fewer factors, from sixteen (Cattell’s 1957; 1973) seven, (Hogan & Hogan’s 1992; 1997); five (Costa & McCrae 1992), three (Eysenck 1992); two super factors of personality (DeYoung, 2006; DeYoung, Peterson & Higgins, 2002; Digman, 1997) and finally, one factor, the GFP (Rushton, 1985). While the precedence has been set for factor analysis of personality measures into smaller and smaller units, none has been done which looks at which factors comprise the three strands of Socioanalytic theory, and this research addresses this for the first time.

The research investigates whether GAH, GAL and FM will be found in two psychometric measures based on Socioanalytic theory; the HPI and the MVPI. It also investigates how far Adjustment influences GAH and GAL. The three key aims of the research were: a) to test whether the three factors of Socioanalytic theory: GAH, GAL or FM would be found with the HPI and the MVPI; b) to find out which scales of the HPI and the MVPI form GAH, GAL or FM; and; c) to investigate how far GAH, GAL and FM could show predictive validity for performance over and above other measures. Ethical consent was a given for this research as part of the PhD research programme at Birkbeck, in accordance with the BPS Code of Ethics and Conducts.

Design and Methodology
Six empirical studies were conducted and the focus of this session will be on the first three studies which resulted in a new short measure for GAH and GAL: Study 1 investigated which personality scales of the HPI and MVPI relate to GAH, GAL and FM using EFA; Study 2 is a CFA to test the model from study 1 and to show how GAH and GAL correlate with
performance; **Study 3** outlines the development and design of the new measure for GAH and GAL, following Hinkin’s Scale Development Process (1988) in order to establish the psychometric properties of the new measure. CFA was conducted and identified two distinct factors. A brief overview to explain the further 3 studies which explain the validation of the new measure will be given. **Study 4** outlines the first validation study against the TIP; the UWES9 and performance outcomes. **Study 5** outlines the second validation study against the IPIP, the CSES and the Dark Triad Questionnaire. **Study 6** outlines the six and final validation of the new measure against the HDS. Methodology includes CFA, SEM, and Hierarchical Regressions.

**Results**
Two distinct higher order factors of GAH and GAL were found within the HPI and MVPI, but no higher order factor was found for FM, and the implications of this will be discussed in the session. The results supported the development of new short measure, and it is this process which is outlined in the paper presentation.

**Application**
If the purpose of personality theory is to explain how the individual engages in social action, (Hogan, 1976, 1983; Hogan, Jones and Cheek, 1985) then knowing how someone is likely to GAH and GAL is useful for organisations, particularly for assessment, selection and future development. This research will explain which facets of the HPI and the MVPI measure this and how a new short measure was developed, its usefulness, and how it can be applied. The HPI and the MVPI contain 406 questions in total. Completion of both is a costly and time-consuming process, particularly so if used in the preliminary selection stage. This new measure offers a shorter, and quicker, way of assessing personality, which includes reputational traits as well as individual values and motivating needs. Theoretically, this research advances the understanding of how personality differences impact at work, and is unique in that, for the first time, an investigation of the Hogan measures has been conducted which explores which aspects of each measure relate to GAH and GAL. A critical analysis of the HPI and the MVPI to examines these aspects has not been conducted previously, and this research attempts to answer a gap in the lack of empirical evidence of how the scales map onto the two measures.

**Relevance to Conference**
The Hogan measures are increasingly used by Occupational and Organisational Psychologists who specialise in selection, development, coaching and recruitment and who find the HPI, the MVPI and the HDS useful and rigorous psychometric measures. This session engages with current psychometric practitioners and considers how useful the measures are in light of the underlying theory and against other measures of personality.

**T14 Standard Paper**
**Making a difference with autism: a workplace intervention and evaluation**

**Phil Wilson & James McShea**, Civil Service Fast Stream

**Category: Learning, Training and Development**

**Background**
Autism spectrum disorder (ASD) - whilst receiving an increasingly high profile through TV, film, theatrical and other media sources - is arguably still often misunderstood by those in the world of work and, indeed, elsewhere. In particular it is frequently characterised in its extreme forms – in terms of those who are high functioning and super smart, desired by Google and other recruiters, versus those with less capability and, some may say, “little to offer” in the workplace. These are, of course, caricatures, with ASD being far more diverse.

In essence, it is a condition - affecting around 1% of the population - that is characterised by difficulties around social interaction and communication that may be displayed in early infancy in terms of limited vocal sounds, poor use of non-verbal behaviour or understanding
of social cues, difficulty showing empathy, literal understanding, repetitive behaviour and a need for routine.

Work may be problematic – for example in respect to struggling with noise, travelling and change of routine that can be necessitated within a job role. Statistics are stark and worrying. Most tellingly, only 15% of adults with autism are in full time work (Redman et al, 2009), with almost 80% on out of work benefits saying they want to work – and 59% of those without a job believing they will never find one.

It is, then, a troubling picture that the Civil Service was keen to address as an inclusive employer. This paper describes a (pilot) intervention, now in its second year that has yielded a strong reception from the young people with ASD who participated. Specifically it offered a two week internship to provide workplace exposure and upskilling – building on work experience and diversity approaches previously reported (Wilson, 2012 and 2013).

The philosophy of the Civil Service is above all neuro-diverse that avoids seeing ASD as a pathology or disorder but sees it instead as a form of human diversity that does not have to conform to a clinical norm. Breakey (2006) states: “any understanding of autism should not be approached from a position of ‘deficit’ but rather a position of ‘difference’. Autistic people are not neuro-typical people with something missing or something extra added on.”

Method

Aims of programme
The two-week experience aimed to:

- Help young people develop skills and familiarity with an office based workplace.
- Provide support and coaching, with a focus on recruitment practices, career development and networking.
- Increase autism awareness in the business.

Programme components
- 14 people - at GCSE to degree level - have participated in the pilots to date, drawn from the Ambitious About Autism charity’s network.
- The programme offered these young people light touch work experience.
- Each young person was also offered the opportunity to participate in one to one coaching sessions focused on career development – delivered by business psychologists and incorporating psychometric assessment.
- Provided practically focused group workshops, regarding selection and networking skills – again delivered by psychologists.
- Autism awareness sessions delivered by young people with autism in partnership with the Ambitious about Autism to raise awareness of autism in the Civil Service.

Results
Evaluation used a mixed methods approach, incorporating surveys and focus groups at participant and manager (of the intern) level and also drew on psychometric analysis.

Psychometric profiling
Using the Talent Q Dimensions tool which provides trait, team and derailier outcomes, offered a compelling description of participants (when aggregated), reinforcing the known ASD characteristics:

Trait Profile – notable results
- Low range mean score for Communicative and Socially Confident
- Low range mean score for Relaxed, Resilient and Flexible
- Low range mean score for Self-Presentation Score
Team Profile – notable results
• Low range mean score for Implementer and Networker

Derailers – notable results
• Low range mean score for Exhibitionism and Self-confident

From this profiling, alignment with expected autistic facets was strong, whilst still offering individual variations to use as a basis for coaching and self-awareness.

Participant feedback (highlights)
• 100% reported an increase in confidence
• 100% would recommend the programme to others
• 100% would consider a career in Civil Service
• Average overall rating of placement 9.4 out of 10
• Average overall rating of support received 9.2 out of 10
• “Energising”
• “Awe inspiring”
• “I give this 10/10”
• “A politically involved place (also full of geeks which is perfect)”
• “How easy it was to fit in”
• “Placement was real work, not just made up work to make it easier”
• “Simply being a member of a team doing important work and being appreciated for the work I do”

Manager feedback (highlights)
• “Pleasure to see participants relax”
• “How unhomogeneous people with autism are”
• “The ability to deal with tricky situations…was impressive”
• “Really enjoyed having a different perspective”
• “Seeing the growth in the young people”

Discussion - learning points
Based on evaluation outcomes it is evident that a highly positive set of results emerged and reinforced the value of such interventions. Top ten learning points can be summarised as follows:
1. 'Distance travelled' in terms of participant development is more valuable than achieving a specific result.
2. Breadth of participant talents is apparent - which need to be accommodated where possible.
3. All levels of intern capability can be utilised in the organisation.
4. Trust ability of participants to do given tasks to a good level.
5. Pre-intervention anxiety of managers (and interns) can be significant – reassurance is needed.
6. Thorough induction/early awareness training is important.
7. Pre-conceptions around ASD should be avoided.
8. Networking and coaching sessions were important interventions.
9. Quiet spaces for interns offer an important facility.
10. Flexible working arrangements can support easy commuting, managing time, etc.

References


Barends, E G & Briner, RB. 2014. Teaching Evidence-Based Practice: Lessons From the Pioneers An Interview With Amanda Burts and Gordon Guyatt. AOM Learn. & Educ. 13, 476-83


**T15** Town Hall Meeting

**Are Assessment Centre Dimensions Measurable?**

**Helen Baron**, Independent, **Max Choi**, Quest Partnership and **Chris Dewberry**, Birkbeck, University of London

**Category: Psychological Assessment at Work**

For some time attempts to show the construct validity of the dimensions or competencies underlying assessment and development centre ratings have shown poor results. Sackett & Dreher (1982) published early factor analytic results showing exercise rather than dimension effects for three different assessment centres. These results have been frequently replicated e.g. Liewens & Christiansen, 2012; Sackett & Liewens, 2008. Jackson et al (in
press) have added to these findings using generalisability theory to consider the reliable variance due to dimensions. The found only about 1% of the variance in the ratings given to candidates in a well-run assessment centre in South Korea was attributable to dimension effects. In other words, assessors are not able to reliably evaluate candidates on dimensions. An earlier paper by Putka and Hoffman (2013) on North American data obtained a very similar estimate.

If there is no valid and reliable dimension variance in assessment centre ratings this could be due to one or more of the following:
1. People do not differ on discrete behavioural dimensions at work.
2. People do not behave consistently across exercises or situations
3. People do differ on discrete behavioural dimensions at work/behave consistently across situations, but these differences aren't reliably replicated in AC exercises.
4. Assessment centre design is too poor to elicit consistent differences at the behavioural dimension level
5. Assessment centre does elicit consistent differences at the behavioural dimension level but as a consequence of cognitive capacity or other issues, assessors aren't able to detect/measure them.
6. Typical Assessment Centre design (multiple assessors within and across candidates and exercises) confounds dimension effects with exercise and assessor effects

Some have argued on the basis of these findings that we need to rethink the measurement model underlying assessment centres to take account of these findings. It is ignoring the evidence to continue to claim dimensional measurement and to make selection decisions or provide developmental feedback on the basis of competency scores. Others contend that the difficulty in finding dimensional structure within assessment centre results is a measurement artefact (Kuncel and Sackett, 2014) or that better practice in centre design and implementation does lead to considerable dimension variance (Guenole et al., 2013). Lievens (2009) suggests greater use of trait activation theory in assessment centre practice.

As practitioners we need to be sure that our practice is evidence based and that we are not promoting a flawed methodology out of unsubstantiated belief. As academics and researchers we need to understand the assessment centre process better. While there are difficulties with construct validity, the evidence for criterion related is much stronger, particularly with mechanical decision making. What is being measured at assessment centre that is so predictive of future performance if it is not the identified dimensions? If we can identify the key factors underlying criterion validity we will be able to develop better theories to understand assessment centres. This in turn has potential to enable the simplification of assessment centres making them cheaper to implement for our clients and possibly less of an ordeal for participants.

In order to facilitate discussion and debate on these topics between and among academics and practitioners we propose a town hall meeting on the topic. This will be of interest to those who are working in the areas of selection, development and assessment. It will also challenge current thinking and may stimulate both improvements in practice and further relevant research.

The format of a town hall meeting is most appropriate for this topic. We will start with a presentation of some of the key findings by an expert academic in the field, and challenge participants to justify their own research and practice or find alternate models to explain AC ratings and scores in the ensuing discussion. The conference attracts some of the UK experts in assessment and we will encourage them to attend to ensure a high level of discussion.
The discussion will be facilitated by 3 members of the Assessment Centre Standards Working Group to ensure a coherent debate and that important issues can be captured to facilitate the work of the group.

References

T16 Extended Paper
**Evidenced based review of England and Wales police recruitment model**
**Howard Clemence, College of Policing**

**Category: Psychological Assessment at Work**

**Background**
The session will draw on the findings of an evidence based review of recruitment within the police service which included the review of 8,000+ abstracts and consideration of 100+ academic articles as part of a Rapid Evidence Assessment during 2015. The work was requested by the police service to ensure that the future model of police recruitment was fit for purpose.

The research was written in 2015 as a College of Policing recommendations report which was peer reviewed by four peer reviewers from backgrounds including Occupational Psychology, research and police Human Resource.

The research links to key strategic work within policing which includes the updating the policing behavioural competencies framework and work associated with embedding of the principles (values) that underpin the policing Code of Ethics into all local and national selection processes.

The research links to the central conference theme of the value that applied psychologists offer as this work has provided policing partners with insightful scientific research which is already being considered for translation into future recruitment practice.

The collation of an appropriate evidence base included the implementation of a rapid evidence assessment (REA). This scientific research methodology included a systematic search of published literature against a set of search terms and search criteria across a
defined set of research questions. The REA included a number of specific questions such as what is effective (e.g., selection methods) in assessing people’s suitability for a job/role and what marketing methods are effective at attracting talented people to join organisations?

An evidence base was collated which identified robust research evidence and identified areas, for further exploration, that have potential to benefit the future of police recruitment.

**Presentation Overview**

This presentation will focus on work associated with narrowing the evidence base of over 8,000 abstracts to those relevant to the research. The presentation will show how systematic research techniques were applied to identify customer needs and effective selection interventions that will establish a recruitment model that is valid, reliable and fair. The presentation will share the seven recommendations that have been posed for a future policing recruitment model.

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 and deliver selection methods for the recruitment and selection of entry level personnel. The presentation will be of interest to those who are required to develop selection methods that are valid, reliable, fair, generating sufficient quality of applicants, minimises adverse impact, and applying the latest techniques in technology and innovation.

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: an outline of how a rapid evidence assessment was applied to assess the latest evidence base for effective selection and assessment, outline how customer needs were taken into consideration; how researchers were briefed, key drivers for review; how key stakeholders were engaged; how best practice and industry standards were taken into consideration, findings and recommendations; peer reviews; how the findings are similar/different to previous police recruitment model; and how the recommendations are being implemented.

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

- The College of Policing Rapid Evidence Assessment (REA) guidelines around what is involved in REAs were considered in the development of the research plans.
- The research identified a number of meta-analysis studies that provided useful areas to consider within the review:
  - the ability of selection measures to predict future job performance (Schmidt and Hunter 1998, Ployhart and Holtz 2008);
  - a number of authors have claimed that there are subgroup differences across a number of selection procedures (for example, Berry et al 2011, Bobko and Roth 2013, Ployhart and Holtz 2008);
  - the literature refers to the twin organisational pressures of meeting diversity targets while simultaneously maintaining the validity of organisational selection procedures as the ‘diversity-validity dilemma’ (eg, Ployhart and Holtz 2008).

- Promising evidence was identified by Rosenfeld et al (2008) who suggest that the Multiple Mini Interview (MMI) may yield higher reliability and be more cost effective than traditional interviews, due to more questions being asked through the MMI format.
- Whilst challenges were found with the implementation of personality testing Denning (2007) found a significant relationship between scores on pre-offer personality tests and the likelihood of passing a background check and becoming a police officer.
The research identified models (eg, Dineen and Solis 2010) for recruitment that include the generation of viable candidates, assessment, maintenance of the status of viable applicants, and post-offer closure.

It was found that the success of targeted recruitment appears to be contingent on an organisation conveying to prospective minority applicants that it values diversity (Avery and McKay, 2006).

Two key industry standards associated with the design and delivery of assessment centres were identified: BS ISO 10667 and the BPS Assessment Centre guidelines.

BPS code of ethics and conduct (2009) was followed throughout the period of the review.

Key messages:

- How the College of Policing developed an evidence base which included identifying strong research evidence and the identification of areas for future exploration that have potential to benefit the future of police recruitment.

- Highlight that in order to implement an effective attraction strategy, organisations need to focus on attracting quantity and quality of applicants. It is not sufficient to have large quantities of applicants – they have to be of the right quality or assessment outcomes in terms of subgroup (eg, minority groups) disproportionality can be exaggerated.

- From a practical point of view, the most important property of a personnel assessment method is predictive validity – the ability of the selection measure to predict future job performance (Schmidt and Hunter 1998, Ployhart and Holtz 2008).

- Highlight how the validity – diversity dilemma presents a challenge to practitioners and organisations around what selection procedures are selected and how candidate groups are monitored to ensure that adverse impact is minimised.

- Highlight promising evidence around interventions where underrepresented groups have been reported to perform better under conditions that require little additional expenditure such as candidates receiving recruitment messages which possess a positive tone or performing better when a clear rationale for why a selection procedure has been included within a recruitment process.

- Changes to the current police recruitment won’t take place until a full evaluation, including costs and benefits, has been completed to determine if changes to process reliably identify applicants who are the right people for the rank of police constable, are predictive of on-the-job performance, do not adversely affect underrepresented candidate groups, and meet assessment delivery standards.

- Impactful engagement with relevant stakeholders – during the review forces, staff associations, and the Home Office were consulted in a number of different ways which have included being asked to comment on an interim report released in April 2016, being invited to a national consultation event, and attending regular review working group meetings. In addition, a peer review process has sought to seek views from relevant policing and non-policing recruitment/research specialists.

- Outline how the review working group will be implementing the recommendations of the review. This will involve the design (by a commercial partner) and piloting of a police assessment centre.

The presentation will close by recommending further research to support practitioners specifically looking at the best available evidence around attracting and selecting candidates for high volume recruitment purposes.

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

- The review of the research evidence highlighted the importance of effective selection processes contributing to the diversity of an organisation, being valid, inherently fair, and lawful.

- The above goal is challenging and complex, as the evidence shows that selection procedures that best predict on-the-job performance (eg, cognitive ability tests or indirect
assessments of cognitive ability) have the greatest racial and ethnic subgroup differences.

- Within the review the College has been careful to recommended selection of procedures that provide a balance of predictive validity and evidence of lower subgroup differences and takes into account the likely cause of subgroup differences (such as measurement error/bias, contextual influences, and the influence of cognitive ability).

- Consideration has been given to section 159 of the Equality Act 2010 which broadly outlines the legal position around organisations applying positive provision – that is, to select a member of an underrepresented group, where a number of candidates are equally qualified.

- Confidentiality of data – all participants’ data collated throughout the review were held in confidence. Data that was shared (e.g. reports to the review working group) 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 stakeholder consultations and to be members of a working group. Frequent meetings were set up and considerations to fairness, validity and reliability of the proposed recruitment model were central to these discussions.

It is considered that the work demonstrates relevance and rigour as follows:

- The review utilised a rigorous rapid evidence assessment which considered over 8,000 abstracts;

- The review tested the assumption held by some stakeholders that the assessment centre (AC) is the ‘problem’ within the recruitment model restricting the number of successful underrepresented groups through the AC. Furthermore the review pushes for more effort and energy to be applied at the front end (eg, attraction) of the selection process so that higher quality applicants are identified earlier on in the selection process.

- The timeliness of the review has helped to influence the redesign of the national police recruitment process and has significantly added value to the debate of how police recruitment should be conducted moving forwards.

Electronic PowerPoint slides will be made available to the session’s attendees.

References:


British Psychological Society Assessment Centre guidelines


College of Policing (2016). Review of initial police recruitment: final report of review recommendation (due to be published by the College of Policing in August 2016).

T17
The history of OP: Practice and research perceptions and insights for the future
Almuth McDowall, Birkbeck University of London and Céline Rojon, University of Edinburgh Business School
Category: Professional Affairs and Awards
This session will consider the legacy of occupational psychology with particular reference to any contributions in psychological assessment, given the long standing history in this field. We will commence by engaging the audience in the ‘history of OP’ videos, showing edited clips with commentary. The session will conclude with a panel to comment on the past, present and future of OP in this field, and will give ample of opportunity for questions and audience participation. OP has a long and distinguished history in the UK, which deserves to be show cased to a younger audience.

T18 Standard Paper
Self-regulation mechanism in senior management transitions
Oxana Popkova & Kim Turnbull-James, Cranfield School of Management
Category: Learning, Training and Development
Introduction: This session will present the preliminary PhD findings on the self-regulation mechanism in successful and unsuccessful transitions to senior management in a large commercial organisation. Contextually, this research focuses on the 4th leadership pipeline transition (Charan, Drotter & Noel, 2011): from leading a function, to leading a business. This transition is mission-critical for commercial organisations. It is also one of the most challenging in an executive career, and one most often failed (Watkins, 2012).

Middle managers who successfully transition to senior management roles, acquire new knowledge, skills, and behaviours supportive of their new positions. These outcomes have been widely researched in organisational psychology (Day, Harrison & Halpin, 2012). However, what enables or inhibits these transitions is much less understood. This management development problem has been gaining in importance over the last decade, as the insufficient bench strength of senior executive talent has turned into a major concern, especially for large commercial organisations (Watkins, 2012).

Over 70% of all management development results from on-the-job formative experiences (DeRue & Wellman, 2009). But what matters even more than the experience itself is (1) how one engages with the experience, (2) how one’s identity evolves in the process, and (3) what
happens to the career goals borne out of that identity. These are different dimensions of one’s self-regulation mechanism (Lord, Dieffendorff, Schmidt & Hall, 2010).

Self-regulation is the process of monitoring and adjusting thoughts, behaviours, and emotions towards a desired state (Baumeister & Vohs, 2012). Self-regulation theory proposes that different dimensions of self-regulation are involved in that process simultaneously (Lord et al., 2010). For example, a senior management transition can be conceived as successful coping with formative career experiences (DeRue & Wellman, 2009), as a movement towards one’s possible self (Cross, Hardin & Gercek-Swing, 2011), and as a series of career goals to be achieved (Latham & Pinder, 2005) – all at the same time. Processes that govern these three self-regulation dimensions appear rather diverse (e.g. Carver & Connor-Smith, 2010; Taber & Blankemeyer, 2015; Parks & Guay, 2009). But homeostatic feedback loop theory (Carver & Scheier, 2011) may help explain how these processes fit together. This theory proposes that people use five self-regulation meta-processes to address their psychological arousal and restore balance (Baumeister & Vohs, 2012). First, a stimulus (e.g. a work-role transition gap to senior management) must emerge and endure (1). The nature and strength of psychological arousal that the stimulus creates is then assessed by a receptor (2). That assessment is gaged by a control (3), by matching one’s progress towards the desired state with the range of possible outcomes that can satisfy the stimulus. The control determines an appropriate cognitive, emotive, and behavioural response to the stimulus (4). The result of that response feeds into the effector, which either enhances the stimulus with positive feedback (i.e. increases the gap between the current and desired states), or depresses it with negative feedback (5).

These five self-regulation processes have been researched in coping with formative career experience, career identity adaptations, and work motivation, but as separate self-regulation dimensions (e.g. Lord et al, 2010; Carver & Connor-Smith, 2010). Recent evidence suggests, however, that different self-regulation dimensions must operate in accord to support successful outcomes (Lord et al, 2010). Conflicts may emerge when processes operate semi-autonomously, or out of sync (Baumeister & Vohs, 2012). We believe there is value in analysing self-regulation dimensions jointly, in cases where different patterns of interaction between them may contribute to divergent outcomes, e.g. successful vs. unsuccessful transitions to senior management roles. From the current literature, it is difficult to tell how self-regulation processes of coping, identity adaptation, and work motivation interact to produce opposite outcomes. Our research project addresses this gap in the literature.

Methodology: The study adopted a qualitative design, in which semi-structured interviews and template analysis (King & Brooks, 2016) were used to explore how self-regulation processes of coping with formative experiences, identity adaptations, and work motivation configure (1) and interact (2) in successful and unsuccessful transitions to senior management roles. Our theory extension methodology aimed to advance theory through the development of hierarchical structure of conceptual categories identified through the literature. Specifically, we explored in-depth the already known self-regulation processes within each of the three dimensions, i.e. coping with formative experiences, identity adaptations, and work motivation. Also, we qualified the process commonalities between the three dimensions, and the process differences between the successful and unsuccessful transitions.

To minimise contextual differences and attenuate self-regulation processes, we recruited a research sample from one large commercial organisation, an international telecommunication group (Telco). The main sample (n=48) included high-potential middle managers in two transition conditions: successful (n=27), and unsuccessful (n=21). The degree of transition success was deduced from Telco’s 2013, 2014, and 2015 talent ratings, contextual semi-structured interviews with Telco’s business and HR managers (n=15), and
internally published guidelines on Telco career paths, and capability requirements to middle and senior managers. The 48 main research participants represented 27% of Telco’s 2012 cohort of high-potential middle managers still serving at the point of entry to senior management. Interview protocol was developed from the literature, and included 36 items structured into 4 sections on the topics of career history, recent formative experiences, current and future work identity, and work motivation. All interviews were conducted over the phone between September 2014 and August 2015, lasted 59 to 93 minutes, were audio-recorded, and transcribed verbatim. The study received ethical approval from Cranfield University, and adhered to the BPS Code of Ethics and Conduct (2009).

Findings and discussion: Firstly, we found support for the self-regulation processes across three dimensions derived from the literature. Secondly, we contrasted how those in successful and unsuccessful conditions went about coping with formative events, identity adaptations, and work motivation. We found that processes in all three self-regulation dimensions configure and interact differently in the two conditions. Following the homeostatic feedback loop theory (Carver & Scheier, 2011), we arranged the identified process configurations into a plausible mechanism that seeks to explain how the gap to senior management gradually diminishes in the successful condition, and grows in the unsuccessful one.

Participants in both conditions perceived the gap to senior management as a strong and enduring stimulus (1). Thereafter, the two process configurations diverged. The stimulus was assessed as a moderate challenge and an opportunity in the successful condition, and as a major challenge and a threat in the unsuccessful condition. These differences in the underlying receptor (2) led to divergent interpretation of formative experiences, possible identities, and desirable goals. In the successful condition, participants experienced internal attributions of outcomes, sense of doing things right, aspiration for incremental change, and desire to enhance one’s organisational mastery, while performing in current role. In the unsuccessful condition, participants experienced external attributions of outcomes, sense of following a wrong path, aspiration for a step-change, and desire to visibly outperform one’s deemed potential alongside one’s current role. The control (3) that matched the participants’ progress with the acceptable performance levels differed widely as well. Those in the successful condition felt more trustful and confident, and had a positive expectation of events, Telco colleagues, superiors, and the organisation. They emerged with a wider range of coping thresholds, identity ideals, and goal standards. Conversely, participants in the unsuccessful condition developed a narrower range of coping thresholds, identity ideals, and goal standards, as they felt suspicious and anxious, and had negative expectations of events, Telco colleagues, superiors, and the organisation. That ultimately produced a divergent cognitive, emotive, and behavioural response (4) from the participants in two conditions. Those in the successful condition manifested more proactive behaviours: trying out new approaches, reaching out for advice and help to Telco superiors, seeking corrective feedback from wider Telco network, being steadfast in pursuing possible identity and goals, but flexible in coping thresholds, ideals, standards, and behavioural strategies. Those in the unsuccessful condition manifested more reactive behaviours: over-applying tried-and-tested approaches to new situations, increased self-reliance, leaning on external or uncritical advisors, avoidance of corrective feedback, keeping possible identity and goals fluid, but sticking with coping thresholds, ideals, standards, and behavioural strategies. Finally, the resulting effector (5) produced a negative feedback loop in the successful condition, and a positive feedback loop in the unsuccessful condition. In the successful condition, the gap to senior management reduced overtime through adequate corrective experience. The participants’ wide engagement with Telco social environment helped them validate the accurate gap to senior management, and calibrate their responses to Telco’s realities. It also procured ongoing social support for coping with moderately challenging formative experiences, adapting identity towards more realistic ideals, and meeting manageable career goals. In the unsuccessful condition, the gap to senior management increased
overtime owing to insufficient corrective experience. The participants' limited social engagement in Telco prevented them from understanding their true gap to senior management, and deprived them of better-suited responses. Further, the lack of social support made these transitions more fragile, as the participants felt the negative relational and organisational fallout from the overly difficult formative experiences, struggled to sustain their ideals at a very high and affixed standard, and failed to successfully meet some overly challenging career goals.

Conclusions: This research was inspired by our observation that some middle managers are able to purposefully pursue successful transitions to senior management roles. Three literatures on the subject — on coping with formative experiences (DeRue & Wellman, 2009), identity adaptations (Cross, et al., 2010), and work motivation (Latham & Pinder, 2005) — evolved virtually independently from each other, although they cover three adjacent dimensions in the self-regulation mechanism. We explored processes in these three dimensions jointly, in the context of senior executive transitions in one large commercial organisation. Preliminary findings suggest that self-regulation processes are configured and interact differently in successful vs. unsuccessful transitions. This research partly confirms, and partly extends the homeostatic feedback loop theory (Carver & Scheier, 2011), by illuminating the cross-dimensional interaction between self-regulation processes. It also contributes additional insight to management development practice, in the context of senior management transitions in large commercial organisations. A one-page summary of the final findings will be distributed to the conference delegates, as the project is due to be completed in December 2016.

References:
T19
Careers Forum
Category: Learning, Training and Development
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.

T20
Forum Theatre. A Demonstration - An opportunity to see Interactive Drama based training in action. No acting required!
The Alston Partnership
Category: Learning, Training and Development
Forum theatre is an engaging way to explore behaviours in the workplace and to support your learning outcomes in the training room. In forum theatre, actor facilitators play out a scenario that encourages debate and discussion around what constitutes best practice in a safe, fun and engaging way.

In this workshop we will explore areas where Forum Theatre can be most effective, for example:
- *Diversity and Inclusion*. How can we ensure diversity is active in our everyday workplace interactions? How can we make it live, rather than it be a policy?
- *OrPerformance Management*. What behaviours do managers need to get the most out of their team?
- We also explore what concepts or learning models look like in practice. How does a model play out in reality?

The Alston Partnership, one of the pioneers of drama based training, provides highly experienced actors and facilitators for development and assessment centres, forum theatre presentations and role play. Founded in 1999 by Andrew Alston and Regina Freedman the team now also comprises Associate Directors Helen Higham Jon Deverell and a data base of over 100 actor associates. At present we are supporting honest conversation and unconscious bias programmes for various clients including The National Institute for Clinical Excellence, KPMG and The House Of Commons.

T21 Standard Paper
How can rigour and relevance in our assessment and selection practices enhance the candidate’s experience?
Helen Worrall, a&dc
Category: Psychological Assessment at Work
Main Message
Through the use of a case study, this session will focus on how the use of rigorous assessment practices can enhance candidate reactions and future candidate behaviour. This is done through providing information on their fit to the organisation and job role, and improving procedural and distributive justice perceptions throughout an assessment process. The session will show how this was achieved while aligning to the client’s requirements for the final implemented assessment process. The session will help practitioner delegates to consider how they can enhance candidate reactions to their own selection processes.

Outline of Agenda
Audience interaction will obtain delegates’ thoughts and experiences about poor and excellent candidate experience, and how this impacted their reactions to selection processes and outcomes.
We will briefly outline theory and research about candidate reactions; what impacts them, the potential benefits of providing a good candidate experience and the potential perils of allowing a poor candidate experience.

We will then outline a specific client situation and their recruitment practices. Finally, we will encourage small group discussions around how practitioners can improve candidate reactions in their own recruitment processes.

The Case Study
At the time of their contact with us, the client received around 5,000 applications each year, which was expected to double over the next year and continue to increase. They needed to enhance the candidate experience to keep candidates engaged throughout, whilst fairly sifting out more candidates. We will outline challenges faced and issues to be addressed in the client’s current assessment process, in terms of where candidate experience could be improved and where best practice principles were not being observed.

We will discuss how the challenges were addressed in an evidence-based and rigorous way, whilst aligning to the requirements and expectations of the client and providing an enhanced candidate experience. This was done by creating robust assessments, using best practice principles wherever possible and implementing these consistently. We conducted a thorough job analysis on which to base the design of assessments, we trialled scenarios to use in the SJT and assessment centre simulations and used robust scoring frameworks throughout to give a fair evaluation of candidates. The use of technology enabled behaviourally-based feedback to be provided to candidates quickly following assessments.

The changes made were designed to improve candidate engagement, enhance fairness perceptions about the process and allow candidates to assess their fit to the organisation. These areas have been shown to be critical to candidates’ future attitudes and behaviours towards organisations. The changes made will be fully discussed in terms of their rigour and relevance to candidate reactions during the session, but are briefly summarised here due to word limits:

SJT
- Branding the SJT made the first contact from the organisation “feel” like it was part of the organisation to engage candidates with the process
- Through development of scenarios with Subject Matter Experts (SMEs), the SJT provided a realistic job preview of graduate level roles within the client organisation
- Used across programmes, therefore providing a consistent “first impression” to candidates
- The first assessment was a clearly job relevant test (therefore having face validity),
- Using a behaviourally-based test that measured a range of behaviours helped candidates to feel they had the opportunity to demonstrate their suitability to the role early in the process

Application form and telephone interview
- Several competency and values based questions, which were the same for all candidates, were inserted into the application form and telephone interview to:
  - Provide candidate information about the behaviours and values important within the organisation
  - Allow candidates to demonstrate broad skills and abilities early on in the selection process
  - Ensure consistent assessment of candidates, to enable quality feedback to be provided to both successful and unsuccessful candidates
• Quasi-BARS rating scales were developed for each question to ensure consistent assessment of candidates and to enable provision of evidence-based feedback
• The amended scoring formats meant that relevant, evidence based feedback could be easily generated and provided to all candidates from telephone interview application form manual screening.

Assessment Centres (ACs)
• Implementing a technology-based administration and assessment system for the ACs allowed feedback to be generated quickly and easily and emailed to candidates, whether successful or unsuccessful
• Updating the materials based on job analysis to make them relevant to graduate levels roles and incorporating the values of the client organisation gave candidates a realistic job preview Using the technology system ensured consistent assessment of candidates
• Behaviourally anchored rating scales for all competency indicators relevant to specific exercises at the AC, enabled rigorous assessment of competencies
• The use of consistent, role relevant exercise materials, a robust scoring framework and the technology enabled good quality, evidence-based feedback to be produced and sent to candidates quickly and easily

We will then instigate discussion in small groups to consider how delegates could enhance candidate experience for their own candidates.

Key messages and insights
The Key message from the paper is around thinking more broadly about candidate experience and what we as Occupational Psychologists can do to enhance it. All too often the focus is on branding and visual appeal, such as seen in the rise of branded and gamified assessments, often used in the attraction of candidates. However, the research shows us that candidate experience throughout an assessment process can be enhanced by considering the type of assessments to use at what stage in the process and using rigorous assessment practices. I am hoping to gather candidate reactions data from the client to present with the submission.

Ethical considerations
In designing scenarios for SJTs and assessment exercises we kept the confidentiality of SMES and ensured they understood how the information would be used. Consideration was taken in regards to data protection in the technologies, for example, gaining candidate consent, ensuring secure networks and systems to store data, ensuring candidate demographic data and assessment scores are stored in separate locations.

Good practice in Psychological testing was followed in the production of the SJT in informing the candidates about the purpose of the test, obtaining informed consent and storing and using data and right to withdraw explained. The same principles will be observed in gathering candidate reactions data. Conservative cut scores were set for the SJT until adverse impact analysis could be conducted to ensure fairness to all demographic groups.

Consideration was given to dealing with candidate reactions following feedback provisions, as this was done via emailed report. Reports were checked for assessor language and candidates were given the opportunity to contact the recruitment team with any questions.

Training was provided to assessors and administrators and we provided on-going support to ensure they were comfortable with using the technology.

What are the main psychological models, theories and research underpinning the session?
The psychological models, theories and research underpinning the session are mainly around candidate experience and how this is impacted by assessment methods. Gilliland’s (1993) model explains how candidate fairness perceptions develop through selection processes and then affect their later attitudes and behaviours. This has been borne out by research. Candidates’ perceptions of perceived fairness of a selection procedure are influenced by consistency of assessment, job relatedness of assessment, face validity and perceived predictive validity (Hausknecht et al., 2004). When assessments are perceived as job relevant and fair, it leads to better reactions to the assessment process, even if the participant is unsuccessful (Schinkel, Vianen, & Dierendonck, 2013). Additionally, when candidates perceive an assessment as fair and job-relevant, they are more likely to accept the feedback provided (for example, in assessment centres: Cascio & Aguinis, 2005). Providing feedback gives a positive impression of the organisation, which has taken time to provide the information, demonstrating respect to the candidates (Gilliland, 1995).

Candidate reactions to a process are very important, they can impact whether candidates continue with the selection process or apply to the organisation for future roles, which could be the loss of a potential high performer (Hausknecht et al., 2004; Murphy, 1986). Additionally, unhappy candidates may share their negative perceptions and experiences with others, which might impact the willingness of others to apply for roles in the organisation (Gilliland, 1993; Hausknecht et al., 2004). These candidates may stop buying products or services from the organisation and may encourage others to do the same (Gilliland, 1993; Hausknecht et al., 2004). If candidates feel the process or decision made has been extremely unfair they may resort to legal challenge, which can be costly and damaging for the organisation (Anderson, 2011).

Allowing candidates to feel they have had enough opportunity to demonstrate their suitability for a role is important for fairness perceptions (Gilliland, 1993; Hausknecht et al., 2004; Ingold, Kleinmann, König, & Melchers, 2016). Assessment methods should also help the candidate to get to know the organisation and the role, which aids self-selection. Providing realistic job previews helps candidates assess their fit to the role and the organisation, which affects likelihood of offer acceptance, candidate expectations of the role and turnover after acceptance (Carlss, 2005; Philips, 1998).

Other relevant research is related to creating robust assessments using best practice principles wherever possible. This relates to conducting a thorough job analysis on which to base the design of assessments, trialling scenarios to use in the SJT and assessment centre simulations and using robust scoring frameworks.

**How does the proposal link to the conference theme?**
The session focuses on enhancing candidate experience through the use of rigorous assessment practices and meeting client needs to ensure the final outcomes are relevant. The way in which the solution was implemented used best practice principles and we continue to question the solution and if it is working as well as possible at every review period.

**Why is the submission appropriate for the Psychological assessment at work category?**
The submission covers selection methods used in a graduate recruitment process, 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?**
Rather than focusing in detail on the creation of any one part of the assessment process, as is often seen in conference papers, this session will cover the whole process and small
changes made at each stage to enhance candidate reactions, using rigorous assessment practices and aligning to client requirements.

Why do you think conference delegate will find the paper stimulating and useful? The session will engender thought and discussion about how delegates can implement relatively simple factors into their recruitment practices to generate positive candidate reactions and, therefore, positive thoughts and behaviours towards the assessing organisation. Thus, the session will provide delegates with useful “take-aways” to apply in practice.

What might the public find interesting about the paper? The public will be able to link the principles explained in this paper and their own experience of running or taking part in recruitment practices. For example, they will understand how receiving a short, generic explanation from an organisation about why there were not successful at any application stage feels unsatisfactory and may impact how they feel about or behave towards that organisation going forward. They may be interested to understand the psychological principles behind these reactions.

T22 Extended Paper
Multi-Method, Multi-Perspective Advanced Officer Job Analysis: Sergeant to Chief Superintendent Ranks
Faye Stead, Amardeep Mann & Howard Clemence, College of Policing
Category: Psychological Assessment at Work

Background
In 2012 Tom Winsor reported on an independent review of police officer and staff remuneration and conditions and made recommendations on how the police service manages its resources to serve the public more cost effectively.

This submission is associated with the second part of Winsor’s review which focuses on recommendations for rewarding police officers for specialist skills. Winsor recommended the introduction of specialist assessments. The ‘specialist’ skills threshold would act as the means of accessing the top of an officer’s pay scale. The Home Secretary commissioned the College of Policing to develop a threshold model for assessing specialist skills for the ranks of police constable through to chief superintendent.

The findings for the constable rank and pilot of these threshold assessments was presented at the DOP conference in 2016. This submission focuses on the second part of the work looking at developing advanced threshold assessments for the ranks of Sergeant, Inspector, Chief Inspector, Superintendent and Chief Superintendent and ensuring that each threshold builds on the previous one providing a ‘step-change’ between ranks. Rather than only being available to officers from specific specialisms, the thresholds produced represent a level of ‘advanced’ capability in the role, warranting eligibility to the highest pay point for all ranks.

The advanced threshold criteria link to the drive to develop police officers, instil the importance of professional development and reward them accordingly. As part of this, all officers would be expected to have completed continuing professional development (CPD), required core learning for their rank. As such, the intention of the advanced threshold criteria is to evaluate whether an officer has reached an altogether higher level of competence, at which they can be considered to be an example to others of how an experienced officer should operate.

The aim of the research was to: determine what sergeants, inspectors, chief inspectors, superintendents and chief superintendents, as well as other relevant individuals (e.g. subordinates, supervisors and line managers) view as being characteristics that represent a higher level of operating within these five ranks. The research identified:
• Characteristics that can be demonstrated by any role within each target rank;
• Characteristics that are clearly differentiated from the generic attributes that would be expected from officers within the target ranks;
• Characteristics that build upon (and are distinct from) the attributes that would be expected from an officer who is deemed to be competent within these five ranks.

This work links to the central conference theme of Research into practice: Relevance and rigour as a thorough evidence based approach to meet the requirements of a changing police service was central. Over recent years the police service has faced unprecedented demands in terms of 20% cuts in spending, changes in the political landscape (e.g. introduction of Police and Crime Commissioners in 2012 and potential impact of ‘Brexit’ in 2016), increasing public expectations and changing nature and complexity of crimes e.g. cybercrime/international crimes. The research was also required to take account of real-world implementation issues of advanced threshold assessments (e.g. impact of rationalisation of support functions, reduction of supervisors).

Presentation Overview
This presentation will focus on the work associated with defining advanced threshold criteria for the ranks of Sergeant, Inspector, Chief Inspector, Superintendent and Chief Superintendent. Four techniques were used for the research: repertory grid technique, critical incident technique, focus groups, online surveys – and involved over 2500 participants across the police service.

It is proposed that the submission is delivered as a presentation as it is anticipated that the content will be of interest from practitioners were are required to design assessment criteria for threshold testing in other organisations and will focus on the content of what characterises make police ranks from sergeant to chief superintendent ‘advanced’ i.e. line managers and leaders of the organisation.

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 the previous DOP input on constable advanced criteria; outlining literature review; key drivers for the job analysis; how 2500 participants were engaged; cross reference to relevant policing evidence around competence; overview of multi-method job analysis approach employed to ensure data reflected the best available evidence; peer reviews of work; how the methodology is different to previous policing job analysis; challenges and practical considerations of the work; the findings of the job analysis; and how the work has been implemented and linked to further work focusing on values and revised behavioural frameworks for policing.

The main psychological theories, models, research that underpin the session include:
• Builds on previous research carried out by the College of Policing focusing on advanced threshold assessments for the rank of Police Constable
• Takes into account the 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 and how advanced practice at different levels within an organisation are implemented e.g. practitioner vs leader
• 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 participants. The presentation will discuss the importance of using different approaches in order to deliver a valid and reliable set of assessment criteria. The methodology and volume of views has strengthened the data in terms of identifying consistent views as to what constitutes characteristics of officers within the five target ranks who operate at higher levels.
• Strategic and visionary engagement and ensuring a ‘future proofing’ element within the criteria so that the advanced criteria also moves the police force in the direction it needs to for the anticipated challenges over the coming years – there is a risk that job analysis may not also consider the longer term strategic direction and demands for job incumbents.
• Practical consideration of how these would be implemented in practice within forces and how advanced threshold criteria must be part of the bigger picture associated with future proofing police officers and ensuring CPD and development of officers is valued within the service.
• The presentation will close by discussing the future path of this research and how it is currently being used to inform other work within the college such as work on values and revised behavioural frameworks.

In terms of ethics, the following key ethical considerations applied to this piece of work:
• Communication to all forces and providing all officers an opportunity to feed into the research
• When developing the advanced threshold levels at each rank, ensuring that all police officers at the target ranks (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 the criteria
• 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 five supervisor/management/leadership level policing ranks which has never been attempted before this piece of work.
- This work has revealed a number of design challenges around developing criteria that is representative across variations in roles but yet still is reflective of characteristics that are uniquely advanced. It highlighted that there were differences across police forces even within the same rank in terms of what was expected so provided an opportunity to gather additional information that, whilst not directly used in this research, was raised as part of the report e.g. blurring of what is expected at different ranks in different forces.
- 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 officers at these ranks i.e. what sets someone apart from being competent, what gives someone the ‘x factor’

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 oficial documents gov uk](http://www.oficial-documents.gov.uk)


Internal College of Policing job analysis report. Multi-Method, Multi-Perceptive Advanced Officer Job Analysis, Sergeant to Chief Superintendent Ranks.


Spending Review 2010. Published by HRM Treasury.

T23 Standard Paper

**Herding Cats: The Effective Leadership and Management of Volunteers**

**Fiona Beddoes-Jones**, Cognitive Fitness Consultancy

**Category: Leadership, Engagement and Motivation**

In our modern age of austerity many organisations now rely on volunteers to achieve their stated purpose and objectives. However, few volunteer managers receive any training in how to lead or manage volunteers effectively and the available literature surrounding Volunteering, particularly with regard to the effective leadership and management of volunteers is sparse, superficial and fragmented.

This paper summarises the available volunteering literature and supplements it with what we know from occupational and social psychology and human resource management (HRM). Implications for practice regarding the effective leadership and management of all volunteers are given.

*This paper is presented as one of the outcomes of the DOP/Leadership Development Programme (LDP), and is accompanied by a draft White Paper of the same name.*

**Herding Cats: The Effective Leadership and Management of Volunteers.**

Due to constricted budgets and an ever increasing focus on cost reductions and financial management, many organisations are now beginning, if they don’t already, to rely heavily on the support and contribution of an unpaid, volunteer workforce to achieve their objectives.

Volunteering can be defined as, “unpaid help given to another person not a member of one’s family,” Verduzco, (2010, p. 49). Snyder and Omoto, (2008, pp. 3), define volunteer work as consisting of, “freely chosen and deliberate helping activities that … are engaged in without expectation of reward or other compensation and … that are performed on behalf of causes or individuals who desire assistance.”

The literature surrounding volunteering is global and burgeoning. It includes ‘emergency’ volunteering after a crisis event such as an earthquake, tsunami or terrorist attack like the twin towers in New York in 2001, faith-based or politically motivated volunteer activities such as leaflet dropping, to the 2 hours a week a retired pensioner may contribute on the till at their local charity shop. It includes everything from sitting unpaid on local or national charitable bodies such as educational or sporting associations, children and adult support organisations, institutes such as the Institute of Directors or the British Psychological Society, to risking one’s life to help others as is the case with volunteer fire fighters, coastguards and RNLI lifeboat crews.

From an oblique perspective, the literature can broadly be divided into three parts, known as the Volunteering Process Model, (Musick and Wilson, 2008, and Wilson, 2012). The first part concerns what motivates people to volunteer in the first place; why do people volunteer? The second part concerns those factors which motivate people to continue to volunteer and how to lead and manage them effectively, and the third part concerns why people stop volunteering or switch their allegiance from one volunteering capacity to another.

This paper firstly summarises and simplifies the literature across all three parts of the volunteering lifecycle, presenting a new simplified but more coherent model of The Volunteering Lifecycle, incorporating the psychological contract for the first time.

Secondly, unlike anything which currently appears to be available within the body of volunteering or management literatures, it details specifically how to lead and manage volunteers effectively bearing in mind that their contribution is entirely voluntary and unpaid and they can simply walk away at any time.
The paperthirdlydetails the implications for practice regarding the effective leadership and management of volunteers including the training of those of managers and leaders who are tasked with the leadership and management of a volunteer workforce; a metaphor which can be described as ‘herding cats’. I don’t mean to imply that volunteers are in any way difficult, independent, unruly or impossible to organise. Unlike sheep, cattle or horses, we cannot herd cats. However, we can learn to lead them so that they choose to follow. Rather like volunteers.

Relevance and Implications for Practice
This paper is relevant to the effective leadership and management of all volunteers within all organisations, formal and informal, organised and ad-hoc, who rely on volunteers and volunteering to achieve their goals, objectives and purpose.

There are wider implications for the recruitment and selection and professional training of those of managers and leaders who are tasked with the leadership and management of volunteers, many of whom research and the literature reveal, receive little or no training in how to lead and manage their volunteer workforce effectively.

The availability of a new DOP/BPS White Paper of the same name as this paper is a valuable addition to the volunteer literature and the BPS/DOP resource list from a global perspective.

References:

Answers to the specific questions in the guidelines:

1. What are the main psychological theories, models and research underpinning your session?
   There is now a burgeoning literature surrounding why people are motivated to volunteer, why they continue to volunteer and why they stop volunteering, or change allegiance to another volunteering organisation. This paper explores and summarises that literature with particular emphasis on the effective leadership and management of volunteers. Personal identity theories are relevant, as are social identity theories, as is the psychological contract and theories of motivation and personality.

2. How does your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
   Due to constricted budgets and an ever increasing focus on cost reductions and financial management, many organisations are beginning, if they don’t already, to rely heavily on the support and contribution of an unpaid, volunteer workforce to achieve their objectives. By sharing new and relevant research, this paper enables new learning, shares it publicly and impacts on practice by adding to the evidence base relating to the effective leadership and management of volunteers.

3. Why is the submission appropriate for the particular strand you have chosen?
   It relates specifically to the effective leadership and management, engagement and motivation of volunteers.
4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
A summary of the relevant literature and new research findings.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
Its relevance to the effective leadership and management of volunteers.

6. What might the public find interesting about your paper or session?
Its relevance to the effective leadership and management of volunteers.

7. If any, what materials do you intend to make available to attendees and in what format?
Paper handouts on the day, and pdf copies of the slides and the draft White Paper post-delivery of the session.

T24 Extended Paper
Ensuring Relevance of Multimedia SJTs for the Emergency Services
Ali Shalfrooshan & Mary Mescal, a&dc
Category: Psychological Assessment at Work

Purpose of Session
The purpose of this session is to discuss the approach taken to ensure relevance of a multimedia SJT used by the emergency services. The session will cover the following:
• Explore the decisions made regarding the simulation format
• Explore how we ensured relevance and rigour of the assessment
• Share the evaluation results from trialling and live use of the assessment
• Discuss lessons learned from the project with session attendees

The majority of the session will be focused on the design of an automated multimedia SJT for 999 and 101 ambulance service Call Handlers. However, other multimedia SJT projects will be referenced to highlight any key insights on how to enhance relevance when designing these types of assessments.

There will be interactive questions at several points during the session to involve attendees and facilitate discussion regarding best practice design. 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.

Ensuring relevance
Situational Judgement Tests are seen as very appealing tools for assessing candidates for selection. Their popularity is typically attributed to their perceived relevance and flexibility. This relevance is very important from a variety of perspectives, including the quality of the assessment experience, the traits being activated and the extent the assessment can provide a realistic job preview.

Typically two types of relevance are considered when designing the content of the test, the task fidelity and the response fidelity (Lievens, Buyse & Sackett, 2005). Task fidelity is the extent to which the test is reflective of the realistic challenges faced in the role. Response fidelity refers to how much the response format corresponds to how individuals would respond to a work simulation.

For task fidelity, research has primarily compared text based SJTs with multimedia versions. Not surprisingly Multimedia simulations are typically shown to have higher task fidelity. However, even though the multimedia format can enable the test to have greater fidelity, it does not guarantee that the test will actually be realistic or immersive. Despite the format
being of higher fidelity how do you ensure the tests are actually relevant to the role and eliciting behaviours that are relevant to the role? This session will detail the steps taken to address these challenges.

**Project Background**
The number of calls handled by ambulance services in England is increasing by 6.5% on average each year, which is equal to approximately 300,000 extra calls. In fact the demand for 999 services is growing faster than both population growth and the growth in demand for other urgent and emergency care services such as A&E. As a consequence the need for Call Handlers is growing each year.

Arguably the role of a Call Handler is quite challenging due to the nature of the calls and the difficulty of the decisions that they need to make. Effective communication is critical for Call Handlers as they will deal with the public, patients, GPs, health centre staff (medical and non-medical), other healthcare professionals and other emergency services to ensure patient care is delivered effectively.

When designing an assessment for any role there is typically a challenge associated with ensuring the tools are relevant and appropriate. Relevance was a key requirement for this project as there were concerns with retention and that new employees were leaving due to not fully understanding the job before starting. As a consequence, a key requirement was to assess individuals in a way that was identifying talent and providing candidates a realistic representation of the challenges of the role.

**Solution Design: Steps taken to ensure relevance**

1. **Ensuring the test format is relevant for both the 999 and 111 services**

As a first step, the ambulance service was keen to ensure that the tests designed were applicable across both 999 and 111 Call Handler roles. There was a perception that the roles required different skills due to differing profiles of the calls taken by Call Handlers.

As a consequence the first task on the project was an initial exploratory piece of job analysis to identify whether there was a discernible difference between the two roles and specifically whether a different test format would be needed for each. The job analysis involved shadowing Call Handlers across the services and utilising the critical incident technique to unpick common situations and effective behaviours.

The conclusion was that despite the nature of the typical calls being different, the qualities needed in new recruits were the same for both 999 and 111. Based on the job analysis and reviewing the academic literature it was determined a multimedia SJT using an effectiveness rating scale was the most appropriate form of assessment. A specification of the test format was proposed to the client and example assessment items were developed to provide a proof of concept.

This approach ensured the client could evaluate whether the assessment approach suggested were relevant for both 999/111 call handler roles and whether this approach was fit for purpose. This stage was very useful for identifying ways to enhance both the task and response fidelity of the assessment.

2. **Measuring values relevant to the role**
Relevance of what the tool was measuring was also a key concern. Due to the nature of the role, it was identified that the Multimedia SJT would need to measure values and behaviours core to South Western Ambulance Service.
While personal values are deep-rooted beliefs held by individuals that are not directly visible, it is generally recognised that personal values influence decision-making and behaviour (e.g., Fritzche & Oz, 2007; Homer & Kahle, 1988). SJTs are multiple choice tests which measure judgement and decision-making in a range of realistic work situations, and therefore could provide a ‘window’ into an individual’s personal values. To ensure relevance it was seen as very important to assess the organisation’s values and behaviours detailed below:

- **Compassionate Care** Being sensitive to the needs of other; demonstrating empathy and understanding when dealing with situations.
- **Character of Integrity** Acting in an open and honest manner; maintaining ethical and moral standards even when under pressure.
- **Professionalism** Taking pride in their own work and seeing beyond their own immediate need; working in a reliable, dependable, and respectful manner.

Each value was broken down to a set of behavioural indicators. These were used to guide the design of the scenarios.

Reviews were carried out with multiple psychologists to ensure that the items were eliciting and measuring the values detailed above. Subject Matter Experts also reviewed the scenarios once they were finalised and were asked to evaluate whether the scenarios measured the value they claimed to measure.

3. **Ensuring high task and content fidelity**
   The most important stage when designing the test was the content design. A second round of job analysis was carried out; the focus was to identify the content for the test and to understand what the most common types of call were. Four business psychologists shadowed 999 and 111 call handlers, a total of 30 Call Handlers were interviewed at this stage.

The other key challenge for maintaining relevance of the assessment was understanding and incorporating the triage software Call Handlers use. The software is designed to triage any health problem, provide a script to the Call Handler and refer the caller to the appropriate service either within or outside the service. Therefore, it was important that the scenarios designed represented realistic responses that were aligned to the triage software’s suggestions and prompts.

When designing the content of the test it was very important to identify typical calls the Call Handler will have to deal with. However, arguably more essential to the content design was identifying appropriate times on the call where the Call Handler was able to directly influence the situation or respond in a way that was not scripted by the triage software. By identifying these appropriate moments, the scenario authors were able to create dilemmas for the candidate that were still realistic and relevant.

4. **Stakeholder reviews and workshops**
   The scenarios were designed by the four business psychologists as scripts, which were reviewed by multiple stakeholders and subject matter experts (SMEs) to ensure that the content was clear and that the actions reflected relevant behaviours for an ambulance Call Handler. More scenarios and items were written than would be required for the final test and items were updated based on feedback. Once the scripts were reviewed and amended, workshops were carried out with 12 SMEs from the 999 and 111 services.

The purpose of the workshops was to ensure that all the language used for the responses were realistic and all of the direction provided for the actors (who would be acting out the scripts once finalised) was clear. Any scenarios that were identified as unrealistic were dropped and not used. After the workshops the experts reviewed the content one more time so that all the language used in the final test was agreed upon and was identified as realistic.
5. Trialling and Evaluation
Following this review, the scenario content was then recorded into audio clips. To maintain relevance the production company listened to 999 and 111 calls as guidance and three psychologists attended the recordings to ensure each audio clip was an accurate reflection of the scenario script, and the situations they were representing. Once produced the audio clips and test content was implemented onto an online platform for trialling. The trial version of the test included over 50% more scenarios and actions than needed for the final test.

An expert group consisting of 30 managers and supervisors of ambulance call handlers completed the test and were used to define how effective or ineffective different response items were to each of the scenarios. A scoring key was established based on expert consensus which could be used to assess applicants. A second trial was also carried out which consisted of 221 applicants to the Call Handler role to create a relevant benchmark.

The scores obtained by 77 applicants to 999/111 call handler roles demonstrated a statistically significant relationship with their interview scores at a later stage in the recruitment process. The correlation coefficients was .31 for the test (p<0.01). This provided initial evidence of the effectiveness of the new online assessment.

6. Implementation and Monitoring Live Use
The assessments are now in live use by South Western Ambulance Service. 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’s feedback regarding the relevance of the assessment format, additional validations studies and a review of whether there are any subgroup differences.

Summary
This project demonstrates the practical steps taken to ensure relevance when designing a multimedia SJT. The use of this type of assessment is something that has yet to be used commonly within the emergency services. However, the initial feedback received suggests that the assessment has been greatly valued by the organisation and candidates. In this project, we attempted to address the requirement for relevance by immersing ourselves in the role and involving experts at every stage of the design process. In the session, additional analyses based on live usage and candidate experience will be shared.

References

T25 Standard Paper
Safety Leadership: Applying a Person-Centred Approach
Sara Guediri, Sharon Clarke & Elinor O'Connor, The University of Manchester
Category: Leadership, Engagement and Motivation
To date, the most common way to study the effects of leadership on workplace safety has been through a variable-centric approach Studies investigating the effectiveness of leadership, tend to focus on a particular leadership style, such as transformational leadership (TFL) and transactional leadership (TAL), and test whether these explain unique amounts of variance in
workplace criteria. However, exploring individual leadership practices in isolation does not reveal the full picture of how leaders combine different behaviours in their day-to-day leadership practices and what effect different combinations of multiple leadership styles have on important workplace outcomes such as occupational safety. In real-life, managers and supervisors are unlikely to exclusively engage in TFL, TAL or any other, sole leadership style for that matter. Person-centric approaches recognise that different leadership styles are used in conjunction and uncover underlying profiles or patterns of how managers combine leadership styles. Adopting a person-oriented approach, we assess in two separate studies, the relationship between differential leadership profiles (i.e., different combinations of high/low/moderate levels of TFL, TAL and passive leadership) with safety incident rates (study 1) and safety performance (study 2).

When Avolio and Bass (1995) conceptualized the ‘full-range leadership model’, they envisioned that TFL and TAL leadership styles are exhibited alongside each other. Leaders might be transformational, transactional as well as passive to varying degrees, and their leadership influence is dependent on how they combine the different styles. However, current leadership thinking seems fixed on being able to prescribe one, ideal leadership style (Hannah, Sumanth, Lester, & Caverretta, 2014). Hannah et al. (2014) argue that to overcome the prevailing focus on single, individual leadership styles, research needs to unravel the difference between ‘types of leaders’ and ‘types of leadership’. Leadership research often makes reference to ‘transactional leaders’ or ‘charismatic leaders’. Hannah et al. (2014) clarify that TFL is a leadership behaviour, but that a ‘transactional leader’, who solely exhibits transformational leadership behaviours, is unlikely to exist nor desirable in real-life management. Certain ‘types of leaders’ might rely to a greater or lesser extent on certain ‘types of leadership’ such as TFL, TAL and passive leadership (PAL), but the two are not synonymously to each other (Hannah et al., 2014). For example, a positive relationship between TFL and workplace safety implies that TFL behaviours are beneficial for safety, but does not necessarily mean that a leader type who solely and relentlessly adopts TFL practices is most effective for safety. Adopting a person-oriented approach helps to disentangle this difference by exploring the existence of different ‘types of leaders’ based on configurations of multiple ‘types of leadership’. Workplace safety lends itself as an important outcome criterion that requires a person-oriented approach as evidence shows that multiple leadership styles are important for driving safety. It has been theorised that maximising workplace safety requires compliance as well as pro-active participation in safety matters, and that it is therefore critical that leaders display task-oriented, instrumental leadership such as TAL practices as well as inspiring, charismatic tactics such as TFL (Griffin & Hu, 2013). We therefore propose that leader profiles with high levels of both TFL and TAL have higher means of employee safety performance and lower safety incident rates compared to a leader profile with high-levels of either TFL or TAL and compared to profiles that are characterised by high-levels of passive leadership.

**Research Question 1:** Are there distinct profiles of leaders’ combination of transformational, transactional and passive leadership style?

**Research Question 2:** Do leader profiles based on differential combinations of transformational, transactional and passive leadership style relate to different levels of safety incidents (study 1) and safety performance (study 2)?

**Method**

In study 1, survey data was collected from managers, who are enrolled in or are alumni of a MBA program and operate in a work environment where safety is relevant (N = 390 managers). Study 2 uses leader and subordinate ratings to overcome the issue of single-
source bias. Study 2 was conducted with two host organisations from the manufacturing and oil and gas sector (N = 160 subordinates and 21 leaders).

**Transformational leadership, transactional leadership and passive leadership** were assessed by Avolio and Bass’s (1995) Multifactor Leadership Questionnaire (MLQ version 5x-Short).

**Safety incidents (Study 1).** Participating managers reported the number of work-related safety incidents that had occurred amongst their subordinates, during the past twelve months.

**Safety performance (Study 2).** Leaders rated their subordinates’ safety compliance and safety participation on Griffin and Neal’s (2000) six-item scale.

**Results**

Latent Profile Analysis was conducted using MPlus Version 7.1 (Muthen & Muthen, 2010). With regards to Research Question 1, in both studies a four-profile solution emerged as best fitting (fit statistics in study 1: AIC = 1578.32; BIC = 1649.71; Entropy = .73; fit statistics in study 2: AIC = 830.12; BIC = 885.47; Entropy = .84). Based on the estimated mean values within the four leader profiles, we labelled these as following (Figure 1): a) **stable-moderate leaders** (moderate TFL and TAL, low PAL), b) **active leaders** (high TFL and TAL, low PAL), c) **passive-avoidant leaders** (low TFL and TAL, high PAL), and d) **inconsistent leaders** (moderate TFL and TAL, high PAL). We tested whether safety incident rates (study 1, Table 1) and safety performance (study 2, Figure 2) differ across the four identified leader profiles.

**Table 1. Relationship between leader profile and distal outcomes in study 1 (safety incidents).**

<table>
<thead>
<tr>
<th></th>
<th>Stable-moderate Leader Profile (A)</th>
<th>Active Leader Profile (B)</th>
<th>Passive Leader Profile (C)</th>
<th>Inconsistent Leader Profile (D)</th>
<th>Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Incident Index</td>
<td>.14</td>
<td>.16</td>
<td>.23</td>
<td>.23</td>
<td>1.58ns</td>
</tr>
</tbody>
</table>

*Note. Analyses were conducted using the DCON command (Lanza, Tan, & Bray, 2013) in MPlus 7.1. The values are estimated means for each profile.*

Safety incidents were lowest in the stable-moderate profile, although differences across the four profiles were not significant. Levels of subordinates’ safety performance were also highest in the stable-moderate leader profile. For safety performance and safety participation (but not safety compliance) mean estimates were significant between the stable-moderate leader profile and inconsistent leader profile. Thus, the results from both studies show a stable-moderate leader profile, which is characterised through moderate levels of TFL and TAL coupled with low PAL as the optimal leader profile for enhancing safety performance. The inconsistent leader profile was associated with the lowest safety performance ratings.

**Discussion**

With regards to Research Question 1, results in both studies identified four distinct leader profiles. This is an important finding as it provides insights into the nature of how leaders exhibit multiple leadership styles conjointly. Interestingly, we did not find evidence for a latent profile that combines opposing levels of TFL and TAL (e.g., high TFL and low TAL). Instead within each of the four profiles, the frequency with which leaders adopt TFL and TAL practices corresponded. This finding underlines the need to distinguish between leaders and leadership (Hannah et al., 2014). The profiles that emerged in our studies suggest that there might not be ‘transformational leaders’ or ‘transactional leaders’, but instead that leaders naturally use these active leadership styles in similar measures.
Our results indicate that the optimal leader profile for enhancing safety performance is defined through moderate levels of TFL and TAL. Thus, very frequently engaging in TFL and TAL might not deliver additional benefits beyond a regular, stable adoption of these leadership practices. The inconsistent leader profile was associated with higher safety incident rates (study 1) and poorer safety performance (study 2) (Research Question 2). The identification of this inconsistent leader profile underlines the importance of a person-centric approach showing that some managers and supervisors might be in equal measures active and passive in their approach to leadership.

**Practical Implications**
As a general implication, it can be suggested that safety leader development programmes should consider taking a person-cantered approach that focuses on the development of optimal leader profiles rather than training managers and supervisors in single leadership styles. The finding that the stable-moderate leader was associated with the highest safety performance ratings, suggests that managers and supervisors should consider exhibiting both TFL and TAL in regular, moderate frequency to positively impact on safety. Moreover, the findings on the inconsistent leader profile for safety suggest that it is perhaps most important for leader development initiatives to communicate the detriment for safety of non-leadership that takes effect even if one is at other times highly active in their leadership approach.

**Conference Theme - Research into practice: Relevance and Rigour**
In line with the conference theme the present research is an example how leadership theory can be matched closer to reality and practice by investigating how managers and supervisors are likely to engage in a range of different leadership styles, and the effect of combinations of leadership.

**References**
**Figure 1.** Latent leader profiles based on different combinations of transformational, transactional and passive leadership. Each line represents one latent leader profile as identified through Latent Profile Analysis. Lines connect estimated mean values for transformational, transactional and passive leadership within each profile. Mean values were centered in the interest of profile comparison.

**Figure 2.** z-Standardized means for safety performance, safety compliance and safety participation within the four latent leader profiles in study 2.
T26 Standard Paper
Assessing entrepreneurs: is it possible to pick a winner?
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 behaviour and the consequent success or otherwise of their businesses. While the value of the average entrepreneur to the UK business economy is around £130,000 annually, rates of new business failure are extremely high, 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. The study question sought to understand: the inter- and intra-group differences between and within the study entrepreneurs and UK managers. Therefore, the study aimed to determine the personality and motivation traits that existed in the entrepreneurs, along with the inter- and intra-group differences that existed with the UK business population, as represented by the UK norm groups of the psychometric measures adopted. In this way, it speaks to both the ongoing debate on psychological assessment at work, and the conference theme of relevance and rigour.

A theoretical framework is provided through Schneider’s (1987) attraction-selection-attrition (ASA) model, which has been used as the basis of a meta-analysis of research on entrepreneurs (Zhao and Seibert, 2006). This is founded on theories of individual difference and occupational fit which, when applied to entrepreneurs conceptualises individuals entering entrepreneurship as initially self-selecting. ASA theorises that, of those attracted to entrepreneurship and sufficiently motivated to select it as a career choice, entrepreneurs who are successful will be those who are psychologically better suited and therefore not removed by attrition, instead, remaining in business. This hypothesised harmonisation process of personality and motivation form the basis for the current study.

Methodology
The rigour of the study lies in its combined use of situation-specific, BPS-registered psychometric measures with individual entrepreneurs in SMEs, and its relevance from the participant group of “real world” entrepreneurs. While the use of these psychometric measures is widespread in business, this is often confined to large firms with large cohorts, for recruitment and promotion. Entrepreneurs, being self-selecting and self-developing, are rarely exposed to such measures. In addition, there is a dearth of studies into the role of individual differences in entrepreneurial success. This may be attributed to the challenges involved in attracting a sufficiently large group of entrepreneurs, contributing, in many cases, to the involvement of business students or nascent entrepreneurs as substitutes. Reviewing the studies included in Zhao and Seibert’s (2006) meta-analysis, in only two of the studies represented was the number of entrepreneurs larger than that used in the current study.

Entrepreneurs were recruited through a process of presentations and networking, and individuals selected themselves for the study by identifying themselves as entrepreneurs. This realist approach represented criterion sampling, individuals being targeted through membership bodies such as the Chamber of Commerce, where it was felt that the population of entrepreneurs might be denser than elsewhere. While random sampling would have been ideal, this approach has extensive precedent in the literature through the use of secondary data such as that generated by the Global Entrepreneurship Monitoring Study (GEMS).

Full study information, including the right to withdraw for any reason or none, at any time was also provided.
Data analysis and results
While the psychometric measures reported in STENs, the underlying raw data for both personality and motivation were used in the analysis. T tests were primarily used to test both for differences between the study entrepreneurs and the UK managers as well as for differences within the entrepreneurs, using 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.

Entrepreneurs were significantly different in both their personality and motivation traits than were UK managers. The largest differences in personality were in their approach to tasks and projects, with the largest mean difference being in creativity. In their motivation, the largest differences were found in connection, esteem and personal motivators, with a lower motivation for security and acquisition and a greater need for autonomy and authority. Within the participant group, there were differences in both personality and motivation by age and gender.

Evidence suggests that entrepreneurs who do better in business have significantly different psychological trait profiles than those who do less well. Entrepreneurs who have been trading for in excess of five years, who employ greater numbers of people and achieved the highest financial turnover, share distinct similarities in their trait profiles. In motivation terms these conditions relate to lower levels of motivation for job security and organisational stability, along with being high for authority. That is, the preference is to take charge of tasks and direct the jobs that need to be done.

Discussion and conclusions
Entrepreneurs, especially at the point of start-up, occupy a situationally weak position, with relatively few behavioural cues and expectations. In these circumstances, individual personality and motivational traits would be expected to be more influential on behaviour.

The study supports the consensus in the trait literature that entrepreneurs are different in both their personality and motivation than are UK managers. In this, there is equally support for Attraction-Selection-Attrition theory. The novelty of utilising psychometric measures of both personality and motivation within the same study yielded interesting results that supported the view of motivation as a mediator between personality and behaviour.

Within the entrepreneurs, there were differences in both personality and motivation by individual and business-level independent variables. The personality profile depicts individuals who are unlikely to lack creative ideas, prefer to plan their own course, while feeling little need for external validation. They may be prone to experience some anxiety and frustration, leading them to seek situations where they can lever greater control.

The entrepreneurs have a lower regard for certainty, stability or job security, instead being motivated by a desire to act as and when they please, taking responsibility for their actions and providing support for others. It is important for the entrepreneur that their business and personal values harmonise.

In terms of differences by gender, male and female entrepreneurs showed greater similarities to each other than with respective participants within the norm group, providing further evidence of a distinct “basket of traits” for entrepreneurs.

At a business level, considering turnover and the number of employees in the entrepreneurs’ businesses, a degree of support for the existing literature is forthcoming, although trait Conscientiousness was problematic. This supports the discussion surrounding the need to consider the composite sub-traits of the Big Five as well as the value of studying personality
in tandem with motivation. Outcomes on business factors and motivation largely supported earlier literature.

In conclusion, while the entrepreneurs were not a homogenous group, there is strong evidence that they are significantly different, in both their personality and motivation, than the UK business population. Taken together, the profile of a successful entrepreneur transposes into a portfolio of effective behaviours.

Contributions
This study is likely to be of interest to practitioners and conference delegates because of its contribution to trait theory in entrepreneurs, especially its novel deployment of commercial assessment measures. It suggestion of a composite entrepreneurial trait profile comprising personality, motivation and success traits has utility for a number of stakeholders. Identifying individuals better suited to an entrepreneurial career and better able to withstand attrition provides rigour and practical guidance for bespoke coaching, training and support.

Equally, this work will be of interest to policy makers and the public. Entrepreneurship is a UK government priority with support, training and funding widely provided for start-ups. The role of entrepreneurship is an inherently risky venture compared with employment, with business failure rates predicted to rise by 10%. The providing of greater support for those who establish a business is a positive action that mitigates against poor venture survival rates and consequently exerts a positive effect on the UK economy.

References

Interactivity
The session will start with a subject-specific icebreaker to get the audience thinking about definitions of entrepreneurs and entrepreneurial success. This will be followed by facilitated inter- and post-talk discussion on the findings and potential applications to assessment in practice and consultancy.

T27 Award Session 1
Student Prize in Excellence 1st Prize Winner
Category: Professional Affairs and Awards
See Awards Programme Book

T28 Standard Paper
Psychological contract and occupational stressors among UK police officers
Fazeelat Duran, Darren Bishopp & Jessica Woodhams, University of Birmingham
Category: Wellbeing and Work
Psychological contract refers to the perceptions of an employee and their employer regarding their mutual obligations towards each other (Rousseau, 1989). This construct is based on “social exchange theory” (Blau, 1964) and is reciprocal in nature (Rousseau, 1990). Organizations that ensure fulfillment of the psychological contract are able to sustain effective employment relationships (Guest, 2004). Psychological contract has been shown to impact on employee and employer behavior and well-being (Coyle-Shapiro & Kessler, 2002) and effects the employee’s intentions regarding whether to resign or stay with an organization (De Cuyper & De Witte, 2006; Flood, Turner, Ramamaoorthy & Pearson, 2001).

Policing is identified as one of the most stressful occupations in the world (Liberman at al., 2002) because of organizational, personal and incident-related stressors. Organizational stressors include a heavy workload, staff shortages, poor communication and inadequate
support (Brough, 2004). With more than 126,000 police officers employed in the UK (Home Office, 2015), work-related stress has the potential to be a significant issue for many individuals.

There is strong evidence (such as Guest, Isaksson & De Witte, 2010) that psychological contract has significant effects on well-being in many sectors, including commercial, business, educational, and retail. However, there is minimal information about the role of a psychological contract within policing. Past studies have been mixed: the psychological contract and fairness has been found to be positively associated with organizational citizenship and psychological distress within policing (Chen & Kao, 2012; Noblet, Rodwell & Allisey, 2009), yet other research found that the satisfaction of psychological contract needs did not make a significant contribution to a demand-control support model in police officers (Rodwell, Nobelet & Allisey, 2011). Interestingly, fairness was a significant predictor of psychological distress in police officers Both studies were based on policing models from Taiwan and Australia and did not focus on investigating the impacts of psychological contract on the well-being of police officers.

The rationale for applying the psychological contract theory in UK policing was to investigate its impact on their well-being because the psychological contract is a useful tool in identifying factors having a negative effect on the well-being of employees (such as Conway & Briner, 2005; Guest et al., 2010; Middlemiss, 2011).

The purpose of this study was to examine the extent to which occupational stressors and multiple facets of psychological contract theory predict well-being in UK frontline police officers. The fundamental objective of this research was to investigate how the psychological contract was associated with occupational stress and well-being among police officers. In order to achieve this aim the following hypotheses were formulated:

**H1:** Fulfillment of employee and employer obligations, psychological contract violation, trust, and fairness predicts general well-being and job-related well-being in police officers.

**Method**
A cross-sectional survey was used to achieve the research objectives and G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009) estimation of the minimum required sample size was 118 police officers (F-Test in multiple regression, a priori analysis).

**Procedure**
The sample consisted of police officers ($n = 127$) employed in the UK. The data was collected from any active police officer regardless of the length of service. The officers were asked to complete a self-report on-line survey (administered through LimeSurvey) consisting of Psychologica\nal Contract across Employment Situations Scale (PSYCONES; Isakson et al., 2005); General Health Questionnaire (GHQ-12, Goldberg & Williams, 1988); the Sources of Occupational Stress Scale (SOOS-14; Kimbrel, Steffen, Meyer, Gulliver, & Kruse, 2011); and Job Related Well-being Scale (JAWS; Sevastos, Smith, & Cordery, 1992).

**Results**
Before running multiple regression analyses, the assumptions of regression were checked using IBM SPSS 22 and the assumptions were met. Hierarchical regression analyses were performed for multiple criterion variables (general well-being, job-related depression, and job-related anxiety). The order of the entry of the predictors was based on the literature.

The results of the analyses indicated that occupational stressors, psychological contract violation, employee and employer obligations fulfillment, trust and fairness model accounted for 27% of variance in general well-being, 46% of variance in job-related depression and 44% of variance in job-related anxiety within police officers. Moreover, psychological
contract violation and occupational stressors were significant predictors of psychological distress.

Discussion
The aim of this study was to examine the extent to which occupational stressors and multiple facets of psychological contract theory predict well-being in police officers. The results provided evidence that, as with the other organizations/sectors, psychological contract is a significant predictor of well-being amongst police officers. Thus, the results are consistent with Dick (2006) arguing that the sources of psychological contract are important for understanding the cause for non-mutuality of understandings in police officers. Moreover, our findings complied with Noblet, Rodwell and Allisey (2009) findings that fairness is a significant predictor of psychological distress among police officers. The limitations of this study were that the data were collected from one police force in the UK and the design of the study was cross-sectional.

Implications
While little can be done to make policing as an occupation less perilous, there is the opportunity to impact on other factors that can affect the physical and psychological well-being of police officers. This study highlighted some factors that if controlled or reduced could improve the well-being of the police officer (i.e., psychological contract violation, fairness and trust). By studying police officers’ psychological contract and thus their expectations of employer-employee relationships and responsibilities, we can better understand which occupational areas need attention. We can also anticipate the negative consequences that are likely to follow an "event" in policing which affects employer-employee relationships and obligations. This greater scrutiny would not only benefit the employee but also the employer (the organization).

Conclusion
Psychological contract and occupational stressors proved to be significant predictors of well-being amongst police officers in the UK. In future, greater attention should be paid to psychological contract theory when developing strategies to limit the impact of occupational stressors and psychological contract violation among police officers.

References


**T29 Keynote Session**

**Psychosocial safety climate: Productivity vs Psychologically Healthy Work**

**Professor Maureen Dollard**, University of South Australia

*Category: Plenary Session in the Grace Suite*

Maintaining a mentally healthy and productive workforce is a seemingly inevitable challenge in capitalist economies. Psychosocial safety climate (PSC) is the organisational climate for worker well-being, psychological health and safety that reflects management values regarding the balance of productivity vs worker psychological health. Taking the psychosocial safety climate as the focal point this presentation will explore the multilevel nature of influences on worker health. Evidence supporting the expansion of work health (stress) theories to include national (e.g., culture, legislation and regulation, corrupt values, welfare regimes, union representation), organisational (e.g., PSC) and team level factors will be explored. International research showing the impact of PSC on working conditions, health and productivity; cost estimates for improving PSC at work; PSC benchmarks for job strain and depression; and implications for work systems improvements will be discussed.

**T30**

**DOP’s 2016 Member Survey: The Results**

**Roxane L. Gervais**, Chair, Division of Occupational Psychology

The Division of Occupational Psychology (DOP) surveyed its members in 2016. The Division administered the last member survey in 2012, with the British Psychology Society gaining information on the membership in 2014. Previous DOP surveys (2011 and 2012) concentrated on members’ perception of the Division, including their satisfaction levels. This present survey gained information on the members’ work practices, those areas on which they focus primarily and those types of organisations that require their services. The Division had 3817 members as at July 2016, just prior to when the survey was first administered. The survey was advertised through a flyer in *The Psychologist* and then via the Division’s listserv, to those 2177 members who had opted in to receive e-mail communication from the Division.
Initial results showed that most of the respondents worked in the following areas: leadership (62%), learning and development (62%), coaching (61%), and training and development (61%). Fewer of the respondents worked in disability in the workplace (11%), human factors (9%), unemployment support (8%), occupational safety and health (8%), and human machine interaction (7%). In terms of job tasks, most of the respondents tended to (almost always) identify client needs (50%) or use the consultancy cycle (35%). Respondents were less likely to facilitate return to work for individuals (never: 45%, rarely: 27%), or to use selection system design (never: 19%, rarely: 25%). The respondents seemed to have good control over their work with most of them noting that they could give input into decisions that affected their work (almost always: 49%, usually: 43%) and knew what was expected of them at work (almost always: 57%, usually: 38%). However, the influence that the respondents had in improving organisational practices could be improved (extremely influential: 15%, very influential: 27%). The findings for those skills or competencies that the respondents used as part of your daily role showed that they were most likely to use consultation skills (80%), financial acumen (53%), and project management (74%). They were less likely to facilitate employee assistance programmes (4%) or occupational health programmes (7%).

This session provides an overview of the results and welcomes discussion on how the Division could use the data in developing the profession further. This could include determining how and where occupational psychologists could increase their influence in the workplace.

T31 Standard Paper 6821
Does the Emotional Intelligence of leaders influence the emotional climate of the organisation?
Jolyon Maddocks, JCA Global
Category: Leadership, Engagement and Motivation
Emotional Intelligence (EI) is well established as a model and process for coaching individuals and developing teams. However, there is far less research and practice on developing Emotional Intelligence within the organisation as a whole. This research provides evidence for the relationship between individual EI and organisational EI (Climate). Both the EIP (16 scales) and LCI (12 scales) have strong psychometric properties with regards to internal reliability, criterion validity and factor structure.

Methodology
A sample of 108 senior managers who completed the EIP and LCI (including external raters) was analysed to test three research questions:
1. Does a leader’s self-perceived Emotional Intelligence, as assessed by the EIP, correlate with the emotional climate or tone they set within the organisation, as measured by external raters on the LCI?
2. Do scores on the EIP scales correlate positively with the positive clusters of the LCI: Visioning, Stretching, Encouraging, Collaborative, Trusted and Appreciative?
3. Do scores on the EIP scales correlate negatively with the negative clusters of the LCI: Competitive, Aggressive, Demanding, Avoidant, Dependent and Rigid?

Results and discussion
Overall almost all of the correlations are in the expected direction. Positive EIP scales correlate positively with the six positive LCI scales and negatively with the negative LCI scales thus supporting the first research question. The majority of LCI correlations for external raters were with interpersonal aspects of the EIP (Regard for Others, Awareness of Others and Relationship Management) indicating that how leaders build relationships has significant impact on the climate they create.
In support of the second research question, higher scores on several EIP scales were found to correlate positively across rater groups with the six positive LCI scales. These include;
Regard for Others, Awareness of Others, Connecting with Others, Trust and Interdependence. This suggests that leaders who value others, understand their motivations and endeavour to build close and trusting relationships are more likely to create a positive emotional climate (Visioning, Stretching, Encouraging, Collaborative, Trusted and Appreciative).

In support of the third research question, lower scores on several EIP scales were found to correlate positively with the six negative LCI scales across rater groups. These include low Regard for Others, low Awareness of Others, low Connecting with Others, Over Independence and low Reflective learning. This suggests that leaders who are less attentive, caring and sensitive to others, less disposed to building close and trusting relationships and less concerned with their self-development are more likely to create a negative emotional climate (Competitive, Aggressive, Demanding, Avoidant, Dependent and Rigid).

Other findings indicated that leaders have less positive impact on their Direct Reports than they do on other groups (e.g. Peers and Line Managers) and that negative leadership behaviours have greater impact on all rater groups than positive leadership behaviours do. This suggests that leaders need to be more aware of how negative leadership behaviour impacts on others (particularly on Direct Reports) as these may easily eradicate the benefits of positive leadership behaviours.

Although the majority of correlations were in the expected direction, there were a few exceptions for Direct Reports. For example, leaders who are more Passive, Dependent and have lower Personal Power were rated as more Trusted and Appreciative by Direct Reports. Leaders with higher Self Regard, Emotional Resilience, Personal Power and Assertiveness were rated as more Avoidant by Direct Reports. This may suggest that leaders with strong Self Management need to balance this with strong Relationship Management so as not to be seen by Direct Reports as too self-sufficient, arrogant or invulnerable.

Conclusion
In conclusion, these findings show a clear relationship between the Emotional Intelligence of leaders and the emotional climate or tone they set within the organisation. A key implication therefore for organisations wishing to build a positive emotional climate is that developing the Emotional Intelligence of their leaders may support and facilitate this process.

BPS submission questions

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

To measure the EI of an organisation JCA developed the Leadership Climate Indicator (LCI).7

The Emotional Intelligence Profile (EIP) was developed by JCA in 1998 as a tool for leadership development.6

Key References

2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?

This research study is a demonstration of applied research conducted within an organisation for a practical purpose. This research gives two recommendations on how to apply EI at an organisational context.

i. A key implication therefore for organisations wishing to build a positive emotional climate is that developing the Emotional Intelligence of their leaders may support and facilitate this process

ii. Leaders need to be more aware of how negative leadership behaviour impacts on others

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

The paper is submitted under ‘Leadership, Engagement and Motivation’ as it shows a clear relationship between leadership behaviour and employee engagement and motivation (reflected by leadership climate as measured by 360 raters).

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

The focus of EI is typically on the individual, but this research introduces a fairly new concept of ‘organisational EI’. This is embedded within a theoretical model shown below that links individual, team and organisational aspects of EI:

![Image of a table showing individual, team, and organisational aspects of EI]

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

The notion that negative leadership behaviour has a greater impact on performance than positive leadership behaviour will resound as true for many people. The implication being that small indiscretions may easily undermine a lot of positive leadership behaviours. At a practical level, awareness of this finding could be very beneficial for leaders.

6. 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)?

A copy of the complete paper

Due to a limited word count all results tables have been excluded
T32 Extended Paper

Researching the boardroom - relevance and rigor

Rachel Duffy, NHS - study was Middlesex

Category: Research Design, Analytical Techniques and Practical Applications

Introductions: What is your experience of research (and practice) of boards? Why do you think this research is important? What do you see as the challenges in engaging and working with this audience?

Theme 1: Why does this research matter?

The need for good corporate governance continues to dominate the challenges that organisations face. The lack of oversight, vigilance and action of the Mid-Staffordshire NHS FT board echo’s the inadequate board oversight, accountability and vigilance diagnosed as the cause of the global financial crisis (Walker, 2009). Walker (2009) and Francis (2013) call for fundamental behavioural and cultural system change. The extent to which we can achieve this is in the hands of boards.

More often than not, improvements in governance practice have been sought by tightening existing guidance in response to corporate failings but the reality suggests that this approach may not be sufficient.

Theme 2: Research context

The search to develop board effectiveness has stimulated a plethora of research seeking to answer the ultimate question: What makes a high performing board? It is hoped that answering this will help to improve governance practice and develop board effectiveness. There is increasing awareness that excellence in governance requires boardroom effectiveness and consideration of the culture, behaviour and dynamics within boards (Bveingto et al., 2005; Pye and Pettigrew, 2005; Walker, 2009). This increasing awareness challenges the traditional agency approach which views composition and structure key to effective governance, and significant and traditional research focused on quantitative methods researching structural aspects and indicators as a focus for improving and understanding board effectiveness. It is widely believed that focusing on these ‘usual suspects’ (Finkelstein & Mooney, 2003) does not lead to improved board effectiveness.

A new paradigm is proposed seeing board process key to making boards more effective (Finkelstein and Mooney, 2003; Pye and Pettigrew, 2005). This paradigm requires a ‘messier and more complex’ research approach to enable us to focus on board ‘processes’. This requires ‘access to the boardroom’ to raise our understanding of the inner working of boards – by talking to board members (Finkelstein and Mooney, 2003). Adopting a ‘messier and more complex’ requires different approaches and methodologies but researchers face unique challenges in gaining access to boards (Leblanc, 2005), and in conducting research into boardroom culture, behaviour and dynamics.

Theme 3: Board context – the realities in gaining access

There’s a uniqueness about boards which provides real challenges to conducting rigorous and relevant research. A key challenge is gaining access, both to the boardroom itself, and to increasing our understanding the dynamics and how the board operates at a deeper level. Furthermore, once we have gained access, it is known that executives are more likely to develop defensive routines that block learning. The realities of board context will be further explored and considered.

Theme 4: Methodology

Methodology

Understanding board process requires moving away from traditional approaches towards more pragmatic, explorative and qualitative methods by observing, talking and listening to
board members to hear about their experiences and insights, and to bring meaning to their experiences. It involved engaging board members at a deeper level.

My choice of methodology and design was informed by the literature review, my practice, and what we know of the board context. It was also informed by the epistemological stance of constructivism where, "truth and meaning do not exist in some external world, but are created by the subject’s interactions with the world" (Gray, 2009: p.18). It was also influenced by the theoretical perspective of interpretivism which is congruent with my epistemology, “the research participants are seen as helping to construct the ‘reality’ with the researcher” (Robson, 2002: 27).

Taking a qualitative approach I used a simple mixed-methods approach comprising literature review, semi-structured interviews with board members and facilitators, and desk research. This used within-method triangulation. I then attempted to establish patterns and meanings from the data.

My methodology incorporated an approach to enable me to gain access to my audience. This involved undertaking a service evaluation of an existing board intervention to hear about the experiences of board members when they participated in this process building on our existing quality assurance processes which had focused on structure and content, to raise insight of their experience and its impact. My participant sample was purposive.

Reliability, validity and robustness
Given this approach I will consider research reliability, validity, and robustness, taking into consideration the challenge by (Gray, 2009) to the objectivity of qualitative research methods.

Ethical considerations
I ensured that my practice was conducted in line with ethical standards in a responsible and morally defensible way. I was conscious of value conflicts and other ethical dilemmas:

“Workplace research often requires respondents to express their views and opinions on work-related issues, some of which might include criticisms of the organization or its management.” (Gray, 2009: p. 74)

Building trust and confidence through respect, integrity and maintaining confidentiality and anonymity is essential in avoiding harm to participants, and obtaining valuable data. Undertaking this research, ‘opening the black box of the boardroom’, was a rare privilege.

- To ensure informed consent all research participants were provided with sufficient and accessible information about the research to enable them to make an informed decision as to their involvement.
- I sought initial access to board members through the existing intervention evaluation online survey. Consent was required and sought from all participants.
- To maintain confidentiality and anonymity of participants in relation to data collection and storage I adhered to the Data Protection Act 1998 in relation to obtaining, recording and storing data.
- I avoided deception by being very clear with participants of the aims and objectives of the study and the commitment and time required.
- I sought and obtained ethical approval from the National Research Ethics Service and ethical permission through Middlesex University Ethics Committee. It also adheres to the BPS code of ethics and conduct.
Theme 5: Undertaking the research activity
The primary focus of this submission is to bring to light the challenges when engaging boards, and insights from personal experience of conducting research in boards. Whilst I will provide an overview of my research methodology the focus of the session is on engaging boards, and therein on my experiences and considerations in preparation, planning and undertaking interviews with board members, i.e. the data collection. It is in these areas that my most insight has been gained.

Interviews were my primary instrument of data and I will discuss my approach to the interviews and my reflective learning as these were undertaken.

I do not intend on sharing the findings or discussion of the topic under investigation (i.e. The opportunity of the board evaluation to develop board effectiveness) – my focus is on how we, as researchers, can engage and work with board members to enable rigorous and relevant research.

Theme 6: My Reflections
My reflections: Overcoming the challenges – gaining access to boards
Having raised the challenges to board access, I share my methodology and approach to overcoming these challenges.

My Reflections: The benefits of being an insider/outsider researcher
Although the objectivity of qualitative research methods is challenged in relation to reliability, validity and robustness, (Gray, 2009) in particular, my being an insider/outsider brought additional considerations in relation to the potential for this to skew my analysis. I found from my experience however that the opposite was true. My reflections on my experience of being an insider/outsider researcher will be considered further with particular attention to the benefits identified when working within this context which supports the findings of Dwyer and Buckle, 2009: 55):

“The issue of researcher membership in the group or area being studied is relevant to all approaches of qualitative methodology as the researcher plays such a direct and intimate role in both data collection and analysis. Whether the researcher is an insider, sharing the characteristic, role, or experience under study with the participants, or an outsider to the commonality shared by participants, the personhood of the researcher, including her or his membership status in relation to those participating in the research, is an essential and ever-present aspect of the investigation.”

Theme 7: Contribution to research and practice – rigour and relevance
Having shared key insights from my research methodology and experience within this context I will bring together concluding themes which I feel contribute to increasing rigour and relevance for researcher and for practice:

• Innovative ways of thinking about how we engage and gain access to boards
  o Methodological appropriateness and fit
  o Working with the realities
• ‘Having a conversation’
  o What does this mean for the role of researcher?
• Being an insider / researcher
  o Getting the balance right
• Practice-based research
  o Research and adding to practice
  o Continued insight and benefit for the client
Responses to questions for submission:

1. Main theories:
   a. New paradigm seeing board process key to making boards more effective
   b. Challenges the traditional agency approach which views composition and structure key to effective governance
   c. Constructivism
   d. Qualitative methods: The personhood of the researcher, including her or his membership status in relation to those participating in the research, is an essential and ever-present aspect of the investigation

2. Rigor and relevance - I am sharing how we can obtain research that is relevant to inform our practice and relevant to the challenges that organisations are grappling with. It also consider use of appropriate methods to enable us to answer the questions we are asking and engage the audience we need to – to ensure its validity, reliability and robustness

3. This submission relates to an approach and methodology of engaging and conducting research with board members into the inner workings of boards

4. The most novel aspect is: my approach to engaging boards utilising a service evaluation approach, ways of gaining insight on board process, challenging the arguments relating to objectivity to consider a relationship approach/working with participants

5. Conference delegates - insight to the board context and challenges stimulating and the insights of the researcher role within this context – towards a more relationship based approach

6. The public - insight into the board context interesting and also bringing a more human perspective to what we consider as the boardroom

7. Not applicable

References

T33 Award Session 2
Academic Contribution to Practice Award Winner
Category: Professional Affairs and Awards
See Awards Programme Book

T34 Standard Paper
Meeting the challenge of safety improvement: a case study of change implementation in community pharmacy
Denham Phipps, Dianne Parker & Darren Ashcroft, The University of Manchester
Category: Work Design, Organisational Change and Development
Introduction
Over the previous two decades, the healthcare sector has seen an increasing interest in quality and safety improvement (Department of Health, 2000). As a result, there have been various efforts to assess patient safety as a precursor to carrying out improvement interventions (e.g. Waterson, 2014). Having gained an insight into safety issues, though, healthcare organisations then face the challenge of making changes to work practices in order to bring about improvement. The aim of the study reported in this submission was to examine attempts by community pharmacy staff to improve patient safety in their pharmacies. We were particularly interested in the use of behaviour change models such as stages of change (e.g. Prochaska et al., 2001) and implementation intentions (e.g. Thürmer et al., 2015) to understand the process of engaging in safety improvement, and in the identification of factors that may facilitate or inhibit improvement (Wilson-Donnelly et al., 2005).

Method
The study used a qualitative case study design. Ten pharmacies in the North West of England were selected on a purposive basis to represent a range of locations, sizes and organisational structures. At each pharmacy we conducted a series of three safety culture workshops with members of staff over a twelve-month period, with all members of staff involved giving informed consent before taking part. During each workshop, staff members were encouraged to discuss issues related to safety culture in their pharmacies, and to identify areas for improvement. In between the workshops, we visited each pharmacy to carry out focus group discussions and informal interviews with those who had taken part; the purpose of these was to discuss what participants had learned from the workshops and the extent to which they had managed to apply any learning to their subsequent practice. With participants’ permission, the workshops and focus groups were audio recorded for transcription. The transcripts were combined with field notes taken during the site visits for data analysis.

Data analysis and results
The data were analysed using template analysis (King, 1998). This involves iterative comparisons between the data and a thematic template, on the basis of which the template is modified until it accounts for the data. The analysis was conducted jointly by two of the authors. The final template was then reviewed by the remaining two authors to ensure that it provided adequate coverage of the research topic.

We identified two main themes from the data. The first theme, “doing safety improvement”, describes the engagement of pharmacy staff in contemplating, preparing for and implementing improvement, consistent with a stages of change model. In some of the pharmacies, staff readily entered into this process, and as a result were able to effect changes in their practice. Explicit consideration of behavioural and implementation intentions appeared to be helpful in planning for improvement activities. In other pharmacies, though, staff were less engaged in the process and so made little or no progress; these participants tended to perceive having less power over the way in which their pharmacy operates.

The second theme, “facilitating safety improvement”, describes the characteristics and behaviours of pharmacies that aid or hinder them in carrying out improvement activities. Participants referred to the prioritisation of safety improvement relative to other organisational objectives, most notably maintaining productivity. Those pharmacies that made the most progress tended to demonstrate a commitment to change on the part of managers and staff, and a working relationship between staff that fosters trust and collaboration. In making improvements they drew upon a number of resources and methods including shared knowledge, safety assessment tools, and resource allocation.
Discussion and conclusions

Our findings illustrate the experiences of community pharmacy staff in implementing safety improvement. These experiences may be understood from the perspective of behaviour change models; for example, the progress that pharmacy staff make in their improvement activities can be described in terms of stages of change. Therefore, these models may provide a useful framework for stimulating or supporting improvement activities. In addition, our findings suggest ways in which a healthcare organisation can build capacity for safety improvement, for example by fostering collaboration and shared knowledge across the organisation, and providing tools for assessing safety needs.

References


T35 Extended Paper

How do we make SJTs fairer?

Mary Mescal & Ali Shalfrooshan, a&dc

Category: Psychological Assessment at Work

Background

Situational Judgement Tests (SJT) are becomingly an increasingly more popular assessment tool across a range of industries and job roles. One of the benefits of the use of SJTs over more traditional psychometrics such as ability tests is with regard to fairness, with SJTs generally demonstrating lower adverse impact for minority groups. However, despite having lower reported levels than other assessments, it has been found that SJTs still cause some level of adverse impact.

Research is moving towards a more open discussion of what can be done in the design of the assessments, which will help to reduce differences in performance between groups. The main focus with regard to adverse impact in SJTs is the performance of Black and Minority Ethnic (BAME) candidates in comparison to White groups. For example, Arthur et al. (2014) found rating formats used can impact performance of certain groups, and Whetzel et al (2008) found a significant correlation between the cognitive loading of SJTs and the difference in performance between Black and White candidates.

Recent research has also focused on the item level analysis of Situational Judgement Tests and how the constructs measured and decisions which have to be made by the candidate may impact the adverse impact overall. Roth et al. (2013) used the Taxonomy of Constructs (Huffcutt et al., 2001) to identify the different constructs measured at the item level of a number of SJTs. Based on this item-level construct identification, they found that cognitively-saturated scales resulted in higher Black-White differences than scales based on Interpersonal items.
The purpose of our session is to present our research regarding item-level analyses of SJTs, involving an exploratory approach to identifying constructs and properties which may impact group differences across different ethnic minority groups. The aim of this research is to help contribute to practitioner knowledge of SJT design by trying to identify certain criteria which should be considered during the development of SJTs.

**Research Objectives and Background**
The objective of our research is to take an exploratory approach in identifying if there are any common features at the item level of SJTs which are associated with higher levels of adverse impact for BAME candidates.

Two text-based SJTs are used as part of this research. The first is an SJT used for the recruitment of Police Constables. The test presents the candidate with 20 scenarios based on the role of a Police Constable and asks them to rate the effectiveness of four actions which could be taken in response to the scenario. The second assessment used in this research is an SJT used in the recruitment of Firefighters. This assessment follows the same basic design of the Police Constable assessment. Both assessments are administered remotely via an online assessment platform.

The two assessments were chosen for this research because despite having a similar design and development process, they have demonstrated different levels of adverse impact for BAME candidates, with the Police Constable assessment demonstrating higher group differences. Consideration was given in both instances to the cognitive load of the assessments, and both assessments also went through a review by diversity representatives to try to ensure fairness for all groups. This posed the question as to whether there was anything different between these two assessments with regard to the item properties, and if this in turn was impacting the performance of certain minority groups.

**Methodology**
Item-level adverse impact analysis was conducted on both assessments in order to identify which items had the greatest group differences. Following this analysis, we are going to take a mainly qualitative approach to identifying the constructs measured in each item. We will firstly conduct a thematic analysis of all the items to identify common recurring themes, constructs, and decision-making criteria. We will use two techniques for this part of the research:

1. Repertory Grid – We will use a repertory grid technique in order to compare and contrast items with different reported levels of adverse impact for ethnic minority groups. We will ask a group of experts to compare and contrast different pairs of items and to identify what constructs make them similar/different. This will identify which items are most closely aligned to which constructs.

2. Identification of Constructs – We will identify the attributes of each individual item by using a Q-Matrix method (Tatsuoka, 1983). This method comes from the Cognitive Diagnosis Model (CDM) literature which focuses on the latent-trait models developed primarily for assessing examinee mastery and non-mastery of a set of skills (eg competencies). We will create a list of possible constructs which are measured in the item. We will draw on the repertory grid analysis to inform this list of constructs. The Q-Matrix approach will involve asking experts to indicate whether the construct is required or not in order for the candidate to effectively respond to the item. The result of this approach will be a matrix indicating which constructs are necessary to respond effectively to each item.
Analysis

Adverse impact was calculated for each item across the two Situational Judgement Tests. This was done using Cohen’s $d$, which is an effect size used to indicate the standardized difference between two means.

For the Police Constable Situational Judgement Test 11,686 participants completed the assessment as part of an application process for Police Constable roles. With regard to ethnic origin, 10,845 of the participants were White and 580 participants were of Black and Minority Ethnic (BAME) origin. The $d$-value for the overall assessment was 0.39, indicating that White candidates performed better overall and the effect size was small. At the item level, the $d$-values ranged from 0.01 to 0.33.

The BAME group was then split into the different subgroups and the $d$-values were again calculated at the item level. The $d$-values at the subgroup level ranged from -0.17 to 0.87. The breakdown of the participants by subgroup was 75 Black participants, 263 Asian participants, 16 Chinese participants, and 226 participants of Mixed ethnic origin.

For the Fire Service Situational Judgement Test, 4,961 participants completed the assessment as part of an application process for Firefighter roles. With regard to ethnic origin, 3,362 of the participants were White and 133 were of BAME origin (a large number did not specify ethnic origin). The $d$-value for the overall assessment was 0.02, indicating that there were negligible differences between performance of the White and BAME groups. At the item level, the $d$-values ranged from -0.10 to 0.19.

Although the subgroups for the BAME group very small for the Fire Service SJT, the $d$-values at the item level were again examined for each group and they ranged from -0.25 to 0.59. The breakdown of participants by subgroup was 16 Asian participants, 6 Chinese participants, 23 Black participants and 88 participants of Mixed ethnic origin.

The next stage of the process will be to conduct a thematic analysis of the items to look for recurring themes/constructs. We will then use the repertory grid method of comparing and contrasting the different items and the development of the Q-Matrix of constructs being measured for each item. In order to do this, a group of psychologists will be asked to take part in both analysis processes. At the end of this process, we should have a list of constructs associated with each item. From this, we will highlight those that are most commonly occurring in the items with higher adverse impact versus those with lower adverse impact. We will present these findings during this session.

Discussion

We have identified two text-based Situational Judgement Tests where, despite a similar design, different levels of adverse impact have been found for Black and Minority Ethnic (BAME) candidates. Through examining differences in standardized means at the item level, we have found a wide range of effect size with regard to adverse impact for different ethnic minority groups.

Building on existing research regarding construct measurement in SJTs and Black-White differences in performance, the results of our exploratory study will be shared. The aim of this session is to share our findings from this research and to outline how these findings may help influence future SJT design processes.

1. What are the main psychological theories, models and research underpinning your session?
   The session will focus on SJT design research and draw on previous research into the impact of certain construct measurement on adverse impact for certain minority groups.
2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
   Our research will use applicant data to assess how different constructs in SJT items may impact adverse impact for certain minority groups. This research can help to inform future design of SJTs in order to help practitioners address issues around adverse impact in selection and assessment.

3. Why is the submission appropriate for the particular category you have chosen?
   We have chosen the “Psychological Assessment at Work” as the research is based on two online SJT assessments, which have been used as part of recruitment processes.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
   There has been little research examining the role of item-level construct measurement of SJTs and the impact across performance of different ethnic subgroups. We believe our approach also presents a new way of examining this aspect and allows us to explore further into how item level SJT design can be improved.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
   Conference delegates involved in this design of SJTs may find this session useful as adverse impact is a constant consideration for those designing assessments of this nature. Equally, the research may be able to reflect possible considerations for those who are involved in the design of other types of assessment method.

6. What might the public find interesting about your paper or session?
   The public may find the constructs highlighted in relation to adverse impact interesting.

References


T36 Extended Paper

**Research into Practice - a two way street**


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

**Introduction**

Although the theme of the DOP Annual Conference 2017 ‘Research into practice’ tends to suggest a focus on examining how research feeds into practice, the opposite is also of great interest to practitioners - to what extent do the everyday insights available to practitioners feed into research?

At the heart of this question is the extent to which the academic research agenda is shaped by:
• Emerging trends in occupational psychology practice
• Practitioners’ working assumptions developed from practical experience in organisations
• Lessons learned from client projects

Concerns have been raised by writers over the past 30 years on a growing researcher/practitioner divide in Occupational Psychology and organisational research more generally (Dunnette, 1990; Gibbons et. al. 1994; Starkey and Madan 2001; Hodgkinson, Herriot & Anderson 2001; Bartunek & Rynes 2014).

One aspect of this issue is the extent to which relationships exist between practitioners and researchers. Hodgkinson et. al. (2001) highlight the growing instance of papers written either entirely by academics or entirely by practitioners, and the decline of papers written in collaboration by mixed groups of practitioners and academics.

Efforts have been made by some UK companies to bridge this divide by retaining academics to advise and collaborate on research. Examples of this include the relationship between BT and Professor Mike Smith of Manchester University during the 1980’s and 1990’s, and collaboration between Professor Peter Warr of Sheffield University and SHL on their research agenda.

Contentions
The session is based on three contentions:
1. That research is insufficiently informed by practice
2. That practitioners could more effectively inform researchers
3. That stronger relationships between practitioners and researchers would lead to more relevant research and more rigorous practice

Survey
If this submission is accepted, a survey of occupational psychology researchers and practitioners will be conducted between October and December 2016 to explore these contentions. The survey will explore the links which currently exist between practitioners and researchers, the nature of these links, and the extent to which these links enable practitioners to shape the research agenda and for researchers to ensure that their research addresses current practical issues.

The survey will canvas views from both occupational psychology practitioners and academic researchers. The researcher sample will be selected from Universities with an established occupational psychology specialism (i.e. an MSc programme or an occupational psychology research unit). The practitioner sample will focus on three groups: occupational psychologists employed directly by companies (e.g. Shell, RBS); occupational psychologists employed by consultancies (e.g. CEB, OPP, KPMG); and independent occupational psychologists.

Session structure
The session will be structured as a short presentation (maximum 15 minutes) followed by a discussion - the discussion will be open to the floor and facilitated by the presenters. The session will be structured as follows:

• Presentation
  o Positioning
  o Contentions
  o Survey
• methodology
• questions
• Results
• Discussion
  o Reactions and thoughts of attendees
  o Suggestions of what could be done to build practitioner – researcher relationships

The purpose of the discussion will be to explore delegates’ views on practitioner – researcher relationships, focusing particularly on the extent to which they see research being informed and influenced by the real-world experience of practitioners. Where delegates feel that there is more opportunity for research to be informed by practitioner experience, the facilitators will ensure that the discussion moves on to explore potential ways that this could be achieved.

Outputs
To gain maximum value from the session the outputs from the session would be summarised in an article for publication in OP Matters, and where relevant, recommendations fed into OP Divisional committees or working groups – for example the Networking & Professional Development Working Group.

References


T37 Standard Paper
Do Air Traffic Controllers have a Risk Type?
Geoff Trickey & Simon Toms, Psychological Consultancy Ltd
Category: Psychological Assessment at Work

Background
The role of ‘Air Traffic Controller’ has few rivals when it comes to handling high-stake risks on a day-to-day basis, so it is unsurprising that risk management is regarded as a priority. Whilst traditional approaches focus upon training, operational procedures, work environments, regulations, and employee health, little research has explored the interaction between personality and risk behaviours. This raises questions about the traditional risk management approach, and whether it just tackles symptoms of risky behaviour without addressing the underlying cause.

The researchers were approached by a major employer of air traffic controllers and asked to provide psychological insight that would inform the latter stages of an on-going selection process. Following successful application in other fields, the researchers proposed a personality-orientated approach that addressed individuals’ reactions, propensities, and aversions towards risk. Although research establishes that broad brush personality
assessments achieve significant correlations with risk, their panoramic perspective has proved unsuited to the task. When an entire profession and their clientele live or die, quite literally, by how successfully they deal with risk, the researchers saw benefit in an assessment focused specifically on risk personality.

**Methodology**
The preference for a targeted focus on risk personality led to the decision to utilise the ‘Risk Type Compass’ (RTC) psychometric tool. The RTC is based on the highly influential ‘Five Factor Model’ of personality, but focusses upon the elements of that model that have the greatest impact on how individuals perceive, manage and make decisions about risk. Selection of these elements was driven by an extensive literature review of risk-related findings from an extensive series of FFM studies. The researchers identified 24 relevant subthemes. Positive and negative items were created for each subtheme, with the resulting questionnaire being administered to a sample of 328 working adults. Factor analysis indicated that 18 of these themes fit into a framework of four factors, which were given working titles of Calm, Emotional, Measured, and Daring. The opposing nature of the former two and latter two factors supported development of two highly reliable bi-polar scales. Arranged orthogonally to cross at their means, this effectively provided the four points for a ‘compass’ model. The inclusion of four additional ‘compass points’ accounted for the potential interactions, resulting in 8 ‘compass’ points, each designated as a ‘Risk Type’. Detailed score interpretation reflects placement within the continuous 360° spectrum of risk dispositions generated by the model.

The applicants for the Air Traffic Controller position had already undergone a series of assessments, and the 90 candidates completed the Risk Type Compass assessment in the latter stages of the process.

**Results**
The researchers compared results for the 90 Air Traffic Controller (ATC) candidates against the General Population (GP) sample of 8,000 participants to identify how the sample were distributed across the 8 Risk Types. This comparison showed a dramatic contrast between the prevalence of Risk Types within the two samples.

In the GP sample, 15% were the Deliberate Risk Type, yet over 71% of the ATC sample fell into this category. It was equally notable that none of the sample were classified as Carefree (12% of the GP sample) or Excitable (13% of the GP sample) Risk Types, with the Prudent (12%) and Composed (9%) Risk Types coming a distant 2nd and 3rd in the ATC sample respectively. 92% fall within the same quadrant of the compass.

Individuals designated as Deliberate Risk Types will have high scores at the Measured and Calm ends of the underlying scales. They will often appear calculated, sure-footed, and not easily unnerved, but will typically test the ground thoroughly and do things ‘by the book’. Their approach will be analytical and business-like, and they will want to plan ahead and be well prepared. Their position opposite the Excitable Risk Type suggests an absence of those Risk Type characteristics, described as making decisions fuelled by enthusiasm for exciting ideas and opportunities, but tempered by pessimism and sensitive risk antennae. They tend to wrestle over decisions, but go in deep once committed.

While the high prevalence of Deliberate Risk Types in the ATC sample represented the research’s first major finding, the Risk Strength findings are its second. Risk Type Strength is measured from 1-5, and reflects an individual’s proximity to the outer perimeter of the compass where individuals are most likely to conform to the extreme Risk Type description. When compared against Deliberate Risk Types from the GP sample, the Air Traffic Controller group were over than three times as likely to fall into the strongest ‘strength 5’ category. 60% of the Deliberate Risk Types in the ATC sample were placed in either
strength 4 or 5 categories, compared with fewer than 27% of Deliberate Risk Types from the GP control group. These results indicate that not only were the Air Traffic Control sample’s risk dispositions appropriately captured by the Deliberate Risk Type, but also that the associated characteristics are likely to have a very considerable influence on how they will be disposed towards risk in the performance of their jobs.

Conclusions
This study highlights the limitations of the general assumption that risk taking is a simple linear variable; from ultra cautious to reckless. The Risk Type approach demonstrates the utility of recognising the actual complexity of the personality/risk relationship. An individual’s Risk Type is a reflection of their perception, tolerance and propensity towards risk taking, and this insight can be applied in various ways. When used in combination with other metrics from the Air Traffic Controller recruitment process, the Risk Type Compass has generated greater understanding and facilitated bespoke and targeted discussion with candidates around a variety of risk-related topics that are central to the role. These findings also suggest that individuals’ underlying personality traits could have a significant bearing upon the levels of attraction and interest they experience towards specialised, and potentially risky, forms of employment.

The insight provided by the Risk Type Compass is also well suited to development contexts; it helps in identifying various strengths and challenges that influence how an individual approaches and completes tasks. An example for the Deliberate Risk Types in the Air Traffic Control industry could be the need to appreciate that, whilst their calm and business-like manner is likely to prove an extremely valuable asset in coping with the stress of their role, that same high level of calmness may also prove a barrier to communicating the potential urgency of a situation to pilots.

1. What are the main psychological theories, models and research underpinning your session?
The main psychological model underpinning the session is the Risk Type allocation identified by the 'Risk Type Compass' (RTC). The tool is based upon the influential ‘Five Factor Model’ of personality, and focusses on the elements of that model that are most relevant to understanding how individuals perceive, manage and make decisions about risk. The research is based upon data generated from the latter stages of a selection process for a role in Air Traffic Control, as all applicants were assessed using the RTC.

2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
The submission ties in closely with the conference theme, as the research is based upon a ‘real-world’ application of a personality assessment that was used as part of a rigorous selection process for a high-risk and specialised role. This enabled the researchers to analyse data derived from high quality practice, in the form of a well-structured industry-based recruitment programme.

3. Why is the submission appropriate for the particular category you have chosen?
The research is central to the ‘Psychological Assessment at Work’ category as it draws upon data generated from an established psychological assessment tool that has been applied to various work contexts across numerous countries. The most notable characteristic of the research is the sample, which is comprised of job applicants for an intense work environment involving potentially extreme stressors that could have serious psychological implications for the individual. Understanding how individuals will psychologically perceive and react to these stressors is a key priority of the selection process, and this was used as clear justification for incorporating an established psychological assessment into the programme.
4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
The most novel aspect of the project was the focus on a highly specialised form of employment. The Air Traffic Control industry involves recurring high stakes decision making and a constant requirement to adhere to well-established protocols and procedures. The importance of tracking the psychological well-being of these workers is a well-established industry priority, yet the benefits of personality assessments during stages of selection and/or development are less well known. The current research is inherently innovative due to its focus on addressing this shortfall, and provides a strong case for why such assessments should be used in the future.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
The usefulness to conference delegates will lie in the familiarity of the assessment (due to its Five Factor Model conceptual grounding) alongside its novel application (i.e. a highly specialised job role). Effectively functioning in the high risk environment of air traffic control ties in closely with an individual’s ability to work under pressure, and utilisation of a personality assessment has enabled the resulting research to better understand and identify some of the most prevalent traits that can help facilitate this functionality.

6. What might the public find interesting about your paper or session?
The project will be of particular interest to members of the public who are interested in how psychological assessments can provide key insights to recruiters and assessors from more specialised industries. The unique characteristics reflecting the sample are likely to be readily identifiable to the public, and the session will demonstrate how these characteristics are translated into psychological concepts that can be identified by relevant tools.

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)?
All delegates will be provided with the slides and accompanying notes of the presentation upon request. The full research report can also be provided upon request.

T38 Standard Paper
Emotional intelligence: is it more relevant than we think?
Nikhita Dost, OPP Ltd
Category: Learning, Training and Development
Emotional intelligence is a popular concept amongst the general public, businesses and Occupational Psychologists. However, individuals do not always realise the full effects of improving emotional intelligence. Therefore, Occupational Psychologists have an important role to play in demonstrating the objective value of emotional intelligence for a business.

This paper describes an example of assessing the effectiveness of emotional intelligence training at a large UK retailer. It also shows the relevance of emotional intelligence in meeting key organisation-wide objectives, and suggests that investing in emotional intelligence training could be directly relevant to such goals.

Aims of the research
In carrying out this research, the retailer wanted to understand the effectiveness of their emotional intelligence training programme. In particular, they wanted to understand the relevance of improving emotional intelligence for customer focus, resilience and authentic leadership, three aspects directly relevant to the organisation’s leadership model.

Why emotional intelligence?
Emotional intelligence was identified as an important factor in helping to meet the needs of individuals and the organisation. Bedwell (2015) defined emotional intelligence as the ability
to identify, manage and use emotions to improve performance, both one’s own and others’. This was considered relevant for enhancing personal resilience and effectiveness as a leader and the quality of customer and colleague interactions.

Research also suggests that emotional intelligence accounts for differences in work performance beyond that explained by personality and ability measures (Mayer & Salovey, 1997; Landy, 2003). Kostman and Bedwell (2003) found that those with high emotional intelligence and average ability performed better than those with high ability and low emotional intelligence. If emotional intelligence can be trained, this could therefore impact on work performance. This has implications for the way individuals are be selected and developed in organisations. In addition, Slaski & Cartwright (2002) found links to health, well-being and motivational leadership, all aspects relevant to the retailer’s leadership model.

Emotional intelligence training was incorporated into a customer service training program, as part of a novel leadership development program.

Research hypotheses
There were the following main hypotheses for the research:
1) Emotional intelligence levels will be higher after training than before training
2) Emotional intelligence will be linked to customer focus, authentic leadership and resilience.

Method
361 leaders took part in leadership and customer service training. This included emotional intelligence training to identify, manage and use emotions to improve performance. The Emotional Judgement Inventory (EJI) model provided the basis for this training. The EJI measures 7 aspects of emotional intelligence:

- **Being Aware of Emotions**
  - The extent to which you believe emotions are valuable and pay attention to them

- **Identifying Own Emotions**
  - The extent to which you are clear about how you feel at any given time, as compared to confusing similar emotions such as anger and frustration

- **Identifying Others’ Emotions**
  - The extent to which you are confident about your assessments of others’ feelings

- **Managing Own Emotions**
  - The tendency to adjust how you feel e.g. make yourself feel better when needed

- **Managing Others’ Emotions**
  - The extent to which you can influence how others feel e.g. make them feel comfortable or cheer them up

- **Using Emotions in Problem Solving**
  - The extent to which you identify and incorporate emotions into everyday tasks e.g. creating a particular mood to help your creativity

- **Expressing Emotions Adaptively**
  - The extent to which you control how you communicate your emotions depending on the situation, expressing feelings to help achieve a desired outcome

To understand the effect of this training, the participants completed questionnaires both before and after attending training, measuring the following aspects:

- Emotional intelligence (Bedwell, 2015)
• Resilience (Friborg et al., 2003)
• Authentic leadership (Beddoes-Jones & Swailes, 2015)
• Customer focus (Liao & Chuang, 2004)

The questionnaire results were analysed to understand the links between these and links between emotional intelligence and the retailer’s leadership model.

**Results**

1) Participants self-assessed as having higher emotional intelligence levels after the training than before the training. This suggests that, at the very least, individuals who went through the programme had a heightened understanding of how to identify, manage and apply emotions.

The graph below shows the difference in emotional intelligence levels before and after training.

![EQ levels before and after training](image)

2) Emotional intelligence levels correlated with customer focus, authentic leadership and resilience. Full results of statistical analyses will be presented at the conference. In brief, those with higher emotional intelligence showed:

- Better customer focus. Those who were better able to manage and identify their own and others’ emotions had higher customer focus.
- More authentic leadership by being more self-aware and being able to better manage their emotions and behaviour.
- Higher resilience by being better able to manage, express and use their emotions to solve problems.

These findings show direct links between the emotional intelligence training and the retailer’s wider organisational aims.

**Discussion**

Overall, the research demonstrated the effectiveness of the training itself in improving emotional intelligence. If emotional intelligence can be trained, this has implications for both selection and development within organisations. It also identified how the training was relevant to leadership characteristics valued by the retailer, shown in the leadership model. Finally, it showed the relevance of this training for dealing with customers and client-facing
work. Together, this gives support for training emotional intelligence in meeting the needs of individuals and the organisation.

The research highlighted that emotional intelligence is linked to the retailer’s goal of providing excellent customer service. Although emotional intelligence is widely recognised as an important "soft" skill, the findings highlight the importance of emotional intelligence as a key building block for a resilient, productive workforce and a proactive organisational culture.

References
Kostman, I. & Bedwell, S. (2003). Predicting multidimensional performance using cognitive ability, personality, and emotional intelligence. In C. Miller (Chair), Researching emotional intelligence in a personnel psychology context. Symposium conducted at the annual meeting of the Society of Industrial and Organizational Psychology, Orlando, FL.

T39 Standard Paper
Risk management in community pharmacies: the differing approaches of managers and frontline staff
Christian E L Thomas, Denham L Phipps & Darren M Ashcroft, The University of Manchester
Category: Work Design, Organisational Change and Development

Introduction
Organisational resilience has been defined as the ability to cope with and recover from unexpected events and the ability to adapt to new demands[1]. Researchers in organisational resilience have distinguished between Safety-I which proposes that safety is achieved when there is an absence of events that go wrong and Safety-II which proposes that staff must adapt to their behaviour in order to ensure that things go right[2]. An example of the divergence between Safety-I and Safety-II views is in the role of procedures. The attempt to limit the behaviour of employees through the use of procedures is typical of the Safety-I perspective[2]. This approach to safety often views any deviations from procedures as potentially unsafe. From the Safety-II perspective, frontline staff must manage multiple organisational demands within a complex setting[3], which may result in having to work outside of procedures. The aim of our study was to look at the views of community pharmacy staff and managers about procedures, and whether these reflected a Safety-I or a Safety-II view.

Methodology
We used a qualitative design and sampled community pharmacy employees working in England and Wales. For Study 1 we conducted 13 focus groups; ten were with front line staff
and three were with head office staff. Staff came from a wide range of pharmacy types (large sized chains, medium sized chains, small sized chains, independents and supermarket pharmacies) and locations (inner cities, suburbs, towns and rural areas). For Study 2 semi-structured interviews were used to explore specific examples of where employees had chosen to bypass or deviate from procedures. The critical incident technique[4] was used during interviews to explore each example provided to gain a rigorous and standardised account of each violation. Ethical approval was provided by the University of Manchester research ethics committee.

Data analysis and results
The data from both studies were combined. Data was analysed using template analysis; this involves using a priori themes taken from the literature to create an initial template that was then compared to the transcripts[5]. The template was then modified until it adequately reflected the data as a whole. The analysis was conducted by the author CELT, the final template was then reviewed by the remaining authors to ensure that it provided adequate coverage of the research topic.

We identified a difference of opinion between management and frontline staff with regards to the use of procedures to manage risk. Management typically held a Safety-I perspective, as they believed that complying with procedures resulted in the safest practice. However, one management team actively encouraged pharmacists to use their professional judgement to manage risk. On the whole, risk management was somewhat reactive with an emphasis on learning from incidents after they had occurred. Management encouraged frontline staff to make a record of their mistakes, to foster learning in the workplace, however frontline staff often worried that there may be personal consequences from sharing their mistakes.

On the other hand, frontline staff adopted a Safety–II perspective to risk management and often displayed organisational resilience during their work. Staff would often deviate from procedures in order to proactively maintain patient safety and to manage their complex work setting. However, at times procedures were not violated when necessary for patient care; instead staff would deviate from procedures to work efficiently due to feeling that there was not enough staff present in the pharmacy. Staff considered procedures useful for outlining expectations, but felt they did not always reflect the best way to work in practice. Furthermore, the amount of procedures provided was deemed to be too high and some felt they were used to protect companies against litigation as oppose to being used to ensure patient care.

Discussion and conclusions
Our findings explore the opinion of community pharmacy staff regarding the use of procedures to manage risk. We have identified a difference between the views of frontline staff and management with regards to how best to manage risk to patient safety in this setting. Overall, management encourage compliance with procedures typical of the Safety-I approach, whereas frontline employees believe flexibility is crucial for ensuring patients receive appropriate and tailored care[6]. The use of the Safety-I and Safety-II perspectives was useful for helping to frame participants’ philosophies regarding risk management. Conference attendees may find our work useful for understanding how procedures are used to manage risk in complex organisations.

References

T40
Society of Occupational Health Panel: Social Determinants of Health
Charlie Vivian, Consultant Occupational Physician, Icarus Health Solutions; Sally Coomber, President, Occupational Health Services, Public Health England; Maureen Dollard, University of South Australia; Peter Kinderman, President of British Psychological Society & Roxane Gervais, Chair, DOP
Category: Work Design, Organisational Change and Development
The panel will explore how changes at a societal level impact on individuals, and how rates of sickness absence have exploded in the last 30 years, possibly due to political and economic changes. They will take a critical look at the extent to which doctors and psychologists work predominately at an individual level, limiting the potential impact of their interventions. An integrated way forward that understands health in a social context will be discussed.

T41
Getting Started on the Stage 2 Qualification
Angie Ingman, Chair of the Qualification in Occupational Psychology Board & Mollie Williams, BPS - Qualification Administrator
Category: Learning, Training and Development
Please note, this is a repeat of W03 for those who could not attend it on Wednesday.
This session will provide information on the structure of the current qualifications – the UK and International - 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.

T42 Symposium
State of the Art of Game-Based Assessment, insight from a UK start-up
Lara Montefiori, Arctic Shores
Category: Psychological Assessment at Work
Game-Based Assessment (GBA) is becoming increasingly popular in workplace assessment, especially, but not exclusively, in the context of large international companies; graduate and apprenticeship schemes, yet little is known about this fascinating Psychological Assessment approach. This six-paper symposium offers a comprehensive insight on the state of the art in GBA by merging the perspectives of Arctic Shores - GBA pioneer - its recently announced partner Cut-e, and Birkbeck College. Hands-on games, scientific evidence, and a snapshot of the ‘behind the scenes’; work that enables GBAs will be combined to answer questions such as ‘What is GBA? Does it work? Is it fair? Is it science?’; and to stimulate discussion between researcher, practitioners, and the wider audience.
### T42a Paper 1
**The elephant in the room: What is Game-Based Assessment?**
**Lara Montefiori, Arctic Shores**
**Category: Psychological Assessment at Work**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the main psychological theories, models and research underpinning your session?</td>
<td>This session describes the rationale upon which GBAs are developed. GBA is a model in itself.</td>
</tr>
<tr>
<td>How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?</td>
<td>The development of a typical GBA requires months of rigorous scientific research. GBAs offer an unprecedented link between experimental psychology research and occupational psychology practice. GBAs are very relevant at the moment as several large organisations are adopting this method to improve their selection strategies.</td>
</tr>
<tr>
<td>Why is the submission appropriate for the particular category you have chosen?</td>
<td>The submission is appropriate for the Psychological Assessment at Work because it is entirely focussed on a specific workplace assessment method.</td>
</tr>
<tr>
<td>What do you consider to be the most novel or innovative aspects of the ideas being presented?</td>
<td>The session presents several innovative ideas, the most novel of which is the fact that the observation of gameplay offers a reliable and unbiased overview on individuals’ psychological profiles.</td>
</tr>
<tr>
<td>Why do you think conference delegates will find the paper or session stimulating and useful?</td>
<td>There is some confusion around the differences between gamification, gamified assessment and game-based assessment. This paper aims at describing GBA, which delegates will find useful, and at highlighting the opportunities afforded by this novel method, which I hope will provide stimulation and food for thought.</td>
</tr>
<tr>
<td>What might the public find interesting about your paper or session?</td>
<td>The public will have the chance to hear a first person’s account of what GBA is, to understand the core premises of this approach, and to appreciate the vast amount of research that goes in developing GBAs.</td>
</tr>
<tr>
<td>If any, what materials do you intend to make available to attendees and in what format?</td>
<td>We will provide a little booklet for attendees in which we will share the symposium slides, white papers and links to play our games. We will provide those via email as we are a green company.</td>
</tr>
</tbody>
</table>

### T42b Paper 2
**Fairness in Game-Based Assessment. Adverse impact, perceived stress, and effect of screen size.**
**Maria Panagiotidi, Arctic Shores**
**Category: Psychological Assessment at Work**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the main psychological theories, models and research underpinning your session?</td>
<td>This session is based on an important factor of psychological assessment: fairness.</td>
</tr>
<tr>
<td>How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?</td>
<td>This session is particularly relevant in the contest of rigour. We are presenting three compelling pieces of evidence showing that GBA is a particularly rigorous method for assessing individual difference, as it decreases bias from stress and generates no</td>
</tr>
<tr>
<td>Question</td>
<td>Response</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Why is the submission appropriate for the particular category you have chosen?</td>
<td>The submission is appropriate for the Psychological Assessment at Work because it is entirely focussed on a specific workplace assessment method.</td>
</tr>
<tr>
<td>What do you consider to be the most novel or innovative aspects of the ideas being presented?</td>
<td>The most innovative aspect of this session is that comparing performance on identical aptitude items, gender bias is eliminated just by embedding those items in a game environment!</td>
</tr>
<tr>
<td>Why do you think conference delegates will find the paper or session stimulating and useful?</td>
<td>The paper will undoubtedly help delegates to understand more about GBA, and also to really appreciate the robustness of the method. The fact that we can prevent adverse impact and decrease test stress, even in individuals who do not usually play video/mobile games, should stimulate some interest in why and how this has not been achieved before.</td>
</tr>
<tr>
<td>What might the public find interesting about your paper or session?</td>
<td>The public will be interested in knowing that GBAs are a fair method which reduces candidates’ perceived stress, and that they help overcoming the adverse impact of other test formats.</td>
</tr>
<tr>
<td>If any, what materials do you intend to make available to attendees and in what format?</td>
<td>We will provide a little booklet for attendees in which we will share the symposium slides, white papers and links to play our games. We will provide those via email as we are a green company.</td>
</tr>
</tbody>
</table>

**T42c Paper 3**  
**Gaming the game. Game-Based Assessment and self-presentation bias.**  
**Maria Panagiotidi, Arctic Shores**  
**Category: Psychological Assessment at Work**

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the main psychological theories, models and research underpinning your session?</td>
<td>This session is based on self-presentation bias, its occurrence in psychological testing – especially in high-stakes situations – and the ability of GBAs to overcome it.</td>
</tr>
<tr>
<td>How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?</td>
<td>This session is particularly relevant in the contest of rigour. We are presenting evidence from two non-experimental studies and one experimental study in which we demonstrated GBAs’ resilience to distortion, which makes of GBA a much more rigorous assessment solution.</td>
</tr>
<tr>
<td>Why is the submission appropriate for the particular category you have chosen?</td>
<td>The submission is appropriate for the Psychological Assessment at Work because it is entirely focussed on a specific workplace assessment method.</td>
</tr>
<tr>
<td>What do you consider to be the most novel or innovative aspects of the ideas being presented?</td>
<td>The most innovative aspect of this session is that we demonstrate that GBAs are impossible to “game”.</td>
</tr>
<tr>
<td>Why do you think conference delegates will find the paper or session stimulating and useful?</td>
<td>Delegates will find the evidence very stimulating – from a psychometric perspective, we are showing a “bulletproof” solution, from an ethical point of view, which some may feel view as excellent progress, whereas some may feel that depriving candidates of the right to self-present is unethical…</td>
</tr>
</tbody>
</table>
What might the public find interesting about your paper or session?

The public will be interested in knowing that GBAs are harder to fake than other measures. We ran a large survey and most people in the public hold this view already. In our experience, people find the iOS vs Android study very interesting, as it is quite relatable.

If any, what materials do you intend to make available to attendees and in what format?

We will provide a little booklet for attendees in which we will share the symposium slides, white papers and links to play our games. We will provide those via email as we are a green company.

T42d Paper 4
Measurement invariance, and dyslexia as a moderator in game-based assessments.
Liam Close, Birkbeck College

Category: Psychological Assessment at Work

Introduction
Gamification is increasing in popularity within the area of Occupational Psychology. Gamification can be defined as the use of game-based elements in non-game settings (Deterding, Dixon, Khaled, & Nacke, 2011). There has been little research conducted investigating gamified selection methods, which raises questions about their validity. The focus of this research project will be on GBAs that can be used within the selection process to assess participants’ cognitive ability. In this study, we will investigate the measurement invariance of computer based assessments (CBA), in comparison to GBAs, and identify how dyslexia moderates performance in GBAs.

Before the use of CBAs, psychometric assessments were mainly completed in paper-pencil form. In most instances, CBAs were very similar to their paper-pencil counterparts in that items are presented on a computer screen instead of paper and participants select a response on the screen, normally using radio buttons. When assessments became available online, researchers focused their attention on testing for measurement invariance of this new assessment format to ensure that the administration method did not confound the results of the assessment. The majority of studies found that most paper-based assessments (PBA) seemed to show little differences in comparison to their computer-based adaptations (e.g., Hardéré, Crowson, Kui Xie, & Cong Ly, 2007). However, Buchanan et al. (2005) found that when participants completed a measure of prospective memory (a self-report measure which asks participants how often they have lapses in memory), only two out of four factor structures could be recovered in the CBA, whereas previous studies found all 4 factors converged in a PBA of the same measure. The research shows that although most assessments show little differences between methods, measurement equivalence cannot be guaranteed between the two measures (Buchanan et al., 2005), which is why research needs to be done to test for measurement invariance between GBAs and CBAs.

Testing for measurement invariance between PBAs and CBAs has been focused mainly on the normal population, whereas the potential impact dyslexia may have on measurement invariance has been underexplored. Dyslexia is a learning difficulty that is mainly associated with reading and spelling issues (Leather, Hogh, Seiss, & Everatt, 2011), but can also impact processing speed, working memory, and motor function. These problems make it hard to accurately measure dyslexic participants’ cognitive ability traits through both CBAs and PBAs. As dyslexia is classed as a disability, the law dictates that adjustments must be made in the selection process to accommodate disabled people so they are not disadvantaged in any way (British Psychological Society, 2005). Due to the increasing popularity of gamification, it is vital that we understand how dyslexia may moderate performance in GBAs so suggestions can be made regarding what adjustments are necessary for dyslexic participants.
Method
Participants will be required to complete two different assessments. The first assessment will be a CBA battery measuring spatial reasoning, verbal reasoning, and numerical reasoning. Each individual test is timed, and requires that participants complete a set of 12 questions in the allotted time (12 minutes per test). Participants will then be asked to complete a parallel form of the same assessments in a game format, in which they will receive the same number of questions and amount of time as the CBA. As the GBA is only available on mobile devices, participants will complete both assessments on a mobile device to reduce any non-game related effect that may confound the results.

Participants will be separated into two groups: those with and those without a formal diagnosis of dyslexia. Participants will also be asked to state the severity of their dyslexia. This will allow a test for measurement invariance between the CBA and GBA in both groups separately, while allowing us to assess how severity of dyslexia moderates performance in GBAs. We will also ask participants to complete the assessments in a supervised session. MANCOVA will be used to test between-group differences between the CBA and GBA assessment for both dyslexic and non-dyslexic groups. SEM will be used to test for measurement invariance and the potential moderating effect dyslexia plays in the performance of both assessments.

Results and Discussion
At this stage, we are presenting a theoretical framework for the study as the data have not yet been collected. It is likely that the data will be collected and analysed before the conference date and will be presented.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the main psychological theories, models and research underpinning your session?</td>
<td>Gamification, measurement invariance, and the moderating effect dyslexia plays on performance in game-based assessments (GBA) are all themes that will be addressed in this paper.</td>
</tr>
<tr>
<td>How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?</td>
<td>The results from this study will add insight into an underdeveloped literature on GBAs and will have practical implications for practitioners and researchers who wish to use GBAs.</td>
</tr>
<tr>
<td>Why is the submission appropriate for the particular category you have chosen?</td>
<td>The themes addressed in this study include: psychometrics, selection methods, and diversity and inclusion.</td>
</tr>
<tr>
<td>What do you consider to be the most novel or innovative aspects of the ideas being presented?</td>
<td>Understanding the extent to which dyslexia may moderate performance in GBAs.</td>
</tr>
<tr>
<td>Why do you think conference delegates will find the paper or session stimulating and useful?</td>
<td>The results from this study will help us understand how measurement invariance is impacted in computer versus GBA.</td>
</tr>
<tr>
<td>What might the public find interesting about your paper or session?</td>
<td>As GBAs can be used as a candidate selection method, understanding how dyslexia may moderate performance in these assessments will be of interest to organisations using this assessments, and dyslexic candidates who are required to complete these types of assessment.</td>
</tr>
<tr>
<td>If any, what materials do you intend to make available to attendees and in what format?</td>
<td>I will provide an electronic version of the slides to interested parties.</td>
</tr>
</tbody>
</table>
References


T42e Paper 5
Incremental Validity of Online Psychometric Assessments and GBAs: Some Preliminary Findings
Katharina Lochner, Cut-e
Category: Psychological Assessment at Work

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the main psychological theories, models and research underpinning your session?</td>
<td>This session is based on a validation between two measures.</td>
</tr>
<tr>
<td>How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?</td>
<td>This session links to Relevance because it provides empirical evidence to support the recent partnership between Arctic Shores and Cut-e. The session explains where the Arctic Shores and Cut-e assessment differ and overlap and where they are complementary to one another.</td>
</tr>
<tr>
<td>Why is the submission appropriate for the particular category you have chosen?</td>
<td>The submission is appropriate for the Psychological Assessment at Work because it describes the relationship of several psychological assessments.</td>
</tr>
<tr>
<td>What do you consider to be the most novel or innovative aspects of the ideas being presented?</td>
<td>With this piece of research, we have found some novel links between individual differences at the cognitive and personality level.</td>
</tr>
<tr>
<td>Why do you think conference delegates will find the paper or session stimulating and useful?</td>
<td>Delegates will find this session useful because it shows that Cosmic Cadet has good construct validity, and some correlations between the Cut-e’s tests and Cosmic Cadet are quite unique.</td>
</tr>
<tr>
<td>What might the public find interesting about your paper or session?</td>
<td>This paper is interesting to the public because it will enhance the credibility of GBAs in terms of validity.</td>
</tr>
<tr>
<td>If any, what materials do you intend to make available to attendees and in what format?</td>
<td>We will provide a little booklet for attendees in which we will share the symposium slides, white papers and links to play our games. We will provide those via email as we are a green company.</td>
</tr>
</tbody>
</table>
T42f Paper 6
Arctic Shores' Psychometric Framework and Infrastructure
Lara Montefiori, Arctic Shores

**Category: Psychological Assessment at Work**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the main psychological theories, models and research underpinning your session?</td>
<td>This session is based on Arctic Shores Psychometric Framework and the description of the technological infrastructure that makes the use of GBAs possible.</td>
</tr>
<tr>
<td>How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?</td>
<td>This session links to rigour because it shows that GBAs are based on well-researched and validated psychometric framework like any other test.</td>
</tr>
<tr>
<td>Why is the submission appropriate for the particular category you have chosen?</td>
<td>The submission is appropriate for the Psychological Assessment at Work because it describes the structure underlying a specific psychological assessment.</td>
</tr>
<tr>
<td>What do you consider to be the most novel or innovative aspects of the ideas being presented?</td>
<td>The technological infrastructure necessary to enable the use of Arctic Shores' GBAs is truly innovative.</td>
</tr>
<tr>
<td>Why do you think conference delegates will find the paper or session stimulating and useful?</td>
<td>There are two useful pieces of information for delegates in paper: first, GBAs require a tech-heavy infrastructure that other test format do not require, and, second, that GBAs, whilst being more fun and innovative, are still based on rigorous psychological frameworks.</td>
</tr>
<tr>
<td>What might the public find interesting about your paper or session?</td>
<td>The public will find it interesting to find out more about the &quot;behind the scenes&quot; work that goes into developing and delivering GBAs.</td>
</tr>
<tr>
<td>If any, what materials do you intend to make available to attendees and in what format?</td>
<td>We will provide a little booklet for attendees in which we will share the symposium slides, white papers and links to play our games. We will provide those via email as we are a green company.</td>
</tr>
</tbody>
</table>

T43 Award Session 3
Lifetime Achievement Award Winner 2015
Dave Bartram

**Category: Professional Affairs and Awards**
See Awards Programme Book

T44 Symposium
Development and Validation of Job Match Solutions
Rainer Kurz, Cubiks

**Category: Psychological Assessment at Work**

This symposium showcases how advances in assessment theory are applied to improve professional practice in the use of personality self-report tools.

The first paper outlines the development of a 6-factor Capability assessment solution that provides an alternative to the Great 8 Competencies, Emotional Intelligence and Learning Agility constructs. It expands the Big 5 personality factors by separating out motivational drive. Based on a large scale validation study (N=929) short predictor and criterion measures were developed and linked through Capability prediction equations. The personality composite based un a unit weight aggregate of 54 items reached a validity of .23 against a 50 item criterion measure. A Capability prediction aggregate across all 18
competencies reached a raw validity of .34 against a concise 18 item measure of overall performance with significant correlations at Cluster and Factor level.

The second paper illustrates how the coarse Five Factor Model of personality can be refined through the use of personality aspect scales that are linked to competencies. Several studies are covered that show that competency prediction composites tend to outperform simple personality scales. Furthermore a study shows that in some circumstances curve-linear scoring best captures the validity of assessment tools.

The third paper demonstrates on a large sample (N=2,506) the circumplex characteristics of 24 predictor constructs grouped into 8 aspects covering all Big 5 factors apart from Neuroticism. The Alpha vs. Beta factor model is fully supported. Validation against the Great 8 competencies and a proprietary model of professional competencies back a People vs Task distinction in the performance data.

T44a Paper 1
Development and Validation of a 6-Factor Capability Prediction Solution
Rainer Kurz, Cubiks
Category: Psychological Assessment at Work

Introduction
Following the (re-)discovery of the ‘Big 5’ personality factors Digman (1997) found that an Alpha factor emerged out of Agreeableness, Emotional Stability and Conscientiousness while Extraversion and Openness formed a Beta factor. Musek (2008) showed that even these higher-order factors correlate gives rise to a General Factor of Personality (GFP). Kurz & Woods (2015) demonstrated how this overarching construct can be decomposed into 8 constructs closely resembling the Great 8 Competencies (Kurz & Bartram, 2002). Hopton (2012) found raw validities of up to .32 for a ‘Great 8 Total’ composite score for Saville Consulting Wave Professional Styles developed on an ‘a priori’ basis.

This paper outlines the application of Predictive Analytics to the development of an integrated assessment model of Capability Match where personality predictor facets and criterion capabilities assessed through competency marker items group into 6 factors within 3 empirically derived clusters.

Design
In the course of the cross-cultural development of the PAPI 3 personality questionnaire N=929 professionals and managers completed the Sales & Leadership version and were rated on 22 competencies by at least 2 reviewers of their choice. The questionnaire measures on a 7 points scale 26 scales - five of which are sub-divided into Facets of 3 items each. Each competency was assessed on a 5 point Effectiveness scale with either 2 or 4 items.

Method
A Predictive Analytics approach was employed to create a hierarchical model linking personality facets to competencies.

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 step 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 and minimal gender adverse impact. The resulting short predictor tool features three Facets per Factor i.e. 54 items in total. Internal Consistency reliability was .765 averaged across the 6 factors. Their 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 constituent items. A PCA (N=929) at this level of detail revealed that a six factor solution closely matched 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.

Combined criterion scores across Self and Reviewer ratings were calculated for all criterion items. A PCA of the combined 18 Marker Items and the 18 predictor facets yielded a clear 6 factor solutions with few cross-loadings (see Table 1).

The combined criterion rating scales showed satisfactory reliabilities with an Internal Consistency value of .862 for the Capability total criterion scale, .813 for Enterprising, .692 for Excelling and .733 for Engaging. At Factor level the internal consistency values averaged .698.

The fifth step utilised a Predictive Analytics approach where on the basis of correlational methods six predictor facets were identified for each marker item. The 18 ‘Capability Prediction’ scores can be aggregated through the model hierarchy into an overarching Total Capability construct predictor score.

Table 1: PCA Varimax rotated solution (loadings <.30 omitted) of 18 predictor facets and 18 criterion marker items (Mean of Self and Reviewer Ratings).
The validity coefficients between Capability predictor-criterion pairs (see Table 2) for external reviewers were all significant at the 1% Level with a .342 value for the Work Capability Total vs. Criterion Total score pairing (N=929) across jobs, organisations, languages and cultures. All equations for the 18 Cubiks competency framework reached statistical significance against their aligned factor and cluster as well as overall performance.

Table 2: Capability Predictor-Criterion correlations (N=929) between self-report questionnaire Capability Predictors and reviewer criterion rating scales with aligned pairs in the diagonal followed by 18 Competencies.

<table>
<thead>
<tr>
<th>Total Capability</th>
<th>Performing</th>
<th>Confident</th>
<th>Excelling</th>
<th>Engaging</th>
<th>Supporting</th>
<th>Defending</th>
<th>Adapting</th>
</tr>
</thead>
<tbody>
<tr>
<td>299</td>
<td>299</td>
<td>299</td>
<td>299</td>
<td>299</td>
<td>299</td>
<td>299</td>
<td>299</td>
</tr>
<tr>
<td>313</td>
<td>313</td>
<td>313</td>
<td>313</td>
<td>313</td>
<td>313</td>
<td>313</td>
<td>313</td>
</tr>
<tr>
<td>302</td>
<td>302</td>
<td>302</td>
<td>302</td>
<td>302</td>
<td>302</td>
<td>302</td>
<td>302</td>
</tr>
<tr>
<td>276</td>
<td>276</td>
<td>276</td>
<td>276</td>
<td>276</td>
<td>276</td>
<td>276</td>
<td>276</td>
</tr>
<tr>
<td>216</td>
<td>216</td>
<td>216</td>
<td>216</td>
<td>216</td>
<td>216</td>
<td>216</td>
<td>216</td>
</tr>
<tr>
<td>312</td>
<td>312</td>
<td>312</td>
<td>312</td>
<td>312</td>
<td>312</td>
<td>312</td>
<td>312</td>
</tr>
<tr>
<td>249</td>
<td>249</td>
<td>249</td>
<td>249</td>
<td>249</td>
<td>249</td>
<td>249</td>
<td>249</td>
</tr>
<tr>
<td>255</td>
<td>255</td>
<td>255</td>
<td>255</td>
<td>255</td>
<td>255</td>
<td>255</td>
<td>255</td>
</tr>
<tr>
<td>265</td>
<td>265</td>
<td>265</td>
<td>265</td>
<td>265</td>
<td>265</td>
<td>265</td>
<td>265</td>
</tr>
<tr>
<td>245</td>
<td>245</td>
<td>245</td>
<td>245</td>
<td>245</td>
<td>245</td>
<td>245</td>
<td>245</td>
</tr>
<tr>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
</tr>
<tr>
<td>214</td>
<td>214</td>
<td>214</td>
<td>214</td>
<td>214</td>
<td>214</td>
<td>214</td>
<td>214</td>
</tr>
<tr>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
</tr>
<tr>
<td>186</td>
<td>186</td>
<td>186</td>
<td>186</td>
<td>186</td>
<td>186</td>
<td>186</td>
<td>186</td>
</tr>
<tr>
<td>172</td>
<td>172</td>
<td>172</td>
<td>172</td>
<td>172</td>
<td>172</td>
<td>172</td>
<td>172</td>
</tr>
<tr>
<td>271</td>
<td>271</td>
<td>271</td>
<td>271</td>
<td>271</td>
<td>271</td>
<td>271</td>
<td>271</td>
</tr>
<tr>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
<td>303</td>
</tr>
<tr>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td>192</td>
<td>192</td>
<td>192</td>
<td>192</td>
<td>192</td>
<td>192</td>
<td>192</td>
<td>192</td>
</tr>
<tr>
<td>271</td>
<td>271</td>
<td>271</td>
<td>271</td>
<td>271</td>
<td>271</td>
<td>271</td>
<td>271</td>
</tr>
</tbody>
</table>

Broken down by major language groups results were comparable reaching statistical significance at the 1% Level for Dutch (.372; N=229), Scandinavian (.309; N=235), French (.357, N=214) and Anglo-Germanic (.393; N=70). The value for Finnish was considerably lower (.169; N=181) reaching significance only at the 5% level due to a lower prevalence of managerial participants.

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-loading on a ‘traditional’ Conscientiousness factor.

At the three cluster level the solution is similar to the Three Effectiveness Factors of Kurz, Saville & Maclver (2009).

The .342 uncorrected correlation size of the Capability Total composite personality predictor against an aggregate of the 18 criterion marker item reviewer ratings is at the high end of the validity ranges reported for OPQ (Bartram, 2005, Table 18) and Wave (Hopton, 2012) and holds up across cultures.

Bartram (2005) found negative correlations for Agreeableness and Emotional Stability based composite predictors when drawing exclusively on Bosses as raters. In the present research
the validity analysis shows significant positive correlations for all predictor composites. This could partly be due to the fact that reviewers were nominated from a wide range of co-workers so that people oriented constructs became more valued than pure task completion. The six Capability factors also provide an alternative to Learning Agility and Emotional Intelligence constructs with balanced coverage of predictor as well as criterion space variables.

References

T44b Paper 2
Mixing ‘primary colours’ of personality can recover realistic complexity
Gillian Hyde & Geoff Trickey, PCL

Category: Psychological Assessment at Work

The Five Factor Model (FFM) has brought considerable consensus to personality research and assessment practices. It has also become a benchmark for personality questionnaires. Factor analysis identifies the underlying themes that simplify the complexity of observed events and reveal a simpler underlying structure. FFM is a pragmatic and empirical ‘lexical’ approach to personality assessment but is not based on any psychological theory. The five factors clearly have a statistical reality but they are an abstraction in search of a meaning. None of the FFM factors ever exists in isolation, only as an element absorbed in a complex interactive mix.

In a psychometric assessment context, we have found it useful to characterize the FFM as ‘the primary colours of personality’ because both the FFM and the primary colours ‘explain’ a perceived complexity – of the tones in our visual world, or of the endless variety of personalities. However, both are reductionist and both primary colours and FFM offer only an impoverished reflection of the real world of our personal experience. In the same way, personality factor scores are a crude representation of the complexity of personality as we encounter it in daily life. The relationship between the person and their test score will be limited and relationships with behaviour even more distant and approximate. We argue that
to maximise the benefits of personality assessment, those ‘primary colours’ need to be remixed to regain some of the complexity.

To address this PCL pioneered the development of algorithms that combine and weight personality scores and offer a range of measures to approximate the qualities relevant in the world of work, targeting specific work place "competencies" and generating output expressed in accessible work place language rather than the language of personality traits. In this approach, profile interpretation is effectively standardized and delivered in widely accessible terminology. ‘Competency Metrics’ turn personality profiles into finely incremented competency ratings; in effect, reporting to what extent an individual’s temperament facilitates or interferes with each competence assessed.

In this session, we report on the psychometric credentials of the FFM measure that powers the PROFILE:MATCH® systems; and demonstrate the incremental validity of utilizing an algorithmic approach on the output, its enhanced dependability and utility, and discuss and illustrate these ideas through client case studies and research findings.

A large study (N=1165), assessing the performance of sales assistants and store managers, with a leading national retail store provided support for our contention. Ten Profile:Match2™ Competency Metrics relevant to retail work, and the data from the personality scales that contributed to those competencies, were correlated with five performance measures. The results revealed that the majority of Competency Metrics were stronger predictors of job performance than personality scales alone. For example, the Competency Metric for Motivation is a significantly stronger predictor of sales performance for sales assistants and store managers’ performance than any of the contributing individual personality scales.

Another validation study (N=132) looked at the relationship between individual competency scores and competency ratings by colleagues. The competency metric ‘Attention to Detail’ correlated 0.42 with performance while 0.33 was the highest correlation with any of the contributing personality scales. In almost two thirds of cases, Competency Metrics were more strongly related to performance ratings than any of the component personality scales. These studies highlight the predictive qualities of the Profile:Match2™ approach over FFM personality scales in assessment for selection or development.

There is also clear evidence that a simple linear relationship does not always exist between personality and performance. For example, extreme scores on most personality scales often forecast poorer performance. The Competency Metric algorithms account for these complex curvilinear relationships between personality and performance; average or slightly above average on a personality scale may be preferable to high or low scores for certain job roles. A PCL study with recruitment consultants (N=113) found that, despite expectations, a very low correlation was observed between Sociability scores and sales performance. Further analysis made it clear that the highest performers fell in the average to above average range on Sociability, while those who scored at either extreme tended to have a less satisfactory level of sales performance - sometimes too much of a particular characteristic can be as detrimental to performance as too little.

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

The submission probes the limitations of factor analytic derived personality questionnaires, using the established and consensual Five Factor Model as a case in point. The research is based on extensive consultancy based research (PCL is now in its 25th year) and the authors' considerable experience in developing selection systems based on personality and performance measures within client organisations.
2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
The current submission addresses the conference theme directly since the presentation content reports experience in addressing those very issues and the significant progress that has been achieved.

3. Why is the submission appropriate for the particular category you have chosen?
This submission is being made as one element in a symposium that will be submitted under the ‘Psychological Assessment at Work’ category. Again, this submission recounts the development of techniques designed specifically to increase the value and validity of ‘Psychological Assessment at Work’.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
Factor analysis is widely used in test development and, within the context of world-wide usage of Five Factor Model instruments, factors tend to get reified and treated as sacrosanct. From another point of view, the Five Factors represent a reductionist deconstruction of personality which we liken to the primary colours and their relationship to the actual world of colour (within which examples of true primary colours is infrequent). Yet all the tones and hues in our visual world can be created by mixing them (as your television demonstrates). Our ‘competency metric’ approach is, in effect, an algorithmic method for ‘remixing’ the ‘primary colours of personality’.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
Our work and the thinking behind it offers, we feel, insights that will spawn other interesting developments and encourage others, to question the established traditions and ritualised personality assessment. The approach offers many advantages for organisational research and consultancy practice, and opens up new possibilities.

6. What might the public find interesting about your paper or session?
There are many independents and small businesses for whom personality assessment is priced out of the picture by costs of either using consultants or booking training courses. The methods we are now using, whilst being driven by high quality FFM technology, generate reports that peak entirely in terms of workplace competencies; reports are ‘pre-digested’ in ways that make them fully accessible and ensure full consistency of interpretation. The ‘competency metric’ model also allows assessments to be targeted on specific required competencies so that reports can be tailored to make all content relevant to the decisions being made.

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)?
All delegates will be provided with presentation slides and case studies. Those who are interested will be offered the opportunity to configure our system and generate a free sample report for that configuration.

T44c Paper 3
Circumplex layout of FFM model and correlation with workplace performance
Stewart Desson, Lumina Learning; Stephen Benton, John Golding, Anthony Towell, University of Westminster
Category: Psychological Assessment at Work
Theoretical Objectives
To measure both poles of each Big Five personality construct and instead of measuring five continuous scales with one end being more positive and socially desirable, measure ten scales as five scale pairs, with each pair being negatively correlated. All ten scales to be measured in both a positive socially desirable form, as well as an overextended or negative form.
Explore a circumplex factor structure in terms of:
- four factor model, with 24 sub scales (4 of the Big 5 Factors with Lumina Spark, neuroticism factor excluded)
- five factor model, with 32 sub scales (5 of the Big 5 Factors covered)
- two factor circumplex structure with the 24 sub scales mapped
- two factor circumplex structure with the 32 sub scales mapped

**Empirical Objectives**
1. To test whether the proposed model of personality is compatible with the Big Five structure
2. To test whether the proposed model of personality is compatible with the two factor Digman structure
3. To test the hypothesis on the proposed circumplex order through a 2 factor model and a correlation analysis

**Method**
A Principal Component Analysis with Varimax rotation was undertaken on a group of professionals (N=2,506) belonging to a cross section of global organisations. Participants completed the Lumina Spark Personality questionnaire online. They self-assessed themselves on a five-point scale: Strongly Agree, Agree, In-between, Disagree, Strongly Disagree.

A hierarchical model with 32 sub scales was created and sub scales aggregated up to measure 10 scales. The 10 scales are formed of 5 pairs of negatively correlated scales. Using rotations of the 8 and 24 personality factors on two axes to explore the arrangement of a circumplex model.

**Results**
The Five factors extracted accounting for the variance as follows:
- Component 1 34.1%
- Component 2 19.2%
- Component 3 14.5%
- Component 4 10.9%
- Component 5 8.5%

Construct VALIDITY - Factor Analysis, with N=2,506 at Spark 10 Aspect Level. A Principal Components analysis with Varimax rotation was used. Loadings ≥ ± .40 are shown.

![Factor Analysis Table]

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>Extraversion</td>
<td>Conscientiousness</td>
<td>Agreeableness</td>
<td>Open to Experience</td>
</tr>
<tr>
<td>Emotional (Risk) Reactor</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional (Reward) Reactor</td>
<td>- .88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discipline Driven</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspiration Driven</td>
<td>- .77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introverted</td>
<td>.98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraverted</td>
<td>- .91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People Focused</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcomes Focused</td>
<td>- .77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big Picture Thinking</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Down To Earth</td>
<td>.31</td>
<td>- .30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
With an 8 Aspect model, the two factors extracted accounted for the variance as follows:
- Component 1 38%
- Component 2 23%

This factor analysis seems to replicate Digman’s and others commonly found two Factor structure. The Component Plot in Rotated Space accurately represents the circular layout that underpins Lumina Spark.

The two dimensional mapping of the 24 traits closely corresponded to the actual arrangement on the Mandala but suggesting that on this particular sample the following adjacent qualities could be switched:
- Reliable & Structured
- Measured & Observed
Component Plot in Rotated Space

Correlations of 24 Spark Qualities with adjacent quality, and with opposite quality
Discussion
The factor solutions are fairly clean with few cross loadings, and it seems a circumplex has been found in the data. These results are compatible with the Alpha and Beta factor model.

Future Research
Further runs of the “Travelling Salesman problem” with optimisation software for the three personas and a 5 factor and 4 factor model.

Correlations between a-priori matched Spark qualities with the Great Eight competency model, as defined by Kurz & Bartram (2002) and Bartram (2005) are expected to reach statistical significance for at least 80% of the hypothesised relationships. The correlations between the predictor data and the Great 8 Competencies is currently being analysed and will be presented.

References

T45 Workshop
Action Learning to enable and support Organisational Change
Wyn Owen, WCO Ltd
Category: Work Design, Organisational Change and Development
The use of group processes to encourage innovation and to transfer best practice is relatively novel with rural businesses. However, *Menter a Busnes* (MaB), a Welsh economic development company, has been utilising this approach for over thirteen years through a management development programme known as Agrisgãp. Since 2003 they have been developing and expanding group principles with a view to engaging a greater number of rural businesses for a variety of purposes and with a broad range of different groups. To date, over 5,000 individuals in more than 600 Agrisgãp Groups have benefitted from the programme. Agrisgãp continues to be an important and cutting edge feature within the Welsh Government’s Farming Connect service and of interest far beyond Wales. This paper outlines the design, launch and delivery of the Agrisgãp programme which utilises Action Learning to develop ideas and resolve issues. Furthermore it describes how Occupational Psychology principles have been utilised to develop, support and asses the programme.

During the initial development and establishment of the Agrisgãp programme and as a factor of Ashridge Consulting’s involvement in the design, Action Learning (McGill and Beaty, 2001) was selected as the process best suited to Agrisgãp groups. To utilise Action Learning as a facilitation process with very traditional Welsh farming family businesses was in itself ground breaking and innovative and also risky. However, despite being typically used previously in very large corporate institutions, Action Learning has proven to be a highly successful and flexible tool which continues to be the primary group facilitation technique used by the group facilitators – known as Agrisgãp Leaders (Pearce and Williams, 2010). It has been valuable in the development of ideas and resolution of issues; moreover its group methodology involves the combination of support and challenge which is a key factor in changing mind-sets and attitudes to change, aligned with the idea that it is much easier to make difficult decisions when working with others. Burnes (2004) reports that the successful organisations in the twenty first century are those that continually instigate change despite the fact that seven out of ten change interventions actually fail. In the Agrisgãp context, the support of a group of like-minded individuals through the challenging change process is considered not only to be extremely beneficial but also to increase the probability of successful change interventions.
Action Learning has enabled Agrisgôp Leaders to engage a target audience with a range of abilities and knowledge and has encouraged and strengthened commitment to the process and the group. Nevertheless MaB has also constantly researched and developed new group facilitation techniques for use in tandem with Action Learning. Agrisgôp Leaders continually introduce, trial, develop and share new and innovative informal and typically short group facilitation techniques with their groups.

However, Action Learning continues to be the preferred primary technique utilised with Agrisgôp groups. The main reasons for this are that one of the main characteristics of the Action Learning process is a strong ethos of confidentiality, which not only very quickly establishes trust within the group but also instils commitment to the group and the process. The fundamental Action Learning process of support and challenge also creates an environment where positive change is encouraged and this consequently enables and empowers individuals to make difficult decisions because they are working with others. Furthermore, Action Learning is an extremely flexible and adaptable process and this has proven invaluable to Agrisgôp Leaders, all of whom develop their own slightly different versions – albeit still facilitating within certain important guidelines. To quote the founding father of Action Learning, Professor Reg Revans, MaB experience would certainly support his assertion that Action Learning is ‘deceptively simple – surprisingly powerful’ (Revans, 1982).

During the development and delivery of the programme, the author has undertaken several studies in order to monitor, review and improve delivery of the programme and the intention would be to briefly share these at the DOP Conference in Liverpool.

The first study was undertaken in 2008 and considered as alternatives to Action Learning, other more formal and structured facilitation techniques. The study involved a comparison of Appreciative Inquiry (AI) and Creative Problem Solving (CPS) undertaken with both Agrisgôp groups and groups of Agrisgôp Leaders (Owen, 2008). Twenty-four participants in four equal sized teams engaged in a day’s facilitation of either AI (Lewis et al., 2008) or CPS (Isaksen et al., 2000) and team potency was measured by individual questionnaires at the beginning, at the half way point and at the end of the session. The results suggested that although there was no effect on potency at the mid-task stage, group potency was higher at the post-task stage in both AI and CPS interventions. Furthermore, potency was significantly higher in the AI teams, when compared to the CPS teams.

The second study was undertaken in 2011 as a result of the high turnover in Agrisgôp Leaders for a variety of reasons including the insular nature of the work, difficulty in recruiting groups, high levels of stress/responsibility and in many cases an overriding desire to act in a consultancy or advisory role as opposed to following the Agrisgôp rationale of facilitating groups to reach their own conclusions. Consequently, a study was undertaken with a view to considering whether personality measures could be utilised to predict individuals who would be effective facilitators of organisational change.

Participants in this study (n=37) were all either currently working as Leaders on the Agrisgôp programme or had previously worked as Agrisgôp Leaders. They completed two personality questionnaires namely a questionnaire administering the 100 item set of IPIP Big-Five Factor Markers (Goldberg, 1990) and the Myers-Briggs Type Indicator (MBTI), (MyersBriggs, 1982). A third questionnaire was utilised in this study, namely the Consultant Effectiveness Questionnaire developed by Hamilton (1988) based on the requisite competency clusters deemed necessary for consultants working with organisational change. This questionnaire was completed by a manager who scored each participant according to the degree to which they believe the change agents ‘measured up’ to each of nine questions relating to organisational effectiveness.
Multiple regression was used to examine relationships between the dependant variable ‘consultant effectiveness’ and the combined effect of the other factors measured by the responses on the Big 5 and the MBTI. The main findings of this study indicated a strong correlation between consultant effectiveness and the factor of ‘agreeableness’ on the Big Five scale. The results also indicated a less strong yet significant relationship between ‘extraversion’ and ‘consultant effectiveness’. However, no evidence was found that the MBTI in any way predicted effective organisational change facilitation. As a result of these findings, a version of the Big 5 questionnaire has been used as one element of the selection process for new Agrisgôp Leaders in the last two recruitment cycles.

The third study instigated in September 2011 came about as a result of increasing pressure from several quarters - not least the funders, to quantify the impact (financial, perspective, attitudinal and continuing) of group-based organisational change programmes such as Agrisgôp. Consequently, a mixed-measures longitudinal tool was developed and completed by over 1,000 Agrisgôp group members pre-, mid- and post-group and collated and analysed in 2014.

The quantitative data analysed (using a one way repeated measures ANOVA) indicated that Agrisgôp participants had since joining their groups:
- Increased confidence (49%)
- Improved communication skills (51%)
- Were more able to apply new information to their business (52%)
- Had a more positive attitude to change (52%)
- Were more likely to have a long term business strategy (13%)

These findings were supported by a large quantity of rich qualitative data collected from the pre, mid and post questionnaires which also (amongst a host of other findings) indicated a shift in mind-set from an individual (what’s in this for me?) to a team (how can I help this group succeed?) approach.

The mixed, measures longitudinal questionnaires continue to be completed by all participants on the current Agrisgop programme (commenced Autumn 2015) and is also being adapted for use on other personal/business development programmes.

At the time of writing, the current Agrisgop programme involves a team of fourteen Agrisgop leaders pan Wales working with a diverse range of groups (n=32) across a new three tier structure. The first tier of groups is known as grass roots and involves bringing together between 4 and 10 group members from at least three different rural businesses to develop either individual or collective ideas in order to build the management capability of the individual group members and create more viable and sustainable businesses for the future.

The second Agrisgôp tier known as themed Agrisgôp recruits and works with groups with a particular collective business interest and aim to achieve a considerable measurable impact in addition to developing the management capabilities of the group members. The group themes can include (but are not restricted to) renewable energy, tourism, adding value to primary produce or digital technology.

The third tier is an additional and innovative level developing strategic management capability and known as Agrisgôp BDAL. Founded upon the principles of Business Driven Action Learning (Boshyk, 2012), this intensive programme utilises Action learning and also; individual coaching, 360° feedback, use of digital technology to cascade learning, self-managed sub teams (researching several other businesses and reporting back to the whole group), outside-in dialogue and finally agreeing on recommendations and future challenges for the group. Working on a high level joint business challenge, these groups are ambitious, intensive and cutting edge and aim not only to develop their own businesses but to research
concepts and develop initiatives and processes that will ultimately benefit the industry at large.

In summary, the author believes that empirically based best practice should be more effectively integrated into the workplace and that one way of achieving this is to encourage and support higher level lifelong learning. Furthermore, programme providers such as MaB need to become more involved in conducting research, in implementing the findings and sharing them with a wider audience.

Having himself undertaken part time higher education for the past 15 years, the submitter firmly believes that occupational psychologists are uniquely placed to narrow the considerable gap that exists between evidence based best practice and the workplace. The submitter considers himself to be extremely privileged in having opportunities to apply academic psychological principles to his workplace. As a practitioner and Psychology graduate, the hope is that this excellent opportunity to share the experience of group interventions, organisational change, Action Learning and their evaluation will be considered a worthy submission for the DOP Annual Conference in January 2017.

Wyn Owen MSc, DipPsych, MBPsS, NSch. 3/8/16

References


T46 Standard Paper
The Components of a “Winning Attitude” according to Successful Entrepreneurs, Olympians and CEOs

Lauren Albrecht, Amanda Potter & Beatrice Redfern, Zircon Management Consulting

Category: Leadership, Engagement and Motivation

Introduction
The psychological qualities that contribute towards success – whether it is in the Olympic Arena or in the boardroom – continue to be of interest to researchers, psychologists and businesses alike. To date, research suggests that there are a number of characteristics that contribute to an individual making it to the top of their sport, industry or stage. There is however, less information about the critical elements or criteria that make the real difference and catapult people to the dizzy heights of Olympic, West End or Global Business success.
Here, success means a person being at the top of their game, achieving significant success and being championed by others as a leader or a personality whose success others aspire to imitate.

In this research, we worked to understand the ingredients that make up a ‘Winning Attitude’ because we believe that whilst many of us are talented, and have strength that help us to succeed. However real success in the form of Olympic medals, creating highly successful companies and leading global organisations require more than just talent.

To date, attempts to disentangle the complexities underlying success, particularly concerning the prevailing intelligence-success debate, suggest that mind-set plays a critical role (Dweck, 2010). Dweck’s research indicates that a Growth Mind-set is a key differentiator between individuals who have the right characteristics for success (e.g. intelligence) and those who actually achieve success. Here, a Growth Mind-set is about having the resilience in character, as well as the drive and motivation to succeed. Additional ingredients in the recipe for success include having the grit and self-control to sustain this Growth Mind-set (Duckworth, 2013; Duckworth, Peterson, Matthews, & Kelly, 2007), as well as having an underlying reason to win - to go-to success or go-from adversity (McCann, 2015).

Method
We conducted 42 interviews with senior business leaders, Chief Executive Officers (CEOs), Presidents, Founders, Entrepreneurs, Sports Stars, Olympians and Entertainment personalities. Each interview was between 45 to 90 minutes in length and asked questions focused on their successes, strengths, drive, ambition, passion and personal experiences and situations that helped them to succeed, and the elements that resulted in success. The interviewees were then invited to complete the Talent Gene® Unique Strengths Questionnaire, to explore their motives, preferences and strengths in the world of work through a series of 133 statements (e.g. “I enjoy solving challenging problems”) measured on a 7-point Likert scale. The interviews and self-reported Unique Strengths were then thematically analysed to understand the attitudinal perspectives of our Winners.

Findings
The findings are categorised under the following headings: External forces, the 10 Winning Attributes, and the Core Strengths of Winners. Alone, these were identified as being the building blocks for success, however together these make up a Winning Attitude. Interviewees were found to have 3 or more of the Winning Attributes and Core Strengths, as well as an External Force serving as a catalyst.

External Forces
Interviewees identified 2 External Forces or experiences which propelled them towards developing a Winning Attitude or mind-set; the forces served as the catalyst driving Winners to persist and prove themselves, both at the start of their journey and on the journey to success.

*Significant Adversity & Loss: “My father used to put me down, that drove me to prove myself. It gave me determination and focus.” Clive Jacobs, Entrepreneur, Holiday Autos, Travel Weekly (UK) and the Caterer*

The 10 Winning Attributes
10 key and distinct Attributes emerged from our research as being fundamental to building a Winning Attitude. While individuals do not need to possess all 10 characteristics in order to succeed, our research suggests that they each have a different combination of these characteristics, and that they have a different combination of attributes depending on their strengths, engagement and experience. Burning Ambition, Dogged Determination, Realistic
Optimism, Unwavering Belief, Intrinsic Generosity, Two way Respect, Spotting Opportunities, Disruptive Thought, Constant Curiosity, and Single Minded Focus.

*Unwavering Belief: “Failure is practicing for success.”* **Katie Piper,** **Presenter/Entrepreneur, Katie Piper Foundation**

**The Core Strengths of Winners**
Individuals who identify and use their Strengths are 6x more engaged, have 6x more positive psychological wellbeing and are 3x more productive (Rath and Conchie, 2008). An individual’s Strengths moderate and maximise their Winning Attitude, or mind-set, and the relative outcome. In other words, Strengths help to enhance and heighten the impact of the Winning Attitude on success and Winning.

The Top 7 Unique Strengths that were present within our Winners include: Being Responsible, Competitive, Methodical, Composed, Positive and Innovative. They were also energised by networking and engaging with them.

We found that an individual’s Strengths are moderators between their Winning Attitude, or mind-set, and the outcome, whether the outcome is a standing ovation, a Gold Olympic medal or reaching a £1m turnover.

*Competitive: “I am personally very addicted to being the best I possibly can be in every aspect of my sport. I do not accept average effort.”* **Goldie Sayers, Olympian, Javelin**

**Conclusion**
Our research has identified that the Winners have a high preference for a number of the Winning Characteristics. It is the combination of how these elements interact in combination with their personal Strengths that enables them to be successful and reach their full potential. Each of the groups of Winners demonstrated different combinations of Strength and attribute for example: The sports stars, focused on the details, were determined and passionate about success. The entrepreneurs looked for opportunities and identified ways to challenge the status quo. The media stars were passionate and had a burning ambition to perform and succeed. The CEOs were methodical, oriented and structured, they collaborated and built two-way respect and understanding.

All is not lost for those of us who are not (yet) Olympians, CEO’s or successful world class entrepreneurs, Winners are developed over time. Everyone has Strengths and talents and have the potential to be Winners in some way. They key is to understand what is your passion, what are your Winning attributes and what are your core Strengths.

This awareness combined with the clarity, focus and determination to succeed creates a Winning formula. The formula is different for all of us depending on our aspirations, motivations and Strengths.

**References**
T47 Professional Forum

**Workplace flexibility and work-life balance – friend or foe?**

*Gail Kinman, University of Bedfordshire; Almuth MacDowall, Birkbeck, University of London*

**Category: Wellbeing and Work**

This professional forum considers the implications of flexible working. Drawing on research evidence, the effectiveness of flexible options will be reviewed and the organisational and individual criteria for success considered. Several issues will be debated: (a) government policies for eligibility; (b) notions of precarious work/zero-hours contracts as “flexibility”; (c) practical ways to instigate flexible arrangements; (d) what actually works? (e) current gaps in knowledge. We aim to raise awareness that flexibility is not a panacea for work-life balance and consider the ways in which this complex issue can be addressed to ensure that interventions are firmly grounded in psychological research evidence.

**Overview**

In 2014, all UK employees who had worked for their employer for a minimum of 26 weeks became eligible to request flexible working. Employers are required to consider these requests, but are not obliged to grant them if there are valid business reasons to refuse: for example, if there would be additional costs involved that would damage the business; if the work could not be reorganised among existing staff; or if the request would have a detrimental impact on quality or performance.

The Government defines flexible working as “a way of working that suits an employee’s needs: e.g. having flexible start and finish times, or working from home” (GOVUK, 2014). Flexible working options can generally be categorised under four headings: (a) variable hours (such as flexi-time and zero hours contracts); (b) restructured hours (such as a compressed working week or job sharing, or term-time working); (c) reduced hours (such as working part-time and phased retirement); and (d) leave options (such as parental leave, sabbaticals and career breaks). There is wide variation in how these options are used in practice, with part-time working being the most common (CIPD, 2016).

The Government’s definition provided above implies that flexible options may be tailored to the needs of employees regardless of life-stage, caring responsibility, or personal preference. Moreover, the extension of the ‘right to request’ is built on an assumption that flexibility is beneficial for employers and employees alike. Government is actively promoting the benefits of flexible working – see https://www.gov.uk/government/speeches/business-benefits-of-flexible-working. There is evidence that individuals and, to some extent, organisations have very high expectations of flexibility and the difference it could make to their lives and productivity (Kinman & MacDowall, 2016). But what about the evidence? The recent CIPD report on flexible working (April 2016) reported that 65% of respondents work flexibly; moreover, people who worked flexibly tended to perceive a better work-life balance and were less likely to feel under pressure. Flexible working is also believed to have benefits for employers, such as more successful adaptation to volatile market conditions and the ability to attract a wider talent pool, together with enhanced productivity and lower absenteeism and turnover rates. There are also substantial financial savings to be made in reducing commuting time and costs and the need for office space.

Nonetheless, flexible working may not be a panacea. There is evidence that flexibility is not necessarily desirable or beneficial for all stakeholders and may even be damaging for some. The benefits and drawbacks of the growing trend for non-standard working arrangements, such as casual working and zero-hours contracts, for work-life balance are currently hotly debated. Moreover, surveys have highlighted gender and generational differences in
attitudes towards flexibility, with more positive attitudes expressed by women and Generation X workers (Kelly Global Workforce, 2015).

So what does the evidence actually say about the implications of flexible working for work-life balance and wellbeing – is it our friend or is it our foe? Does it really have wide-ranging benefits for employees, families and organisations? What type of flexibility is most beneficial? What type of individual and organisation will most benefit from flexibility? This professional forum provides a critical, evidence-based overview of the pros and cons of flexible working initiatives. It explores how practitioners can help organisations and employees work together to develop more creative flexible working options to maximise the benefits of flexibility for all.

Structure
The forum will begin with a ‘warm up exercise’ asking participants to tweet their definitions of flexible working to the DOP Twitter wall. We will show these live, and compare them with government, organisational and academic definitions and recent online conversations around flexibility. This will lead into an evidence-based review of flexible working options and the current uptake in the UK. Assumptions regarding the benefits and drawbacks of flexibility will then be explored.

Almuth McDowall (Birkbeck, University of London) will set out the case for flexible working. As discussed above, employees’ attitudes towards flexible working, particularly e-working, are typically positive and many anticipated benefits for employers have been highlighted (Kinman & MacDowall, 2016; Oseland & Webber, 2012). A literature review conducted by Hill et al. (2010) found some benefits of flexibility for work-life integration. Moreover, the findings of a recent study over five working showed that employees experience more positive and less negative job-related affect on days when they e-work. The benefits of flexible working have also been highlighted in high-quality reviews and case-controlled studies. For instance, US researchers (Kelly et al., 2014) have gained robust experimental evidence about the potential benefits of flexibility from a randomised trial in an IT company. The study involved training supervisors on the value of providing support to help individuals develop flexible working solutions and prompting employees to reconsider when and where they work. Following the interventions, some changes in perceptions of schedule control and supervisor support were observed, with more modest improvements in work-family conflict and family time adequacy. There was no evidence, however, for unintended consequences (e.g. employees did not increase their working hours) and those more at risk of work-family conflict tended to benefit more from the intervention.

Gail Kinman (University of Bedfordshire) will consider the evidence ‘against’ flexibility highlighting the need to consider the hidden costs to individuals and organisations. A systematic review of nearly 150 papers by De Menezes and Kelliher (2011) found no clear business case for different types of flexibility. Flexibility can also encourage ‘enabled intensification’; whereby employees (especially those who are highly involved in their work) may use it to work longer and harder (Kinman & Jones, 2008). Moreover, there is evidence that e-working can lead to social isolation, role stress and family-to-work conflict (Kinman & McDowall, 2016). Longitudinal research also suggests that flexible workers are less likely to be chosen for high profile, urgent tasks (Kelliher & Anderson, 2009). There are also concerns about diversity, as the uptake of flexible working (especially for men) can be stigmatised (e.g. Rudman & Mescher, 2013) as they can be seen as lacking in commitment. Given that one of the reasons for increased home and flexible working is reduced commuting time, it is also important to consider evidence from transport studies. While full systematic reviews are not available, a recent study suggests that the positive effects are smaller than anticipated (Kim, 2016). Finally, although some benefits for e-working have been demonstrated, its relationship with wellbeing is complex and the advantages appear to be contingent on job control and role centrality (Biron & Veldheuven, 2016; Kinman & MacDowall, 2016)
Discussion
Several key questions arising from the presentations will be considered:

- What is (work) flexibility – how can it be defined in the light of different typologies and practices?
- Is there a dark side to flexibility? What are its unintended consequences and how can we minimise them?
- In practice, are current flexible working options sufficiently ‘flexible’? Who is responsible for managing which aspects (e.g. scheduling, liaison with colleagues, channels of communication, client relationships)?
- Do the assumptions of ‘flexibility’ inherent in zero-hours contracts and casual working really make up for the disadvantages?
- How can we persuade organisations and individuals that merely offering flexible working options may not be of universal benefit?
- How can we reduce the stigma of uptake of flexible working options?
- How can we encourage organisations, line managers and employers to work together to develop more creative flexible working options that address the varying needs of employees in terms of working context, life stage, caring responsibility and preference?
- How can we provide employees with guidance on how to maximise the benefits and reduce the disadvantages of flexible options such as e-working?

Learning objectives and value to participants
This professional forum clearly links with the conference theme of ‘research into practice: relevance and rigour. It will: a) provide delegates with a synthesis of current research findings; b) translate these complex findings into practical solutions; c) consider options to help researchers and practitioners work with individuals and organisations to maximise the potential of flexible working to enhance the work-life balance and wellbeing; d) consider gaps in current knowledge. The forum aims to:

- Update knowledge of flexible working options
- Develop insight into the pros and cons of flexible working, and provide an overview of recent high-quality research
- Raise awareness of the benefits of flexibility in different working contexts and at different stages of the employee life-cycle.
- Develop a critical awareness of the unintended consequences of some initiatives that aim to enhance flexibility
- Consider how flexible working can be used creatively in different working contexts
- Help organisations develop flexible working and work-life balance policies holistically and sustainably
- Develop an evaluative framework for benchmarking flexible working and generating local evidence for its effectiveness.

Audience
The workshop assumes some knowledge of the debates surrounding flexible working, but will be relevant for postgraduates as well as more experienced practitioners and researchers.

Participants
In past conferences, workshops and forums on the topic of work-life balance have been considerably over-subscribed. For this reason, we request a large room set out in cabaret style which could accommodate up to 50 people. We have also requested a session of no less than 1.5 hours which has been agreed by the committee (subject to acceptance).
References

T48 Standard Paper
Influences on Counterproductive Work Behaviour and Organisational Citizenship Behaviour
Alanna May Harrington, University of Manchester and Cubiks
Category: Leadership, Engagement and Motivation
Introduction
The purpose of this Masters dissertation research is to investigate the relationship between perceived psychological contact breach and extra-role performance behaviours; namely counterproductive work behaviour (CWB) and organizational citizenship behaviour (OCB). It also considers a number of mediating and moderating factors in these relationships, in order to further our understanding of the complexity of this relationship.

Firstly, it seeks to test for the mediating mechanism of perceived violation, which can be defined as the emotion response to perceived breach. It also examines the role of the individual difference of psychological entitlement in shaping employee’s emotional responses to psychological contract breach and their resultant tendency to engage in counterproductive work behaviours. It is proposed that highly entitled employees have higher expectations regarding their employer’s obligations towards them, and consequently react more negatively to perceived breach, leading to a greater inclination to behave in a manner which is detrimental to the organization. Finally, in order to provide insight into how
highly entitled employees can be managed effectively to minimize this risk, the study will also investigate the potential of ethical leadership to reduce the propensity towards counterproductive work behaviours of entitled employees who experience psychological contract breach.

**Design & Methodology**

The study is a quantitative survey design. There are two dependent variables; counterproductive work behaviour and organisational citizenship behaviour, and one independent variable, psychological contract breach. The mediator of perceived violation was examined, and two moderating variables; psychological entitlement as a moderator of the relationship between breach and violation, and ethical leadership as a moderator of the relationship between perceived violation and the behavioural outcomes. Self-report measures of all variables were completed by participants, and supervisor ratings were collected for the measures of the dependent variables, as a means of improving the reliability of the data. There is evidence to suggest that collecting responses from an observer enhances the validity and reliability of counterproductive work behaviour and organisational citizenship behaviour measures, as these measures are prone to response biases. All data was collected online using Qualtrics survey software in order to make the questionnaire accessible to employees to take either at work or in their spare time. Participants were required to be currently in employment, working either full or part time hours, with a direct supervisor, and aged over 18. Recruitment took place in both the United Kingdom and the Republic of Ireland.

Measures used were;

- Psychological Contract Breach and Violation (Robinson & Morrison, 2000)
- Psychological Entitlement Scale (Campbell et al., 2004)
- Ethical Leadership Scale (Brown et al., 2005)
- Counterproductive Work Behaviour Checklist – 32 Item (Spector, Fox, Penney, Bruursem, Goh, & Kessler, 2006)
- Organisational Citizenship Behaviour Checklist – 20 item (Fox & Spector, 2009)

A conditional moderated mediation regression analysis using the PROCESS Macro for SPSS is currently being undertaken, with preliminary findings indicating the model is significant, explaining over 50% of variance in the behavioural outcomes. There is also support for the role of ethical leadership in moderating the relationship between violation and CWB, but not OCB, and support for entitlement as a moderator of the relationship between breach and violation. Full results are pending but will be available by the date of the conference.

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

Psychological contract breach occurs when an employee perceives that the organization has not fulfilled their obligations or met their expectations. Breach occurs for two main reasons; reneging, which is when the organization recognizes that the obligation exists but knowingly fails to meet that obligation, and incongruence, which occurs when employees and organizations differ in their understanding about the existence or nature of an obligation (Robinson & Morrison, 2000). Perceptions of breach, regardless of their accuracy have been consistently linked to a variety of negative organizational outcomes such as lack of trust, lower job satisfaction, higher turnover intentions, and decreased performance and commitment (Robinson & Morrison, 2000).

Psychological contract breach has been considered as a stimulus for CWB. Perceptions of psychological contract breach and the resulting feelings of violation are thought to influence an employee’s likelihood to engage in CWB (Jensen et al., 2010). Equity theory (Adams,
1963; 1965) has been used to explain the relationship between breach and CWB. It states that individuals perceive inequity when they observe that another has a different ratio of input to outputs, for example when employees paid by the same organization perceive that one person receives a higher salary for the same amount of work (Pritchard, 1969). It is proposed that deviant behavior is considered an intentional act motivated by the need to restore equity (Aquino et al., 1999). Social exchange theory is also important to explaining this link, as any employer-employee relationship is governed by the rules of social exchange, and when the organization is perceived to break a promise, employees may reciprocate by hurting organizational interests (Colbert et al., 2004).

The experience of increased anger and other negative emotions resulting from breach is known as violation. The experience of violation has been show to drive employee’s behavioural reactions to breach (Priesmuth & Taylor, 2016). This premise is based on the Job Stress/Emotion/Counterproductive Work Behaviour model proposed by Fox, Spector & Miles (2001) which suggests that CWB is a response to stressful events in the work environment and that the negative emotions, such as anger or anxiety that are generated by these stressors mediate this relationship.

It is also proposed that in circumstances where breach is perceived, individuals will often respond by withdrawing their participation in OCB (Coyle-Shapiro, 2002). This is because it is often more difficult to reduce in-role performance, which is formally required and would results in loss of rewards or punishment.

The study also examines entitlement as a moderator. The term psychological entitlement refers to “a relatively stable belief that one should receive desirable treatment with little consideration of actual deservingness” (Harvey & Martinko, 2009, p.459). In the workplace, it typically manifests in beliefs that they should obtain praise, salary increases or other rewards, regardless of actual performance levels (Lee et al., in press). It is generally agreed that all individuals possess varying degrees of entitlement. It is thought that high or excessive entitlement relates to a number of undesirable outcomes such as perceived inequity, job dissatisfaction, corruption (Fisk, 2010), and also turnover intentions and supervisor conflict (Harvey & Martinko, 2009)

Entitlement is linked to extreme self-serving attribution style and a low need for cognition (Harvey & Martinko, 2009). Given the distorted perceptions of highly entitled individuals, it is proposed that highly entitled employees are more likely to perceive violation, as they have higher expectations of the employment relationship, and distorted perception of their own performance levels and value to the organization. According to Robinson & Morrison (2000) breach will not always lead to violation. This depends upon an interpretation process whereby the employee attaches meaning to the perceived breach.

The second moderator is ethical leadership, which is “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two way communication, reinforcement and decision making” (Brown, Trevino & Mitchell, 2005). It is proposed that ethical leadership influences the behavior of employees through a social learning process (Bandura, 1986), which is the learning of behavior through observational learning, imitation and modelling. Leaders are a likely source of such modelling due to the status and power given to them by their roles to affect behavior and outcomes. This study contributes to the ethical leadership research by investigating whether it can mitigate the impact of breach and violation on engagement in CWB and withdrawal from OCB.
2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
This paper links well with the theme as it is research that has a strong applied value; the findings can inform practitioners of how to limit engagement in CWB and withdrawal from OCB using strong ethical leadership. It can also provide useful information on how to effectively manage entitled employees, which could become more and more important in the coming years as it is hypothesised that entitlement is increasing in society over time. It also fits with the theme as the study was conducted with scientific rigour, meeting ethical standards, using appropriate statistical methods and based on a strong theoretical premise.

3. Why is the submission appropriate for the particular category you have chosen?
It is appropriate as it investigates the use of particular leadership style in determining employee’s engagement and behaviour at work, particularly organisational citizenship and counterproductive work behaviour.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
This is the first time all of these variables have been investigated together in a combined model. To date, no research that I am aware of has investigated whether ethical leadership can mitigate undesirable behavioural responses to breach. There is a gap in the research surrounding the relationship between violation and OCB and CWB, and I believe this is important to address as it is likely the feelings of anger and betrayal that lead to behavioural responses as opposed to the initial perception of promises being broken or expectations not being met.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
I recently presented an introduction to this topic at the BPS Postgraduate and Trainee Conference in York and it was very well received, with lots of feedback and questions received, despite the audience not being in the field of occupational psychology. I believe it will be even more interesting for delegates with a knowledge of these areas. Also, this is based on very recent developments in research that I have learned about in my MSc, which may be interesting for delegates who have not been in academia recently, to hear about recent advances in our field.

6. What might the public find interesting about your paper or session?
Many non-occupational psychologists are interested in entitlement, and when I discuss this research with people they often have examples of co-workers who had entitled attitudes and how it made their working life challenging. It is a topic that is very relatable for anyone who has experience of any work environment. The presentation explains all of the concepts so that it can be understood by someone without any prior knowledge of the topics being discussed, and gives real world examples, for example images of Bill Gates and Sepp Blatter are shown as examples of ethical and unethical leaders.

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 will provide electronic copies of the slides to attendees.

T49 Award Session 4
Lifetime Achievement Award Winner 2016
Category: Professional Affairs and Awards
See Awards Programme Book

167
T50 Extended Paper

Geopolitical Diversity in Occupational Psychology: A ‘research-into-practice’ essential

Bill Puplampu, Central University, Ghana; Chris Lewis, Aver psychology, UK

Category: Leadership, Engagement and Motivation

Introduction

As Occupational Psychologists, our work enables us to tackle many work related human challenges across the six listed submission categories of this conference and indeed of the science of occupational and organizational psychology. We have made considerable progress in both theory and practice in nearly 100 years of active engagement with society. Apart from direct psychological interventions, much of our work now informs and interfaces various Human Resource and general management initiatives.

In the last decade or so, however, there is increasing disquiet within our science about resource myopia (Drenth and Heller, 2004); narrow range of organisations from which we derive our samples/carry out our research (Patterson, 2001) and the dangers of weak science leading to populist, puerile and pedantic research efforts (Anderson et al, 2001). We also find that there is some disquiet about the issues we investigate with successive editors of our leading Journal: Journal of Occupational and Organizational Psychology – JOOP calling for greater attention to meaning, lived experience, philosophical underpinnings of peoples’ work life and so on (West et al, 1992; Sparrow, 1999; Arnold, 2004). This is probably the crucial issue underpinning ‘Research into Practice: Relevance and Rigour’.

Under-representation of global south

In addition to the issues noted above, a matter of concern to those occupational psychologists who work outside the global north is the rather poor attention to the development of occupational psychology theory beyond the dominant postulations derived from the UK and the USA. There seems to be an assumption that our theories should sit well, context notwithstanding. Johns (2006) has however noted the need for attention to context in research and theorizing in the social human and management sciences.

Using developments in the fields of work motivation and leadership, this paper seeks to show that occupational psychology would benefit from drawing in a diversified field of research sourced from other locations such as South America, Africa and Asia. We suggest that continued neglect of such geopolitical areas of the world which are underrepresented in occupational psychology theorizing undermine the prospect of occupational psychology truly reaching out and tackling global issues from the perspective of those directly affected by these issues.

We argue that the solution lies not only in methodological reflexivity and multidisciplinary inclusiveness but also in deliberate and sustained promotion of efforts to mine work related understandings from an autochthonous and indigenous perspective.

Work motivation theory explores the initiation, maintenance and qualitative direction of work behavior and has key principles such as the intrinsic-extrinsic and drive-process divides. Despite growing evidence of varied approaches to motivation (Latham, 2007), there is hardly any build-up of understandings from non-western areas (Munro, 1986; Puplampu, 2013). In many of these geographic areas, the drive-process and intrinsic-extrinsic divides appear tenuous and artificial. Meanwhile these are geopolitical areas with many concerns around productivity and work performance. Must occupational psychology interventions necessarily occur in the theory testing mode? We argue not.

Leadership theory has grown considerably and in 2011, JOOP attempted to explore leadership in Africa. Muchiri’s (2011) paper and that of Nkomo and Kriek (2011) suggest that there is considerable scope for new indigenous learnings from Africa on leadership in
Africa. This is backed up by the current writers who show in previous work that research into the everyday realities and foibles of corporate executives in an African setting offer rich opportunities to understand the complexities of executive leadership in emerging African markets.

**Essential argument**

The position advanced by this paper therefore is that: occupational psychology needs to enter a phase of deliberate efforts targeted at mining alternative, varied and diverse understandings from further afield – than that mainstream theory is used to. Of course the question may be asked about how much testing has already taken place to ascertain the applicability of extant theory to different locations. The counter argument may be that knowledge generation may proceed with or without testing of existing theory – as indigenous and autochthonous forms may be accessed for their value and potential contribution.

Through these approaches, we are likely to facilitate greater diversity of thought in and application of occupational psychology to emerging real world problems in a globalized and internationalized age. We argue that relevant theory and research that is impactful on practice must draw in location specific knowledge. Location specific and autochthonous knowledge needs to feed into development of indigenous theory.

We argue that in the increasingly globalized international space, relevance and rigour of practice impacting research cannot be attained without a deliberate attention to varied and mined local knowledge, context and theory. We suggest that the assumption that our theories as they stand can travel well, context notwithstanding is flawed. Occupational psychology must recognize that in places such as the many countries in Africa, there are cultural issues, clashes between tradition and modernity, economic opportunities in the midst of stagnation, political, institutional and State level weaknesses, thriving traditions and norms, considerable influence of religion. How much do these feature in theory development? This is what we mean by geopolitical diversity in theory as an essential tool for mainstreaming occupational psychology research into practice within a global space.

This paper calls for debate and seeks to engage colleagues who have practiced in either the global north or south or both and who have experiences about how well or otherwise occupational psychology theory travels

**References**


**T51**

Transitions and the unexpected

**Category: Professional Affairs and Awards**

Transitions and the unexpected – facing today’s biggest challenges

Following on from the successful launch last year of this new addition to our programme, we will have a series of high profile guest speakers address a global and strategic current and relevant issue voted by you our members. 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. The shortlist of titles ranges from the effects of globalisation on isolationism to the challenges faced with achieving equal pay.

**T52** Standard Paper

**Working hard, but sustainably: College apprentices’ understandings of job performance**

**Andrew James Clements**, University of Bedfordshire

**Category: Psychological Assessment at Work**

Introduction

This paper reports on research conducted regarding the perspectives on job performance of college students on apprenticeship programmes. This was conducted as part of a consultancy project aiming to develop a selection and development tool on behalf of a client organisation. The focus of this paper is on exploring young peoples’ understanding of job performance, and the context surrounding performance.

Youth unemployment has been a concern for some time, both in the UK and abroad. A SKOPE (2012) monograph reports that the proportion of UK employers willing to recruit young people has fallen progressively, regardless of economic health or decline. The UK Commission for Employment and Skills (UKCES, 2014) noted that youth unemployment in the UK is at around 20%. Despite this shortage of opportunities for young people, employers often claim that there is a shortage of individuals fit for work. Employers have claimed that 1 in 5 job vacancies are difficult to fill due to a skill supply shortage (UKCES, 2015). Other data, however, suggests that employers’ concern is not with skills but with a lack of work experience (UKCES, 2015). If young people lack experience of work, than one strategic response is to seek ways to provide young people with relevant experience, such as via apprenticeship.

Apprenticeship and employability

The term “apprenticeship” typically refers to the process by which one journeys from being a novice to becoming an expert in a particular profession – but the term also applies to a specific framework for work-based learning (Fuller & Unwin, 2008). Apprenticeships are a
form of vocational education and training (VET) that serve two primary goals for UK government: the formation of professional skills in young people, and the promotion of social inclusion (Fuller & Unwin, 2013). In the UK there are two principle forms of apprenticeship structure: programme-led apprenticeships in which work-based activity takes place at the end of a period of full-time education, and employer-led programmes in which apprentices have employee status (Fuller & Unwin, 2008). Part of the rationale for the development of apprenticeship schemes is to enhance the labour market prospects of individuals engaged in these schemes (Department for Education [DFE], 2011). In other words the employment opportunities for apprentices should be better than for equivalent individuals not engaged in the programme.

The client organisation asked the researcher to help develop a psychometric tool for use in 1) selecting young people for apprenticeship schemes, and 2) identifying aspects of performance in which young people may benefit from further development. Due to challenges the client had experienced in developing a tool with acceptable factor structure, the researcher explored the perceptions of performance in college students on apprenticeship programmes, in order to identify potential factors.

The structure of job performance
Job performance is commonly defined in terms of behaviours under an individual worker’s control, which contribute to the goals of the employing organisation (Rotundo & Sackett, 2002). There have been a number of job performance frameworks or typologies developed over recent decades (Griffin, Neal & Parket, 2007; Rotundo & Sackett, 2002). Viswesvaran, Ones and Schmidt (1996) identified nine common job performance measures within the literature, although a meta-analysis performed by Viswesvaran, Schmidt and Ones (2005) suggested that a single job performance factor was also supportable. Based on an examination of these typologies, an initial selection of performance dimensions was proposed for the consultancy project:

- Communication
- Discipline and organisation
- Interpersonal skills
- Motivation
- Citizenship behaviours
- Counterproductive work behaviours

Some elements of existing typologies were not included, e.g. task performance, because of the commercial requirement that a tool be developed for use across different apprenticeship schemes. Focus groups were conducted with college students on apprenticeship programmes in order to explore students’ understandings of these dimensions, and the extent to which these dimensions fit students’ discussion of performance.

Method

Design
A qualitative design was adopted for this study, in which participants were invited to join focus groups discussing perceptions of what employers want, and the nature of job performance.

Participants
Participants were recruited from a college in the southwest of England, with which the client organisation had an existing working relationship. Thirty college students enrolled on apprenticeship courses participated in focus groups. Participants represented a range of apprenticeship programmes, including construction, hair and beauty, and electronic engineering.
**Materials**
Participants were asked to respond to a series of open ended questions. The opening question invited participants to discuss what qualities they thought employers were seeking in people like themselves. Prompts were used to explore these further before participants were asked to discuss specific performance dimensions that the researcher had identified in advance. In order to help develop a tool that would mitigate the impact of social desirability, effort was made to explore both positive and negative aspects of performance.

**Procedure**
A semi-structured interview format was used. That is, a series of questions were used with focus groups in order to guide discussion, but freedom was given to identify further topics relevant for discussion. Group discussions typically lasted between 40 minutes to 1 hour. With the exception of one focus group (with three participants), group discussions were recorded to facilitate accurate analysis of discussions. Interviews were transcribed by a transcription agency following the signing of a non-disclosure agreement. The study followed BPS ethics, and ethical approval was obtained from the researcher’s Psychology Department.

Data were analysed using template analysis. This is a form of thematic analysis in which existing codes are applied to data, and then revised until they provide the best fit for data (King, 2004). This was conducted in order to explicitly examine how well performance dimension identified via a review of the job performance literature fit the perspectives of young college students. The analysis also examined students’ understandings of elements of performance.

**Findings**
Participants endorsed the importance of both motivation and discipline. The two constructs at time seemed interchangeable (for example, motivation was sometimes linked with the notion of persisting in work that one does not wish to perform). Discipline and organisation was identified with a sense of management, as well as the use of physical tools such as timetables. Both were seen as being associated with wellbeing and career success, although participants perceived motivation as potentially resulting in working too hard and being exploited.

Interpersonal and communication skills were also endorsed as important. However, it was difficult to identify conceptual differences in participants’ discussion of these performance dimensions. Both were associated with the need to work as part of a team, with the “dark side” of these skills linked by participants to being “too” assertive and reluctant to listen, or at times focus on work. When discussing these skills, participants often implicitly and explicitly referred to leadership behaviours.

Citizenship behaviours were linked by participants to both motivation (in the sense of helping because one wanted to) and interpersonal performance (in the sense of wishing to help others). As with discussion of motivation at work, participants perceived a risk of citizenship behaviours becoming “expected” and thereby leading to exploitation. However, participants also noted that attempts to help others may not always be welcome. While participants were able to identify mixed-blessings in most performance dimensions, participants did not consider any form of counterproductive work behaviour to be justified (with the exception of “banter”).

**Implications**
Participants were able to identify the “dark side” of some performance dimensions, which may inform the construction of psychometric tools that lack obvious “correct” answers. Items reflecting counterproductive work behaviours are likely to be an exception. In discussing
work behaviours relating to performance, participants indicated an awareness of what was professionally expected. However, while they presented themselves as wishing to perform well at work, they were also conscious of the need to balance this with considerations such as their own wellbeing, and their ability to function as part of a team, which were seen as potentially conflicting with “excessive” levels of performance.

References
Department for Education [DFE] (2011) Firms’ engagement with the apprenticeship programme, London: Department for Education
ESRC Centre on Skills, Knowledge and Organisational Performance [SKOPE] (2012) Youth transitions, the labour market, and entry into employment: Some reflections and questions, Research paper 108
Fuller, A. & Unwin, L. (2013) Apprenticeships and regeneration: The civic struggle to achieve social and economic goals, British Journal of Educational Studies, 61 (1), 63-78

T53 Standard Paper
Cross-Cultural Differences in Workspace Personalisation
Yuefei Cao, University of Bath

Category: Work Design, Organisational Change and Development

Introduction
Organisational psychology literature has demonstrated positive effects of office personalisation on employees’ wellbeing, satisfaction with their job and work environment and performance. Personalisation refers to the deliberate decoration or modification of an office environment by its occupants (Byron & Laurence, 2015; Wells, 2000). Previous research suggest that there are two approaches of the process that how personalisation affects individuals. One approach suggests that allowing employees to personalise provides a sense of personal control to employees. According to this approach, some research demonstrated the sense of control provided by personalisation directly result in the positive outcomes such as enhanced wellbeing and productivity (Lee & Brand, 2005; Wells, 2000), while some found that the sense of control leads to these outcomes via moderating impacts of negative factors in the environment, such as noise and lack of privacy (Laurence, Fried, & Slowik, 2013; Lee & Brand, 2010). The other approach is called the social identity approach, which applies social identity theory to explain the effects of personalisation (Knight & Haslam, 2010a, 2010b). It argues that personalisation is seen as a manner to provide work
autonomy to employees, which can enhance their organisational identification, and then the increased organisational identification leads positive outcomes to them. Therefore, these approaches previously presented mainly emphasise control and autonomy process.

The existing research has not paid attention to the role of culture in the effects of personalisation. However, some cross-cultural research has investigated the relationship between culture and control, and the relationship between culture and autonomy. On one hand, in terms of culture and control, Sastry and Ross (1998) found the negative relationship between personal control and psychological distress is more for non-Asian participants in their research, rather than for Asians. On the other hand, there is an inconsistency in the research about autonomy. Self-determination theory suggests that autonomy need is a universal need (Deci et al., 2001; Ryan & Deci, 2000). Later research has also confirmed the cross-cultural application of autonomy need (Chirkov, Ryan, Kim, & Kaplan, 2003; Chirkov, Ryan, & Willness, 2005; Deci et al., 2001; Yeh, Bedford, & Yang, 2009). However, according to Hofstede’s (1980) framework of cultural differences, there is one index called power distance, which refers to the different levels of acceptance of inequality in distribution on power in a society or an organisation. In other words, cultures with large power distance accept and expect the unequal distribution of power, while cultures with small power distance are more comfortable with the equal distributed power. Therefore, some research uses the concept of power distance to investigate the effects of empowerment and autonomy. For example, Eylon and Au (1999) demonstrated that low power distance cultures perform better in empowered condition, while high power distance cultures perform less well in this condition. Consequently, from the research about culture and control, and culture and autonomy, it can be inferred that there might be some cultural differences in the effects of personalisation.

To the best of our knowledge, none of previous studies has considered the impact of culture on the relationship between personalization and those outcomes (e.g. wellbeing, productivity, and satisfaction). Additionally, no research has ever been investigated this relationship in an eastern culture context. Therefore, the present research seeks to address these gaps in the existing literature by exploring the effects of workspace personalisation and the role of culture in these effects. The purpose of this research is: a) to examine how culture can moderate the effects of workspace personalisation on individual and organizational outcomes; b) to cross-culturally explore the process of how personalisation affects these outcomes.

Methodology
Case studies have been used as the research method. Two educational institutions, Zhanjiang Health College in China, and University of Bath in the UK, were chosen to conduct these case studies. 15 employees at Zhanjiang and 16 employees at Bath took part in the studies. In the case studies, the researcher firstly had a semi-structured interview with the participating employee. The interview included questions about participants’ feelings about their workspace, what personalised items they have, and the effect of personalisation on them. In addition, participant’s workspace was photographed and an observation checklist adapted by Wells (2000) was used in order to analyse these photograph. The checklist includes scales assessing the extent of personalisation and aesthetic quality of workspace, and a list of personalisation categories. Participants were anonymised in all audio-recordings and transcripts. All identifying items were blurred in the digital images so that the images remain anonymous.

Data Analysis
Each interview lasted approximately 30 minutes and was transcribed by the researcher herself. Additionally, the transcriptions of 15 interviews in China were translated from Chinese to English. The thematic analysis is being used as a method in the on-going data analysis. The observation checklists will be analysed by descriptive statistics and a series of
analyses of variance, in order to determine the percentage of participants who display various types of personal items at their workspaces, and to reveal the differences in the types of displaying items between two cultural groups of participants. The preliminary results are likely to address that the attitudes and opinions about restriction of personalization vary according to two different cultures.

Discussion
This study will have practical implications for business managers and office designers to improve the quality of physical working environments, as it will offer an insight into the distribution of any challenges of workspace personalisation and management. Also, it will have implication in diversity management of office environment through indicating the profile of impacts of personalisation on different groups of employees.

References


**T54 Standard Paper**

**Getting BARS right – lessons from assessment data**

James Meachin, Pearson Kandola, LLP

*Category: Psychological Assessment at Work*

**Introduction**

Organisations rely on performance assessments to support recruitment, appraisal and development activities. Research has shown that well designed rating formats can improve the psychometric properties of performance assessments. For example, by reducing halo and leniency and increasing inter-rater agreement (e.g. Shapiro & Shrom, 1980). In particular, Behaviourally Anchored Rating Scales (BARS) have been identified as an effective format (e.g. Debnath et al, 2015). As a result, research has informed practice and supported greater rigour in decision making.

However, for practitioners seeking to develop BARS, there is little practical guidance about how item content influences performance ratings. For example recommendations include “the number of response categories should be limited, that the anchors on the scale should be rigorously developed, and that anchors should be more than simple descriptive labels, such as poor, average, outstanding, and so forth” (Landy & Farr, 1980).

This paper bridges the gap between research and practice by using a large sample of real-world assessment ratings based on BARS to identify common features of BARS-items that demonstrate more, and less, robust psychometric properties. In summary if the benefits of BARS are to be fully realised in practice, there is the need for clearer guidelines on drafting items.

**Method**

Competency-based BARS were developed to support the graduate recruitment process of a large public sector employer in the UK. The BARS covered an interview stage and a subsequent assessment centre stage. Trained internal assessors from the organisation completed online BARS rating forms during the assessments, and this data was used for this paper. Across three years, data was available for 1,888 candidates at interview stage, and 1,059 candidates at assessment centre stage. The assessment process described in this paper is no longer in operation.

A fundamental principle of performance assessments is the requirement to differentiate between different levels of ability. As such, this research focused on the relationship between BARS-item content and the distribution of performance ratings across candidates. The BARS used in this study described three levels of performance: ‘Ineffective’, ‘Effective’ and ‘Highly Effective’, with behavioural anchors describing benchmark behaviours for each.

Given the relatively large sample size in this study, a roughly normal distribution would be expected within the BARS-items. High-performing and low-performing BARS-items were identified through statistical tests. For example, BARS-items that produced a Leptokurtic distribution (clustering at the mean with a small standard deviation), or a skewed distribution, were classified as low-performing. BARS which produced a normal distribution were classed as high-performing. For the analysis, the top-10 ‘high-performing’ and ‘low-performing’
BARS-items for the interview and, separately, the assessment centre were analysed for common themes.

**Results**

A clear pattern emerged with predictable differences between the high-performing and low-performing BARS-items. These are summarised in the table below:

<table>
<thead>
<tr>
<th>Theme</th>
<th>High-performing BARS-items</th>
<th>Low-performing BARS-items</th>
</tr>
</thead>
</table>
| Clarity of progression     | There was a clear distinction between the BARS-items at each level of performance. For example, the BARS-items relating to time management progressed from ‘Ineffective’ to ‘Highly effective’ as follows:  
  - Deals with tasks as and when they arise  
  - Considers key tasks and deadlines at the outset  
  - Builds contingency into plans. Recognises the need for ongoing monitoring against milestones | There was a relative distinction between the BARS-items at each level of performance. For example [italics added]:  
  - *Does not respect* the decisions made by the team  
  - *Shows some respect* for the decisions made by the team  
  - Respects the decisions made by the team. Is willing to compromise to meet the overall objective. |
| Describing frequency       | Relied on behavioural descriptions to distinguish between levels of performance:  
  - Does not identify next steps beyond the meeting. What needs to happen next is unclear  
  - Ends the meeting having identified specific areas for improvement  
  - Identifies how specific areas can be improved. Next steps and changes are clear. | Sometimes used frequency descriptions in combination with behaviours, which led to higher central tendency:  
  - Frequently used jargon, technical terms, or overly complex language  
  - Occasionally used jargon, technical terms, or overly complex language  
  - Consistently used clear and simple language; avoided jargon |
| Spread of difficulty/likelihood | Used behavioural descriptions that were within a ‘normal’ or more ‘typical’ range:  
  - Does not use Chris as an expert, tends to talk at him  
  - Uses Chris to test their own points of view or to answer very specific questions  
  - Treats Chris as an expert and includes him in problem solving. Asks exploratory questions that gain his views on key issues | Used behavioural descriptions that were relatively extreme at the end points, leading to a higher central tendency:  
  - Expresses opinions in an arrogant or intolerant way  
  - Shows acceptance of others, even if they hold divergent opinions. Can express disagreement constructively and respond positively to challenges  
  - Expresses opinions with warmth, sensitivity and diplomacy |
<table>
<thead>
<tr>
<th>Theme</th>
<th>High-performing BARS-items</th>
<th>Low-performing BARS-items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence of behaviour</td>
<td>Described ‘ineffective’ behaviours as clear actions that can be seen. For example:</td>
<td>Sometimes described ‘infective’ behaviours as an absence of doing something, which led to a positive skew in ratings. For example:</td>
</tr>
<tr>
<td></td>
<td>• Rambled when answering questions, went off the point, or provided information which was</td>
<td>• Does not demonstrate an understanding of the benefits of working collaboratively.</td>
</tr>
<tr>
<td></td>
<td>overly brief.</td>
<td></td>
</tr>
</tbody>
</table>

Discussion
While BARS are recognized as beneficial tools in supporting objective performance assessments, greater rigour can be introduced by providing clearer, empirically driven guidance, on how the wording of BARS-items affects the psychometric properties of ratings.

References

T55 Standard Paper
**Searching for Cyber Aptitude from within the Armed Forces**
Sean Keeley, Jo Parkes & Trevor Pons, IBM

**Category: Psychological Assessment at Work**

Background
The demand for cybersecurity experts has quadrupled to a record high over the last year in light of data breaches at TalkTalk, Sony and Ashley Madison to name but a few. This surge in demand has left the industry actively seeking to make new hires in 2016, with the jobs market expected to be strong for the foreseeable future.

Large organizations across many industries are planning to bolster in-house security teams, as well as calling on specialist contractors for support. Businesses are now more aware than ever of the devastating effects which a hacking incident can have. TalkTalk was hit by a significant and sustained cyber-attack in October 2015, its third in the calendar year, which could cost the telecoms company up to $50 million.

The global cybersecurity market is expected to be worth $170 billion by 2020, and the cybersecurity market is estimated to grow at a compound annual growth rate of 9.8% from 2015 to 2020. Compounding this further is the global cybersecurity labour epidemic. More than 200,000 U.S. cybersecurity jobs are unfilled. The cybersecurity workforce shortage is expected to reach 1.5 million unfilled positions by 2019. Demand for cybersecurity professionals over the past five years grew 3.5 times faster than demand for other IT jobs and about 12 times faster than for all other jobs.

It is within this environment that the MoD is in competition with the private sector for recruiting and retaining cyber skilled individuals. Having fair less flexibility than their private sector counterparts, the MoD is reliant on identifying individuals both capable of acquiring the required skills and motivated to serve their country, thus being more likely remain in service.
Developing a solution

Research
We conducted job analysis in order to identify what existing skills, abilities, aptitude and behaviours would be required of an individual suitable for this career. 27 1:1 interviews and 8 focus groups were conducted with a representative sample from across the division. All individuals involved also completed existing cognitive ability and personality assessments.

The sensitive nature of the roles seriously hampered typical job analysis approaches as we were not allowed physical access to the working environment, let alone conduct observations and the people we interviewed were not at liberty to explain in much detail what they did or how they went about doing it. As such, we were almost completely reliant on the use of analogies to get insight into what would be required to successfully perform in the role.

During this time, we identified a paradox between generic concepts of military ‘good’ and the reality of being good within the cyber team, this included working in a rank agnostic and more sedentary environment. To summarise, we identified that the major role requirements for a Cyber Specialist are individuals who are:

- **Intellectually bright** but not necessarily academically qualified. There are significant and surprising amounts of material to learn, which is continuous and builds on previous learning.
- **Very resilient** due to the confidential and sometimes disturbing nature of materials that may be involved.
- **Tenacious** and interested/happy working with lots of detail, being willing to probe again and again.
- **IT Literate** with a good knowledge of how IT systems work. This however was a skill identified as something that could be acquired in role rather than exist at time of commencement.
- **Independent** and comfortable working in an environment which is based on technical skills and low on structure. They have a lot of latitude to determine what they work on and how they do it.
- **Confident** dealing with individuals and staff at all levels within an organisation
- **Effective and credible communicators** capable of flexing various communication styles and making clear recommendations that will enable sometimes less ‘able’ clients to make informed decisions.
- **Proactive** in seeking opportunities to enhance and share knowledge.

Whilst there are already a number of commercial cyber solutions, existing assessments tend to concentrate more on current cyber technical knowledge, ability and/or skills rather than potential aptitude, our findings made it clear that what was required was an assessment tool which could test underlying cognitive ability, personality behaviours and innate aptitude for cyber roles.

Design
The premise for the assessment design is that as the technologies are changing rapidly, it is more appropriate to identify underlying cognitive abilities, skills and behaviours aligned to ‘learning and adapting’ continuously as new technologies and challenges emerge in this fast-paced and challenging environment.

Our final solution was a suite of assessments referred to as the Defence Cyber Aptitude Test (DCAT), that comprises of:

1. **Computerised Adaptive Test of Generic Cognitive Ability.**

   Constructs Assessed:
   - Logical Reasoning
• Numerical Reasoning
• Verbal Reasoning

Number of questions: Variable
Alpha: minimum of 0.815
Estimated completion time: 15 minutes
Rationale: Cognitive Ability is the best predictor of performance across jobs. It is also the best predictor of training or knowledge acquisition success.

The Cyber roles require the evaluation of critical information to come to a conclusion:
• Do I pursue this individual further?
• What’s the best way to make my argument to supervisors or co-workers?
• How do I make sense of the information gathered about these 3 people?

The Cyber roles also require the ability to learn new concepts and skills
• What’s this new social app and how can I leverage this information?
• How will I do in this class?
• How does this new programming language compare with what I already know?

Note, this assessment was previously created by our team for the British Army to use in recruitment.

2. Fault Finding Assessment
Constructs Assessed:
• Logical Reasoning
• Fault Finding
• Decoding

Alpha: 0.87
Final number of questions: 10 (From first iteration where 24 items were trialed)
Time Limit: 6

Rationale: The fault finding test is designed to provide a fair, objective, rapid and practical measure of skills in diagnosing faults in a system. It does this by presenting an input, a series of functions and a subsequent output and requires that candidates identify any faults in the coding system.

A pictorial code was created to ensure no benefit would be given to any individuals with previous coding experience were we use one already in existence. This will help to identify individuals who have or are capable of attaining the skills required to identify errors in processes as well as the ability to translate a form of code.

3. Checking Assessment
Constructs Assessed:
• Checking Skills
• Accuracy
• Systematic Approach

Alpha: 0.73
Final number of questions: 13 (From first iteration where 24 items were trialed)
Time Limit: 12

Rationale: Accuracy is typically assessed under time constraints but this would muddy the construct with an irrelevant requirement. As such, the Bridge Checking Test was designed to
provide a fair, objective, rapid and practical measure of skills in applying a systematic approach to identify errors rather than using time as a differentiator.

It does this by presenting a grid of ‘islands’ interconnected with a series of ‘bridges’. Candidates are required to identify if the ‘islands’ have been labelled correctly based on the number of ‘bridges’ connected to them. This will help to indicate if individuals have or are capable of attaining the skills required to accurately analyse data and unearth anomalies.

4. Personality Preference Assessment
Key Personality Traits Assessed:
- Tolerance
- Perseverance
- Team Player
- Sociability
- Dependability
- Conformity
- Self Confidence
- Social Assuredness
- Energy

Number of questions: 82 (From first iteration where 120 items across 13 traits were trialed)
Estimated completion time: 10 minutes

Rationale: The ‘Interplay’ of many of the personality traits ran counter-intuitive and sat outside of typical ‘service’ ethos. For example, individuals with strong preference for persevering with tasks until completion might find it challenging to cease work on or hand over a task with no completion point.

Data analysis & results
Analysis was conducted on a much larger form (with an average seat time of 85 minutes). Norms (n = 262) were based on the initial trial data although it was anticipated that maximum performance assessment means would increase, given that the trial population would be less motivated to perform well (no consequence) and more likely to experience test fatigue (average seat times for the first iteration was 85 minutes with some individuals taking nearly twice that).

Re-norming of the final form took place early this year (n = 150). Most individuals are now completing the assessment suite in less than 50 minutes (significantly less if not taking the personality preference questionnaire).

The DCAT is still in the nascent stages of its lifecycle and as such a concurrent validation has not yet been conducted. An independent validation exercise is scheduled to be completed by the time of the conference.

Next steps
Given the dynamic nature of this test, we would expect test upgrades to continue for the next few years on an annual or bi-annual basis. It is also entirely possible that the next 12-18 months will see MOD UK looking to refine and hybridise the core tool to include gamification and an adaptation of the tool to enable it to be applied to all prospective entry-level applicants to the UK Armed Forces (116,200 applicants from July 2014 to June 2015).

Discussion points
- Conducting robust Job Analysis when you can’t ask someone what they do, how they do it or why
• Assessing for aptitude rather than ability and keeping construct assessment as ‘pure’ as possible
• The benefits of working with a military organisation when meeting aggressive timelines

T56 Standard Paper
Big Data Analytics and its Prospects for Changing Change Management
Thomas Calvard, University of Edinburgh Business School; Paulina Osiecka, Osiecka Consulting Ltd
Category: Work Design, Organisational Change and Development

Abstract
While technological change is often discussed in terms of its disruptive and innovative effects, it is discussed less in terms of its explicit relationships with change management theory and practice, an important area of occupational and organisational psychology. The current paper introduces the technological topic and trend of big data analytics, and relates it to Armenakis and Bedeian’s (1999) framework of four themes common to all change efforts – content, context, process and criterion. These four themes are used to organise and draw out the major implications big data analytics is likely to have in terms of changing change management.

Introduction and Background
In some recent commentaries in the business world on ‘changing change management’ (e.g. BCG, 2012; McKinsey, 2015), the track record of traditional change management is argued to be relatively dismal and stuck in a pre-digital era, lacking more personalised, integrated and sustainable approaches. At the same time, independently of these discussions, management researchers are starting to note the emergence of an increasingly digital workforce and workplace (Colbert, Yee & George, 2016), with big data analytics and a cluster of related technological trends (e.g. mobile devices, cloud computing, AI) at the heart of these changes (Colbert et al., 2016; George, Haas & Pentland, 2014).

In this paper we want to emphasise the importance of connecting these two perspectives more explicitly. Technological changes are often widely discussed, but this is done separately to most work on change management theory and practice. Change management textbooks and skill sets tend to have a more general, abstracted focus on stages of change implementation and managing the reactions and involvement of stakeholders, while the technological context remains neglected (Hughes, 2010; McKinsey, 2015). The aim here is to explore the various ways in which the personal, social and strategic elements of change management can be related to the more technical elements of big data analytics.

Big data analytics can be defined at the broadest level as data whose size forces us to look beyond the tried-and-true methods of the time in order to store and analyze it (Jacobs, 2009). This definition can be further broken down into various ‘V’ considerations characterising big data - its volume, velocity, variety, veracity and its value (IBM, 2015). It’s also important to note more critically that the use of metrics and analytics with smaller data in fields like statistics, human resources (HR) and business intelligence, is not a new phenomenon and has a longer history of its own, which should not be neglected (Forbes, 2013; Harford, 2014).

Nevertheless, big data is bringing potential changes to the way HR and organisational psychology think about and use analytical decision-making alongside evolving practices and skills (e.g. Angrave et al., 2016; Tonidandel, King & Cortina, 2015). However, as noted above, thus far hardly any work has considered change management as a more specific field, with its own distinct set of concerns in relation to big data analytics.
Hence this paper uses an influential change management framework devised by Armenakis and Bedeian (1999) and made up of four key areas – content, context, process and criterion – as a guide for assessing the various ways in which change management might be affected, positively and negatively, by big data analytics.

**Big Data and the Content, Context, Process and Criteria of Organisational Change**

Too often changes are simply dichotomised into small-scale vs large-scale, and change management into bottom-up vs top-down activities, without much further refinement. The Armenakis and Bedeian (1999) framework was therefore chosen for structuring this paper because it constitutes a comprehensive, influential high-level scheme, covering four major aspects common to any change efforts in organisations. Briefly represented here, the four areas of the framework as applied and related to big data analytics, are developed as follows:

**Content:** This concerns being specific about the substance of different types of change. For instance, the popular Change Activation toolkit (2016) recently identified twelve common types of change, including mergers, downsizings, relocations, and so on. The collection and analysis of big data may serve to establish more robust, extensive findings about particular types of organisational changes (e.g. growing large, detailed databases on mergers).

**Context:** This concerns the external and internal forces that bring about organisational changes. Here organisations may be attempting to create bigger, more open datasets that connect the internal context of an organisation with external realities in its environment. Different sectors (e.g. manufacturing, aviation, city services) will face their own distinct forces, and big data can help build a 'big context' map for analysing and digitally ‘sensing’ their relationships with their environments (General Electric, 2015).

**Process:** This concerns the various phases of change and the top-down or bottom-up experiences of how changes come about. Big data that can be captured in real-time and on a continuous basis may help to test and refine stage models, and detect more complex patterns of organisational change (e.g. spirals, cycles) (Eisenhardt, 2000; Langley et al., 2013). Big data at multiple levels may also shed greater light on top-down and bottom-up processes of change, local reasons for resistance, and how portfolios of change projects are managed.

**Criteria:** Finally, this concerns the way change is measured, evaluated and sustained, and on what terms. Big data analytics offers some hope for making evaluations more thorough and easier to conduct, at least where the data is available. More extensive data may lead to more complex models and pathways of change evaluation, as well as capturing surprising trends and unintended consequences. Big data may thus help to overcome some informational barriers to evaluation, although it may not be totally immune to informal, political barriers (Skinner, 2004).

**Implications and Conclusions**

This paper concludes that big data analytics will have a range of profound effects on change management theory and practice, often positive in nature, but with some critical risks remaining if not addressed appropriately. Big data analytics offers new possibilities for enhancing the rigour and relevance of change management by changing the way scientific and statistical processes of inquiry are conducted (Chiaburu, 2015; Wired, 2008). It may even help redefine best practice, (re)developing key ways of working with change (Burnes & Cooke, 2013).

At the same time, big data analytics should not be uncritically adopted, but considered alongside the need for more evidence-based change management research agendas (Barens et al., 2014). The UK is also facing a digital skills crisis where many change agents
will lack the competence to properly incorporate big data analytics into their methods (the 
Guardian, 2015), and new spaces of expertise will need to be created, also to address 
ethical concerns and pitfalls that can arise in analytics (Guzzo et al., 2015).

Future research can and should continue to draw on other, more specific theories and 
frameworks of change in relation to big data, and consider other topics within change 
management – such as reactions to change, change agents/agency, leadership and 
learning. In sum, big data analytics can hugely improve change management study and 
practice, provided it builds on the strengths and opportunities, and avoids the weaknesses 
and threats, of what remains a much-discussed but surprisingly fragile field (Hughes, 2010).

Selected References
20 July 2016: http://www.mckinsey.com/global-themes/leadership/changing-change-
management

T57
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 key dates, format and content, and the do's and don'ts of topics for submission to 
our quarterly journal.
Everybody welcome from students to experienced professionals.

T58 Standard Paper
Unpacking the left side of PsyCap: An Acherian Analysis
Royston Meriton, Leeds University Business School
Category: Psychological Assessment at Work

Introduction
Positive psychology burst on the organizational and management scene some 20 years ago 
armed with a portfolio of human strengths under the psychological capital (PsyCap) banner 
whose constituents include hope, optimism, self-efficacy and resilience. In this stream of 
literature, the constituents of PsyCap are argued to be state-like, flexible and amenable to 
development rather than fixed dispositional traits. Positive organizational studies focus on 
the relationship between these human strengths and desirable outcomes and how these 
may be promoted at work. Indeed, the concept of psychological capital (PsyCap) continues 
to attract a great many interests from both academics and practitioners and it has been 
linked to employee attitudes, behaviours and performance at different levels of analysis. A 
recent meta-analysis found a sizeable number of empirical studies which yielded significant 
predictive validity of PsyCap in individual outcomes.

The impact of positive employees in the work place is however still an incomplete picture 
and researching the dynamics of PsyCap has hit a few humps and bumps along the way. 
Many authors have attacked PsyCap research on methodological grounds criticising its 
heavy reliance on a single methodological strategy. Others have attacked it for its treatment
of context with some pointing out that the PsyCap discourse is one with a heavy North American bias. Many have argued that culture does play a role in shaping perceptions of positiveness and have encouraged studies that take into account the role of social context.

Furthermore, studies addressing the nature of PsyCap, its measurement, the factors that influence its development, and when and how it influences individual-level outcomes are scarce. In other words, few have considered what is ‘to the left’ of PsyCap (i.e., the antecedents). Until recently, the limited studies on antecedents have focused on organizational factors such as supportive organisational climate, stressful working environment, and transformational and authentic leadership. The only known study to date with a focus on individual differences is offered by Avey (2014). Avey found individual differences measured as proactive personality and self-esteem accounted for a larger share of the variance in PsyCap compared to leadership and job characteristics.

The aim of this paper is to attempt to address some of the noted limitations of PsyCap research, in particular I seek to further unpack the individual differences that may account for the heterogeneity in PsyCap. To do this I draw on the recent research finding which suggests “not only that PsyCap is a multidimensional higher order made up of positive states of optimism, efficacy, hope and resilience, but also that it is a multiestablished construct” (Avey, 2014: 146), that is, a construct established first in multiple other domains. It is my contention that the multiestablished nature of PsyCap speaks to the idea that personal resources need to be understood in terms of an individual's psychobiographical domain. The psychobiographical domain comprises the structural conditions of personal identity and the ability of individuals to manage feelings. In her recent work on what it means to be human, Margaret Archer summons the resources of critical realism to advance her idea of how people forge identities in interaction with structural conditions lodged in the external context. She takes an emergent view of selfhood arguing for reflexivity, exercised as internal conversation, as the mediating mechanism between structural conditions and human action. In short, reflexive deliberation, via the internal conversation, is the mechanism linking structure to agency. She identifies four modes of reflexivity which are dependent on whether individual experience was formed as part of contextual continuity or discontinuity.

Communicative reflexivity is formed from experience of contextual continuity while autonomous, meta and fractured reflexivity respectively are variously formed out of experience of contextual discontinuity. Close inspection of Archer’s writing reveals that the idea of internal conversation appears to be variously linked with coping in childhood. Contextual discontinuity for instance means that the young subject is confronted with unfamiliar situations. In order to resist fracturing and cope with the novelty of the situations, these subjects need to draw on their own resources to become self-reliant. Thus, Archer (2007: 194) equips the autonomous reflexives with self-confidence, noting that, “the experience of discontinuities and the confidence to handle them are mutually reinforcing; together they generate self-reliance.”

According to Hobfoll (2002), resources tend to come in bundles, therefore, it is highly likely that the emergence of self-confidence is accompanied by resilience, hope and optimism. The communicatives on the other hand are sheltered from the novelties of discontinuous experiences owing to the presence of close familial ties, the need to draw on their own resources to cope in unfamiliar situations is greatly attenuated. It is on the basis of the punctuated psychobiographical domain owing to the experience of contextual discontinuity that I see a relationship between Archer’s autonomous reflexivity and the constituents of PsyCap. Indeed Gillberg and Bergman begin to make a similar point arguing that the social settings that produce resources in the form of self-confidence serve as factors that strengthen autonomous reflexivity. Therefore, the aim of this work is to examine the existing research on autonomous reflexivity for a link with the constituents of PsyCap.
Methodology
I offer a modified realist review of existing primary research on autonomous reflexivity as the methodological approach. A realist review is a systematic, theory driven, evidence based approach to reviewing a body of work which usually involves the analysis of both qualitative and quantitative data. It seeks to unpack the relationships between context, mechanism and outcomes which has been summarised by Pawson and Tilley (1997) as Context + Mechanism = Outcome (C + M = O). In practice this means that a specific set of mechanisms will lead to certain outcomes when operating in a particular context. I find the realist review particularly useful for this study given its emphasis on context. Although I will only be reporting the findings relevant to the psychological mechanisms, they nevertheless reflect part of an overall action system. In order to apply the realist review in this work I introduce agentic intervention in the equation. Agentic intervention is made up of reflexivity exercised through internal conversation and psychological resources. Thus, for this work the following formula applies: Contextual Mechanisms + Agency = Outcome. The theoretical framework is shown in Figure 1. Five steps have been proposed to carry out a realist review: (1) clarify scope; (2) search for evidence; (3) relevance appraisal; (4) synthesise evidence and draw conclusions and finally; (5) disseminate, implement and evaluate.

![Diagram](image-url)

**Figure 1: Theoretical Framework**
Searching, Selection and Appraisal, and Synthesis

The Searching Process
I relied on existing qualitative studies for evidence. The searches for relevant works were executed for the period 2003 to 2016 to coincide with the first appearance of internal conversations in Archer’s (2003) “Structure, Agency and the Internal Conversation.” The search terms were truncated in order to capture different uses of autonomous reflexivity.

Selection and Appraisal of Documents
A total of 502 references stored electronically were returned from the search strategies. Those references were mostly academic articles, however a few represented offline materials such as books, book chapters and PhD theses. Table 1 summarises the work processes from database selection through to screening processes and the final selection of included works.

Table 1: Distribution of papers and search strategy

<table>
<thead>
<tr>
<th>Search Strategy Development</th>
<th>Articles retained after...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Name of Database</td>
</tr>
<tr>
<td>Springer</td>
<td>6</td>
</tr>
<tr>
<td>Proquest ABI</td>
<td>18</td>
</tr>
<tr>
<td>Science Direct</td>
<td>1</td>
</tr>
<tr>
<td>Web of Science Business</td>
<td>7</td>
</tr>
<tr>
<td>Source Premier</td>
<td>2</td>
</tr>
<tr>
<td>Google Scholar</td>
<td>467</td>
</tr>
<tr>
<td>Total</td>
<td>502</td>
</tr>
</tbody>
</table>

Data Extraction and Synthesis
Relevant data were extracted by employing the thematic content analysis technique. The initial coding was based on the individual constituents of PsyCap. Direct quotations from the works retained were used as supportive evidence.

Findings
Table 2 reports the codes and themes extracted from the studies analysed. In reporting the findings I also make use of some quotes from the studies analysed to provide further illuminations. For the purpose of this paper only the findings related to the psychological resources are reported.

Discussions and Conclusion
In this work I have taken a novel approach to investigate the ‘left side’ of PsyCap. By drawing on the resources of critical realism I operationalised human agency in terms of internal conversation and psychological resources. By applying the principles of a realist review, the findings indeed indicate that autonomous reflexivity may well be a predictor of the positive psychological resources that underlie PsyCap. Given that reflexive modes are formed during the formative stages of human development, the findings suggest that
PsyCap may well be a multiestablished construct. Hence, this reinforces the role of the social context in shaping the resources available to individuals.

The practical implication of the findings advocates that through human resources management (HRM) practices, organizations can exercise control on the overall level of PsyCap, by first selecting and hiring employees for high PsyCap based on individual differences in dominant mode of reflexivity. There are also methodological implications, I see the adoption of a customised realist review as a novel way to examine the emergence of phenomena in a non-reductionist approach. Although I am only reporting the findings related to psychological resources I also found intriguing dynamics between autonomous reflexivity, psychap and the organizational context which suggest an element of reciprocity between them. It must be noted that previous studies involving PsyCap have almost exclusively adopted a positivist approach.

Table 2: Summary of findings

<table>
<thead>
<tr>
<th>Themes</th>
<th>Codes</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-confidence/efficacy</td>
<td>Determination Commitment Efficacy Self-esteem Highly competent Challenge seeking</td>
<td>From the way my parents were with me, I was very confident, very dominant. I could do a lot of things that other teenagers my age wouldn't do, I was very self-sufficient” (Archer, 2007a, p.197).</td>
</tr>
<tr>
<td>Resilience</td>
<td>Readiness Solid temper and standing Do not give up easily Prepared to face challenges Self-reliant Overcoming difficulties Proactive</td>
<td>Her personal qualities highlighted by the Archerian analysis, included a strong streak of determination and resilience, supported by an independence of mind which reflected an inner strength (Cownie, 2015, p. 148, 149).</td>
</tr>
<tr>
<td>Hopefulness</td>
<td>Independent Future oriented Search for opportunities Planning Agentic strategies Internal locus of control Multiple pathways</td>
<td>Rather than allow the structural conditions to prevent her from progressing to higher education, she exercised her agency to project possible futures and planned accordingly. It is a strategy that demonstrates the process of weighing up possible outcomes, associated with rational choice theory and is a characteristic of autonomous reflexivity (Dismore, 2014, p. 339).</td>
</tr>
<tr>
<td>Themes</td>
<td>Codes</td>
<td>Quotes</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Optimism</td>
<td>Internal locus of control</td>
<td>...I’m not pessimistic, but I always tend to think I could have done something better (Greenbank, 2010, p. 67).</td>
</tr>
<tr>
<td></td>
<td>Not pessimistic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Entrepreneurial identity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Realistic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Future oriented</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pursue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>opportunities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pragmatic</td>
<td></td>
</tr>
</tbody>
</table>

The study is limited by the lack of original data and it is acknowledged that the primary studies I have reviewed were not designed with the same intention in mind. However, this can also reflect a potential strength of the current approach in unravelling otherwise embedded insights. Future studies are recommended to explore the relationship between the meta-reflexive mode and the emergence of the human psychological strengths outlined in this study. This will help paint a fuller picture of the relationship between internal conversation and PsyCap.

(Word count: 2000)

**References**


**T59**

**DOP 2016 Annual General Meeting**

**Category: Professional Affairs and Awards**

Join DOP committee members to find out more about your DOP. *Please note*: Only full members of the DOP are able to vote.
Timetable Abstracts
Friday 6 January

F01 Standard Paper
Strategic Machiavellians: Introducing the multi-dimensional Machiavellianism measure
Ioannis Kratsiotis & David Hughes, University of Manchester
Category: Psychological Assessment at Work
The construct of Machiavellianism has been originally developed by Christie and Geis (1970). The construct included themes such as amorality, cynicism, untrustworthy view of the human nature, and willingness to manipulate. The need for a revised measure of Machiavellianism has been repeatedly highlighted by individual differences researchers. There is a growing consensus that Machiavellianism should broaden its boundaries and incorporate additional dimensions. Machiavellianism measures suffer from three major limitations. First, they are psychometrically sub-optimal (Miller, Smart, & Rechner, 2015). Second, they are virtually indistinguishable from Psychopathy measures (Miller, Hyatt, Maples-Keller, Carter, & Lynam, 2016). Third they do not offer incremental predictive validity beyond psychopathy (Glenn & Sellbom, 2015).

We believe that these problems stem primarily from a mismatch between Machiavellianism theory and measures. In other words, Machiavellianism measures lack content validity. For example, Miller et al. (2016) show that Machiavellianism measures are virtually indistinguishable from Psychopathy measures, as they focus on the negative aspects of Machiavellianism and ignore the strategic approach central to Machiavelli's original thesis (Jones & Paulhus, 2009). Further, Jones and Paulhus (2009) concluded that Machiavellianism measures have been contaminated by impulsivity, which does not match the theoretical profile of Machiavellians.

In order to address these problems, we set about creating a new measure of Machiavellianism. We conducted a systematic review of Machiavelli's original work, The Prince (1513), contemporary measures and theories. We identified six core factors, which we named, self-serving motives, desire for power, amorality, negative view of others, manipulativeness and strategic focus. Next, using existing and newly written items, we developed psychometric measures of each factor. We then conducted a validation study using a sample of corporate employees (N = 962). We compared our measure to existing Machiavellianism and Dark Triad measures and examined predictive validity with eight theoretically salient outcomes, including the organisational variables of Counterproductive Work Behaviour, Organisational Citizenship Behaviour, and Innovative Work Behaviour.

Data were analysed using Exploratory Factor Analysis, Confirmatory Factor Analysis, and Structural Equation modelling. Our measure conformed to the hypothesised six-factor structure and demonstrated excellent model fit in CFA whereas the existing measures did not. However, the strategic focus factor did not load on a general Machiavellianism factor leaving a five-factor model of Machiavellianism and a single strategic focus factor. The Machiavellianism factor predicted all outcome variables measured and demonstrated incremental predictive validity over the other Machiavellianism and dark triad measures. Finally, and perhaps most interestingly, we examined interaction effects between Machiavellianism and strategic focus. For all but one outcome, we observed a significant interaction which displayed incremental predictive validity over all of the other the predictor variables included in the study, suggesting that strategic Machiavellians are adaptive whereas non-strategic Machiavellians are not. Further, we observed that all Machiavellians, regardless of their strategic focus, report strong levels of impulsivity but that strategic
Machiavellians were the most self-controlled group studied, together suggesting that strategic Machiavellians can override their impulses to facilitate goal attainment. Moreover, the present study gives us an insight into how Machiavellians operate within the workplace and also suggests some areas where they might be productive (Innovative Work Behaviour) and counterproductive (Counterproductive Work Behaviour).

The study produced a theoretically robust multi-dimensional measure, demonstrating impressive factorial validity, and incremental predictive validity over existing measures. Moreover, it is the first study to our knowledge providing empirical evidence of the interaction between strategic focus and Machiavellianism. Machiavellianism and Psychopathy overlap due to their shared core of callousness and manipulativeness (Jones & Figueredo, 2013). Our results perhaps suggest that without a strategic focus one cannot be Machiavellian but rather that a non-strategic Machiavellian is simply high in Psychopathy. The present study has the potential to redefine the theory and measurement of Machiavellianism. Furthermore, it has potential practical applications which are relevant to the conference theme, and might be of interest to conference delegates and attendees. The new psychometric instrument can be used as part of the recruitment process and the assessment of existing employees. Furthermore, the study’s findings suggest that Machiavellian individuals and subsequently organisations as a whole can be benefited by strategic thinking training programmes. Finally, human resources interventions can be designed, aiming to align the organisations’ strategic goals to the individual goals of Machiavellian employees and thus translating self-serving motives to pro-organisational ones.

References

F02 Discussion
EAOHP Discussion Panel Insights from OCHP – What works?
Juliet Hassard, Birkbeck, University of London, Gail Kinman, University of Bedfordshire, Karina Nielsen, University of East Anglia
Discussant: Kevin Teoh, Birkbeck, University of London
The European Academy of Occupational Health Psychology (EAOHP) supports research, education and professional practice in the discipline across Europe and globally. We work closely with bodies such as the European Agency for Safety and Health at Work and the Society for Occupational Health Psychology in North America. The EAOHP has recently forged a strong reciprocal relationship with the BPS Division of Occupational Psychology and a Memorandum of Understanding is in progress. It is anticipated that this more formal collaboration between the DOP and the EAOHP will encourage members to work together
more closely in order to develop and evaluate a range of creative, evidence-informed and pragmatic approaches to improving wellbeing at work.

This panel discussion is relevant to researchers and practitioners with an interest in the field of OHP who wish to find out what actually works. It draws on insights from experts working in key areas of occupational health psychology to identify ways to enhance the wellbeing of employees at individual and organisational levels. Delegates will gain an overview of how research findings can be translated into creative and effective interventions that have strong potential to improve wellbeing in different occupational settings. The session will focus on how to develop effective interventions to reduce work-related stress, enhance work-life balance and introduce health promotion initiatives as well as the factors that influence their effectiveness. Case study examples will be provided and challenges, opportunities and obstacles faced by researchers and practitioners in the field will be discussed. Gaps in knowledge and priorities for future research in OHP will also be explored.

Karina Nielsen from Sheffield University Management School will focus on the implementation of interventions to manage work-related stress. It is increasingly recognised that the process of implementing interventions is as important at the content of the intervention itself. Key principles include: a) the support of senior management is required to provide the necessary resources, but the assistance of line managers is needed in driving day-to-day change and prioritising intervention activities; b) participatory approaches, where employees and other key stakeholders are actively involved in the design, planning and implementation of interventions to ensure ownership and maximise their feasibility and acceptability, and c) intervention fit, where interventions and their activities are congruent with the organisational context. Also considered will be the need to integrate the intervention into existing structures and management practices to ensure people are familiar with the processes in order to implement sustainable change. The need for interventions to be aligned with organisational priorities, rather than be conflict with them, will also be considered.

Juliet Hassard from Birkbeck, University of London will consider the introduction of health promotion initiatives in organisations. Developing and sustaining a healthy working environment and workforce has clear benefits for companies and employees, but it can also lead to an improvement in social and economic development at local, regional, national and European levels. This presentation will draw on the findings of a literature review that aimed to identify the key reasons, arguments and motivations for employers to carry out workplace health promotion initiatives. It will also identify some of the associated challenges and obstacles. The breadth and strength of the available research findings in this important domain of enquiry will be explored together with the implications for practice.

Gail Kinman from the University of Bedfordshire will consider the challenges faced by individuals and organisations in maintaining a healthy work-life balance. The ways in which work can impact on personal life and constrain recovery will be considered along with the implications for wellbeing and productivity. The need to revisit the meaning of work-life balance and the ways in which recovery can be achieved in the face of rapidly changing working environments will be explored. Focus will be placed on how work intensification aided by the use of technology can challenge work-life balance. A systemic framework to help organisations and individuals build healthy work-life balance policies and practices will be presented. The fitness for purpose of a range of models with strong potential to inform interventions to improve recovery will be considered, with particular emphasis placed on person-environment fit approaches that accommodate wide variation in individual needs and approaches to work.
The speakers will initially provide an overview of each topic and identify key points for practice. Kevin Teoh from Birkbeck University of London will then lead a question and answer session drawing on issues raised by the panel and the audience. The session will conclude by identifying: a) what interventions work, for whom, under which circumstances? b) what are our gaps in knowledge? c) what are our priorities for future research?

**F03 Standard Paper**

**Exploring the Sources of and Reactions to Workplace Frustration: A Triangulation Study**

**Sophie Ward, Gail Steptoe-Warren & Simon Goodman,** Coventry University; **Kathryn Waddington,** University of Westminster

**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 and widespread issue within organisations. Particularly in the UK, with research conducted in 2013 showing that frustrated employees accounted for around 20% or more of an organisations workforce in the UK (Hay Group 2013). It is of high importance therefore, especially given the consequences of workplace frustration for both organisations and individuals, such as deviant behaviour (Elias 2013: 204), employee turnover (O’Connor et al. 1984), and work-related anxiety (Spector 1997), 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 and increasing issue within organisations, frustration has often been neglected in organisational research, with much of the research currently conducted into the area being limited and outdated (E.g. Gilmer 1961, Spector 1975, Taylor and Walton 1971), and the majority of models developed being highly speculative and/or narrow in their focus (E.g. Fox and Spector 1999, Keenan and Newton 1984, Spector 1978). In line with Dollard et al.’s (1939) frustration-aggression hypothesis the majority of research and models, such as those developed by Spector (1978) and Keenan and Newton (1984), focus greatly on workplace aggression as a result of frustration (E.g. Berkowitz 1989, Spector 1975, 1978), or on the impact of frustration on performance (E.g. Libb and Serum 1974, Spector 1978). Moreover, much of the research conducted is also reductionist in terms of the methodology utilised, with the majority of data being that gathered from questionnaires (Simminger 1971, Spector 1975) or case studies (Gilmer 1961, Taylor and Walton 1971).

Although useful, the research and models are therefore limited and outdated in terms of their explanation of workplace frustration and the focus of this research needs to be expanded and modernised. Something which the current research aims to do. Given the increasing levels of frustration within UK organisations and the majority of prior research being conducted in the USA (E.g. Fox and Spector 1999, O’Connor et al. 1984, Spector 1975, 1978, 1997), the current research focuses specifically on the UK. Using methodological triangulation, in particular semi-structured interviews, diaries and open questionnaires, the current study has gathered the experiences of employees and volunteers from the public, private, and voluntary sector, as well as independents. So far the data captured has been gathered from over 150 UK individuals and specifically explores the sources of and reactions to the frustrating experience. A few statistics have also emerged from the questionnaire data, including how many of these individuals have experienced a frustrating event at work and/or left an organisation/job role as a result.

The qualitative data is being analysed using Thematic Analysis (Braun and Clarke 2006) to explore the key themes of the discourse. The exact key themes and subsequent subordinate themes that will emerge from the data are not yet evident at this stage in the research.
process, however these themes will be presented and discussed with delegates in January, along with illustrative quotations and the quantitative findings. Preliminary analysis suggests that the experience of workplace frustration is indeed very high with 78.2% of those who have currently taken part in the questionnaire indicating that they have experienced a frustrating event at work. The initial analysis also suggests that workplace frustration can be caused by a multitude of factors, including co-workers, bullying, technology, a lack of work-life balance and an organisations commitment to an employee. Furthermore, a variety of reactions to workplace frustration have currently been identified, including aggression, deviant behaviours and low levels of performance, as well as seeking support and communicating frustrations to management.

Results so far suggest workplace frustration is indeed an ongoing and significant issue in the UK, one that warrants further investigation and requires successful interventions to reduce the issue and support employees to react to frustration in more positive ways. Preliminary results also show the wide variety of sources of and reactions to workplace frustration in the UK in the 21st century, providing novel additions to the literature and associated fields, and providing the structure for a new and comprehensive taxonomy of the sources of workplace frustration, two new measures, and over time, a model of workplace frustration from which interventions can be developed.

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 (2016) Standards of Conduct, Performance and Ethics, and British Psychological Society’s (2009) Code of Ethics and Conduct principles. Ethical considerations such as anonymity, confidentiality, and a participant’s right to withdraw, were addressed by using participant numbers, pseudonyms and informing participants of their right to withdraw from the study at any time before fourteen days after participation.

Research into practice: Relevance and Rigour: As stated previously, workplace frustration is becoming a significant issue in UK organisations in the 21st century, which is not surprising given the extraordinary demands of today’s fast-changing world. Indeed, as a result of rapid changes internal and external to organisations, including that of new technology (The Guardian 2015) and the current economy (OECD 2014), many more sources 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, sometimes harming the organisation and other individuals (Klotz and 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 that can subsequently be translated into practice. This research has begun to make a relevant and timely contribution to this need, and provides an up-to-date understanding of the sources of and reactions to workplace frustration, as well as a new taxonomy of the sources of workplace frustration and two new measures. All of which will likely be of great value to organisations, practitioners, researchers and the wider community, having a meaning impact in the world of work.

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, 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 and the ways in which individuals react to it, 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 and increasing issue within organisations, especially in the UK, the research into the area of frustration in the workplace, particularly empirical research, has been limited and narrow in its focus, with consequential models appearing simplistic and/or highly speculative. The majority of past research conducted is also outdated due to rapid changes internally and externally to organisations. The current research however will provide delegates with novel insights, supported by an in-depth 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: Despite the paucity of prior research on workplace frustration, as a common felt and important workplace emotion it is an area of significant interest for delegates and the public. The current research hopes to engage with this interest and to educate on the perplexing issue of frustration in the workplace, to provide delegates, and the public, with a better understanding of workplace frustration in the UK in the 21st century, specifically the sources of and reactions to workplace frustration. Furthermore, the initial development of a new taxonomy of the sources of workplace frustration will be discussed, as well as the development of two new measures of workplace frustration which may be useful for further research and practice, particular for those wishing to identify and reduce frustration within their organisation. 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:


F04 Standard Paper

**Discursive strategies used by Sales Leaders in value co-creation**

Tim Holyoake & Ann Bicknell, University of Leicester

**Category: Leadership, Engagement and Motivation**

**Introduction**

A scan through any business media indicates the global impact of the business to business (B2B) sales and marketing industry at the level of jobs, salaries, accounts and economies. It is now generally believed that the most effective B2B salespeople – the Sales Leaders - are those who work actively with their customers to co-create mutual value (Hohenschwert, 2012). The scale of the value that these individuals appropriate has contributed to the creation of numerous sales methodologies, many achieving a lucrative following despite variable evidence for their effectiveness. This paper examines the theoretical constructs underpinning some of these methodologies in the light of new data and proposes a contemporary integrated model: PACE.

No longer seen as low-skilled order takers, Sales Leaders have to orchestrate, influence and lead encounters between their company and their customer so that value co-creation occurs, a necessary pre-requisite for value appropriation. This view of salespeople has been reinforced during the last twenty years by theories of sales and marketing based on the service-dominant logic (SDL) worldview. SDL claims that customer perceptions of what specific products or services will enable them to achieve determines their value, meaning that customers are always actively involved in value co-creation with their suppliers. Value is therefore socially constructed and phenomenologically determined (Edvardsson, Tronvoll & Gruber, 2011). This contrasts with the more established goods-dominant logic (GDL) worldview that conceptualised value as an inherent property of the product or service offered by a supplier (Vargo & Lusch, 2004).
Payne, Storbacka & Frow (2008) proposed a bipartite model of value co-creation, suggesting that a series of encounter processes over the lifetime of a commercial relationship was at the heart of successful value co-creation and appropriation. Therefore, it is logical that the way salespeople use language during these encounters will be central to their success, yet research into the processes underlying SDL has undervalued this interpersonal focus in favour of an inter-organisational one. This research therefore sought to understand the discursive strategies used by successful Sales Leaders during value co-creation and appropriation.

**Design**

**Methodology**

Semi-structured interviews with questions designed to elicit the discursive strategies used by successful Sales Leaders over a typical five-phase sales relationship lifecycle (awareness, exploration, expansion, commitment and termination) were used to generate rich data. A purposive sampling strategy was employed to identify a cohort of eight participants who had achieved more than 20% above their annual quota in at least one of the previous three years prior to the study in the UK subsidiary of a multinational software company.

**Data analysis**

A qualitative, critical discursive psychological analysis (Edley, 2001) was used to rigorously and transparently analyse the data. A number of interpretative repertoires used to construct concepts of value and identity were identified. The ideological dilemmas raised and subject positions taken were examined at an inter-personal level.

**Results**

The results identified two interpretative repertoires used to discuss concepts of value centred on understandings of SDL and GDL respectively. Three distinct interpretative repertoires to construct their identity were also found. The analysis provided evidence that:

- **(P) People Matter**: Value co-creation is a culturally and historically situated activity, embodied in and through relationships and value appropriation is a consequence of co-creation activities commensurate with the expectations of SDL models of value. However, under certain circumstances, successful Sales Leaders also position value as being an inherent property of the products being sold, suggesting that a continuum to justify concepts of value exists and that the GDL versus SDL debate is an unhelpful dichotomy.

- **(A) Advocacy**: Value co-creation is understood as a tripartite endeavour, with the voice of the community of existing customers being of crucial importance in value co-creation activities.

- **(C) Contention**: Successful Sales Leaders position themselves as knowledge and resource brokers to facilitate value co-creation activities by using discursive strategies aimed at building credibility and trust. However, they also argue that challenging value (knowledge, resources) that has already been co-created, potentially jeopardising that hard-won credibility and trust, is also necessary for maximising value appropriation.

- **(E) Evolution**: Sales Leaders do not position themselves solely as hunters, farmers or professionals, but use their identity flexibly dependent on factors including the phase of the commercial relationship, the specific individuals within it, the customer involved and the maturity of the value co-creation process.

**Discussion & Conclusions**

The results suggest that a model combining aspects of GDL and SDL into a continuum best reflects the lived experience of value co-creation and appropriation successful B2B Sales Leaders. In addition, a tripartite (rather than bipartite) model of encounter processes more closely reflects the discursive strategies used. This model privileges the voices of particular
individuals within a customer, the Sales Leader and individuals from the existing community of clients. The flexible use of identity by successful Sales Leaders throughout a sales relationship is contrary to much common wisdom about their individual nature.

While the research undertaken was historically and culturally situated within a single company, the results do suggest that existing models underestimate the complexity of the discursive strategies required within the encounter processes to successfully co-create and appropriate value. A new tripartite model of value that reflects the GDL-SDL continuum and incorporates the voices of the customer, supplier and wider client community is therefore proposed: PACE. If future research supports this model it will have far-reaching consequences, not only for the selection and development of individual salespeople, but for the wider go-to-market strategy of B2B sales organisations in general.

References

Answers to specific questions about this submission
8. **Theories, models and research**: Service-dominant logic, goods-dominant logic, the social construction and discursive psychological understandings of value and identity.
9. **Link to conference theme**: There is currently little understanding of what happens at an inter-personal level of analysis when salespeople engage in value co-creation exercises with their customers, as most effort has been focussed on inter-organisational understandings of the processes involved. This paper applies theoretical discursive psychological understandings of language to shed light on these crucial activities in an industry which has significant impact on global economies.
10. **Category relevance**: (Successful) Sales Leaders drive the processes that result in value co-creation and appropriation.
11. **Innovation**: There are no other published papers that I am aware of that study value co-creation and appropriation from a critical discursive psychological perspective. The paper proposes a new, tripartite model of value co-creation (PACE), extending the bipartite model proposed by Payne et al. (2008).
12. **Appeal to delegates**: Occupational psychologists have a crucial role to play in facilitating commercial organisations to become more effective at generating revenue. This has extensive and meaningful impact on the world of work for many individuals and for their companies.
13. **Public appeal**: It further dispels the myth that to be a successful salesperson, you have to conform to a specific personality type. The paper concludes that (in the case of the organisation studied) the ability for salespeople to flexibly use their identity to co-create value and martial particular discursive strategies is what results in success, rather than it being the result of a particular personality type.
14. **Materials for delegates**: Electronic version of slides.
F05 Standard Paper
Does bullying mediate the effects of corporate psychopathy and narcissism?
Abigail Phillips, David Hughes, Paul Irving, Alexander Tokarev & Chloe O'Keefe,
University of Manchester

Category: Wellbeing and Work

Introduction
Organisational researchers increasingly acknowledge the importance of dark traits when exploring deviant and destructive workplace behaviour (Smith & Lilienfeld, 2013). However, there remains a paucity of empirical work in this area.

Research Objectives

1. Address the dearth of empirical work by investigating the repercussions of dark personality traits in the workplace
2. Specifically, across three samples, explore the relationships between psychopathic and narcissistic personalities in managers, with workplace bullying, counterproductive work behaviour, psychological wellbeing, depression, and job satisfaction in subordinate employees
3. Examine the relative importance of psychopathy and narcissism with respect to these outcomes when entered into the same model

Methodology

Design
In three studies, we examined whether bullying mediated the effects of managerial psychopathy and narcissism on employee outcomes. Study 1 (n=700), examined the employee outcomes of counterproductive work behaviour and psychological wellbeing. Study 2 (n=380), examined employee job satisfaction. Study 3 (n=500 data collection in progress), examined employee depression.

Subordinate employees provided ratings of their manager’s personality, the prevalence of workplace bullying in their organisation, and individual employee outcomes. Participants were recruited online via a professional networking site.

Ethics
No identifying information was recorded from participants, providing the ultimate safeguard for the protection of anonymity. Participants were briefed on study aims and understood that they were under no obligation to participate and were free to withdraw at any time.

Data Analysis
Structural equation modelling (SEM) was used to analyse the data. Initially, confirmatory factor analysis was used to confirm the fit and construct validity of the measurement models. This was followed by structural modelling in which the structural relationships between constructs were explored.

Results
Across all three studies, SEM provided clear evidence that both psychopathic and narcissistic manager personality were associated with increased workplace bullying (30-53% variance explained). In addition, workplace bullying mediated the relationship between psychopathic and narcissistic supervision for all employee outcomes. Both psychopathy and narcissism were significantly associated with bullying and the employee outcomes when examined independently. However, when entered into the same model, narcissism was no longer a significant predictor, suggesting that the aspects of narcissism related to the employee outcomes considered are those that overlap with psychopathy.
Discussion
We make four important contributions. First, we provide convincing evidence of the detrimental outcomes for both employees and organisations when individuals high in dark personality traits hold positions of power. Second, by utilising a multidimensional measure of psychopathy we were able to further support the four-factor model of this construct (Babiak et al., 2010). Third, we show compellingly that bullying is a major mechanism through which the effects of dark traits are transmitted. Fourth, that the substantial effects of narcissism become non-significant when considered alongside psychopathy suggests that it is characteristics common to both constructs which explain their effects. Indeed, facet-level analysis revealed that manipulativeness and callousness account for the vast majority of variance explained, supporting previous claims that these traits form the causal core of the dark triad (Jones & Figueredo, 2013).

What are the main psychological theories, models and research underpinning your session?
This session is underpinned by theories suggesting that dark personality traits are at the core of dysfunctional leadership (e.g. Burke, 2006). The choice of measures was also influenced by theoretical advancements suggesting a four-factor structure to psychopathy (e.g. Babiak et al., 2010). Our analysis also explores the proposition that callousness and manipulativeness are the traits at the core of the dark triad (Jones & Figueredo, 2013).

1. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
The outcome variables considered here make this research extremely relevant to practitioners. With respect to rigour, a particular focus of this research was to address methodological limitations characteristics of much of the previous work in this area. To this end we utilised psychometrically robust facet measures, utilised other-ratings of personality, and implemented sophisticated analysis methods.

2. Why is the submission appropriate for the particular category you have chosen?
The explicit focus on psychological wellbeing as a key outcome variable makes this research directly relevant to the chosen category.

3. What do you consider to be the most novel or innovative aspects of the ideas being presented?
Our research explores how psychopathic and narcissistic traits in managers influence destructive organisational and employee outcomes through workplace bullying. That our findings generalise across 3 separate samples and a sample of over 1,200 individuals provides substantial evidence for the conclusions drawn.

4. Why do you think conference delegates will find the paper or session stimulating and useful?
Conference delegates should find it interesting that we now have strong empirical evidence supporting long-held theoretical claims regarding the implications of dark traits in the workplace. We expect that the strength of the relationships observed, the amount of variance explained by models, and the comparative importance of the dark traits when entered into the same model to be of particular interest.

5. What might the public find interesting about your paper or session?
Psychopathy has become a topic of great fascination and intrigue within the general population. We expect that understanding the distinction between clinical and sub-clinical psychopathy and narcissism, and the implications that can arise when working with individuals high in dark traits will be particularly interesting to the public.

6. If any, what materials do you intend to make available to attendees and in what format?
Electronic copies of the presentation slides can be made available.
References

F06 Workshop
Improving assessment centre decision making – reducing bias and increasing validity
Helen Baron, Independent; Max Choi, Quest Partnership

Category: Psychological Assessment at Work

The aim of this workshop is to acquaint participants with the latest research into decision making at assessment centre and how to incorporate the findings in assessment and development centre design and implementation to create more effective assessments. The workshop follows the approach outlined in the BPS standard on *The Design and Development of Assessment Centres: A standard produced by the British Psychological Society’s Division of Occupational Psychology*. The approach of the workshop is to encourage evidence based practice in line with the conference theme.

There are paradoxes in the literature on assessment centres, where meta-analyses of validity show coefficients rarely more than 0.4 for corrected criterion related validity and yet both cognitive tests and structured interviews often show higher values (e.g. Robertson and Smith, 2001). Construct validity for the underlying dimensions is hard to find. A priori one would expect a multi method approach with substantial investment of time and resources should result in increased validity. This workshop reviews the evidence and supports participants on re-evaluating their practice with practical guidance on best practice.

Cognitive Biases in decision making within ACs
Bias or error in judgements can occur during rating process and/or during the decision making process or “wash up” itself. We are interested in the quality of decision making within an AC. Therefore, the first question to explore is what is it that we are actually assessing when we have exercises loaded with competencies or dimensions?

The Halo Effect is bad – or is it?
The halo effect is a cognitive bias in which the assessor’s general view of the participants’ competence colours their ratings of specific behaviours. It can be exacerbated by confirmation bias which is the tendency to favour evidence and explanations of behaviour which supports the observers existing views over contradictory evidence. Viswesvaran et al (2005) identified that 60% of the construct-level variance in job performance is associated with a general performance factor which is independent of dimensions. Jackson et al (2016 in press) using modern Bayesian generalizability theory approaches demonstrated that ACs have a general performance factor and a general exercise factor. Barry et al (1990) argued that the halo effect may not be an error as such, as greater halo resulted in higher validity coefficients, and also was related to higher performance ratings.

Assessors Cannot Differentiate Competencies – but does it matter?
A potential cause of the halo effect is a lack of cognitive capacity to differentiate dimensions from each other. Lievens (2001) found that manager assessors found it more difficult to differentiate between dimensions compared to psychologist assessors. However, manager assessors rated candidates with a higher accuracy than psychologists. Gaugler et al (1989) found assessors who rated a small number of dimensions classified behaviours more
accurately and made more accurate ratings than assessors who rated a large number of
dimensions.

Brannick (2008) argued that exercises do not work as they are poor psychometric tools i.e.
do not measure behaviour well. He suggested that using very short interactive role-play
exercises focused on a specific area would allow a larger number of better quality
assessments thereby improving the psychometric quality of the measurement. Kuncel and
Sackett (2014) showed that with a sufficient number of ratings, dimension effects can
overtake exercise effects as the dominant source of variance. Speer et al (2014) showed
ACs employing exercises with varying behavioural demands achieved greater validity.

Therefore, designing shorter exercises following robust psychometric principles, each
measuring something specific in terms of behaviour – might this be the way forward?

**Decision Making**

Even when the individual assessor ratings have been optimised the way these are combined
to provide a final overall score or set of dimension ratings can introduce error. Typically
decisions are made in a group meeting or “wash up” where assessors review the evidence
and agree a final score. There are a number of additional biases that can occur during this
process. Individual human decision making is not always as rational as we like to believe
(Kahneman, 2014). Further problems arise when groups work together to make decisions,
the best known of which is probably “group think”. Strategies for reducing these biases will
be discussed.

The deficiencies of group (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.

**Diversity and bias in decision making**

Approaches which improve the quality of ratings and ensure that decisions are based on the
ratings will tend to improve fairness and reduce biases based on participants demographic
or background factors. However, in addition to exercise related training, all assessors
should receive some specific equal opportunities training. They need to understand how
their own stereotypes can bias their ratings and decision making. Allowing assessors to
explore their own feelings and stereotypes can help them to avoid making biased
judgements about people who are different from themselves. An awareness of some of the
subtle ways in which competencies can be expressed and evaluated differently according to
group membership is central to the achievement of fairness and objectivity. As well as these
issues some cognitive biases, such as spotlighting, can have particular impact on scores for
members of minority groups. The workshop will illustrate some of these biases and discuss
how to overcome them.

**Mechanical Decision Making**

A key recommendation in the standard is that a mechanical approach to decision making
should be used where the Centre is supporting high stakes decisions such as job selection.
Many practitioners are unfamiliar with this approach and how to implement it successfully.

6.4 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 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 an equation based approach 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.

There are many possible approaches to the mechanical combination of scores. These can include averages and sums of scores as well as counting the number of scores above a given threshold. In order to choose the most effective algorithm it is important to understand the impact of individual scores on final score variance and be able to relate this to the measurement aims of the AC through appropriate weightings. To do this effectively requires an understanding of how the variance of a total score depends on its components.

F07 Fringe Event

**Publishing research in Occupational Medicine**

**John Hobson**, Editor, Occupational Medicine, Journal of the Society of Occupational Medicine; Managing director, Hobson Health

**Category: Learning, Training and Development**

Research is essential if occupational health (OH) is to remain a relevant and effective speciality, and particularly if it is going to achieve the aims of protecting and optimising the health of working-age people. Work-related mental health problems and interventions to facilitate or maintain work are of increasing importance.

The need for medical research and for evidence as to whether an intervention has a positive outcome or a benefit has never been greater. Occupational health is no different from any other branch of medicine or healthcare and our advice should be evidence based. The basic principle of evidence-based medicine (EBM) is that we should treat where there is evidence of benefit and not treat where there is evidence of no benefit (or harm).

Most OH practitioners will have carried out research as part of their training, many carry out audits of their daily practice and others will investigate aspects of their work where specific problems arise. Publishing research is important for many reasons and as a health professional there is additional responsibility to make sure our findings are shared.

Publishing research is rewarding and satisfying and well worth the effort. Getting published is easier than most people think and if someone has completed a thesis or dissertation they have already done the majority of the work.

The peer-reviewed journal Occupational Medicine publishes practical research, which will be read by OH practitioners and other allied professionals. The journal is concerned at the number of OH practitioners, particularly those in training who carry out research projects, dissertations and theses but never publish them. This research is never released into the public arena where it can be made available to other researchers and practitioners. In 2013, Occupational Medicine held its first authors’ workshop in London. Ten aspiring authors spent a day learning about how to publish a paper from their research thesis or dissertation and had one-on-one time with an editor. The exercise has been successful in helping the attendees get their research published and the workshop was repeated in 2015.

This presentation is by John Hobson, the editor of Occupational Medicine and considers the state of research in occupational health generally with particular consideration to work-related mental health problems and occupational psychology. It explores the research publication process and explodes myths about getting research published. It really is easier than most people realise.
F08 Standard Paper
Bridging psychometric theory & practice: A research analyst’s perspective
Sonya Bendriem, Suchi Pathak & Jayson Darby, Thomas International
Category: Psychological Assessment at Work

Overview
We conducted a talent benchmarking exercise with a furniture retail company to help them with their recruitment and employee training. A talent benchmark is an applied and commercial criterion-study examining performance in a particular role or organisation in relation to assessment scores – in this case Trait Emotional Intelligence (TEIQue) scores – in order to identify what good looks like in that role or organisation and to provide organisations with evidence-based recommendations for the recruitment and development of their employees. It also provides us with a robust criterion-validation research study with objective performance measures to continue validating the TEIQue in an applied setting. This was a collaborative exercise between the company’s HR Director, Project Manager, a Sales Consultant, Project Manager and Research Analyst.

This paper session will cover how a research analyst approached this project from a psychology research perspective while ensuring commercial value for the client. Lessons learned on how to maintain psychometric rigour while balancing client requirements will be discussed.

TEIQue Background:
The TEIQue – developed by K.V. Petrides at the psychometric lab, University College London (UCL) in 2011 – is predicated on trait EI theory, which conceptualises emotional intelligence as a personality trait, located at the lower levels of personality hierarchies (Petrides, Pita, & Kokkinaki, 2007). The TEIQue employs a self-report methodology in which participants rate themselves on a 7-point likert scale items of agreement to 153 statements. Responses generate 15 facet scores of emotional intelligence, four factors scores (well-being, self-control, emotionality and sociability) and a global trait EI score. The TEIQue is differentiated from other assessments of Emotional Intelligence by its underlying theory (trait) and applied methodology (self-report vs. tests of maximal performance).

Research has linked trait EI to positive business outcomes such as improved employability prospects (Nelis et al., 2011), increased management effectiveness (Ashraf & Khan, 2012) and lower levels of burnout (Mikolajczak et al., 2007). Meta-analyses have found that emotional intelligence, especially at the trait level, has the largest incremental validity in predicting job performance, beyond cognitive ability and Big Five personality traits (O’Boyle, Humphrey, Pollack, Hawyer & Story, 2011). Emotional intelligence can especially play an important role in the success of sales roles which involve being able to understand clients’ needs and emotions and managing those emotions to close deals and maintain relationships (Sojka & Deeter-Schmelz, 2002). This study contributes uniquely to this literature by looking specifically at non-commission based sales roles, where salespeople have a greater focus on helping customers and building relationships.

Methods & Procedures
Sales performance and TEIQue data was collected for 174 non-commission based sales consultants from a furniture retail store across various UK location stores:
- Completed TEIQue via email invitations for TEIQue (voluntary participation)
  - Received personalised feedback report
- HR Manager provided archival (over a 15-month period) objective sales conversion rates (average order per store footfall)*
  - Most important key performance indicator for this role
- Data and analyses remained confidential and group-level based
<table>
<thead>
<tr>
<th>*Average order £</th>
<th>Average sale figure per furniture order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Footfall</td>
<td>Average number of people coming in to that store</td>
</tr>
<tr>
<td>Conversion rate</td>
<td>Average order divided by that store’s footfall (%)</td>
</tr>
</tbody>
</table>

Company Overview:
A key value that this company promotes is to have service-oriented, friendly and attentive staff, especially as their target clientele are the elderly. The company actively recruit employees who tend to be more amiable, accommodating and other-focused.

Results
Employees were grouped by top, average and bottom performers according to company standards for meeting KPI goals for conversion rates. The primary method of analysis was the ANOVA to compare TEIQue facet means across the three performance groups. Top performers were found to be significantly higher on self-motivation, optimism and assertiveness than bottom and average performers. The first two findings were not too surprising given that the sales role is non-commissioned based. However, when looking at the culture the company endorses and recruits to, the assertiveness finding became an important area of focus for this client.

Applied Recommendations:
Individuals who scores themselves on the lower end of assertiveness scale tend to value other people’s ideas and opinions over than own and may seem passive in getting their point across. Although being friendly and service-oriented is very important for sales and keeping good customer relations for this clientele, a lack of assertiveness may mean that employees miss opportunities to close sales. In order to keep in line with their culture, we recommended a bespoke training course on service-driven assertiveness — rather than results-driven assertiveness — to train employees to better recognise and act on opportunities to close sales without compromising customer relations.

Turning Research into Practice:
A crucial part of this project was conceptualising the findings according to the company culture and needs to create actionable and practical recommendations:
- Bespoke recruitment interview guide based on the TEIQue facets linked to better performance in that role to help highlight important characteristics to focus on during recruitment while keeping in line with best practice use of personality assessments in the workplace (avoiding using personality traits as black-and-white cut-off criteria).
- Tailored in-house training course on service-oriented assertiveness aimed at developing current employees who are less naturally assertiveness.
- Established a long-lasting relationship where various members of the project team followed up with the client every few months to support them in implementing the recommendations and other challenges that emerged.
- Consulted on their internal succession planning to help them develop their staff’s existing characteristics into strong leadership roles. What makes someone successful in a role may not always be what makes them a successful manager of that role.

Lessons learned:
- Prepping the project to maximise value & relevance
  - Quantitative performance data
  - Capturing relevant KPIs for that role
  - Making performance comparable across teams

In order to collect the most relevant data and to ensure that the benchmark cost will be valuable for the client, it is important to ask the right questions early on (e.g. which
assessments are most appropriate for the client challenge, what performance metrics does the client have / would be willing to develop, what HR records can the client provide). Collecting objective and quantitative data that relates to the most important KPIs for that role provides richer information and relevant recommendations than purely subjective data (e.g. manager ratings). Finally, it is important to make the performance measures comparable across participants (e.g. controlling for extraneous factors such as footfall) to avoid making false assumptions of success.

- **Contextualising the results to the company culture & needs**
  - Actionable and practical recommendations
  - Considering various areas of the employee life-cycle

Statistical findings do not mean much without understanding the context of the company culture and the job role. Clients are much more engaged with the results if they are contextualised within their culture with bespoke solutions. To create a long-lasting impact, it’s important to use findings of what ‘good looks like’ not only for recruiting the right people in the future, but also for developing current employees who may not yet fall under that category.

- **Communicating the results appropriately for the audience**
  - Accessible language for non-psychologists
  - Various presentation formats

A common mistake of a talent benchmarking exercise is to handover the statistical findings to the client without appropriate recommendations, advice and follow-up. Without creating a report and presentation explaining the findings and their implications for the company, a client can misinterpret results and use them inappropriately or struggle to understand them and not use them at all. Providing various formats (e.g. full technical report, executive summary, power point presentation) of presenting the information can be useful to engage diverse key stakeholders and engage them with the results and recommendations.

- **Measuring return on investment**
  - Frequent follow-ups
  - Long-term impact of findings

It is important to follow-up with the client to ensure they have all the support they need to be able to implement the recommendations, to ask for feedback and to measure – ideally quantifiably – the return on their time and cost investment in using psychometric assessments in their business and the success of any changes made as a result of the benchmark. Not only does it help with future projects, but it creates a long-lasting relationship with the client and generates opportunities for new collaborations (e.g. on other areas of the employee life-cycle).

**References**
F09 Standard Paper
The effect of technostress on the work-life interface (POP)
Gottfried Catania & Katya De Giovanni, University of Malta
Category: Wellbeing and Work

Introduction
Technological advances have undoubtedly led to advantages in the quality and frequency of communication (Tarafdar, Gupta & Turel, 2013). However, a dark side seems also to have emerged. In fact, the concept of “technostress” (Brod, 1984) implies that the use of technology can also lead to stress in the user. This may be due to overuse of and addiction to easily available equipment such as smartphones and tablets, as well as the blurring of boundaries between work and other important aspects of life, such as relationships. The Lookout Mobile Security (2012) study, for example, found that 43% of smartphone users find their use stressful due to the constant pressure of checking for messages, yet 60% feel the need to check their phones for message and emails at least once every hour. Similarly, 24% of users check their smartphones while driving, and 54% just before going to bed, in the middles of the night, or just after waking up.

Tarafdar, Tu, Ragu-Nathan & Ragu-Nathan (2007), have categorized technostress creating conditions at work into 5 varieties, namely techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. Negative effects of technostress at the workplace which have been confirmed include exacerbating role overload, increasing role conflict, reducing productivity and job satisfaction, and increasing work-home conflict (Ayyagari, Grover & Purvis, 2011; Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan 2011; Wright et al., 2014). A preliminary study by Gamgoum (2014) has indicated that the problem also affects significant others, with 81% of the sample showing signs of third party technostress, defined as stress experienced due to the overuse of technology by third parties.

However, it has been noted that most studies focus on professional workers who use technology extensively at work. Similarly, most studies on the subject are quantitative in nature, and tend to examine the effects of technostress on individual outcome variables, namely job satisfaction and stress; and organizational variables, such as reduced efficiency. Given the pervasiveness of technology in our everyday lives, a study examining the in-depth perceptions of a variety of workers, not just professionals, is needed. This paper addresses the research gap by using qualitative methods to examine the effects of technostress on the work-life interface, picking up on the comment by Kossek and Lautsch (2008), that instead of reducing or eliminating work-life conflicts, modern communication technologies “can turn homes into electronic work cottages, expanding working into family time, and the reverse” (p. 153).

Methodology
Thirty-four interviews with a convenience sample made up of a variety of adults were carried out in March and April 2016. Interviewees signed a consent form which explained the details of the study and the relevant ethical issues, including the guarantees of anonymity and confidentiality. Interviews were transcribed verbatim and Thematic Analysis (Braun and Clarke, 2006) will be used to analyse the data. The authors will each examine 17 transcripts and elicit themes by using the following process. First, all the transcripts will be read twice and codes will be jotted on the right had side of the transcript. The authors of the paper will each come up with a theme table from the transcripts which will then be discussed, and a common theme table agreed upon.
Preliminary Data analysis and results
A preliminary look at the transcripts reveals the presence of three main themes. The first theme is entitled “Personal Feelings” and it is about the way in which the constant use of technology in a person’s everyday life might elicit certain positive and negative feelings, and consequently affect the individuals on a personal level. The second theme is entitled “Social and Recreational Aspects” and it deals with how participants describe technology and social media as promoting communication. It also describes how the use of technological devices can impact social life in a negative way. The final theme entitled “Work Aspects” describes the utilization of technology in participants’ work and career. The use of technology becomes a necessity – it can be used for self-advertisement and marketing for one's own work and skills, but can also be a source of distraction.

Discussion and conclusions
The aim of this study is that of exploring the effects of technostress on the work-life interface. With technology being such an essential and wide-spread phenomenon it is important to consider the effects that it might have on workers and their personal lives and to find ways in which these can be addressed. Organisations need to become more aware of how their employees are using technology at the workplace, and therefore it might be the case of needing to enforce discipline in with regard to social media during working hours. Another issue is the promotion of safe use of technology by means of the organisation of workshops or training sessions aimed at informing employees on the use and misuse of technology as well as giving frequent tech-free breaks.

This paper links with the main conference theme by presenting a rigorous research on a topic – the effects of technology use - which is highly relevant in today’s organizations. The submission is appropriate for the category “well-being and work” because it examines the effect of a particular phenomenon, namely the use of technology, on the interface between work and the rest of one’s life, with particular emphasis on its possible negative aspects. The most novel aspect of this presentation is the use of qualitative methods to explore a construct mostly studied quantitatively, while at the same time extending the sample to a more general worker population. Both conference delegates and the general public should find this paper interesting as most persons in the developed world nowadays regularly use technology such as smartphones and tablets, and therefore an understanding of the possible negative effects of their use on the work-life interface will be useful. We do not intend to distribute printed hand-outs, but electronic copies of the slides will be made available on request.

F10 Symposium
Leadership Triple Bill: Impact, Mergers & The Big Four
Hannah Mullaney, Saville Consulting
Category: Leadership, Engagement and Motivation
The session will explore leadership from three unique perspectives. Firstly, it will introduce a different way of thinking about leadership effectiveness, moving beyond competencies and considering impact. Secondly, results and case studies from an ongoing global research programme exploring the pivotal role of integration leaders in mergers and acquisitions are shared. And finally, the career trajectory of an EY leader is discussed as findings from an organisational benchmarking exercise reveal that leadership doesn't always look the same.

Learning objectives:
• To understand a new proposed model of leadership effectiveness and consider the implications of the approach
• To understand what makes for a successful M&amp;A integration leader and to apply this understanding to real life scenarios in gaining knowledge of some of the challenges faced by organisations placing M&amp;A leaders

• To understand how leadership in one organisation can evolve as individuals move along with career trajectory

• To challenge current thinking on leadership by considering the implications of the above given the roles in which delegates are currently in and the work that they do

F10a Paper 1
The Evolution of an EY Leader – A Case Study
Emma Bradbury, EY; Hannah Mullaney & Gabby Parry, Saville Consulting
Category: Leadership, Engagement and Motivation

Overview
There are a vast number of leadership models and a plethora of research around what good leadership looks like (Judge et al, 2002), however, one central question remains unanswered: “Is there one profile of effective leadership or does leadership vary by role, context and level within any one organisation?” We had the chance to explore this further in partnership with EY on a project in 2015.

The project was conducting a comprehensive analysis of key success factors at each leadership level within the organisation – from Managers, through to Senior Managers, through to Directors and finally to Partners. The objective of the work was to assist the Talent Development team in creating appropriate development programme selection criteria and corresponding selection assessments. It also, however, provided a rare opportunity to examine the leadership career trajectory within a Big 4 firm.

The research itself involved administering a behavioural questionnaire to all Managers, Senior Managers and Directors and gathering performance ratings on each individual from their respective Counsellors (a Counsellor is a line manager whose role is to manage performance, support development and career progression, provide coaching and develop skills and capabilities – everyone at EY has a Counsellor). Scores on behaviours were then correlated with overall performance, as measured by ratings on Applying Specialist Expertise, Accomplishing Objectives and Demonstrating Potential. In total, over 1500 employees were involved in the study and matched data was obtained for 274 Managers, 299 Senior Managers and 142 Directors.

Some Partner self-report data (N=90) had already been gathered through previous projects and this was integrated with the data collected above. We were, unfortunately, unable to gather performance data on these Partners and so, while we were still about to profile the group, we were not able to link behaviour to success using the same method. Instead, we conducted job analysis through a series of interviews and focus groups. We were also able to utilise a small amount of survey data, collected in 2012, to corroborate our findings.

Results & Implications

All correlations shown are significant at the 0.05 level (two-tailed). Validities have been adjusted for attenuation based on the reliability of the criteria (based on 263 pairs of criterion ratings).

Managers:
• Behaviours positively associated with success: Driving Success (0.38); Providing Leadership (0.26); Communication (0.21)
• Behaviours negatively associated with success: Giving Support (-0.30)
• Behaviours predicting potential only: Building Relationships (0.24)

Managers needed strong leadership and communication skills to get the best out of their new teams (they now had to influence others – who were often peers previously). They needed to convince and persuade their teams and they needed to be assertive rather than nice (this finding supports results from Judge et al’s 2002 meta-analysis that found Agreeableness to be positively correlated with leadership effectiveness, but not with leader emergence). This information is incredibly valuable when thinking about how to up skill talent coming up to Manager level. Those demonstrating most potential were also strong on Building Relationships – important at Senior Manager level. Interestingly, the step up to Manager was most often described as “the most difficult so far” by Managers and Senior Managers.

Senior Managers:
• Behaviours positively associated with success: Driving Success (0.28); Providing Leadership (0.29); Communication (0.28); Building Relationships (0.23)  
• Behaviours negatively associated with success: Evaluating Problems (-0.26) and Creating Innovation (-0.24)  
• Behaviours predicting potential only: Adjusting to Change (0.29)

Senior Managers still needed strong leadership and communication skills to get the best out of their teams. They must now, thought, also be adept at building relationships as they start to work more directly with clients. The role here seems to focus more on people and getting things done; behaviours relating to thought and problem solving appear to hold you back and these should be managed. Those demonstrating most potential were also strong on Adjusting to Change – Adaptability becomes a key success factor at Director level.

Directors:
• Behaviours positively associated with success: Driving Success (0.32); Building Relationships (0.33); Showing Resilience (0.44)  
• Behaviours negatively associated with success: Processing Details (-0.31)  
• Behaviours predicting potential only: None identified in correlational analysis – however, given the requirement for a solid business case to make Partner, potential here could be less about behaviour and more about market knowledge, networks and opportunities available.

Behaviours related to taking control, directing others and empowering individuals are no longer differentiators at Director level. Instead, the greater span of control demands resilience and adaptability. Relationships remain key as client work continues to grow. A focus on the detail is likely to distract from the strategic and people elements of the role.

Partners:
• Job analysis conducted by EY identified four key areas essential for Partner success: Grow (Commercial Innovation; Sales Excellence), Operate (Operational Excellence; Commitment to Quality), Lead (Inclusive Leadership; Presence & Impact), Develop (Adaptability & Resilience; Developing People).  
• Conversations with key stakeholders suggested that Grow was most important – this is supported by the fact that you cannot make Partner without having a solid business case.  
• The 2012 survey data suggested that market leading Partners are pioneers, however, “Mavericks” are likely to pose a risk to a Partnership  
• Further research is likely needed here

The EY leadership career trajectory is depicted in the diagram below. It is clear that leadership at EY is not driven by the same behaviours s at every level. This has
implications not only for Talent Teams but also for leaders themselves. To continue to be successful they must continue to develop and adapt, sometimes completely stepping away from those things that made them successful early on in their Professional Services career (Evaluating Problems, Processing Details). The one behaviour that is essential, regardless of level, is drive – ambition is essential. Leadership at EY is a journey that requires constant tenacity.

However, with such a clear picture of what success looks like at each level, the firm can use this to articulate expectations, identify potential, develop readiness and ultimately, improve performance.

Key Messages & Insights
- Regardless of level, drive was a key behavioural success factor for leaders at EY. This is likely to reflect the cultural aspect of life in a Big 4 – without ambition, you are unlikely to prosper.
- Leadership and Communication are key to success at Manager and Senior Manager levels at EY, however, after that they stop becoming a differentiator, as other behaviours become more important.
- Relationships start to become important at Senior Manager level and continue to be at higher levels.
- Adaptability is added as a key differentiator at Director level.
- Innovation is added as a key differentiator at Partner level.
- People elements of leadership appear to be most important at lower leadership levels, with Pioneering elements of leadership replacing these at Director and Partner levels. It could be hypothesised that Professional elements of leadership (arguably relating more to self-leadership) are honed before the step up to Manager.

References
In all cases, submissions should also address the following questions:

1. **What are the main psychological theories, models and research underpinning your session?**
   Situational theories of leadership (Kerr & Jermier, 1978; Hersey & Blanchard, 1982) as well as research exploring personality as a predictor of leadership (summarised in Judge et al’s 2002 meta-analysis).

   The session uses the Wave model (Saville, Maclver & Kurz, 2012) as a framework for understanding what good looks like at each of the different levels. This is can be translated into the 3P model (Saville, Maclver & Kurz, 2012), also utilised in the paper.

   *Note - references can be included if desired but must be within the maximum word limit.*

2. **How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?**
   This paper is a prime example of running a large scale, research project within a working organisation. It is extremely important for EY to understand the success profile of leaders at each level, so that they are able to recruit and develop effectively and manage individual career trajectories and expectations.

   Moreover, to ensure assessment practices remain relevant to organisations it is important that we take evidence-based approaches and use valid assessment measures. The study links the assessment measures used to performance data and critically compares the success factors at different levels.

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 identifies the career trajectory for leaders at EY.

4. **What do you consider to be the most novel or innovative aspects of the ideas being presented?**
   It is rare to be able to profile this many individuals from one organisation and to have enough individuals doing the equivalent roles to provide sample sizes large enough to cut the data by level/role. It presents a creative approach in demonstrating how to present a clearer picture of the behaviours underpinning the career trajectory of a leader within an organisation using such robust research methods.

5. **Why do you think conference delegates will find the paper or session stimulating and useful?**
   Anyone with a remit or interest in leadership or Professional Services will find this paper interesting. The session’s focus is on how leadership evolves through the lifetime of a leader within the organisation and will be particularly helpful to those in the leadership development or succession planning space.

6. **What might the public find interesting about your paper or session?**
Leadership is a popular topic amongst the public, particularly of late, given recent political events in the UK. That leadership is driven different behaviours at different levels in an organisation – and that we should not have a one size fits all attitude to leadership (and leadership models).

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 the slides will be made available after the session (upon request).

F10b Paper 2
What’s so special about the integration leader?
Hannah Mullaney, Saville Consulting
Category: Leadership, Engagement and Motivation
Overview
How organisational and occupational psychology can support M&A activity and the successful integration of people has long been well documented (Cartwright & Cooper, 1990; Callan, 1993; Cartwright & Schoenberg, 2006). There is, however, very little that investigates the integration leader themselves. Integration leaders are considered to have a pivotal role in the success of any integration. They must identify issues, remove blockers, engage, encourage loyalty and ensure business as usual results whilst simultaneously promoting new systems, processes and ways of working and seek synergies that will contribute to the future success of integration. They do all of this while navigating the unknown.

Integration leaders may be selected for the role as a “stretch opportunity” – i.e. An experience that will grow them as a leader... The role is by its nature temporary, rarely is an integration leader the expected destination role; once stretched, leaders will go on to bigger and better things and the next “opportunity” will go to someone new.

These individuals are, of course, likely to be relatively experienced leaders already, however, there is a strong element of risk for the integration leaders’ career and for the integration if the integration leader is not suitable for the role. It is surprising that to date there is very little published research aimed at identifying the behavioural characteristics of a successful integration leader. This gap is what this paper seeks to address.

The session will provide an overview of an ongoing global research programme, exploring the behavioural success drivers of integration leaders and will share preliminary findings and case studies from the programme with delegates. It will inspire thought around how integration leaders are placed in the future and gaps in development might be addressed.

The research uses the Wave Professional Styles questionnaire, which allows for analysis of data using both the 3P Leadership model and the Work Roles model. It also surveys integration leaders on the frequency of involvement in key integration activities and gathers quantitative and qualitative data from key HR and Corporate Development M&A stakeholders on what they perceive as important to the role. Data will be analysed to provide answers to the questions:
• What does “good” looks like for integration leaders?
• What are the behavioural drivers behind some of the key integration activities integration leaders should be getting involved in?
• Who currently gets placed into role and how does this differ by industry, deal size, location? And how does this compare with what “good” looks like? Where are the synergies and where are the gaps?
Research Approach
Due to the nature of the role, we required both a small sample, practitioner led case study approach and a larger scale, quantitative, research led methodology. The overall data from the research will be linked to the case studies following the collection of data from all integration leaders.

The project was launched at the end of May 2016 and currently includes 56 integration leaders and 15 M&A stakeholders from four organisations. This is expected to double between now and Autumn, when the final results will be analysed and reported. It is anticipated that these results will be shared will delegates, alongside the following case studies that will present a flavour for the sorts of challenges facing organisations in practice.

Preliminary Results/Case Studies

Integration Leader Role Profile
Key HR and Corporate Development stakeholders from multiple organisations highlighted the ‘People’ aspects of leadership to be more important (compared to benchmark importance ratings), along with the behaviours relating to ‘Organisational Transformation’, which forms part of the ‘Pioneering’ aspect of leadership. They rated behaviours related to building ‘New Products/Markets’ as significantly less important. Qualitative data suggests that this is because integration leaders focus on “getting the people stuff sorted first”.

Case Study 1. Multinational conglomerate; annual revenue $122billion; 300K employees (Integration Leaders involved = 20)
- There were some interesting discrepancies found when profiling integration leaders in this organisation and comparing them to the success profile described above. While their integration leaders were by no means low on scales relating to the ‘People’ aspect of leadership (they were average or just below), given the importance placed on these by stakeholders, it was surprising not to see higher average scores (in some cases the integration leaders’ average potential scores were two Stens lower than the average Sten scores on job profiler data, which reached 7.5 on Communication). Furthermore, even though stakeholders valued less those behaviours related to building ‘New Products/Markets’ (average Sten of 4 on job profiler data), among the integration leaders profiled, there appeared to be more of a strength here than perhaps perceived to be required (averaging overall at 5.8 and in some sub-groups reaching 6.4). There were some differences observed between divisions as well – Corporate leaders were much stronger, on average, on the pioneering aspects of leadership, Healthcare leaders were much stronger, on average, on the people aspects of leadership and Oil & Gas leaders were, on average, relatively balanced across the professional, people and pioneering aspects of leadership.
- The data was also considered from a “Work Roles” perspective; given how much of the role involves working with and through others it was important to explore such working styles. Compared to an international Senior Manager and Executive norm group (N=953), integration leaders were more likely to be ‘Analysts’ and ‘Supporters’ and less likely to be ‘Finishers’ (the proportion of ‘Analysts’ and ‘Supporters’ increased by 10% and 8% respectively, compared the benchmark group; the proportion of individuals with ‘Finisher’ as a less preferred role nearly doubled). This might support the notion that the integration leader is the problem solver who must collaborate and consult with others, however, does pose a question around the potential for doing so at risk of not actually getting things done (fewer Finishers).
- The key question for this organisation was:
  - Are we sometimes asking some of our best innovative and commercial leaders to take on the wrong role?
Case Study 2. Diversified global manufacturer; annual revenue $7 billion; 26K employees (Integration leaders involved = 7)

- A similar pattern was seen as in Case Study 1 – scores on behaviours related to the people aspects of leadership were only average (the biggest gap was around communication) and those relating to developing new products and markets were relatively strong. This could be a pattern we continue to observe as research progresses.
- The data was again also looked at through a “Work Roles” lens. Compared to an international Senior Manager and Executive norm group (N=953), integration leaders were more likely to be ‘Strivers’ (there were nearly three times the proportion of ‘Strivers’ compared to the benchmark group). They were also less likely to be ‘Finishers’, ‘Relators’ and ‘Optimists’ (there were nearly double the proportions of individuals with these styles as a less preferred role). This, we were told, was very reflective of the culture at this organisation.
- The key question for this organisation was:
  - Is our organisational culture at odds with what we require from Integration Leaders?

Key messages and insights:
- Behaviours related to the people elements of leadership were viewed as most important in the role of Integration Leader by key HR & Corporate Development M&A stakeholders.
- In their desire for stability after upheaval, the same group rate behaviours related to the development of new products and markets as significantly less important.
- In both case studies presented, Integration Leaders themselves had, on average, perhaps more capability than required when it came to behaviours relating to innovation/new products and markets. This could be explained by the fact that a lot of them had come from strong commercial and growth focused roles, but does raise the question of whether the right skill sets are being sought when leaders are identified for Integration Leader roles.
- Given the importance of those behaviours relating to the people aspects of leadership, the fit of Integration Leaders sampled could again be questioned and thought given to the sort of support that could be provided.
- In both case studies, Integration Leaders were less likely to get involved in sponsoring culture and engagement surveys. They were more likely to get involved in preparing other leaders for their roles, dealing with people issues as they arose. Given the patterns already identified around the people elements of leadership, this is perhaps not surprising. Given the importance of the people elements of leadership, however, it is worthy of consideration.

References
Cartwright, S. and Schoenberg, R. (2006) Thirty years of mergers and acquisitions research: Recent advances and future opportunities. British Journal of Management, 17(S1), S1-S5

Q&A
1. The session makes use of the Wave model, the 3P model of leadership and the Work Roles model (all Saville, Maclver & Kurz, 2012).

   It also draws on research in the human capital M&A space that highlights the importance of leadership and change management in unlocking an M&A deal’s full potential.
2. The structure of the session mirrors the theme, starting with the research project above before moving onto the case studies, telling the stories of the individual organisations involved and the questions raised for them by the results.

Since 2014 companies have announced around $4.9 trillion worth of deals globally (The Deloitte M&A Index 2016) – understanding those leading these deals is highly relevant.

It is often difficult to get organisations involved in research – time is tight and if activity isn’t directly impacting on the bottom line, it can be difficult to drive. We have built a persuasive proposition to sell in the value of the work and recruit some of the world’s largest organisations, without comprising on rigour.

3. The session would sit in the Leadership, Engagement and Motivation category because it is primarily about leadership.

4. As already highlighted, there is very little research on the subject of what makes a successful integration leader and so the endeavour to profile this role is probably the most novel aspect of the story being presented. The implications this then has are wide reaching and that it has the potential to change the way organisations think about placing their integration leaders represents innovation at its most practical.

5. Any delegate with a remit or interest in leadership or M&A would find the session stimulating. They would leave with a better understanding of integration leaders and what drives their success, as well as a grasp of the associated challenges faced by some of the world’s biggest organisations. This knowledge would allow them to better support M&A leadership activities in their own organisations.

6. Those members of the public who follow M&A deals – particularly those who invest in them – may, on reading the results of this paper, start taking more of an interest in the integration leaders involved in such deals and may include such factors in future investment decisions.

Furthermore, divergences in economic growth will continue to have a negative impact on amount of M&A activity observed. With deals harder to come by, the pressure on organisations to make each one work and maximise cost synergies only increases and anything they can do to ensure they have the very best people in place will serve them well.

7. Electronic copies of the slides will be made available after the session (upon request).

F10c Paper 3

Beyond Competencies: Introducing the Impact Model of Leadership Performance
Tom Hopton, Rab Maclver & Ann-Marie Smith, Saville Consulting

Category: Leadership, Engagement and Motivation

Introduction

Work performance as a construct has been the subject of considerable scientific scrutiny, with many different models of multidimensional performance having been elucidated over the last quarter century. Prominent examples include the models of Borman & Motowidlo, (1993), Campbell et al. (1993), Campbell (2012), Kurz & Bartram (2002) and Murphy (1989).

While such models inevitably differ in certain respects, a common feature of many is a focus on workplace “competencies”. Kurz and Bartram (2002) adopted a definition of competencies as “sets of behaviors that are instrumental in the delivery of desired results or outcomes”. This definition is useful because it introduces one of the key assumptions of
many performance models: namely, that performance can be thought of as being composed of a hierarchy of components. At the most basic level, tangible behaviours can be clustered together into sets or groups to form competencies. These competencies are often themselves clustered and sometimes combined with other kinds of performance metrics to form higher-order performance criteria.

There has been a degree of debate about the best unit of analysis when measuring workplace performance. While the pragmatic answer is that the best approach to take depends somewhat on the situation at hand, the measurement of leadership performance poses particular challenges as, by its very nature, leadership performance is invariably concerned with more than "just" the behaviours demonstrated by the leader. When talking about leadership performance we are often also concerned with the leader’s effect or impact on others and, sometimes, on the organisation as a whole.

Many of the most well-known models of workplace performance feature competencies or components which attempt to capture leadership performance. For example, the Great Eight model (Kurz & Bartram, 2002) has a scale called “Leading & Deciding”; likewise, the Campbell (2012) model features six sub-factors which together comprise leadership performance. An advantage of such competency-based approaches to leadership performance is in their clear conceptual link to specific behaviours and actions. As such, they can often be measured relatively straightforwardly and it is often possible to draw transparent inferences from results derived from such models. Nevertheless, their specificity can also be a hindrance as they tend to be somewhat role- and context-specific in nature. In some cases, this specificity may render it impossible or inappropriate to compare leaders in different contexts using the same competencies.

On the other hand, leaders can be (and often are) judged against a range of higher-order performance criteria including indices such as company share price, turnover, staff engagement levels, staff retention rates and countless other organisation-level metrics. These performance criteria tend to be much broader in focus and thus more generalizable across contexts and situations. They also benefit from being commonly perceived as somewhat more “objective” in nature than competencies. This is largely because they frequently take the form of quantifiable metrics which do not rely on the so-called “subjective” stakeholder ratings of performance typically used to measure competencies. Yet, organisational outcomes are often somewhat disconnected from the specific actions of individuals; clearly, no one leader (no matter how omnipotent) can reasonably be held solely responsible for a company’s total share price, turnover, staff engagement levels and staff retention rates. So there remains a question about the value of such broad criteria in forecasting individual leader performance.

Having outlined just a few of the issues associated with the measurement of workplace performance, we’d like to reiterate that both specific competencies and broad outcome criteria can and do have their uses. There will often be requirements or considerations in a given situation which favour the use of one type of criteria over others.

Nevertheless, our latest research argues for a model of leadership performance which acknowledges the impact of leaders in the achievement of organisational outcomes, while also recognising that individual leader behaviours matter. We propose that the use of competencies to measure leadership performance can be helpfully supplemented by focusing on higher-order, but still behaviourally oriented, organisational outcomes. Our new Impact model tries to find a “goldilocks zone” between relying too heavily on either very specific behavioural criteria or on very general organisational-outcome criteria.
Derived from factor analysis and validation, the Impact model is comprised of nine primary Impact areas. They are clustered under three higher order factors, and their definitions are provided below.

This paper outlines one part of the Impact model’s validation.

**Design/Methodology**

A global research study was carried out which surveyed a mixed occupational group of professionals.

A number of these professionals (n=6410) were invited to rate:
1. Their manager's effectiveness in terms of the 36 Competency Dimensions of the Wave Styles model.
2. Their manager’s impact in terms of the 9 Impact Areas.
3. Their manager’s effectiveness in terms of 3 Global Performance scales, aggregated to produce a single measure of Overall Performance.

*The Effectiveness scale used a 1-7 Likert format, where 1=Extremely Ineffective, 4=Unsure, 7=Extremely Effective.  
The Impact scale used a 1-7 Likert format, where 1=Large Negative Impact, 4=Unsure, 7=Large Positive Impact.*

A Sustainable Engagement Index score was also available for each manager, which served as an additional performance criterion.

The particular analyses run for the purpose of this paper are detailed in the Results section.

**Results**

- The average correlation between the 9 Impact areas and the 36 Competency Dimensions was .50.
- The minimum correlation between any Impact area and any Competency Dimension was .38.
- The maximum correlation between any Impact area and any Competency Dimension was .60.

These results suggest that there is a relatively good degree of construct convergence between these two different criterion models. This provides reassurance that the two different models are broadly in agreement, thereby offering some construct validation support for the Impact model. Nevertheless, the fact that the two sets of criteria do not overlap too closely also reassures that the Impact model is introducing something new over and above the measurement offered by the 36 Competency Dimensions.
• The average correlation between the 9 Impact areas and the Overall Performance measure was .60.
• The average correlation between the 36 Competency Dimensions and the Overall Performance measure was 74.
• The average correlation between the 9 Impact areas and the Sustainable Engagement Index was .46.
• The average correlation between the 36 Competency Dimensions and the Sustainable Engagement Index was .35.

These results suggest that both models correlate strongly with Overall Performance and, to a lesser extent, with Sustainable Engagement.

Discussion
Our research suggests that the Impact model offers something new to the measurement of leadership performance, taking a new approach which sits somewhere between specific, behavioural competency performance measures and general, organisation-level outcome measures.

In this sample, both the Impact and more traditional competency model show clear correlations with Overall Performance and Sustainable Engagement measures. The results of this study suggest that if one wishes to focus primarily on the individual’s overall performance in terms of behaviours then the competency model may be the most suitable; on the other hand, if one wishes to focus on the higher-order outcome of sustainable engagement, then the Impact model may be the better choice.

Given that the Impact model is based on just nine items – and therefore takes about a quarter of the time to be assessed than the thirty-six-item Competency Dimension model – it is likely to be a particularly efficient and pragmatic model for quickly collecting criterion data on leadership performance.

It is worth interpreting all of these results in light of the degree of multicollinearity seen in this particular dataset. In general, it appears that when people rated their manager positively in one area, they tended to rate their manager positively across many other areas. Perhaps because of the nature of the survey used (it being both relatively long in duration and requiring employees to provide their perceptions of their own manager) there appears to be something of a halo effect across the data set. This would be expected to inflate correlations across the board and might explain why there is relatively little variation in the different correlations seen.

We are currently arranging further validation studies and analyses of the Impact model and would hope to see a greater differentiation amongst performance criterion scales in other data sets. Nevertheless, this validation study represents the first large scale, external data collection involving the Impact model, so provides a good starting point for further research. Should we have the opportunity to present this paper at the 2017 DOP Conference, we would be delighted to share additional results from upcoming research scheduled between now and then(!)

The main psychological theories, models and research underpinning this session are workplace competency models including the Campbell (2012) and Great Eight (Kurz & Bartram, 2002) models.

This proposal links with the main conference theme of Research into practice: Relevance and rigour because the conceptual relevance of the proposed Impact model for
leadership applications, as well as its psychometric rigour and robustness, are two of the key considerations in this paper. The Impact model is a tangible example of a piece of research which is now moving into I/O practice, as it is being introduced to assess leadership performance in the latter half of 2016.

The submission is appropriate for the particular category chosen as this is an explicit example of a new leadership assessment model.

The most novel or innovative aspects of the ideas being presented include introducing a model of leadership performance which takes a middle-ground between established competency and organisational-level outcome models. The new Impact model acknowledges the importance of leaders for achieving various organisational outcomes, while also recognising that individual behaviours contribute to their impact.

Conference delegates will find the paper or session stimulating and useful because a number of them are likely to be psychometricians themselves and/or engaged in leadership assessment. 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.

The public may find this paper or session interesting because, judging by the extent of media coverage and academic investigation of the subject, leadership appears to be something which many people are interested in. Our research has new, clear and practical implications for optimising the assessment of leaders, which will be informative for anyone who works with leaders.

Electronic copies of the presentation will be available on request after the session.

References

F11 Standard Paper
Bystanders' responses to workplace cyberbullying: The impact of mode and type
Iain Coyne, Loughborough University; Alana-Marie Gopaul, Ministry of Public Administration, Trinidad & Tobago; Frances Cousins, University of Leicester

Category: Wellbeing and Work

Workplace cyberbullying has been defined as: “a situation where over time, an individual is repeatedly subjected to perceived negative acts conducted through technology (e.g. phone, email, web sites, social media) which are related to their work context. In this situation the target of workplace cyberbullying has difficulty defending him or herself against these actions” (Farley et al, in press). In comparison to offline workplace bullying, our understanding of workplace cyberbullying and its implications for practice are limited.
Currently, research on offline and online workplace bullying tends to adopt a victim perspective, leaving bystander intervention relatively unexplored. Bystanders are people who witness bullying, but are not involved directly as a bully or target. Such individuals can discourage or escalate the bullying by speaking up on the victim’s behalf, or supporting the bully either actively or passively (Lutgen-Sandvik, 2006). Li, Smith and Cross (2012) argue the bystander role in cyberbullying is more complex than offline bullying, as the bystander can be with the target of the cyberbullying, the perpetrator or neither and views the cyberbullying indirectly (e.g. through visiting the social networking site).

Research into bystander intervention is pertinent for a number of reasons. Firstly, linked to findings from social psychology (Levine, et al. 2002; Scully & Rowe, 2009), bystanders can influence the way that bullying is perceived and enacted (e.g. Salmivalli, 2010). Secondly, research has identified that bystanders’ responses to bullying episodes may range widely according to their perception of the situation and their personal characteristics. Bloch (2012) proposed that on occasions when bystanders perceive the victim’s actions and behaviour within the social norms of the workplace they are likely to adopt the ‘defender role’ and stand up to the bully on behalf of the victim. In contrast, in the ‘prosecutor role’, the victim is viewed as deviant in terms of the norms of the workplace and the cause of his/her own difficulties. Finally, bystanders who adopt the ‘commuter role’ alternate between looking on the victim as normal or deviant and fluctuate between sympathising with the victim and conforming to the assessment of the victim as deviant. Yet, despite research investigating bystander effects in other contexts, bystander intervention and roles in workplace cyberbullying has yet to be considered in the research literature.

**Bullying mode:** Cyberbullying may be described as more covert and ‘behind the scenes’ than offline bullying (Spears et al., 2009), which has possible implications for bystanders’ willingness to assist victims. Online communication lacks the personal dimension and can result in individuals focusing less attention on each other and more on the communication itself (Kiesler, 1986). Resultantly, a deindividuation effect occurs, making people less sensitive to the thoughts and feelings of others (Siegel et al., 1986). This deindividuation may cause a bystander to exhibit less attention, empathic understanding and social identification towards the actual target.

Misunderstandings between sender and receiver are more likely in online communication, since it lacks the facial and body language cues that are normally used in face-to-face expression (Suler, 2004). These cues present in face-to-face communication play an important role in the process of automatic activation of empathy, and their absence can lead to increased level of aggression and a greater chance of disinhibited behaviours (Ang & Goh, 2010). Coupled with the fact that emotions are particularly difficult to accurately communicate and perceive via email (Byron, 2008), messages via email may increase the potential for misinterpretation (Giumetti et al., 2012). This can make it more difficult for bystanders to determine whether the perpetrator intends to harm the victim or not (Giumetti et al., 2013). Thus it is possible that online cyberbullying may be more ambiguous to bystanders, in turn reducing the likelihood of them adopting a defender role.

**Hypothesis 1:** Bullying mode (offline vs. online) will influence bystander intentions.

**Bullying Type**

The literature on bullying in schools has shown that type of bullying affects bystander response. Bauman and Del Rio (2006) found that teachers were significantly less likely to intervene, show sympathy to victims or punish bullies in relational bullying than physical and verbal bullying. They suggest this may be due to the subtlety of relational bullying, as opposed to physical where there are clear operating guidelines against physical violence. However, in the workplace it may be more difficult to identify behaviours that are bullying
using this schema, due to physical violence being less likely (Monks & Coyne, 2011). Moreover, at work there is considerable scope for subtle and often covert tactics of leadership that can lead to ambiguity in terms of the attributions of the bystander (Leymann, 1990). Consequently, many incidents of verbal work-related bullying can be misinterpreted as strong or negative management (Simpson & Cohen, 2004).

**Hypothesis 2: Bullying type (work-related vs. personal) will influence bystander intentions.**

Privitera and Campbell (2009) suggest targets can experience work-related and personal bullying both offline and online. The possible ambiguity of bullying behaviour in work-related bullying (especially as the majority of this could be deemed relational bullying), and the potential for increased misinterpretation of intention in online communication due to reduced social cues, may have an interactive effect. As such, the higher ambiguity of work-related, cyberbullying may decrease the likelihood of bystander intervention and adoption of the defender role.

**Hypothesis 3: There will be an interaction effect of bullying type and mode on bystander intentions.**

**Method**

Vignettes were designed so that all participants were presented with scenarios of all four combinations of type (personal vs. work-related) and mode (online vs. offline). Vignettes are an appropriate method for broaching sensitive issues since participants’ responses based on personal experience are not required (Wilks, 2004). Vignettes were chosen over computer laboratory designs because these designs do not capture fully the key definitional criteria of frequency and duration required for an act to be considered workplace bullying.

Bullying behaviours exhibited in the scenarios were generated using examples of personal and work-related negative acts from the Negative Acts Questionnaire (NAQ-R) (Einarsen, Hoel, & Notelaers, 2009). Behaviours had to meet the criterion of being able to be enacted online and were restricted to email abuse. We chose this approach because we were not examining the effects of different online media on bystander intentions and also because email has tended to be the focus of the limited workplace cyberbullying research so far (e.g. Baruch, 2005; Ford, 2013; Weatherbee, 2007). In order to ensure our behaviours mapped closely workplace bullying definitional criteria of frequency and duration we included a clear indication each negative act was persistent and ongoing. Additionally to capture the criteria of power imbalance in all cases the act was perpetrated by a supervisor on a subordinate. Gender of both victim and perpetrator was not identified.

**Participant Roles.** Based on Bloch’s (2012) three main participant roles in workplace bullying, three 5-point Likert scale questions were created, ranging from 1 *(strongly disagree)* to 5 *(strongly agree)*. For the defender role participants responded to the question: ‘I would feel sympathetic to my co-worker’; for the persecutor role: ‘I agree with my Supervisor’s actions’ and for the commuter role: ‘My support wavers between both my Supervisor and my co-worker’.

**Likelihood to Respond.** Participants we asked to what extent they agreed to the statement (measured by a 5-point Likert scale ranging from 1 *(strongly disagree)* to 5 *(strongly agree)*) ‘I would respond to this situation in some way’.

The final vignettes were distributed via email and posted on a social network site, initially inviting candidates from Trinidad and Tobago who met the criteria of being currently or previously employed in an organisation to participate. In order to acquire a larger sample, this opportunity sampling was later extended to snowball sampling of the general public. Of the 110 participants, 68% were female, and 41% male. Respondents were predominantly
from Trinidad and Tobago (73.6%), with 18.2% from the UK. Mean age was 29.9 years (SD = 8.1), and mean job tenure was 3.5 years (SD = 4.7). The sample comprised 62.9% staff, 22.7% supervisors and 13.6% managers.

**Results**

Results indicated significant main effects of bullying mode (F (1, 99) = 9.17, p = 0.003, r = .29) and type (F (1, 99) = 9.85, p = 0.002, r = .30) on the extent participants indicated they would respond in some way. Bystanders were significantly more likely to respond in offline than online scenarios and when the bullying was personal than work-related. There was a non-significant interaction effect between type and mode.

Results also illustrated significant main effects of bullying mode (F (1, 104) = 12.56, p = 0.001, r = .33) and type (F (1, 104) = 19.49, p < 0.001, r = .40) on ratings of sympathy with the target. Bystanders were significantly more likely to adopt the defender role offline than online and when the bullying was personal than work-related. There was a non-significant interaction effect.

In relation to the persecutor role, significant main effects of mode (F (1, 101) = 31.67, p<0.001, r = .49) and type (F (1, 101) = 131.42, p<0.001, r = .75) as well as an interaction effect between mode and type emerged (F (1, 104) = 6.846, p = 0.01, r = .25). The interaction graph (Figure 1) reveals that the increase in support for the supervisor’s work-related bullying behaviour is greater when the behaviour is online than offline.

A significant main effect of type is seen for ratings of wavering of support between the perpetrator and target (F (1, 102) = 31.01, p<0.001, r = .48). Bystanders were significantly more likely to adopt the commuter role when the bullying was work-related than personal.

**Figure 1.** Interaction effect of mode and type of bullying on ratings of support for perpetrator’s actions.

![Interaction Graph](image)

**Discussion and Conclusion**

This study uses a novel quasi-experimental approach to examine the impact of bullying mode and type on bystander intervention in workplace cyberbullying. Currently, research into bystanders of workplace bullying is limited and to the best of our knowledge, there exists no research examining bystander intentions in workplace cyberbullying. From a rigour perspective, the study adopts appropriate methodology for studying sensitive issues and frames the research within existing knowledge of cyberbullying, offline workplace bullying and computer-mediated communication. In terms of practice it illustrates that online forms of abuse may change behavioural intentions of bystanders – even to the point that they are more likely to agree with the actions of a perpetrator. Arguably, if bystanders of bullying do not intervene, they are providing passive support to the perpetrator to continue with his/her actions. If, as seen in school contexts, bystander support can reduce bullying, understanding
bystander behaviour online and developing approaches to enhance positive support online is a key intervention.

Possible reasons for not intervening in online/work-based acts could be due to bystanders’ lack of emotional empathy or injustice perceptions with the target, making it difficult for them to determine the emotional state of the target. Also, reduced social cues may result in bystanders not experiencing as strong an emotional reaction as they would witnessing offline bullying. Online communication is likely to be ambiguous in nature and hence difficult to determine if it is bullying or not (e.g. misinterpreted as strong management). Finally, bystanders may be fearful of retaliation online by defending the victim. Therefore, interventions such as cyber-mentoring, anonymous reporting functions and acceptable use protocols are likely to need to try and enhance bystander attention to, empathy and social identification with the target of cyberbullying as well as creating a safe environment for them to intervene.

Overall this research should appeal to conference delegates and the public because it examines a topic area attracting increased academic, practitioner, public and media attention, but as yet relatively limited in empirical investigation. It provides some insights of bystander behaviour, suggesting possible interventions based on these insights. In view of rapid advances in technology-based communication, it is forward-looking in its conceptualisation addressing an issue which is likely to become of mounting concern to organisations as well as to individuals’ daily activities online – especially given the impact cyberbullying can have on individual well-being.

F12 Discussion
What have the Romans ever done for us? Promoting the achievements of Occupational Psychology over the past century
Roxane L. Gervais, Chair, Division of Occupational Psychology; Richard Kwiatkowski, Cranfield School of Management; Rob Vondy, Health and Safety Executive; Simon Toms, Psychological Consultancy Ltd; Ian Bushnell, University of Glasgow & Ashley Weinberg, University of Salford

Category: Leadership, Engagement and Motivation
The Division of Occupational Psychology (DOP), as one of the first institutes within the British Psychological Society (the Society), has accomplished a lot in improving on the effectiveness of the work environment. Occupational psychologists function in applied or academic settings to determine those factors that benefit workers and organisations and thereby maintain acceptable levels of occupational safety and health. This focused and interactive session outlines four key areas in which occupational psychology and psychologists have or are promoting and advancing the profession and discipline.

The first paper provides an overview of where we were and what we did. Richard Kwiatkoski will provide a brief outline of the people and institutions that made up the foundation of the Division. Rob Vondy follows Richard to showcase policy in an applied setting. The Health and Safety Executive’s (HSE) MS approach is a robust process, inclusive of a validated instrument, which organisations can use to address those work-related stressors, which, if poorly managed increase work-related stress.

Simon Toms and Ian Bushnell, as the next speakers, focus on protected titles in other countries and assess how the United Kingdom (UK) compares. The move to protected titles has caused angst within the profession and it is useful to understand how other countries have dealt with the process. It would be useful also if the discussion could generate some points on which to move forward on this topic.

The Society has actively forged links with other organisations to ensure the more effective dissemination of psychology as a discipline, and one that should influence significantly
policy. Ashley Weinberg, as the final speaker centres on one of the associations with which the Society is seeking to form new links, the UK’s Political Studies Association. He will outline the reasons for establishing the relationship and the short and long-term benefits that this will bring to the Society and specifically to the Division.

What have the Romans ever done for us? From The National Institute for Industrial Psychology and Industrial Fatigue Board via Section and Division to CIPD and Nudge: Some psychological contributions to industrial history.
Richard Kwiatkowski

This short presentation is an unashamedly polemic account of the early days of Occupational / Organisational / Work / Industrial Psychology and points to the fervour and zeal of the pioneers, such as the National Institute of Industrial Psychology; the Industrial fatigue Board and the MRC Applied Psychology Unit. It shows how their motivation, and that of their successors, was both altruistic and scientific; and how we are the inheritors of a proud humanistic tradition that, alas, is largely invisible. It goes on to describe the genesis of the Society’s Section and Division of Occupational psychology (and their joining), points to some of their philosophical aims, aspirations, and achievements, and finally addresses the parallels between the pioneers and ‘giving psychology away’ in the present day.

The Management Standards Approach for Work-Related Stress: Improving the health of the workforce
Rob Vondy

That individuals spend a significant proportion of their time at work is well documented. This has led to researchers, policy makers and politicians promoting good occupational safety and health practices to ensure that workers’ remain safe and that their health is protected when they are at work. Indeed, being in work has been shown to be beneficial to people’s physical and psychological health.

However, work is not static but constantly changing with new technology, work scheduling, globalisation etc., at times these changes are positive but not always. The global economy, including the global financial crisis; an increasing diverse workforce; process and organisational changes; as well as a rapidly developing ‘always on’ culture; have impacted on how we work and may have added to the work-related stress workers experience. Moreover, there is evidence that stressors within the work environment have an increasingly negative impact on workers’ health. While there are challenges within any workplace, this increased negative impact has contributed to a rise in sickness absence and costs across industry in terms of staffing costs, reduced performance and lost productivity. In 2004, HSE developed the Management Standards for Work-Related Stress approach (the MS approach) to address those work characteristics that contribute to increased stress levels within workers. It is a primary stress intervention, i.e. one undertaken at the organisational level. At this level, the focus is on preventing injury to workers by eliminating or significantly reducing the work-related stressors that adversely affect workers’ stress levels.

There is research supporting the use of the approach and/or its indicator tool in managing work-related stress. To date, researchers from countries such as Italy and Australia have published studies using the approach, with over 20 known translations of its indicator tool, including in Farsi, Hindi, Portuguese, Russian and Spanish. This session will outline the HSE’s focus on the MS approach and the policy implications in addressing work-related stressors, and the investment in promoting the approach across industry.

Standardising the profession’s title and protecting it now and into the future
Toms, S., & Bushnell, I.W.R.
This presentation aims to inform discussions on the approach to regulation in occupational psychology by identifying and exploring the diverse and differing approaches adopted by comparable disciplines in a variety of countries. This will contribute to a framework in which the impact of these differing approaches can be better understood.

The submission is based upon a project conducted as part of the Society’s/DOP’s Leadership Development Programme, which seeks to establish a clear methodological framework that can be used to identify, collate, and present findings of interest on the topic of international regulatory approaches. As well as informing delegates, it is also hoped that the framework presented will guide future researchers in assessing different countries. The methods of the project included a set of questions used to identify information, along with the typical governmental, organisational, and educational resources that should be targeted.

The presentation establishes a benchmark to regulatory procedures by using the UK as an example, before exploring the approaches adopted by the relevant and comparable discipline in Australia, South Africa, United States of America (USA), Brazil, The Netherlands, and Singapore respectively.

The presentation will conclude by drawing international findings together into two main themes: the role of education, and legal protection. These are directly compared against the approach adopted by the UK, allowing the presentation to identify similarities, contrasts, and differences across the international community. Recommendations are also made into possible avenues of future research.

By presenting this project to delegates, the researchers aim to introduce and inform a discussion with delegates into the current and future regulatory approaches adopted by the Society, DOP, and the Health and Care Professions Council (HCPC) within the wider context of international comparisons. Opportunities to contribute to the project will also be provided.

Beyond the DOP: Linking and networking

Ashley Weinberg

Changing people’s working lives for the better is a primary focus for Occupational Psychologists, and requires political skills to be practised by professionals in our field. Therefore, it comes as no surprise that many colleagues from the DOP are supporting the establishment of a new Society section in political psychology. This features a new partnership with the UK’s Political Studies Association and includes forging links with the International Society for Political Psychology. Indeed the ‘Psychology of Politicians’ was the first book based on empirical data about this occupation and featured contributions from Occupational Psychologists specialising in selection, induction and socialisation, employee stress and leadership development. Of course, politics is far from being just about politicians. In everyday work, work psychologists are engaged in processes, which demand political skills required to bring about change at individual, group and organisational levels. Examples include persuading others, facilitating control over events, communicating attitudes and desires and preparing the ground for change - each requires political awareness and an understanding of the underlying psychological mechanisms for achieving goals in the practice of Occupational Psychology. Furthermore, we need to possess the coping strategies to deal with political challenges and as such, the stoic philosophy of Roman Emperor Marcus Aurelius contains advice of use to all practitioners. Links between the DOP and learned allies specialising in the art and practice of politics are not only logical, but help to raise our awareness of the politicians we don’t always recognise – all of us!
**F13 Standard Paper**

**Stressful work environment among remand-prison officers: Findings of the qualitative and quantitative research**

**Milda Perminiene**, University of East London; **Gabija Jarasiunaite & Loreta Gustainiene**, Vytautas Magnus University

**Category: Wellbeing and Work**

Work stress has a pivotal role on dysfunctional employee outcomes, such as burnout, emotional exhaustion, psychosomatic health complaints, physical health symptoms and job dissatisfaction. Besides, through employee absenteeism, lack of commitment and motivation, work distress has an effect on the organisational success.

A considerable amount of literature has been published on work stress among employees of various professions. However, prison officers face very distinct work conditions. Besides, remand-prison officers may be exposed to even more stressful working environment as they have to deal with individuals prior to the court, of whom they many times lack prior knowledge (in terms of their health condition, committed crimes, etc.). Hence, understanding of the particular stressors that remand-prison officers face are of the utmost importance.

In order to identify particular stressors that the remand-prison officers face on a daily basis, two types of studies were implemented. First, six focus groups were held with the employees of the different departments of one remand-prison in Lithuania. Each focus group was formed of 8 to 10 individuals, each session lasted for about an hour.

Discussion with the employees revealed that remand-prison officers face various demands and effort requirements, i.e. heavy workload, bureaucracy, constantly increasing requirements and responsibilities, night shifts, high responsibility for behaviour of prisoners, feeling the need for the permanent standby, threat of inmate violence, fear/risk of infectious diseases, high emotional strain, manipulations and provocations from prisoners, double moral standards and unclear demands from authorities. In addition, the officers seem to lack resources and control, i.e. they reported the understaffing problem, lack of time to do all the duties, fewer rights than prisoners, feeling the fear to complain or report their issues to the leaders of the remand-prison, experiencing unfounded complains about their work and accusations from prisoners.

Finally, employees do seem to lack rewards as they do not see the opportunity to be promoted, feel like their work is not appreciated enough, feel lack of trust from other colleagues and feel they are not valued enough, because of the very low salaries. They also experience restrictions at work, i.e. they cannot bring cell phones and usb to work, they have to have frequent x-rays, and they feel like being locked from the outside world.

Our respondents identified a number of stressors that could be attributed to high demands, lack of control, high effort and lack of reward. These elements could be ascribed to two well-known and much used models in the area of organisational psychology, i.e. Effort-reward imbalance (ERI) model (Siegrist, 1996; Siegrist, Siegrist, & Weber, 1986) and Job demand control Model (JDC) (Karasek, 1979; Karasek & Theorell, 1990).

The effort-reward imbalance model emerged as one of the useful theories to explain stressors at work (Siegrist, 1996; Siegrist, Siegrist, & Weber, 1986). The focus of this model is on the reciprocity of high-cost/low-gain conditions, where the imbalance of effort and reward is considered to be particularly stressful to an employee (Siegrist, 1996). Another dominant model that is used to conceptualize stress in organizations is the job demand-control model presented by Robert Karasek (1979). The model integrates two main domains: job demands and job control (or decision latitude) (Karasek, 1979; Karasek & Theorell, 1990).
The attempts to compare the two models in ability to explain stress-related outcomes demonstrated controversial findings. For example, Bethge, Randoschewski, and Muller-Fahnrow (2009) demonstrated that in a sample of German employees elements of both models were significantly linked to restrictions of work ability. However, judging by the odds ratios, high demands and low control better explained restrictions of work ability in comparison to the effort-reward imbalance (i.e. OR=4.66 vs. OR=2.88) (Bethge et al., 2009). Ostry, Kelly, Deemers, Mustard, and Hertzman (2003) demonstrated that the demand-control and effort-reward imbalance models independently predicted poor self-reported health status. However, the effort-reward imbalance model predicted the presence of a chronic disease, while the demand-control model did not (Ostry et al., 2003). In the study by Phipps, Malley, and Ashcroft (2012) safety climate ratings were better predicted by the demand-control-support model in comparison to effort-reward imbalance. On the other hand, in the Ostry, Hershler, Chen, and Hertzman (2004) study researchers did not find support that high demand-low control and effort – reward imbalance predicted mental health (Ostry et al., 2004). However, two elements from the effort-reward imbalance model, namely, esteem reward and status control did predict respondents’ more frequent visits to a physician (Ostry et al., 2004).

In addition to rather controversial findings regarding comparisons of the effort-reward imbalance and demand-control models, no previous studies reported on the importance of the two models in explaining stress-related outcomes among prison officers. Hence, the purpose of the second study was to identify whether elements ascribed to the demand-control or effort–reward imbalance model better explain self-reported outcomes of job satisfaction and recuperation needs among the remand-prison officers.

The second quantitative study was implemented in a remand-prison in Lithuania using self-report questionnaires. The total sample consisted of 126 employees, 71 male (56.3%) and 50 (39.7%) female respondents, whose average age was 40 years (SD=10.24). Two outcome variables were measured Using the Short Inventory to Monitor Psychosocial Hazards (SIMPH; Notelaers et al., 2007) i.e. job satisfaction (five items, measuring how satisfying is one’s work) and recovery needs (six items, measuring how exhausting is one’s work).

The two elements ascribed to the effort-reward model were emotion hiding requirements (considered as an effort) and remuneration (considered as rewards), whereas the two elements ascribed to the demand-control model were emotional requirements (considered as demands) and quantitative requirements (considered as unavailability for control). The effort-reward and demand-control variables were measured using the Copenhagen Psychosocial Questionnaire (Peijtersen et al., 2007).

The evaluation of the explained variance of the outcome variables demonstrated that the effort-reward imbalance model better explained job satisfaction, whereas job demand-control model better explained recovery needs of the remand prison-officers. Hence, one cannot conclude which model is better or more useful in explaining the stress-related employee outcomes. It is rather more accurate to say that each model is useful in explaining the stressful working environment depending on the outcomes considered in the specific work environment.

F14 Extended Paper
You’ve got mail - but do you ‘get’ it? Personality differences in email use
John Hackston, OPP Ltd
Category: Wellbeing and Work
Introduction
Email is an essential tool for many; in 2015, over 205 billion emails were sent and received every day (Radicati, 2015). However email can be a source of stress, especially for managers (Future Work Centre, 2015) or for those who perceive email as distracting (Hair, Renaud and Ramsay, 2007). In other contexts, individuals with personality type preferences
for Introversion and for Sensing have been shown to have a higher degree of apprehension about communication (Opt & Loffredo, 2000), and there may also be a relationship between personality and email-related stress. While there have been some studies into internet usage and personality (e.g. Mark and Ganzach, 2014), there has been less research into the specific relationship between email use and personality, especially in a work context. This study explores personality differences in the ways in which people relate to email, in how they use email, and in how they are affected by email. This can then form a basis for understanding how personality influences our own email use, and for how to communicate more effectively by email with others in ways that avoid causing them or us undue stress.

**Methodology**
Data was collected via an online survey between March and May 2016, 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 (where we get our energy from), Sensing/iNtuition (what information we prefer to use), Thinking/Feeling (what process we use to make decisions) and Judging/Perceiving (whether we prefer to live our lives in a more structured, organised way or a more open, spontaneous way). 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 use of and preferences for email, including:

- Number of emails sent and received
- Types of devices used for email
- Level of agreement with statements about their preferences for and actual use of email
- Use of email outside normal working hours
- Best and worst aspects of using email

368 people completed the questionnaire. 74% were female, 26% male; age ranged from 22 to 79 years, with a mean of 47.

**Results**
Detailed results will be presented at the conference. In summary, however:

- Most (84%) agreed or strongly agreed that they could not do their job without using email; women were more likely to agree than men.
- Extraverts sent and received significantly more work-related emails than did Introverts. Both groups received more emails than they sent.
- There were no personality differences in the devices preferred or used for email, but there was an age difference; those who preferred to use a smartphone were significantly younger than those who preferred to use other devices. There were no differences in actual device use.
- Most respondents checked and sent emails outside of normal working hours, including on holiday, at the weekend, and in the evening. They were somewhat less likely to access email in the morning, and least likely to do so late at night or in bed. However, even here, less than half never checked or sent emails late at night or in bed.
- In every ‘out of hours’ context, the group were less likely to send emails than to check them.
- Those with a preference for iNtuition were significantly more likely to check emails on holiday, at the weekend, in the evening or before going to work than those with a Sensing preference, and less likely to send work emails at the weekend, in the evening and before going to work.
- Compared with other workers, members of virtual teams feel that they waste more time dealing with email and that they use email less efficiently.
- Some questions about email use were agreed to by almost all respondents; others were disagreed with by almost all. However, there were differences, in the directions predicted, between people of different personality type preferences.
• A number of differences were found between respondents of different occupational levels. For example, managers and especially senior managers were more likely to agree that they are sent too many irrelevant emails, waste too much time on email, find email overwhelming and stressful, and have to deal with email outside normal working hours.
• The best aspects of using email included: being able to use it with anyone, anywhere, anytime; speed; and providing an audit trail. The worst aspects included: junk emails; ease of misinterpretation of email; and use of email instead of face to face communication. There were however personality type differences in the best and worst aspects mentioned by individuals.
• In line with previous research (Reinke and Chamorro-Premuzic, 2014; Kushlev and Dunn, 2015), those who were more stressed felt less in control of their working life and sent and received more emails. Specifically, they sent and checked more emails late at night or in bed and sent more emails at the weekend and in the evening (though there was no relationship with the checking of emails at these times).
• Those with a Perceiving preference reported being significantly more stressed than those with a Judging preference. This is contrary to the stereotypical image of a Perceiving person, but may reflect the realities of the pressures around using email in organisations. It had been predicted that Introverts would be more stressed than Extraverts, but this was not found within the group as a whole. However Introverts on average send and receive fewer emails than Extraverts, but amongst the subgroup who received the most mails, Introverts were significantly more stressed than Extraverts.

Discussion
The results of the survey support previous research, for example into the components of email-related stress. In our session we will build on these and the more detailed research findings to present general recommendations for email practice and etiquette, as well as specific suggestions for communicating to people of different personality preferences. In an interactive session, delegates will take part in group exercises to identify their own email strategies and blind spots, drawing on the results of the survey to suggest possible areas for development. Delegates will also be given a checklist and guide to use within their own organisation or with their clients.

References
Future Work Centre (2015). You’ve got mail! Research report. Future Work Centre
F15 Symposium

**Occupational Psychology in Public Policy**

Christine Hamilton, Independent Occupational Psychologist

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

Occupational Psychology in Public Policy (OPiPP) is a working group of the DOP established to influence government departments and stakeholders on the contribution that occupational psychology can have on the world of work. We would like to present our work to date and particularly the work of 2 other working groups: Inclusive Leadership and Board Effectiveness; and at least a summary of the work of the other working groups.

We would wish to have opportunity for presentations but also time for the audience to have opportunity to discuss in some depth on each topic using a "world cafe" style approach after the presentations.

F15a Paper 1

**Inclusive Leadership**

Doyin Atewologun, Queen Mary University of London; Maria Nitu, CAPP and Co Ltd

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

What exactly is inclusive leadership? How does it compare to other forms of leadership and what differential impact does it have on a diverse workforce? These questions, and many others, arose following Diversity & Inclusion (D&I) Working Group members’ recent reflections on industry trends in D&I. In our experience as researchers and consultants, HR and D&I specialists were talking about inclusive leadership and running workshops on it, but we did not see the same level of engagement and energy across work psychology research. So, in early 2014, the Diversity & Inclusion Working Group embarked on a DOP-funded research project to investigate the evidence for "Inclusive Leadership". As part of a Review Panel comprising research and practicing Occupational Psychologists, we developed the following systematic review question: What leader behaviours/styles/approaches/trait are positively (or negatively) associated with the inclusion (or exclusion) of employees belonging to historically disadvantaged groups?

At the DOP 2015 Annual Conference we presented the preliminary results of our systematic literature review. According to the Centre for Evidence-based Management, a systematic review “seeks to identify all relevant studies on a specific topic as comprehensively as possible, and to select appropriate studies based on explicit criteria…The methodological quality of the studies in question is assessed by several researchers independently of each other on the basis of explicit criteria. A systematic review is therefore transparent, verifiable and reproducible…Systematic reviews are not only used as a way to aggregate evidence relating to a specific topic, but also to make clear what is not known and, thereby, to direct new primary research into areas where there is a gap in the body of knowledge.”

(http://www.cebma.org/frequently-asked-questions/what-is-a-systematic-review).

In line with the above, we followed a methodical process for examining the evidence for the concept of inclusive leadership. We developed a strategy for retrieving articles, explicit criteria for including or excluding studies, and developed a tool for appraising their quality. Additionally, our approach to ‘leadership’ and ‘inclusion’ was broad. We considered it important to have a wide scope of the literature within which the concept of inclusive leadership may take various forms. Thus, we operationalized ‘leadership’ as leader, supervisor or manager styles, behaviours or traits. We operationalized ‘inclusion’ adapting several of the most widely-used definitions, including indicators of belongingness, uniqueness, access to information and resources, and involvement in decisionmaking. Additionally, we integrated broader concepts such as satisfaction and well-being as possible outcomes of inclusion. Regarding criteria for historically disadvantaged groups, we limited our review to the following demographic characteristics - gender, race/ethnicity, age,
disability, religion, sexual orientation and class. Based on our search strategy, we retrieved approximately 300 studies. We are currently critically evaluating and synthesising the data, and provide a few descriptive highlights of the 173 evaluated articles to date.

- Only 7% of articles linking leadership (or management or supervisory) positions to the inclusion of a diverse workforce adopt a pre-established definition of inclusion in their studies.
- Only 12% of the evaluated articles refer to a theoretically established form of leadership in their studies. Leader-member exchange and transformational leadership are the most frequently cited theories/models, accounting for over half of this sub-sample.
- Of the 173 studies, over half consider gender, just under a third consider race/ethnicity. Less than 10% consider age, sexuality, culture/nationality, disability or class (sums do not add up to 100% as some studies look at multiple characteristics). Less than 1% of studies consider religion.
- 29% of studies were rated as ‘poor’ quality, presenting only descriptive findings and a minimal audit trail (for qualitative studies) or surveys of perceptions and/or frequency data that did not test relationships between data (for quantitative studies). Although we are still midway through our analysis, our initial findings already raise some questions for consideration:
  - Leader-member exchange and transformational theories are the most widely studied leadership theories in relation to diversity and inclusion in organisations. However, in the studies retrieved, transformational leadership appears to be linked predominantly to group and organisational outcomes while leader-member exchange is linked to individual perceptions and experiences. Is Inclusive Leadership a binary concept with distinct individual and organisational outcomes?
  - Fewer than 15 articles used a pre-established definition of inclusion, and, these definitions differ from each other considerably. So, what exactly is inclusion and what is its conceptual link to variables like affective commitment or workgroup cohesion (indicators of belongingness) or perceived organizational support (indicator of being valued)?
  - Most articles focus on only one diversity facet at a time. However, individuals all have multiple identities which interact in complex ways to affect workplace experiences. What are the implications for organizations and researchers if we considered inclusion along multiple, simultaneous identity dimensions?

Following our presentation, the engaged audience prompted even more questions to reflect on as a research team and as a profession as a whole. What can we learn from education, which has an established literature on inclusion in schools? How can we encourage practitioners to share their insights and research findings regarding their ‘real world’ experiences of inclusive leadership without the risk of them losing their market advantage? How will we use the findings internally – what are the implications for developing an inclusive profession as occupational psychologists and within the BPS more broadly? We may not have all the answers now, but the response to our presentation reinforced the potential contribution of our findings to research, practice and the profession. The review findings will be launched in the first quarter of 2015, and we intend to engage in other dissemination activities through white papers, academic papers and in seminar/workshop formats.

**F15b Paper 2**

**Board Effectiveness**

**Ros Searle, University of Coventry**

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

The DOP Board Effectiveness Working Group has a 3 year plan to:

- To promote greater understanding and awareness of the psychological evidence as it applies to board effectiveness.
To extend awareness from a simple gender divide and instead examine under-representation in boards, and how to better develop the skills and competencies required.

To influence policymakers and practitioners and to provide education, best practice and evidence-based information around responsible governance.

To provide DOP responses to EU and UK Government consultation on gender imbalance.

To build further ‘women at the top’ events to showcase DOP expertise and raise awareness of issues

To create education and guidance programmes to enhance board effectiveness

F16 Standard Paper
Exploring the relationship between remote e-working and work-related well-being
Maria Charalampous, Christine Grant, Carlo Tramontano & Beth Grunfeld, Coventry University

Category: Wellbeing and Work

Introduction: Remote e-working refers to work conducted at anyplace and anytime by using information and communication technologies (ICTs) to stay connected with colleagues and supervisors. This qualitative study aims at unfolding how remote e-working is associated with five dimensions of work-related well-being (i.e., affective, social, cognitive, psychosomatic, and professional; Van Horn, Taris, Schaufeli & Schreurs, 2004). Whilst researchers have agreed that remote e-working may impact individuals’ psychological state and well-being at work, this relationship is more complex than initially contended. On the one hand, remote e-working was found to increase employees’ job satisfaction, organisational commitment and positive emotions; decreasing their levels of stress linked to day-to-day demands of the office and commute (Kelliher and Anderson, 2010; Anderson, Kaplan & Vega, 2015). On the other hand, De Menezes and Kelliher’s (2011) review supported that remote e-working may lead to stress. E-workers were found to overwork and be constantly available to clients (24/7), which in turn harmed their switching-off from work (Kossek, Lautsch & Eaton, 2009). In spite of a growing body of research on the topic, findings are inconclusive and somewhat ambiguous, and rely on quite narrow definitions of both remote e-working and well-being at work. Thus, the current study adds rigour and novelty by including remote e-workers with a variety of working patterns and conceptualising well-being at work as a multidimensional concept, to capture how specific work features may be associated to work-related well-being.

Synopsizing, the main research objective is to untangle the relationship between remote e-working and the five postulated dimensions of work-related well-being. This study could contribute to the conference’s “work and well-being” category because it explores how working away from a traditional office environment and using technology may link to well-being at work; something which will allow organisations to monitor and improve health and well-being of remote e-workers.

Design and Method: Thirty-nine semi-structured interviews with remote e-workers (22 female, Mage = 46.86, SD = 8.25) were conducted during a collaborative project between the research team and a UK market-leading software development organisation. The inclusion criterion was that employees were spending at least one day per week working away from a traditional office environment. All interviewees, except two, were full-time contractors and were working in multiple locations across UK, except three employees who were employed in company’s Australian offices. Interviewees were working in different business units (e.g., health and social care and marketing), in different levels of the organisation (e.g., 16 had managerial responsibilities), and in different job roles (e.g., operations directors, software developers and consultants). Remote e-working intensity varied, ranging from full-time at
home to splitting time between home, different company sites, customer sites and any other locations such as trains and hotels.

This study was reviewed and given an approving ethical opinion for conduct by the Coventry University Ethics Committee.

**Analysis:** Transcriptions and analysis of the interview data are still in progress and will be finalised by the end of December 2016. Researchers are using thematic analysis to acknowledge, analyse and describe the identified themes (Braun & Clarke, 2006). The lead researcher is coding the transcripts using NVivo, and a second researcher is reviewing the transcripts and the code, ensuring saturation. The two researcher are discussing the emergent themes, seeking advices from a third researcher if needed.

**Preliminary Findings:** Suggest that remote e-working may be indeed associated with well-being at work in all of the postulated dimensions mentioned above. Particularly, remote e-workers expressed that part of their job satisfaction and organisational commitment was linked to the flexibility and easier navigation between working and personal roles. Although work-related emotions were linked to work features and outcomes, working from home was often the trade-off after extensive travelling and revealed positive emotions such as relaxation (i.e., affective dimension). Moreover, being able to do “the right work in the right place” increased remote e-workers concentration (i.e. cognitive dimension). Face-to-face contact and personal effort was denoted as important aspects for developing and maintaining work relationships (i.e. social dimension). However the rules and processes to be followed, remote e-workers stated that this kind of work increased their autonomy and empowered them to take ownership (i.e. professional dimension). Additionally, the findings add to the scarce research about how remote e-working may influence physical activity, eating habits and associated health outcomes. Precisely, remote e-working gives employees the flexibility to fit more exercise in and choose better quality food. Nevertheless, sedentary behaviours and extensive travelling were suggested to be challenging aspects leading to body irritations (i.e., psychosomatic dimension).

**Discussion & conclusions**
The preliminary findings revealed that there is a relationship between remote e-working and all five dimensions of well-being at work, having both positive and negative implications. Specifically, positive associations occur in cases when there is an increase in feelings of organisational commitment, job satisfaction, autonomy, concentration and healthier habits. On the contrary, remote e-working can challenge work relationships and exasperate physical conditions when extended driving is involved.

**Practical Application:** This gained insight into the nature of remote e-working and how it links to well-being at work will aid the development of a new e-well-being scale. This scale potentially may be used by organisations to detect and manage any issues raised by remote e-working before harming individuals’ personal and working lives. A discussion around specific actions and strategies that could be put in place to improve the remote e-working experience will thus be enabled.

An electronic copy of slides will be provided online.

**References:**


F17 Standard Paper

**Avoidance of project issues- The fundamental culprit in Information Technology (IT) Project Failure**

**Alexandra Forsythe & Jillian Mancarella**, University of Liverpool

**Category: Leadership, Engagement and Motivation**

**Introduction**

Here we explore the influence of identity-protective strategies and attribution bias on ineffective project reporting, contributing to Information Technology project failure. Drawing upon attribution theory (Heider, 1958) and identity processing style (Berzonsky, 1990) the dimensions of externality, internality, stability, globality and controllability were assessed to determine their relationship with project failure and the ways in which participants focus on creating or maintaining a secure and coherent identity in the workplace through informative, normative and diffuse-avoidant identity processing styles. Results suggest that during project failure, a self-serving bias relieves the individual of personal responsibility, helps individuals persevere in the face of adversity and allows them to protect their self-esteem in the workplace (Martinko, Gundlach and Douglas, 2002).

**Rationale**

As global expansion continues industries face new competing challenges and priorities in the rapidly changing Information Technology (IT) environment. Whilst this growth presents opportunities for success, the IT industry is also fraught with continued failure. The major causes of project failure are reported as time overrun, cost blowout, poor quality of product and lack of governance (Standish Group, 2015; McKinsey, 2015). Senior managers and executives are now more likely to accept responsibility for IT project failure when external stresses and issues are understood and environmental conditions acknowledged (Atkinson, 1999; Whitney and Daniel, 2013), however there has been comparatively little consideration given to how the behaviour of the project team members contributes to IT project performance.

**Case Study**

Data was collected and analysed from an organisation that reported poor IT project performance. The organisation has recently gone through restructuring, including a new operating model. Reviewing the reasons behind IT project failure was a key initiative to improve project outcomes. It was hypothesized that attributional and identity processing style would impact on project outcome.

**Measures**

The design of this study is a quantitative method employing a between-subjects factorial design. The Attributional Style Questionnaire (Peterson, Semmel, von Baeyer, Abramson, Metalsky and Seligman, 1982) measured individual differences in attributional style in which negative events are credited to external (vs internal), global (vs specific) and unstable (vs stable) causes. It uses three subscales; locus, stability, and globality. There is evidence that
this instrument has substantial construct, criterion, and content validity (Dykema, Bergbower, Doctora, Peterson, 1996). Identity processing style of informational, normative and diffuse-avoidant was measured through the Identity Style Inventory (Berzonsky, 1992). Factor structure, reliability and validity are confirmed when the questionnaire is used in decisional and problem-solving situations (Berzonsky, Soenens, Luyckx, Smits, Papini and Goossens, 2013)

**Ethics**
This study complied with the BPS ethical guidelines on respect; competence; responsibility and integrity.

**Data Analysis and Results**
An inspection of the mean scores indicated project failure was related to a higher level of the attribute of externality (M=1.90, SD=.30). In other words assigning the event to outside, environmental influences, and not to own actions. Failure was related to a higher level of stability (M=1.90, SD=.30), indicating the perception that factors surrounding an event were fluid and changing. A slightly higher level for the attribute of globality (M=1.63, SD=.49), indicating that events are considered widespread and all encompassing, and a slightly higher level of the attribute of controllability (M=1.16, SD=.37), indicating the project resources had limited influence over the project outcome.

Figure 1 illustrates the dominant identity processing style. The ways in which project failure was explained is presented in Figure 2 and the impact that project failure has on participants is presented in Figure 3.

**Figure 1: Identity processing style**

**Figure 2: Project Failure Explanations**
Figure 3: Project Impact

A one-way MANOVA examined the impact of project outcome on identity processing style and attributional type. There was a significant effect between project success and project failure on the combined independent variables, F (8, 75) = 53.6, p = .000; Wilks’ Λ = .15, ηp² = .85. Partial eta squared (ηp² = .85) indicated a large effect size, which indicates 85% of the variance of the dependent variables is explained by the independent variable project outcome. When the results for the independent variables were considered separately, using a Bonferroni adjusted alpha level, externality, F(1,82)=149.332, p=.000, ηp²=.646; stability, F(1,82)=296.371, p=.000, ηp²=.783; globality, F(1,82)=54.256, p=.000, ηp²=.398; controllability, F(1,82)=5.993, p=.016, ηp²=.068.

Discussion and Conclusion
Generally participants had a collective style of external, stable and global attributional style when experiencing project failure. This indicates that the individuals attribute the project failure to external causes by not taking responsibility for the outcome, and believe that the same reasons for failure will be consistently evident across future projects. The stable and global aspects would indicate negative attributional style encourages the perception that the environment surrounding projects are fluid and changing, with those events as being extensive and involving most situations. It was also felt the project team member had a lack of control over the project outcome. The project members have developed resiliency by having an external attribution reinforcing the perception that project failure was not their fault they can then reapportion blame to environmental factors such as lack of executive sponsorship.

While most participants displayed a medium to high level of commitment, a level of complacency has arisen due to the belief that the same external factors would manifest regularly and be evident in future projects undertaken. Only a minority of participants would actively do anything to change the outcome and would continue to work in IT projects in the future as they believed that the project failure was not due to their own weaknesses. The majority of participants had a normative type of identity processing style. This indicates that the individuals, when faced with project failure, in an attempt to protect their self-esteem are not pro-active and wait to be told what to do. Normative types do not take the initiative to raise project risks and they are reliant on line or senior managers to do so. This eventuates into ineffective project reporting due to inability to identify project issues and the lack of awareness by senior management of the potential problem. The project team members with a diffuse-avoidant identity processing style also employed self-protective strategies to avoid receiving negative feedback or blame. Diffuse-avoidant types dodge potential conflict and delay raising issues, once again resulting in ineffective project reporting. Project team members with an informational style are at risk of an unhealthy identity confusion, as they
attempt to resolve project issues that are perceived to be outside their control. It is important to form a constant feeling of independence and an established identity to maintain self-esteem in the workplace.

The results from this study will contribute to the understanding of IT project failure, enable a focus on project team behaviours and effective project reporting, and the required leadership style.

References
http://www.mckinsey.com/insights/business_technology/delivering_large-scale_it_projects_on_time_on_budget_and_on_value.

F18 Standard Paper
What makes a resilient e-worker? A competency approach supporting well-being
Christine Grant, Coventry University; Gail Kinman, University of Bedford
Category: Wellbeing and Work

Introduction
The number of e-workers in the UK is growing rapidly. Research findings have highlighted the potential for e-working to threaten as well as facilitate work-life balance, well-being and job performance, but little is yet known about the competencies required by resilient e-workers. This qualitative study aims to gain insight into the skills, competencies and coping styles that are ‘healthy’ and ‘unhealthy’ for e-workers. It is anticipated that the findings will help to develop a research-informed framework to better understand the impact of e-working on job effectiveness, work-life balance and well-being with clear benefits for employees and organisations.

The main aim of this research is to develop an e-worker competency framework enabling e-workers to manage their work-life integration more effectively and ameliorate work-life conflict, both of which can impair well-being and performance over time.
Research objectives:
- To identify key skills, attributes, knowledge and experience that contribute to the resilient e-worker.
- To develop a preliminary competency framework of the knowledge, skills and behaviours of the developed and undeveloped e-worker.

Theory and Significance:
There is evidence that frequent ICT use for work purposes has both positive and negative effects on individual well-being and organisational productivity (Grant, Wallace & Spurgeon, 2013). The incidence of e-working is rapidly growing, but there is evidence that organisations provide employees with little guidance on how to engage with ICT for work purposes in a healthy and sustainable way (Grant & Kinman, 2016). Such problems may become more common if organisations do not identify the skills that are important in order to develop their e-workers in the light of the constant availability of technology allowing work to continue after hours. Extended working hours can lead to a lack of opportunity for recuperation and an increase in work intensity, which can lead to health-related problems (Grant et al., 2013). Furthermore, it is acknowledged that developments in technology, by themselves, cannot increase job performance; an associated change in working practices, behaviour and new skills are required (Kowalski and Swanson 2005; Baruch 2000).

This research is based on the notion of resilience in the workplace which has been defined as the cognitive abilities, competencies and behavioural characteristics that are contextual to situations (Lengnick-Hall et al. 2011). With limited research available in this area, there is a clear need for an e-competency framework that offers guidance on how e-workers can improve their skills and self-regulate their behaviour, whilst organisations need to provide mechanisms to support and guide employees towards healthy and productive behaviours.

Design & method
Data were collected through a series of 34 semi-structured interviews, mean age 45.7, with 16 female and 18 male participants. The majority were working full-time and from a range of job roles within a UK software development organisation. The criteria for selection of participants included experience in e-working.

During the interviews, interviewees were asked to explain what makes their own e-working successful and to highlight the issues that affect them negatively. They were also asked to identify and prioritise the skills, competencies and coping strategies that they believe makes them effective and productive e-workers and to identify healthy and unhealthy strategies used to manage e-working.

This study was approved by the Coventry University Ethics Committee and adheres to the British Psychological code of conduct for research.

Data analysis & results
Data were transcribed and subjected to thematic analysis (Braun and Clarke, 2006). The data was further analysed using a framework analysis approach (Gale et al., 2013) to extract the key skills, behaviours associated with e-resilience and associated competencies such as self-management of work-life balance and well-being. Five key themes emerged: knowledge, skills and abilities; agile working; lifestyle and personal qualities; management styles; and organisational actions. Organisational actions are identified as the need to provide specific e-worker training, inclusion of the required skills and behaviours in appraisals and to review policies, ensuring they are effective and relevant to e-workers. The ability to self-manage and self-motivate were considered particularly important competencies enabling healthy behaviours to be maintained. Interviewees also identified the ability to develop trusting
relationships with line managers and to be aware of the implications of blurred boundaries between work and non-working lives for work-life balance and well-being. Communication skills that are well developed were also considered vital by many interviewees, as was the need to have effective coping mechanisms in place to manage workload.

The framework can help organisations to develop key skills and competencies to support e-workers primarily through training and coaching. Managers could use the framework to help e-workers develop a self-regulatory approach. This research is appropriate for the work and well-being category as the potential benefits for the health and well-being of e-workers are clear. This paper is part of an ongoing body of work completed by the authors on the emerging field of e-working that has attracted attention from organisations and policy makers. The team is currently developing solutions to improve the way in which we use technology in a healthy and sustainable way and develop a more resilient approach to e-working.

Discussion & conclusions

The findings provide insights into the skills, competencies and abilities required for effective e-working. The preliminary framework emerging from the data indicates that, whilst many skills thought to be essential for healthy and productive e-working are similar to those required for working in the office, there are some crucial differences. What is clear from the research is that, although some individuals may have developed some of the competencies, the framework has strong potential to enable e-workers to develop self-regulatory practices and for organisations to provide effective guidance and support to manage issues such as managing boundaries and work-life integration effectively when using technology.

Practical applications

This research provides organisations and managers with the ability to benchmark their e-workers capability and to identify (using the framework) specific training needs and coaching/counselling opportunities to improve their performance and productivity and ameliorate some of the negative effects of ICT usage. A short discussion will consider what organisations and e-workers can do to manage risks and develop appropriate guidance and coping strategies for ‘e-resilience’.

A PDF copy of slides will be provided online.

References


F19 Standard Paper
A comparison of employers and educators implicit theories of employability
Stella Williams & Catherine Steele, University of Leicester; Lorna Dodd, Newman University
Category: Learning, Training and Development

Introduction
A recent systematic review of employability conceptualisations identified a lack of data-driven theory development (Williams et al., 2015). While existing theories incorporate available empirical evidence, without a consideration of key stakeholders understanding of employability, it is unclear whether these theories offer a complete picture of the way in which employability is understood in practice.

The aim of the present research was to develop a data-driven formulation of employability from the perspective of two stakeholders within graduate employability (employers and educators). Consequently, this research addresses the question ‘what does employability mean to those involved in its development and assessment?’.

Methodology
This research utilised methods derived from personal construct theory (Kelly, 1955). A repertory grid technique was employed to access individual’s implicit theories of employability. A total of 22 employers and 14 educators were sampled via a purposive snowballing technique.

Participants were asked to identify 6 students/employees, representing a range of high, moderate, and low levels of employability. They were then asked to compare these individuals, in terms of how they were similar/different in terms of their employability. This data was used to form bi-dimensional constructs e.g. hardworking-lazy, on which the remaining individuals were rated.

Data analysis and results
Resulting constructs were aggregated via the means of a content analysis. Results of this analysis underwent a number of inter-rater agreement processes, culminating in an inter-rater agreement level of 95%.

A total of 13 superordinate categories were developed, namely: commitment, intrapersonal components, interpersonal skills, knowledge and experience, creativity, strategic practice, evidence-based practice, communication skills, proactivity, taking responsibility, adjustment, professional development and professionalism.

A differential analysis was conducted to identify any variation in the representation of these categories within each subsample. Three main distinctions were identified, relating to the interpersonal, intrapersonal, and commitment categories.

Discussion with conclusions
Discussion, in this case, will focus on the differences identified between employers and educators implicit theories. While not derived from an assessment of employability interventions, these differences illustrate the understanding of employability held by those involved in the development and delivery of these interventions. As such this has implications for the evaluation of these interventions validity.

Implications
The present results can be considered alongside existing employability conceptualisations, as a basis for accurate assessments of employability development, both for individual interventions, and at an individual level. Furthermore, they can be utilised to inform the
development of interventions aimed at enhancing the employability of those both within, and outside of, higher education.

**Originality**
This differential analysis not only offers a novel approach to developing understanding around this concept, but also offers up-to-date information around the appropriateness of current theories and practices.

**Ethical issues**
Prior to the present study commencing, ethical approval was granted by the two higher education institutes involved. All ethical principles of the British Psychological Society were upheld.

**Relevance of proposal**
This proposal is highly relevant to the main conference theme. A rigorous investigation into the meaning of employability is presented. This investigation offers a context in which to consider the relevance of existing theories for practice. Identifying areas of interest to practitioners, on which to compare these current theories construct validity.

The topic is particularly appropriate to the category 'learning, training and development' as these findings identify key areas of differentiation between the implicit theories of those developing employability, and those making judgement on employability. The results of this study offer dimensions of employability on which to consider the focus and success of employability development interventions.

**Outline of agenda, and key message**
The talk, covering an empirical piece of research, will commence with a brief introduction to the context of employability development in higher education (HE), followed by an outline of the projects aims and methodological approach. The remainder of the session would then focus on the emerging disparages between implicit theories of employers and those involved in employability development in HE. The key message intended to be communicated is the need for consistency in the way employers and educators view employability, and the potential impact of the nature of academic careers on the way employability is understood.

It is hoped that delegates attending this talk will be inspired to consider what elements of their training need attention, as well as stimulating discussions around the perceived accuracy of these results, their origins, and their perceived impact on HE provision. Benefits are also seen for the general public, who having personally invested in their own, or their child's education within HE, will be seeking information to inform their understanding of what this investment might offer them in the world of work.

**F20 Standard Paper**
**Beyond Workload: Illegitimate tasks and academic wellbeing**
**Siobhan Wray**, York St. John University; **Gail Kinman**, University of Bedfordshire

**Category: Wellbeing and Work**
Professional work is associated with extensive knowledge and training, is defined by a set of professional standards and has a high degree of professional autonomy (Bunderson, 2001). Professionals often have two specific work-related identities, that of their professional group and the organisation for which they work.

In line with previous research (Kinman & Court, 2010; Kinman & Wray, 2015) it is postulated that high levels of role stress associated with ambiguity and conflict will have a negative outcome for academics, resulting in higher levels of emotional exhaustion and disengagement from work. To further develop this area of enquiry, this paper will explore how the perception of and attributions assigned to organisationally driven work tasks may be
implicated in the mechanisms linking role stress with burnout in professional work through the examination of illegitimate tasks.

Illegitimate tasks are stressors that have an impact on one’s sense of self, particularly in relation to the perception of professional roles (Semmer, Tschan, Meier, Facchin, & Jacobshagen, 2010), often tied to a sense of social identity (Warr, 2007). Semmer et al (2010) postulate that when tasks are perceived as illegitimate, they have a strong stressor effect; partly because it constitutes an attack on personal identity. Initial research into this construct suggests that tasks that are perceived as outside of one’s expected job role are likely to result in negative outcomes such as psychological distress, job dissatisfaction and leaving intentions. Ability to perform tasks well may be inhibited via the constructs of role conflict and ambiguity. The growing role demands, significant changes in the nature of academic work and a perceived lack of respect and esteem (Kinman & Jones, 2008a; Kinman & Court, 2010) and the schism between the academic role and the managerialist role (Winter, 2009) would suggest that this is an area of research that may be of particular relevance to academics.

Aims
To examine the effect of role strain on emotional exhaustion and disengagement in a sample of UK academic staff.
To examine the mediating effect of illegitimate tasks on the relationship between role stress and burnout dimensions.

Method
A cross-sectional correlational design was utilised. An online questionnaire was distributed electronically to all active members of the University and College Union (UCU) in 2014 and 6460 (53% female) academic staff fully completed the survey.

The role subscale of the HSE Management Standards Indicator Tool (Mackay et al, 2004) was utilised in order to assess role stress. The scale was reversed scored, with higher scores representing higher levels of role stress. Illegitimate tasks were measured using the Bern Illegitimate task inventory (BITS) (Semmer et al, 2010). Burnout was measured using the English version of the Oldenberg Burnout Inventory (Halbesleben & Demerouti, 2005).

Results
A mediation analysis was calculated using ordinary least square path analysis. Role strain indirectly influenced both disengagement and emotional exhaustion through reported increase in the perception of illegitimate tasks. Participants reporting higher levels of strain relating to role reported higher levels of illegitimate tasks (a = .43). Higher levels of illegitimate tasks were associated with higher levels of disengagement (b = .32) and emotional exhaustion (b = .33). Role strain had a direct effect on both disengagement (c = .38; CI .36 to .39; p > .001) and emotional exhaustion (c = .27 ; CI .26 to .29; p>.001). Evidence for the relationship between burnout dimensions and role strain, via the mechanism of illegitimate tasks suggests that role strain can influence the perceptions of tasks at work.

Discussion
Role strain has a direct effect on levels of emotional exhaustion and disengagement in academic employees, suggesting that task conflict and ambiguity are significant stressors for academic staff. This supports previous findings (Kinman & Court, 2010; Kinman & Wray; 2015). Additionally, this study set out to examine if role strain has an indirect effect on burnout dimensions through illegitimate tasks. The findings suggest that higher levels of reported role strain increase the perceptions of task illegitimacy and thus emotional exhaustion and disengagement. Academics who reported higher levels of role strain were more likely to report that they perceived tasks as unrelated to their role or entirely
unnecessary, resulting in higher reported levels of emotional exhaustion and disengagement. This supports the tenant of Semmer et al’s (2007) argument, that role strain, in particular perceptions of illegitimacy, can be considered a violation of professional identity, and as such a form of “stress as offence to self”. This is particularly relevant for the academic profession, where roles are expanding to incorporate a wide range of new activities from business development to competitive student recruitment, and professional identity has been threatened (Deem, Hillyard & Reed, 2007; Fanghanel, 2011).

Implications for practice:
A focus on the impact of academic work on the professional identity of those undertaking academic roles offers the opportunity to consider the wellbeing of academic staff from a new perspective. A focus on both the number and nature of tasks that academic are required to undertake may offer greater opportunities for the development of interventions to support wellbeing at both organisational and national policy levels.

Limitations
Although the sample for this study is large (n=6460), the design is cross-sectional. Furthermore, research is requires to identify what elements of the academic role are perceived to be illegitimate in their nature.

References

F21 DOP Chair’s Address

The Division of Occupational Psychology: Looking back, looking forward
Roxane L. Gervais, Chair, Division of Occupational Psychology
As I outlined last year during the Chair’s address, the Division of Occupational Psychology has encountered many changes and challenges and has benefited from these by becoming more resilient. This year, I will take this opportunity to discuss why it is important to assess where the Division has been and how it could meet its strategic objectives to 2020. Occupational psychology, as a discipline and a profession, within and outside of the Division has a rich history and as occupational psychologists, we should celebrate this a lot more than we do at present. It is important that we commemorate more what we have done and learn from these activities, events and outputs to shape how our profession and discipline should progress. In recognising our achievements and preparing for our future, we have to recognise that some of the changes within the Division will not be organic, but rather be driven by a Society-wide focus. The member network review that has progressed into a structural review continues and this will have a major impact on the Division over the next few years. Despite any required changes, the Division has to become more visible, and to have a larger impact on policy in terms of improving the work environment and supporting the well-being of the workforce.

The DOP Leadership Development Graduation Programme: Celebrating the 2017 Graduates
Roxane L. Gervais, Chair, Division of Occupational Psychology; Alison McFarland

Category: Plenary Session in the Grace Suite

The Division of Occupational Psychology (DOP) started its Leadership Development Programme (LDP) in 2012. The main aim of the programme was to generate a pipeline of DOP leaders and thereby ensure consistency in the preparation of its future leaders for their roles at all levels within the DOP committee. The programme is unique in that its focus is on leadership development within a volunteer context. In 2015, the Division of Counselling Psychology (DCoP) agreed to six of its members receiving training under the one-year programme. The joining of these two disciplines, occupational and counselling, realised unexpected synergies that has improved the format of the programme and opened up new possibilities of cohesive working that was not thought possible when the programme was first envisaged. The DOP wishes to open up the programme to other member networks within the Society as it has seen the benefits that it can provide. This is echoed in the sentiments of the DCoP participants.

This graduation ceremony at the DOP’s 2017 annual conference acknowledges those individuals from the cadre who have completed successfully the one-year programme. As the LDP moves into its sixth year of existence in 2017, the DOP will develop the programme further and expects that other member networks will choose to include participants to support the training and development of volunteers. Researchers (Morrison, 1994; Renz, 2010) have supported the training and development of volunteers, especially those in a leadership position. In having a structured approach to the development of its leaders, the DOP is following good practice to allow volunteers to obtain skills they can use in their volunteer roles, and as an extra benefit, in their work roles.

References
F22 Keynote Session
Re-thinking and Re-focusing the Psychological Contract
Professor David E Guest, Professor in Organizational Psychology and HRM, King's College London

Category: Plenary Session in the Grace Suite
The psychological contract has been a focus of theory and research for over 50 years and continues to attract considerable attention. In a major review by Conway and Briner (2005) it was argued that its main contribution lay in the concept of breach of the psychological contract and much of the research has been concerned to explore the nature and consequences of breach. As a result, there has been a neglect of psychological contract fulfilment which potentially has greater practical utility. The aim of the presentation is therefore to present a theory of psychological contract fulfilment, to identify the causes and consequences of a fulfilled psychological contract and, in the light of this, to outline new avenues for research and practice.

F23 Extended Paper
Rich pickings from a Reflective Goal Setting smorgasbord of applications
Cheryl Travers, Loughborough University

Category: Learning, Training and Development

Background
Fifteen years ago I designed a final year module for Business School undergraduates, which was ultimately to help students enhance their self-awareness, interpersonal skills, and their management/leadership skills and employability. As an Occupational Psychologist working within this academic context, I felt that there was a gap in the teaching and learning provision for university undergraduate students, which both capitalised on their industrial placement experiences, and fed into their future employment. I had also taught and trained a wide range of adult learners in executive education and management development across a range of sectors and levels. I listened to those students, and my corporate contacts, and deduced that students would benefit from a greater focus on the theory and application of interpersonal skills/personal development. My research and observations of students’ learning experiences, up to that point, suggested a lack of: necessary soft skills to maximise placement experiences; emotional intelligence to balance pressures of study, relationships and job search; and insight into the transfer of academic learning to practice. Adults learn differently to children and, as Knowles (1968 and 1984) suggests, are intrinsically motivated, self-directed, bring both resources and experiences, and are task, problem and life centred. I wanted to help our students become resilient and self-insightful future managers and leaders and felt they needed a greater ‘andragogical’ approach to their learning. The approach had the benefit of being based on strong theory, devised from rigorous research, and having the potential for great impact and relevance.

The data
Hitherto largely inaccessible data on students’ learning experiences became available, via innovative teaching resources designed to support overall reflection and transfer of learning from this module. Drawing upon established models and frameworks, such as Gibbs Reflective Cycle (1988), Pennebakers’ work on the use written diaries (e.g. 2004), juxtaposed with the Goal Setting Theory of Locke and Latham (1990, 2002) students set personal development goals and wrote about these in ongoing reflective written diaries. Diary, and other reflective data gathered, has provided an opportunity to identify the active ingredients in the transformative learning process (e.g. Mezirow, 1978-2009), and to investigate topic areas linked to my previous research areas, e.g., managing occupational stress. Outputs from this work have so far been fed back into module design and add weight and credibility to the power of this particular methodology for personal goal setting.
Research into Practice – Students as critical users of theory and potential impact
This work not only makes use of the theories in practice, but enables student end-users to employ theory in a research-informed way. In effect, students become ‘critical users of psychological theory’ from their work across a range of related discipline areas. The combination of goal setting, coupled with reflective practice, also supports users in becoming self-coaches. They are encouraged to seek (and critique) suitable theory and frameworks to enable: goal-selection, goal-setting, goal-implementation and goal-evaluation, to maximise their success. It also supports their learning with an outline applicable ‘process’ as opposed to just theoretical ‘content’.
Findings so far have shown that the framework also has an impact on academic growth and transfer of learning beyond the module, thus acting as a conduit to academic achievement in other study areas. But most of all, the research shows that written reflection, coupled with goal setting, is a powerful tool for the transfer of learning for those softer interpersonal skills that have been previously viewed as harder to evaluate progress post training intervention.

Expanding the application of the framework
In my role as Director of Executive Education in my business school, I have led the redesign of most of our offerings around this Reflective Goal Setting model. We have introduced a ‘transformational learning journey’ approach, to accompany the traditional ‘module by module’ assessment framework. After piloting an online approach to written reflection with students, we have designed a resource in the form of a Reflective Goal Setting diary, which can be used online or in written form. This opens up the opportunities to use this with a wider variety of learners in more diverse contexts. Our corporate clients and students in executive education feed back to us that Reflective Goal Setting has a highly positive impact on personal development and the development of their leadership skills. The model can help support a variety of learners, personally, professionally and academically and is built around the premise that learners can flourish in the actual learning environment and beyond, if they have the skills to continuously learn by setting personally challenging goals. Using theory in this way helps learners raise their own standards, but in a guided way. It enables them to transcend their own expectations, and establish their distinctiveness, whilst retaining their authenticity.

Findings to be presented at the conference
This interactive paper will initially present the framework and outline its theoretical underpinnings. It will then show how it works in practice, so that attendees can have an immediate ‘Theory into Practice take away’ which they can use personally, in teaching, or with clients. But mainly, it will take three examples of where it has been used and summarise the key findings with that particular group of learners: a) a cohort of 100 undergraduate final year business and management student, b) 28 managers on a bespoke MSc programme for a finance sector association and c) 34 delegates on a management and leadership diploma for a NHS teaching hospital. It will showcase the power of good theory in practice across a range of learning, training and development contexts. Findings will address the types of goals chosen by these particular cohorts, the levers and barriers to their use of the framework, and the impact that this kind of use of theory has on their personal development and skills enhancement.

Take-aways for attendees
References and PDF’s of related papers and book chapters will be available to delegates at the conference, plus copies of the slides. A detailed set of materials outlining how to apply the model will also be given.

References

247

**F24**
**Stage 2 Qualification for Supervisors**
**Angie Ingman,** Chair of the Qualification in Occupational Psychology Board & **Karen Moore,** Chief Supervisor/Registrar

**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 look at how you choose a Trainee and how you need to set clear expectations? What should be included in your contract? What are the expected timescales? 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.

**F25** Standard Paper
**Current Understanding and Attitudes Relating to Work-Life Balance in the Armed Forces**
**Natalie Fisher & Emmeline Elliott,** QinetiQ

**Category: Wellbeing and Work**

**Introduction**

[1. What are the main psychological theories, models and research underpinning your session? Answer below.]
Greenhaus and Beutell’s (1985) seminal model of Work Family Conflict (WFC) provides the overarching framework for this research. It states that work-family pressure incompatibility is caused by any role characteristic that affects an individual’s time involvement, strain, or behaviour within one role impacting negatively on the other. The model also proposes that role pressures (and hence WFC) are intensified when work and family roles are central to an individual’s self-concept and when there are strong sanctions for non-compliance with role demands, as in the military.

[2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour? Answer below.]
Much of the available research on WLB relates to the civilian workforce and less is known about the military. This research was carried out to provide a better understanding of the current WLB culture in the Armed Forces and its influence on attitudes relating to job satisfaction and retention. Specifically, it addressed the following research questions:
- What are the theories and the current understanding relating to WLB?
- What are the tools/activities/policies that facilitate WLB?
- What are the perceptions (e.g. cultural attitudes) of Service personnel with regard to WLB?

A rigorous, evidence based approach was used via a systematic search strategy to review the existing literature followed by interviews with military stakeholders and focus groups with Service personnel across all Services. The data was analysed using thematic analysis.
The findings will be used to inform how the implementation of formal flexible working might be received by Service personnel and in turn will help shape policy, communications and training/education.

**Methodology**
Three methodologies were used to gather information and collect data:
- A literature review;
- Face-to-face interviews with stakeholders; and
- Focus groups with Service personnel.

The Ministry of Defence Research Ethics Committee (MODREC) provided approval to conduct the focus groups. To ensure informed consent Participant Information Sheet was provided at least 24 hours prior to the focus groups and those interested contacted the researchers directly.

In total, nine face-to-face semi-structured interviews were conducted with stakeholders (three per Service). One hundred and sixteen Service personnel took part in 14 focus groups.

The qualitative data were analysed using thematic analysis to understand the perceptions of Service personnel with regard to WLB.

**Findings**
The findings will cover the following areas:
- Key Themes;
- Awareness of Formal WLB Policies;
- Informal Practices;
- Spillover;
- Resources;
- Culture;
- The Inability to Plan;
- The Impact on Job Satisfaction and Retention;
- Individual Differences;
- Positive Aspects of a Military Lifestyle in Achieving a WLB;
- Improving WLB; and
- Future Policy Changes Impacting on WLB.

**Conclusions**
A one-size-fits-all approach to improving the WLB of Service personnel will not work. There are too many individual differences that will impact on what an individual wants in terms of their WLB.

**Recommendations**
The researchers suggest the following recommendations:
- Policies need to be accessible and managers need training to support their application.
- Culture change that focuses on output and trust to deliver, with corresponding senior role models.
- WLB means different things to different people and so an organisation that can bend and flex accordingly would be ideal.
- Culture change is required in relation to part-time working and flexible working.
References

F26 Award Session 5
**Practitioner of the Year Award Winner**
**Category: Professional Affairs and Awards**
See Awards Programme Book

F27 Standard Paper
**Bringing HR analytics into practice: Defining measures to evaluate senior managers’ performance**
Caroline Fortunski, IBM Smarter Workforce
**Category: Research Design, Analytical Techniques and Practical Applications**

**Introduction**
With the rise of interest in big data and HR analytics, more and more organisations look to apply data-driven solutions to evaluate and monitor their employees’ performance in relation to business outcomes. However, theoretical frameworks selecting the constructs to be included in these analytical evaluations are frequently undefined or little developed. This puts organisations at the risk of assessing employee performance by evaluating data which is little related to performance, and of making flawed decisions in their strategic talent management. Thus, it is essential to define behavioural constructs accounting for high performance and performance measures accurately for all job roles in an organisation. This paper aims to link research from economics and occupational psychology to identify how senior managers’ performance can be evaluated in HR analytics by defining relevant behavioural and economic measurements. Job analysis methods in occupational psychology frequently focus on identifying job-specific competencies which lead to improved performance outcomes at lower job levels, and validation analyses of the outcomes are conducted using performance measures that are clearly linked to these job roles. However, for managers operating at higher levels in their organisation leadership-relevant behavioural competencies need to be linked to organisational performance outcomes (Fang & Wei, 2010) which can be defined by using a large number of measures or measurement combinations (Choong, 2013; Fang & Wei, 2010). The following sections outline potential measures of organisational performance and how these can be linked to and potentially predicted by effective leadership behaviours of IBM’s High Performance Behaviour model.

**Measures of organisational performance**
Merchant (2006) describes two types of performance measures and their measurement advantages and disadvantages: (1) Market-related measures, e.g. the shareholder value, represent a combination of an organisation’s current and potential future value based on past organisational performance and its predicted future performance. The disadvantages of using market-related measures as performance indicators are that they are partly based on predictions instead of actual performance outcomes and that they are dependent on market conditions. This may bring about inaccurate conclusions of over-estimating manager performance in favourable market conditions and under-estimating performance when market conditions are less favourable (Fang & Wei, 2010). (2) Accounting measures are any financial performance measures an organisation produces, e.g. revenue and profit. The advantage in using these as performance measures is that they are firm outcomes of an organisation’s past performance and changes in these measures can be linked to observed behavioural competencies (Kühn, 2007). Disadvantages of using accounting measures as single performance measures are that they do not represent an organisation’s value accurately. For example, investments in human capital will affect accounting measures negatively in the short term but their potential positive long-term effects are not taken into
account in accounting measures. Thus, accounting measures cannot be used to predict an organisation's future performance (Merchant, 2006) as they focus on measuring short-term profitability based on past performance (Kihn, 2007).

Ittner and Larcker (2000) argue that non-financial performance measures, e.g. employee engagement or attrition rates, can be used as indicators of long-term organisational strategy achievement because they provide indirect information on intangible assets and can be used to create a vision of an organisation's long-term performance. This shows that organisational performance can and should be evaluated by looking beyond market value and financial performance measures, taking into account employees' views and positive effects of human capital investment. To measure organisational performance accurately, non-financial measures should be combined with financial measures and a balanced weighting between these measures should be applied to create an overall performance measure (Choong, 2013; Kihn, 2007; Sholihin, Pike & Mangena, 2010).

**Links between leadership behaviours (IBM's High Performance Behaviours) and organisational performance**

IBM's High Performance Behaviour model describes leadership behaviours that are associated with effective leadership performance. The behaviours are grouped into four clusters: Creating Strategy, Engaging Talent, Inspiring People and Achieving Excellence. These are described in more detail in the following and linked to performance measures they are likely to affect.

The Creating Strategy cluster includes behaviours of Gathering Intelligence, Generating Ideas and Accelerating Innovation. These behaviours make the highest contribution to an organization's performance in strategy formation, planning and big picture thinking. These behaviours are likely to be positively linked to market-related performance measures since they enable an organisation to focus on performing well in the future and securing or creating their competitive advantage in the market. They are less likely to be related to financial measures of past performance but may be related to non-financial performance measures related to an organisation's objectives, e.g. human capital investment measures could be used to evaluate progress in talent management if an organisation aims to invest in developing talent.

The Engaging Talent cluster is made up of behaviours of Establishing Trust, Fostering Collaboration and Developing Talent. Outstanding leaders seek to understand perspectives, build relationships and encourage and develop employees’ talents. These behaviours are essential to improving performance and creating an atmosphere of learning and are likely to be linked to non-financial performance measures, e.g. employee engagement, productivity, employee tenure, business culture, or measures used to evaluate workplace attractiveness for external applicants. They are less likely to be linked directly to financial performance measures, however the non-financial measures that are likely to improve may affect financial performance outcomes or market-related performance outcomes in the long term.

Influencing People, Building Confidence and Communicating Effectively are the behaviours that make up the Inspiring People cluster. Outstanding leaders inspire and excite. These behaviours relate particularly to building confidence and excitement in a team and are crucial for achieving support for ideas. Similarly to the behaviours in the Engaging Talent cluster, these behaviours are likely to be linked to non-financial performance measures of e.g. employee engagement, productivity, motivation and alignment with an organisation’s strategy and values. Improvements in these non-financial measures are likely to bring about improvements of financial and market-related performance measures in the long term.

The final cluster of Achieving Excellence includes the behaviours of Implementing Change, Improving Performance and Winning Customers. These action-oriented behaviours define
how leaders break down barriers and make things happen. It is a leader’s responsibility to ensure tasks are structured, plans and ideas are implemented and that employees continually improve business performance. These behaviours are likely to be linked to financial performance measures which are indicators of short- and mid-term performance and profitability, e.g. revenue, profit or sales achieved. They are less likely to be linked positively to non-financial performance measures or other measures that are indicators of an organisation’s performance in the long term.

In summary, linking IBM’s High Performance Behaviours to measures of organisational performance shows that senior managers’ impact on organisational performance should to a great degree be evaluated by looking at future-oriented performance measures which are used as indicators of their organisation being set up for performing well in the future. This includes non-financial measures and market-related measures. To some degree, senior managers’ performance should also be evaluated by financial performance measures when organisational performance in the short- or mid-term needs to be improved. The next step for this research project is to collect and analyse data to test the presented hypotheses.

References

F28 Standard Paper
Taking the Leisure-work Interface “ Seriously”
Ciara Kelly, Loughborough University; Karoline Strauss, ESSEC Business School; John Arnold, Loughborough

Category: Wellbeing and Work
In this paper, we draw on developments within the field of leisure research to expand our understanding of the interface between work and non-work experiences. In particular, we argue that the concept of serious leisure can provide us with a more nuanced way of examining the enriching and conflicting effects of the activities people pursue in their non-work time. Serious leisure is an approach towards leisure activities that embodies six specific characteristics: it requires continuity of engagement over time, effort to acquire skills and knowledge, perseverance through difficulties, a unique ethos associated with the activity, and the creation of a sense of identity around the activity (Gould, Moore, Mcguire, & Stebbins, 2008; Stebbins, 2011). Serious leisure is proposed to be the most effective way of garnering enduring benefits from leisure (Stebbins, 1982), in contrast to “casual leisure” which describes the infrequent pursuit of an activity, for the immediate and short lived
experience of pleasure (Stebbins, 1997, p.18). We specifically examine the following hypotheses:

**H1:** Time spent in a serious leisure activity will be positively related to psychological resources the following day.
**H2:** Time spent in a serious leisure activity will be positively related to work performance the following day via the effect on psychological resources.

**Analysis**

We tested our hypothesis on a sample of individuals recruited from a range of recreational venues and online sites and forums linked to recreation, including climbing walls, theatre groups, table-top gaming groups, and parkrun events. 170 people signed up to take part in the research project, from this list 95 participants responded to an invitation to fill in the baseline survey. Participants were then emailed a morning and end of work survey for ten working days. The morning survey measured psychological resources (self-efficacy, positive affect and fatigue) and recorded participants' leisure activities from the previous day. The end of work survey recorded work performance (task proficiency, personal initiative and task proactivity). We received 721 valid morning surveys and 647 valid evening surveys. This provided 588 days with data from both surveys.

Data was analysed using SPSS mixed method procedure which allows partitioning of variance between the people in the study and variance which corresponds to daily changes within participants. Mediation tests were carried out using MPLUS. All variables measured at the day level were person centred to remove between person variation on these measures. Nested models were tested to assess the relative impact of control variables (age, gender, job autonomy and physicality of leisure; Model 1), casual leisure (Model 2), serious leisure (Model 3) and moderators (Model 4) on work performance.

**Results**

Time spent in a serious leisure activity was positively related to self-efficacy the following day. We found no evidence for significant relationships between time spent in serious leisure and positive affect or fatigue. Therefore there is only partial support for hypothesis 1.

Time spent in a serious leisure activity was found to be indirectly related to work performance the following day, via its effect of self-efficacy, partially supporting hypothesis 2. Casual leisure was unrelated to psychological resources and negatively related to personal initiative.

**Discussion**

Spending time in a serious leisure activity is related to increased self-efficacy and through this relationship with self-efficacy it is indirectly related to performance. This indicates that there are immediate daily benefits related to the amount of time spent in serious leisure activities. This link between leisure and work highlights the need to consider the impact of areas beyond family in considering how non-work domains can be fruitful for their enriching effects on work performance. It also demonstrates how viewing the non-work domain through the serious leisure perspective can provide some insight into specific types of leisure which have differential effects on psychological resources, as well as effects on workplace performance. Supporting this distinction between the effects of serious and casual leisure on the work-life interface, our findings indicated no relationship between casual leisure time and psychological resources and a negative relationship between casual leisure time and proactive behaviours in the workplace the following day. Future research is needed to further explore the reasons for casual leisure’s negative relationship with work and to examine the boundary conditions and range of resources created through serious leisure.
F29 Extended Paper

Emotional Intelligence from the Ivory Tower: Consensus and Misconceptions
Thomas Evans & Gail Steptoe-Warren, Coventry University

Category: Psychological Assessment at Work

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

The field of Emotional Intelligence (EI) appears to be a minefield of theoretical obscurities, inaccuracies, over-exaggerations and inappropriate or unethical applications (Locke 2005). The proposed presentation will begin with a summary of the inconsistencies, misconceptions, and contradictions that plague the field. For example, that there are growing numbers of calls for EI to be built into academic curriculum (Brown, 2003; Clark, Callister, & Wallace, 2003; Gliebe, 2012; Liptak, 2005; Topping, Holmes, & Bremner, 2000; Ornstein & Nelson, 2006; Tucker et al., 2000; Whetten & Cameron, 2005), despite the lack of a convincing body of evidence to suggest that training is effective, or that it would have significant implications for any important outcomes.

The current study is then introduced in an attempt to explore the degree to which a convincing consensus exists regarding the definition and value of EI. The study explores the understanding of, and attitudes towards, EI from a sample of researching and teaching academics. The current study aims not to establish an answer, but to recognise the diversity, gauge the instability of the field, and to explore the extent to which academia can support the development of understanding.

Preliminary results suggest EI is perceived as a 'common-sense construct' with very few participants holding any detailed knowledge of the construct itself, or whether and how it relates to any other individual differences. Further, the vast majority failed to note any negative consequences of high EI, and reported to perceive themselves as being emotionally intelligent. Most problematically however, many reported incorporating EI into their own research or teaching activities, despite a lack of clear understanding. In the discussion of these results, themes are placed within the context of the literature, and many common misconceptions are refuted. For example, some argue that EI should be seen as an intelligence type only (Côté, 2010), however understanding of affective phenomena improves by incorporating affective traits i.e. trait EI (Hughes and Evans, in press).

A consensus on EI is lacking and thus greater attention is needed to ensure self-perpetuating misconceptions are replaced with a clearer understanding of the theoretical grounding to, and robust empirical evidence for, EI. As academics, we must work together towards a clearer understanding, and be responsible in our activities, whether that be lectures, research projects, or something else, with regards to how we disseminate and apply EI.

2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?

The current study aims to explore whether there is a rigorous consensus in academic's understanding of EI, and thus whether application of EI into teaching and research is likely to address, not perpetuate, misconceptions within the field.

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

The current submission falls under psychological assessment at work, as the focus is on the understanding and attitudes towards EI, an important individual difference within the workplace.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
The most innovative aspect of this research is the introspective perspective adopted, examining how teaching and researching academics consider EI. Examining the prevalence, extent, and implications of numerous misconceptions and consensuses, the current study presents a novel perspective on the EI field and a valuable opportunity to pause and reflect on the evidence-based on which we base our views and actions.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
The participatory nature of the session will encourage a stimulating and engaging session for participants. The session will also be useful by representing a relevant self-check on their understanding of, and attitudes towards, EI. This should hopefully instigate changes in understanding and use of EI in practices more in-line with the academic literature.

6. What might the public find interesting about your paper or session?
EI features surprisingly often in the public eye. The public may therefore be interested in the lack of academic consensuses within academia. This may also help to cast doubt upon the current conceptualisations of EI where they lack robust theoretical and empirical support.

7. If any, what materials do you intend to make available to attendees and in what format?
Participants will be provided with an electronic link or paper copy to complete the study (see below). Attendees will also be provided with an electronic or paper copy of the slides presented.

8. How will you ensure that at least 10 minutes of the session is interactive?
First, the current submission will be unique in that the first five-to-ten minutes of the session attendees will be encouraged to participate in the current study. As the audience is often diverse, similar but alternative studies for student and practitioner populations will be available at this time. Results will be collected through an online link and through paper copies. Secondly, after a twenty-five minute presentation on the results already collected, a summary of the results collected at the start of the session will be presented – showing how their understanding and attitudes either relate to, or differ from, the results presented. This two-step format was trialled in last-year’s DOP on a project about workplace frustration extremely successfully.

References


**F30 Standard Paper**

**Resilience in ex-military personnel: Development and transference to other careers**

**Nicola Paget & Chris Grant**, Coventry University

**Category: Wellbeing and Work**

Details of Presentation/Research: Contribution to Knowledge: Previous studies of Military veterans and Psychological resilience, including those based on positive psychology, have focussed on traumatic stress or PTSD, and the requirement of resilience to maintain mental health (Cornum, Matthews and Seligman 2011). Simons & Yoder (2013) state a need for further understanding of military resilience to enable the use of that knowledge in the civilian context. Even those completing a ‘full career’ in the Armed Forces directly from school, may be as young as 40 years old (MOD 2016), allowing plenty of time for a second civilian career, however, some will be seeking employment in their 50’s. Walker 2012 raised concerns of personnel attaining productive employment upon cessation of service. This has not previously been related to the wellbeing of the aging population and subsequent increase in working lifespan in general (DWP 2014, CIPD 2015).

This mixed methods research is the first to focus on the positive aspects of resilience gained within a military environment and transferred to a second civilian career. The first part of the study reviewed the diverse range of definitions of resilience, to clarify a meaning suitable for scientific research and analysis in this context. Understanding the resilience of ex-Forces personnel as a transferrable construct is essential for research to progress and lessons learnt that are also applicable to mature employees in a civilian environment. It may provide the basis of a toolkit for civilian organisations and employees to improve job satisfaction and reduce workplace stress.

**Relevance to DOP Conference**

The public’s increased interest in the long term effects of stress and its potential links to cognitive decline (Alzheimers Society, 2016) makes any method of workplace stress management even more relevant to society as a whole. Interest in resilience as a topic of study has continued to grow following last year’s conference, and much research from a perspective of positive psychology is already being completed at Coventry university in areas other than the Armed Forces. Collection of evidence from ex-military personnel based around the world in all aspects of the Armed Forces, has taken the study of Resilience along new lines of exploration. Evidence from quantitative analysis has been supported by qualitative analysis of interviews for a more thorough approach and as a foundation for future study. The presentation will include graphical representations of the significant quantitative results and a summary of mediating factors of resilience identified in the qualitative aspect of the research. A discussion of the findings, any limitations and future research will also be included.
Methodology

80 participants (confirmed to be ex-military and not suffering/suffered with PTSD) through all ranks and all services, completed online questionnaires for quantitative analysis. The measures employed are Friberg & Hjemdal (2003) RSA to measure Resilience (this has undergone validation over the past 15 years, it is fully copyrighted and permissions granted); The Job Perception Scale (Hatfield, Robinson and Huseman, 1985) (13 questions (Parts 1-3 measuring Work Items, Pay Items, Promotion Items. This has an alpha coefficient of 0.87 to 0.93 and is a validated scale). Stress will be measured using the Caplan et al (1980), (validated and with a reliability alpha coefficient of .81 to .86). Having a productive career was defined as involving job satisfaction and low stress. 10 purposively selected participants undertook a semi-structure interview to discuss self-perceived causes of high resilience and low stress, within Forces personnel and any anomalies identified in the quantitative analysis. Preliminary Findings: All scales met validity criteria with a cronbach’s alpha of: resilience scale used (RSA) 0.918 with all 33 items, Job Satisfaction scale using only 3 factors 0.911, 13 items, Workplace Stress 0.800, 13 items. Max resilience = 218, min= 94 out of a possible 231. Multiple regression identified no mediating factors of resilience, yet means analysis showed an increase in resilience with rank and with service role ranked by potential operational stress. There is a positive relationship between resilience and job satisfaction (r = .487, sig <0.001) and resilience and stress (r = -.435, sig <0.001). The subsequent interviews clarified potential reasons for the lack of distinct statistical relationships between any of the demographic data and resilience, based on culture, personality traits and bias. Thematic analysis identified common activities and lifestyle factors which the interviewees perceived to be the cause of their high resilience and considerably lower stress than their civilian counterparts. It also identified factors the interviewees perceived to be attributed to their success in finding successful and satisfying new careers.

References
F31 Standard Paper

**Using data from a repertory grid study to design questionnaires (POP)**

**Gottfried Catania,** University of Malta; **Ray Randall & Cheryl Travers,** Loughborough University

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

**Introduction**

The design of questionnaires for use in research can draw on a number of sources. Typically, sources include the existing literature and interviews with relevant persons. When preparing questionnaires for a specific expert group, however, both of the above methods can prove problematic: there may not be enough existing relevant studies, and experts make use of tacit knowledge (Grant, 2007) which is difficult to bring into conscious awareness, and thus traditional interview techniques might not work very well in these cases.

The repertory grid technique (Kelly, 1955) has been shown to be an ideal tool for such situations (Catania, 2014). This paper describes the use of this technique to understand how financial advisors conceptualise ethical and unethical behaviour in their profession. It demonstrates how the data collected was analysed both qualitatively and quantitatively, resulting in a series of hypotheses meriting further quantitative investigation. The process of constructing and piloting the questionnaire to be used for this investigation is then explained.

**Methodology**

Twenty repertory grid interviews, each lasting between 60 and 90 minutes, were carried out with financial advisors from a particular bank. These interviews resulted in 153 unique constructs, which were organised into 22 categories and 4 superordinate categories by the researcher. The classification was carried out separately by 3 further raters until an interrater agreement of 82% was achieved.

All 20 grids were then integrated into one composite grid for quantitative analysis, using the construct categories as new constructs and the mean scores of each underlying construct as ratings. Idiogrid software (Grice, 2010) was used to compute correlations between elements and constructs. The correlation between the results of ethical and unethical advisors was -0.63 which, while high and in the expected direction, indicated that there were particular characteristics which are common to both types of advisors and thus cannot be used to distinguish between them. The correlation between the results for effective and ineffective advisors was 0.02, or effectively no correlation – an even more surprising result.

Following from the above, a questionnaire was designed to investigate these results further using a larger sample. The 153 original constructs were reduced to 66 items using an iterative process by two researchers familiar with the subject matter. Since these items were representing the 22 original categories, i.e. each category was represented by an average of 3 items, quantitative piloting with the aim of reducing the items further was deemed unnecessary as it would have been unlikely that the number of items could be reduced further significantly. Piloting using cognitive interviewing was carried out with 5 financial advisors, with the aim of further refining the items and making sure that the meaning of each item was clear and unambiguous. A final pilot study was carried out to estimate the time taken to complete the full questionnaire.

The finalised questionnaire consists of 268 items. Participants will be asked to consider the most effective financial advisor they know. The first question asks about how well they know this particular advisor, answered on a five point likert-type scale (hardly at all – extremely well). The rest of the items are the 66 items are already described above, which participants have to rate on a seven point likert-type scale (strongly disagree – strongly agree). This process is repeated 3 further times, with the participant being asked to consider the most unethical, ineffective, and ethical advisor they know subsequently.
Data analysis and results
Data is being collected at this moment, and results and analysis will be available for presentation at the conference. The aim is to recruit around 100 financial advisors, starting off with the bank where repertory grid interviews were carried out, and including further participants through snowball sampling if the required number of participants is not achieved. A number of specific hypotheses will be examined, with the aim of understanding the specific characteristics which distinguish the different categories of financial advisor.

Discussion and conclusions
Understanding the factors which might lead to unethical behaviour are important in any profession, but particularly so in financial services where the regulatory and reputational consequences can be so dramatic. Ethical behaviour has usually been studied from the point of view of the organisation and, while the field of behavioural business ethics has recently emerged, focusing on individual behaviour, few studies in this field have focused on the financial sector so far. This is the research gap which this study will try to address.

This paper presents a relatively novel approach to questionnaire design using data from repertory grid interviews with subject matter experts as the basis for questionnaire item design. The resulting questionnaire has a high degree of face validity as it used the language of the financial advisors themselves. It links with the main conference theme by presenting a rigorous methodological process of questionnaire design, while the results of the subsequent study will be especially useful in practice to guide selection and training processes for financial advisors. It also clearly fits into the research design, analytical techniques and practical applications category as it concentrates mostly on research design for practical purposes. Conference participants interested in questionnaire design might find the methodological aspects of the paper very useful, while members of the public might be interested in understanding the process behind questionnaire design and how research can have practical applications.

Electronic copies of the slides will be made available on request.

F32 Standard Paper
"The new nowhere-land". Who is responsible for our "always on culture"?
Almuth McDowall, Birkbeck University of London; Gail Kinman, University of Bedfordshire; Chris Grant, Coventry University; Cristina Quinones-Garcia, Open University; Svenja Schlachter, University of Surrey
Category: Wellbeing and Work

Introduction
Much has been written in the popular media about how the world of work is changing as we are increasingly “sleeping with our Smartphones” (Perlow, 2012). Clearly, information and communication technology (ICT) use offers considerable advantages in terms of more instant communication and increased flexibility but there are also drawbacks, such as perceived obligation to be available and omnipresent. In the literature, this has been referred to as the “empowerment-enslavement paradox” (Jarvenpaa & Lang, 2005). A systematic review of relevant literature (Colleague & Author 1) has summarised the literature on the implications of ICT use highlighting that both organisational expectations and individual behaviours need to be considered. Given the increasing research focus on the latter, but the lack of research on the organizational context, this study aimed to examine individuals’ perceptions of policies and practices regarding ICT use in UK organisations and perceptions of the pros and cons for individuals and business. Our research questions were:
a) What are organisational policies on work-life balance and ICT use (e.g. is there a policy at all)?
b) Who is, or feels, responsible for our paradoxical relationship with ICT?
c) What are the biggest challenges posed by ICT use and the perceived advantages?
Survey strategy and participants
We distributed a bespoke survey, consisting of multiple choice and open-ended items asking about responsibility for work-life balance and ICT use, in the UK via social media, online groups and snowballing techniques. Responses were incentivised with a modest charitable donation per completed response. In total, we received 374 complete usable responses and there was little, if any, missing data. Respondents were from various industries and backgrounds, with education (33%) being the largest category. With regards to job roles, the largest categories were academic (22%) and management (also 22%). Demographic data (e.g. gender, age) was not collected as we were interested in organisational not individual variables.

Results
Over half of respondents (55%) reported that no work-life balance policy is in place in their organisations; more people reported not to know (27.5%) if a policy is in existence. Near 60% reported that their organisations provided no guidance to help develop people to use their ICTs more effectively. The IT department or function was considered most likely to be responsible for ICT use (27%), followed by line managers (22%).

With regards to perceived responsibility for managing ICT use, just over 50% reported that employer and employee should share this in equal measures, with over 30% reporting that the greater onus is on the employee. Only 10% considered that the employer has sole responsibility.

The most frequently purported benefits of ICT use were communication and effectiveness.

Figure 1: purported benefits of ICT use

![Chart showing purported benefits of ICT use](image)

The most frequently reported drawbacks of ICT use were health and relationships at work were relationships at work and wellbeing.

Figure 2: purported drawbacks of ICT use

![Chart showing purported drawbacks of ICT use](image)

Qualitative content analysis of open comments is currently ongoing. Initial analysis indicates that organisations do not provide any innovative practices to manage ICT use or, if such options are available, employees are unaware of them. The use of specific software (e.g.}
Yammer, Twitter) to support work and communication, and online document sharing was highlighted by some. A considerable degree of cynicism was expressed by participants about the absence of policies and support; for example, “management is totally dependent on IT, and not using common sense”.

With regards to the biggest challenges faced by organisations, the majority of comments relate to email; more specifically, the need to reply and manage it without a support system to control the volume of messages received and requirements to respond— “I literally find myself dreaming about the size of my inbox”. The next largest categories appear the potential for ICT to (unhelpfully) blur the boundaries between working and home life, expectations of being “always on” and the impact of wellbeing. Concerns about, data security were also expressed.

Discussion
In this sample, the data trends highlight:

a) a distinct lack of organisational strategies and knowledge to deal with ICT use and
communication, without clear policies, training or support structures in place

b) the likely impact on health and wellbeing and work-life balance

c) some ambivalence about ICT use. There are some purported benefits such as better
communication and data sharing due to ICT use, but also a lack of organisational
preparedness and disadvantages as well as benefits for communication and personal
relationships.

The results of this survey provide novel and interesting insight into organisational practices regarding ICT use. To start, it appears that the use and management of ICT remains an individual issue rather than an organisational responsibility. This fits with previous research findings about the technology acceptance model, which shows that organisational expectations and individual instrumentality beliefs (perceived usefulness of technology) interact, but are associated with work-family conflict (Fenner & Renn, 2009). If organisational expectations are weak or lacking, it is likely that personal agency and instrumentality beliefs will come to the forefront, in other words putting the onus on the individual which is likely to compound the negative impact of demands relating to ICT engagement. It was notable in this sample how few respondents reported effective and useful practices or policies in their organisations, and where they did, they seemed to originate from employees themselves (e.g. “inbox zero”) rather than collective strategies or those based on evidence-based guidance.

Conclusion, limitations and directions for future research
We acknowledge that whilst our sample was robust, certain sectors such as education were over-represented, necessitating the need for more representative follow up research. It would be a fruitful first step to conduct a comparison between what organisations purport to provide (e.g. training, policies) and how effective these are perceived by employees, and collate some robust outcome measures including health and work-life conflict measures. At present, there is much anecdotal information, but not enough ‘hard’ evidence to document the potential positive and negative effects of our “always on” culture. How such evidence can be translated into guidance and interventions at the organisational and individual level needs to be at the heart of future examination. Duranova and Ohly (2016) offer a theoretical discussion of psychological models that could be applied including self-determination, action theory and boundary management that could provide a framework for such research.

References
Colleague & Author 1. Anonymised for peer review purposes.
Technology Use, Recovery and Well-being Processes (pp. 93-97). In Springer
International Publishing.
Information systems management, 22(4), 7-23.

261
Poster Abstracts
All posters will be displayed in the Ballroom Foyer for the duration of the conference - Come along and view the posters.

DOP01
Can the Premortem Solve the Hidden Profile?
Dawn Nicholson, Tim Hopthrow, Georgina Randsley de Moura & Jamie Harper,
University of Kent
Category: Work Design, Organisational Change and Development

Contribution to Science/Study Background
Stasser and Titus (1985) identified a primary factor in group decision-making quality as being whether groups effectively exchanged information to reach the optimal decision, particularly when group members did not all have access to all items of information, as is often the case. This gave birth to the Hidden Profile (HP) paradigm, spawning thirty years of research, principally examining how information is distributed between, and exchanged by, group members and how this impacts group decision-making. The HP has been experimentally operationalised as a decision-making task in different ways, e.g. a candidate hiring task. In a typical experimental task, key decision-relevant (and irrelevant) information is distributed either to all group members (shared information) or to only one group member (unique information). Information is manipulated to ensure there is always an optimal decision, e.g. in the candidate-hiring task, one candidate will always have more positive attributes than the other candidates, making them the right choice for the role under consideration. This fact only emerges if unique information is exchanged between all group members.

In a meta-analysis of 65 Hidden Profiles studies covering 25 years, Lu, Yuan, and McLeod (2012) concluded that groups in a HP scenario have poorer decision-making outcomes than those groups where all group members have access to all information: HP groups were eight times less likely to find the solution than groups having full information. Empirical evidence thus demonstrates that groups do not make optimal decisions when faced with the likely scenario that not all group members have access to all information, as is often the case in real life. Interventions to address this have so far met with limited success. This research tested an intervention – the Premortem (Klein, 2003, p.98-101) – as a new means to improve group information exchange and processing in a Hidden Profile hiring decision task.

Innovation/Novelty & Public Interest Levels
This study takes an existing intervention – the Premortem - and applies it for the first time as a means of solving the Hidden Profile, making it novel and innovative. The Premortem has been used as a project plan implementation tool in many organisations. Extending this into improving team/group decision-making is of interest to academics and practitioners alike. Life outside of work also involves much team/group decision-making, so equipping people with a tool with the potential to improve that process should be interesting and positively received. Given recent political events, over the coming months, major decisions affecting our country will be taken in relatively small face-to-face groups. The public, in fact all of us, are hugely interested in the decisions to be made and the process of making them. This thrusts the subject of decision making right into the spotlight, making this research and its application highly topical.

There is already a significant amount of information available on-line setting out how to conduct a Premortem in a project plan management context. An example of this will be made available to participants along with copies of the poster (see PDFs attached).
Contribution to Practice/Conference Theme
The Premortem offers considerable advantages over previously developed HP interventions in using mental simulation to create an open, productive discussion forum, in which decision-makers can review, critique and amend their decision. It is similar to group review/brainstorming processes recognised and used in many workplaces. These factors make the study findings readily generalisable to real organisational groups and give the Premortem the potential to play a considerable role in practice. This makes it a perfect fit with the main conference theme of ‘Research into practice: Relevance and rigour’

Appropriateness of Submission Category
Groups are ubiquitous. Most if not all organisations deploy team/group work and a large element of this involves decision-making. Notwithstanding, uncertainty surrounding the superior quality of group decision-making remains. This is unfortunate: group work is expensive, both in terms of time and human resource, so continuing research into this question is important to ensure that the right conditions enabling optimal group decision making are in place. This requires the development of effective interventions such as the Premortem, applied here to improve team/group decision making through increased intragroup information exchange and processing. The emphasis on group decision-making means the study is perfectly placed within the Category of ‘Work Design, Organisational Change and Development’, with its focus on teamwork.

Research Design and Findings
Method
The experiment was a within-participants design, incorporating a Premortem intervention, in a face-to-face group study with psychology undergraduates (N = 224) as participants working in four-person groups (N = 56).

Dependent Variables were: (i) information exchange: the proportion of time groups spent discussing the candidates before the Premortem (T1) versus after the Premortem (T2); and (ii) information processing: decision quality - whether groups selected the optimal candidate more frequently at T2 versus T1.

Participants were firstly asked to select a candidate individually then worked in groups to make a group hiring decision; firstly before, and then again after, a Premortem intervention.

Findings
The Premortem increased information exchange relating to the optimal versus sub-optimal candidates. This varied as a function of whether or not groups solved the Hidden Profile at Time 1, as revealed by a significant T1 Group HP Resolved X Time X Candidate three-way interaction, F(1,52) = 7.01, MSE = 446.65, p < .05, ηp² = .119.

Discussion
The Premortem had a positive effect on information exchange in a Hidden Profile hiring decision task and can contribute to maximizing optimal group decision-making in face-to-face groups.

DOP02
Dispositional mindfulness, emotional demands and strain in healthcare assistants
Stacey Hardacre & Gail Kinman, University of Bedfordshire
Category: Wellbeing and Work
The increasing proportion of elderly people that requires institutional and community-based care highlights the need for high-quality care providers. There is evidence, however, that health care assistants (HCAs) experience a range of occupational and organizational demands such as high workloads, physical/verbal abuse and job insecurity, as well as poor terms and conditions of employment (Ruotsalainen et al. 2015). Several studies indicate
that working in healthcare requires sustained emotional labour that can threaten the wellbeing of employees and the quality of patient care (Diefendorff et al. 2011; Montgomery et al. 2005). Although most research has focused on qualified healthcare workers, there is evidence that many HCAs find their work particularly emotionally demanding (Dyer et al. 2008; Sundin et al. 2007).

Mindfulness has been described as awareness and attention to present events and experiences. There is growing evidence that interventions based on the principles of mindfulness can enhance emotional literacy, health and wellbeing in occupational settings, particularly within the health and social care professions (Lamothe et al. 2016; Gotink et al. 2015). Dispositional mindfulness is conceptualised as a naturally-occurring tendency to be aware of present-moment experiences in an accepting and non-judgmental manner (Baer et al., 2004). The present study examined the role played by dispositional mindfulness in the relationship between emotional demands and perceived stress and life satisfaction in a sample of HCAs. As well as main effects, whereby dispositional mindfulness would reduce the perception of emotional demands and strain, it is argued that it might play a moderating and/or mediating role and protect HCAs from the negative impact of emotional demands on wellbeing. As experience in healthcare work has been found to relate to self-reported work-related stressors and strains (Laschinger et al., 2009), the length of time employed in HCA work was also considered.

624 HCAs competed an online questionnaire. Several validated scales were used: the Perceived Stress scale (Cohen et al. 1983); the Satisfaction with Life scale (Diener et al., 2013); the emotional demands subscale of the Copenhagen Psychosocial Questionnaire (Kristensen et al. 2005); and the Mindful Awareness Attention scale (Brown & Ryan, 2003).

Emotional demands were significantly related with both stress and life satisfaction in a positive direction (p<.001). HCAs who reported a higher level of dispositional mindfulness tended to consider their work to be less emotionally demanding and perceive less stress and more life satisfaction. Experience in the HCA role was not significantly related to any of the study variables. Moderated regression analysis found no evidence that trait mindfulness buffered the relationship between emotional demands and either strain outcome. Nonetheless, bootstrapping analysis found some evidence for trait mindfulness as a potential mediator of the relationship between emotional demands and stress.

The findings of this study confirm that HCAs find their work emotionally demanding and that this is related to perceived stress and low life satisfaction. HCAs who reported experiencing mindful states more frequently in daily life appeared to be better able to manage the emotional demands of the caring role; they also tended to be less stressed and more satisfied with life. Some evidence was found that dispositional mindfulness might mediate the relationship between emotional demands and perceived stress. It is possible that HCAs use mindfulness as a way of coping with the emotional demands of the job and that attempting to remain in the present moment with judgement protects them against stress. Interventions based on mindfulness principles may therefore be useful in improving the wellbeing of HCAs.

References


DOP03
Is it all a matter of perception? Examining the relationship between Perceived Email Pressure, Cognitive Appraisal and Psychological Capital
Suzanne Marfleet & Christine Grant, Coventry University
Category: Wellbeing and Work
Research Objective
Many of us now have access to work e-mails at home and while for some it is a positive tool which provides flexibility, for others it is a burden, pressure and a source of stress which negatively affects work life balance and well-being. Since 2002 the number of employees checking emails after work has tripled, and this is likely to increase as technology improves, making it more and more difficult for people to fully disconnect from work (Butts, Becker & Boswell 2015).

It may be that personality and individual differences influence the way in which one reacts to accessing work emails outside office hours. This paper investigates the relationship between Perceived Email Pressure, Cognitive Appraisal and Psychological Capital. The pressure to check emails outside of office hours has been shown to both negatively and positively affect work-life balance therefore this research aims to shed more light on the individual differences that may influence this relationship.

Three scales will be used - Perceived Email Pressure Scale (Kelly et al, 2015), Cognitive Appraisal Scale (Skinner & Brewer 2002) and the Psychological Capital Questionnaire (Luthans, Avolio & Avey, 2007).

Data collection is still in progress; however the following hypotheses are suggested:
Hypothesis 1
Threat appraisal of email will be associated with higher levels of perceived email pressure

Hypothesis 2
Challenge appraisal of email will be associated with lower levels of perceived email pressure

The secondary aim of the research is to examine the relationship between Psychological Capital, Cognitive Appraisal and Perceived Email Pressure.

Hypothesis 3
The relationship between Cognitive Appraisal and Perceived E-mail Pressure is moderated by PsyCap such that as levels of PsyCap increase an individual is more likely to appraise email as a challenge and therefore score lower on Perceived E-mail Pressure.

A quantitative analysis of the data will be performed. To address Hypotheses 1 and 2 a correlation analysis will be performed. To address hypothesis 3 a regression analysis will be conducted to detect an interaction effect between variables. Perceived e-mail pressure is the outcome variable, cognitive appraisal the predictor variable and PsyCap the moderator variable.

Questions from Submission Guidance

1. What are the main psychological theories, models and research underpinning your session?
   Affective Events Theory (Weiss & Cropanzano 1996)
   Theory of Stress & Coping (Lazarus & Folkman 1984) – Cognitive Appraisal
   Psychological Capital (Yousef & Luthans 2007)

2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
   The ability to access email remotely and outside office hours is becoming more widespread, and in some industries almost expected. This can affect work/life balance in both positive and negative ways and as Psychologists we are well placed to advise organizations on effective email policies; however we need research in order to be able to do so. This paper provides a starting point for a relevant topic in today’s workplace.

3. Why is the submission appropriate for the particular category you have chosen?
   I have chosen work/life balance as the submission category. Checking work emails at home and outside working hours can blur boundaries between work and home and become a source of stress for many individuals. However some view it as a useful tool which provides flexibility. Either way, there is a direct effect on work/life balance.

4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
   The use of psychological capital as an intervention to change the challenge/threat appraisal of an individual

5. Why do you think conference delegates will find the paper or session stimulating and useful?
   Because it addresses an issue that is highly relevant in today’s working world and will provide further insight on the complexity of individual reactions to email.

6. What might the public find interesting about your paper or session?
   That it is our perception of an event which can affect our reaction to it, and that there are ways to alter that perception and hopefully reduce stress.
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)?
None

**Ethics**
Coventry University ethics team have approved the project. The researcher will also ensure that the project adheres to the BPS (2009) code of ethics and conduct and HCPC (2008) ethical guidelines.

Data Protection: Questionnaire data will remain anonymous and to this end will be stored on Coventry Universities secure servers. All information and data collected will remain confidential.

Prior to taking part in the study all participants will be required to provide informed consent. Information on their right to withdraw at any time as well as how to go about doing so will also be provided. The topic is stress related and as such strong feelings may arise from taking part. Information has been provided in Participant Information Sheet as to organisations they can contact should this happen.

**DOP04**
**Psychological Modelling of Surgical Safety: Can We Improve Compliance?**
**Tracey Rosell**, University of Leicester
**Category: Work Design, Organisational Change and Development**

1. **Introduction**

   The three-stage Surgical Safety Checklist (SSC), developed by the World Health Organisation, became mandatory in the NHS from 2010. ‘Five Steps to Safer Surgery’ was also implemented by the NHS’ National Patient Safety Agency to improve team culture and healthcare safety. *National safety standards for invasive procedures* (‘NatSSips’) were developed in September 2015 to establish national standards that build on the SSC to standardise invasive processes, including briefings key to patient safety (NHS England Patient Safety Domain, 2015a).

1.1. **Non-compliance**

   Despite evidence supporting SSC and debriefings' positive benefits e.g. reductions in mortality and morbidity, full compliance has not been achieved in the NHS (Mayer et al, 2015). This was thought to be due to poor implementation, resistance to SSC use, psychological safety, hierarchy, and workflow problems.

1.2. **Debriefing**

   Debriefing techniques have roots in Kolb’s cyclical theoretical framework of experiential learning (1984). Tannenbaum and Cerasoli’s (2013) meta-analysis indicated that debriefing can improve performance by approximately 20-26% ($d = .67$).

2. **Method**

   A survey was administered on NHS operating theatre personnel (N=143) at three Acute hospitals to assess compliance with SSC Sign-Out and debriefing, and perception of effects. Novel survey measurements were constructed about the Sign-Out and debriefing stages:

   (1) perception of efficacy to promote patient safety,
   (2) perception of their effect on workflow and/or their design and
   (3) education/training received about them.

   These were based on NatSSIPs’ requirements and existing literature on non-compliance. Construct validity was established by means of confirmatory factor analysis.
The psychological safety and the team climate measurement were based on the publically available National Patient Safety Association Team Climate Assessment Measure (Aston Organisation Development Ltd and National Patient Safety Agency, 2006) and Edmondson’s questionnaire (1999). The survey’s internal reliability was checked using Cronbach’s alpha. The theory of planned behaviour (TPB) (Ajzen, 1991) was used to theoretically underpin staff’s non-compliant behaviour.

3. Results

A bivariate correlation was conducted which supported the existing literature’s hypotheses that compliance was significantly related to Psychological Safety, \( r = 0.300, \) BCa CI [.160, .463], \( p < .001 \). However its predicative power was weak in this environment (R-squared = 0.058).

Linear regression was run on the novel measures to investigate for more effective compliance predictors. The most effective model was the combination of Perception of Efficacy to Promote Patient Safety and Education, \( b = 0.19 \) C.I.[0.26, 0.36], SE B = .085, \( t = 2.28, p = .024 \).

The results supported the hypothesis that compliance was significantly related to respondents’ Perception of the Effect on Workflow and/or Design, \( r = 0.621, \) BCa CI [.503, .718], \( p <.001 \) (2-tailed). Moderation analysis conducted supported the proposition that Education has a moderating effect on the relationship between Compliance and Perception of Effect on Workflow/design.

Although the existing literature frames doctors/surgeons as the dominant group (inhibiting team-members from speaking-up) examination of the data, in conjunction with TPB, indicated that Senior Theatre Nurses encourage compliance or feedback most.

4. Discussion

Respondents demonstrated good levels of psychological safety and positive team culture (\( M = 3.8, SD = .39 \) using a Likert scale of 1-5, with 5 being the most positive score); and descriptive statistics illustrated they appreciate SSC and debriefing’s importance and effectiveness in attaining patient safety. However, they do not comply consistently.

This may relate to insufficient organisational support (only 39.6% considered they had received a strong explanation about what debriefings should contain). As identified in existing literature, staff reported organisational factors lead to non-compliance: accordingly their planned behaviour is affected negatively.

A model to predict compliant behaviour is insufficient on its own. Appreciation of system barriers and the psychological basis of the behaviour are needed. For example, traditional perspectives of hierarchies, influential in psychological safety and TPB, do not appear to determine compliance outcomes. Appreciation of such factors can lead to organisational and work design changes, thereby supporting compliance.

5. Conference relevance

5.1. Linking with main conference theme

This study researches developing practice within the field of psychological safety and safety compliance to improve patient safety: NatSSips processes now require NHS Trusts’ local procedures to comply with national standards. This will necessitate organisational support to ensure time, resources, and training are available.
Thus the results offer a timely model to NHS and other organisations wanting to improve compliance and/or incorporate debriefing into learning processes.

It challenges the existing qualitative and quantitative research’s interpretation of psychological safety and hierarchy within inter-disciplinary surgical teams. It presents a novel, evidence-based approach to resolving non-compliance by them.

5.2. Appropriateness for category

The submission is appropriate for the category because it focuses on measuring teamwork within operating theatres’ physical work environment, human factors/ergonomics, and requirements for future organisational development within the NHS.

5.3. Most novel/innovative aspects

Believed to be the first study into compliance by surgical staff since NatSSips’ implementation in 2015, the combined quantitative analysis of the checklist’s Sign-Out and debriefing stages introduces novel measurement scales constructed for this research.

5.4. Why conference delegates will find the poster stimulating and useful

This novel view of working practices in interdisciplinary teams within an unpredictable environment has applications for other industries seeking explanations for non-compliance of motivated, highly-skilled teams, despite regulations and specialised training.

It challenges the existing perception of hierarchical structures and proposes psychological safety’s importance in irregular multi-disciplinary environments may need to be reassessed.

5.5. What public might find interesting about the poster

It presents the reality of how surgical teams work and explains why organisational barriers prevent staff attaining perfected processes. The conflicting demands of operating theatre activities are illustrated, and a different perspective of the hierarchy of teams is revealed.

5.6. Key points for 60 second pitch

- The three-stage Surgical Safety Checklist (SSC), developed by the World Health Organisation, became mandatory in the NHS from 2010.
- Despite evidence supporting SSC and debriefings’ positive benefits e.g. reductions in mortality and morbidity, full compliance has not been achieved in the NHS.
- A survey was administered on NHS operating theatre personnel at three Acute hospitals to assess compliance with SSC Sign-Out and debriefing, and perception of their effects on patient safety and workflow.
- Believed to be the first study into compliance by surgical staff since NatSSips’ implementation in 2015, the combined quantitative analysis of the checklist’s Sign-Out and debriefing stages introduces novel measurement scales constructed for this research.
- It challenges the existing perception of hierarchical structures and proposes psychological safety’s importance in irregular multi-disciplinary environments may need to be reassessed.
5.7. Proposal to augment/enliven poster display
Crisp, colourful design including quotation from Anaesthetist, figures and photo of surgical team are included.
Printed handouts with scaled down version of poster and extra information will be made available at the conference.

6. Ethical considerations
This study was reviewed by the Trust R&D committee: no formal ethics committee approval was required. University of Leicester ethical clearance was granted. No patients were directly involved. The purpose of the study and the basis of informed consent was explained to participants at the beginning of the questionnaire. The study has not received any commercial sponsorship.

References

DOP05
Person-Environment Fit Perspective: In a Turkish Sample
Ufuk Barmanpek, University of Leicester
Category: Learning, Training and Development
1. Introduction
Underpinned Research Models
• The HEXACO Personality Traits
• Holland’s RIASEC Vocational Interests Theory
• Person-Environment Fit Perspective

Objectives
In the present study, we investigated the role of personality traits and vocational interests of Turkish people in person-environment fit perspective in general. Particularly, we hypothesized that the role of personality traits are better predictors in person-job fit perspective. In addition to this, vocational interests are better predictors of person-vocation fit perspective. In these cases, both personality traits and vocational interests were investigated in both perspectives.

Practical Implications and Contributions
This study provides an empirical research on person-environment fit perspective by exploring the two sides of fit theory: person-vocation, person job fit. Moreover, personality
traits and vocational interests are taken into consideration in these both types of fit theories. Recent studies have mostly focused on the one type of fit but in this study, we mainly consider the two types and it contributes more efficiency. It is also note that it is important to understand the main antecedents in fit perspectives and how these relate in different kinds of fit levels.

Figuring out better fit between work environment and an individual can guide people in their career lives. Additionally, matching person to environment can lead a higher level of satisfaction, commitment and performance. Regarding to the Turkish sample, personenvironment fit perspective has been disregarded and this study might lead career counsellors and the executives of human resource department to take into consideration of the main domains in recruitment and selection processes, and finding a better work environment.

2. Literature Review

Person-Environment Fit Theory
During last few decades, person-environment fit perspective has been studied empirically, theoretically and practically by researchers and practitioners in organisational behaviour and psychology researches (Ehrhart & Makransky, 2007). Fit perspective also is described match and congruence of the work environment and an individual (Iplik, Kilic, & Yalcin, 2009). Person-environment fit theory is based upon the people’s behaviour, and more particularly preferences of people. According to Kristof, there are two main assumptions in explanations of person environment fit theory: Firstly, the behaviour of individuals is described a function that is between environment and person; Secondly, both environment and person need to be compatible (1996). Moreover, this perspective is grounded in some theories: The Theory of Vocational Behaviour (Holland, 1973), and the Theory of Work Adjustment (Dawis & Lofquist, 1984). These theories are based upon the similar perspectives that refer the individuals’ perceptions and work environments.

Person-environment fit theory can be described in a variety of ways such as person-vocation, person-organisation, person-job and person-group fit (Kristof, 1996). Different specific conceptualisations have been studied separately or corporation of some of the types in a single study by researcher (Lauver & Kristof-Brown, 2001). It is noted in these studies that conceptually distinctions have emerged in different fit types (Iplik et al., 2009). Following these directions, we investigated the person-job and person-vocation fit types that are subdimensions of person environment fit theory in general.

Another distinction in person-environment fit theory is subjective and objective fit perspectives. Subjective fit is described individuals’ perceptions that how well people fit their vocation and job, while objective fit is “how well individuals’ characteristics correspond to external judgments of the job’s or the vocation’s characteristics” (Ehrhart & Makransky, 2007, p. 208). From the views of these perspectives, we mainly focused on the subjective fit that is the representation of the relations of the process of vocation and job choices. Also, it is more related with the specific individual and organisational based outcomes.

Person-Vocation Fit and Vocational Interests
According to Furnham, vocation can be described more broadly and within an occupation, there might many jobs that differ one from another (2001). With regard to the vocational interests, it is mainly related with choosing and flourishing an appropriate work environment that fit their own characteristics (Holland, 1973). Based upon the Holland’s theory, it is stated that vocational interests lead individuals’ vocational membership. Particularly, Personvocation fit can be explained as interests’ congruence. In other words, it is the degree of congruence of work environment and vocational interests of people.
In the literature, there are variety of frameworks and typologies that represent the vocational interests’ model. We applied the most commonly used framework that is RIASEC dimensions: Realistic, Investigative, Artistic, Social, Enterprising, Conventional (Holland, 1985). The main reason for chosen this model is that both work environments and the characteristics of people can be described by this model (Ehrhart & Makransky, 2007).

**Person-Job Fit and Personality Traits**

A job can be explained as “the tasks a person is expected to accomplish in exchange for employment, as well as the characteristics of those tasks” (Kristof, 1996, p. 8). More specifically, the categorisation of job can be made regarding to its tasks, attributes and activities. Additionally, according to the organisational related researchers, person-job fits refers the compatibility with a particular job (Kristof, 1996). Person-job fit studies are mainly related with tasks of job and it does not share with same values and goals of the organisation. It is therefore, person-job fit is emerged more when people’s expectancies are met with the job or people’s abilities are needed to do a task or duty more effectively.

In this study, we investigated the role of personality in person-job fit perspective. Particularly, many studies have been investigated in terms of the Big Five Personality Traits in person-job fit perspective. However, a renewed version of personality framework is needed to apply, HEXACO: Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness to new experiences (Ashton, Lee & de Vries, 2014).

Person-job perspective is basically emerged in recruitment and selection processes with examining an individual’s KSAs (Knowledge, Skills, Abilities) and the demands of a specific job. In this case, the fit of an individual’s personality and a job may be rely on the KSAs of a person and a job (Anderson & Ostroff, 1997). It is therefore, it is worth exploring the role of personality in person-job fit perspective.

**Methodology**

**Sampling, Data Collection Methods and Procedure**

The participants will be randomly recruited from Turkish working population. Approximately 200 participants were expected for this study and it will be cross-sectional. Additionally, a quantitative research method will be carried out defining, identifying, analysing the findings for the role of personality and vocational interests in person-environment fit. For the data collection, self-report questionnaire will be created. Basically, it will be Turkish version but it will be translated to the Turkish from English and translated back English to Turkish. This questionnaire will be web-based and a created link will be forwarded via Gmail, Facebook, Instagram, Twitter and LinkedIn. It will be one-way study. The process of data collection will start 20th of July, 2016 to 20th of September, 2016.

**Research Hypotheses:**

1. Certain personalities are associated with better Person-Job Fit.
2. Certain vocational interests are associated with better Person-Vocation fit.

**Data Analysis Techniques**

SPSS 20. will be carried out for analyses. As distinct from the main research questions, firstly, mean, standard deviations and internal reliabilities of each scales will be presented. Secondly, Hierarchical regression analysis will be conducted to the role of personality and vocational interests in person-environment fit perspective. Specifically, personality traits’ dimensions will be added in the first step and vocational interests’ dimensions will be added in the second step for the prediction of person-job and person-vocation fit. Following this, vocational interests’ dimensions will be added in the first step and vocational interests’ dimensions will be added in the second step for the prediction of person-job and personvocation fit.
Ethical Issues
Firstly, we applied to the University of Leicester’s Ethics Committee for gaining approval. After gaining approval, the link of the survey will be sent to the participants. Participation of the study is truly voluntarily and participants will be informed. Secondly, in the survey, consent form will be inserted and participation rights will be explained in order to minimise any misunderstandings (Saunders et al, 2007). Obtained data will be kept carefully in our private computers and results will not be sharing with anyone else. This situation will also be informed to the participants. Also, this study’s findings will be used in any national, international conferences and publications. Therefore, participants will be aware of this. At the end of the 5 years, whole online data will be deleted.

4. Results and Discussion
Results of the study will be presented during conference. Additionally, results will be discussed relation to the current literature and will be available in the conference.

5. Summary
As a consequence, this study will provide a view that related to the role of personality and vocational interests in person-environment fit perspective in general. In a practical view, this study will lead a comprehensive application in especially career counselling, career exploration and recruitment and selection processes. Additionally, in Turkey, the role of personality and vocational interests in person-environment fit has not commonly applied in the literature. Thus, regarding to the literature, it provides an extensive information for researchers to understand Turkish type fit perspective. It brings a general view for fit related comparison and meta-analytic studies.

6. Addressing the Main Concept of Conference
Our study mainly underpins the HEXACO Personality Trait Model, Holland’s RIASEC Theory, Person-Environment Fit Theory. Basically, this study provides an empirical and theoretical view for the conference but it also can be applied for the practical world by guiding people in their careers and helping a general understanding of Turkish working population. Additionally, fit perspective has been studied for few decades however, in Turkey, application of this perspective lesser common especially in practice. Thus, it can be such a useful example for Turkish organisations. This study is particularly related with career in general and specifically in career exploration and counselling. It can be very useful study for both practical and theoretical career expression. Also, presentation will give a change for people to understand the effectiveness personality and vocational interests in person-environment fit. It will be a novel study because there are variety of fit perspectives, which are person-organisation, person-vocation, person-job and person-group fit. Most of the studies focused on only the one side of the fit but in this study, we look two sides of the fit together. The main idea of this study is to explore finding a proper environment for individuals. When people are interested in this study during conference, they will have a chance to make a judgment of their characteristics and working environments. So, they will see where they are or where they want to be regarding to the fit of their personality, vocational interests and work-fit.

References

**DOP06**

**Inter-organisational Psychological Contracts**

**Ray Millican**, London Metropolitan University

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

The main psychological theory underpinning this submission is that of psychological contract. This research investigates if psychological contract theory can be translated to an inter-organisational supply chain context and related to the supply chain collaboration literature.

This research links directly to the DOP 2017 conference theme of Research into Practice: Relevance & Rigour because, firstly, the research utilises a creative ‘critical incident’ approach but follows rigorous ethical and methodological guidelines. International confidentiality agreements were signed and a research contract agreed with the focal company. The BPS ethical code was explained to all participants and a university based ethics review board approved the final research methodology. Secondly, the research is relevant because it applies psychological contract theory within a context where occupational psychology is not widely used, but has significant potential. Finally, the findings of the research directly links theory to practice, provides scope for significant further research and offers several practical insights and potential applications for both Occupational Psychologists and Supply Chain practitioners.

This poster could be submitted under psychological contracts within the learning, training and development category or under inter-organisational collaboration within the work design, organisational change and development category. It has been submitted under the latter category because the research supports and compliments a stream of supply chain literature focussed upon inter-organisational collaboration. Further, the insights provided by the research may help to facilitate inter-organisational collaboration, and help to improve organisational change performance.

The most novel aspect of the ideas presented in this research is the application of the psychological contract metaphor to the collaborative supply chain context. The supply chain literature discusses matters of trust in professional relationships but does not differentiate expectation, promise, need and belief. This metaphor is particular relevant within the supply chain context given the reliance of inter-organisational relationships upon legally binding contract structures and relationship agreements. The most innovative aspect of the research is the use of a methodology that identifies a ‘critical incident’ that caused operational problems but did not breach legal contract. The incident is used as the focus for semi-structured interviews with key decision makers. This approach requires complete access to
confidential legal documentation and operational performance data. It then requires boundary spanning legal, operational and psychological collaboration to identify a potential incident and convert this into a robust basis for research.

The conference delegates may find the session interesting because the research is related to the subject matter of an advertised conference keynote session and long established psychological concept. However the research seeks to apply the theory to a different, inter-organisational context. The research seeks to make a contribution to the psychological contract literature whilst also providing a platform for the development of further research and practical applications within the Occupational Psychology and Supply Chain professions.

On a wider basis, the public may find the research interesting because supply chains are critical to the economic well being of the country. Therefore any improvement in efficiency or performance is of benefit to the national economy. More directly, the application of psychological contract to commercial exchange could potentially affect all consumers, as well as business to business contracts. This means the research and subsequent application could apply to everyone.

In order to enliven the poster session, mini posters and simple card based 3D models of inter-organisational supply chain relationships will be made available. A demonstration of the application of psychological contract expectations in a major domestic purchase is currently being developed with a new car retailer for a major car brand. This will provide a quick, multiple choice, fun demonstration of the expectations we all may have when we enter into a major domestic purchase. This is merely intended to demonstrate that legal commitment and the psychological expectations that surround major purchases may differ.

A 60 second summary of this submission would include the following key points:

- **Hypothesis.**
  - The research investigated if psychological contract theory could be applied within the inter-organisational supply chain context.

- **Method**
  - The research was undertaken in a complex European supply chain in the pharmaceutical industry and consisted of semi-structured interviews with key decision makers.
  - The interviews explored a 'critical incident' that caused operational problems but did not breach legal contract.

- **Results**
  - The research found that psychological contracts exist in supply chains and their content can be identified.

- **Discussion**
  - Breach can influence collaboration & relationship resilience.

- **Further research**
  - Further research could be undertaken to translate other psychological theory to the supply chain context.

- **Applications**
  - Practical applications include improved supply chain partner selection and relationship resilience support.

A PDF of the provisional poster has been submitted. Please note that all names, affiliations and logos have been removed for the submission process. Hence there are some gaps in graphics and text. These omissions will be reinstated should the submission be successful.
References (examples)

DOP07
Student career goals, advice-seeking, and perceptions of factors enhancing employability
Andrew James Clements, University of Bedfordshire and Caroline Kamau, Birkbeck, University of London
Category: Learning, Training and Development
Introduction
Graduates face an increasingly competitive job market (Helyer & Lee, 2014, 2012). The “employability” of graduates has been identified as 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). Individuals who perceive their employability as greater feel less job insecurity and may be more confident (De Cuyper, Mäkikangas, Kinnunen, Mauno, & De Witte, 2012), leading to greater efforts to attain a desired job.

Concerns have been expressed that undergraduates do not engage with employability sufficiently early (Tansley, Jome, Haase, & Maatens, 2001). Undergraduates often do not fully internalise the importance of employability 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. Given the scarcity of this research, the present study aimed to enhance the evidence base for practice in supporting employability. 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. The present study took a qualitative approach to investigating undergraduate students’ goals, and strategies that they used to achieve career goals, with a particular focus on advice-seeking, due to the importance of networking for career success (e.g. Seibert, Kramer & Liden, 2001). Thematic analysis was used to examine the factors that students perceived as important to employability, and the extent to which these were congruent with their advice-seeking behaviours.

Method
Design
A qualitative survey design was adopted in this study.

Participant
Undergraduate students (N=358) were recruited from 23 universities in the UK. The majority (75.4%) of participants identified as female. The mean age was 23.06 years (SD=7.15). A majority of the participants (61.7%) were white British. In terms of year of study, participants were drawn from first year (39.9%), second year (29.1%), and third year (21.8%) students primarily. Nearly all participants were in full-time study (90.5%).
Materials
Participants were presented with three open-ended questions, which focused on students' career goals, their career advice-seeking behaviours, and the factors that they perceived as likely to enhance employability.

Procedure
After gaining ethical approval from the lead author’s departmental ethics committee, access was sought from a variety of universities in the UK. These institutions included both pre- and post-1992 universities. University departments supporting the study contacted students, including via emails, posters, and adverts on virtual learning environments. Social media, such as Twitter, was also used to advertise the survey. The British Psychological Society (2009) code of ethics and conduct was adhered to in this study. Data obtained from the survey were kept on password protected computers. Thematic analysis was used to interpret the data, following the guidelines of Braun and Clarke (2006).

Findings
Just under half of the sample (48.3%) identified a specific career goal, which typically identified a specific profession which the participant wished to join. Just under 13% identified broad goals, relating to the kind of activity (e.g. helping people) which they wished to be the focus of their career. About 15% identified vague goals, such as doing the “best” that they could, and 4.5% said that they were unsure of their career goals. In goal-setting theory, specific challenging goals are expected to promote the development of strategies to enhance the likelihood of success. The analysis then examined factors that students identified as likely to enhance their employability, and examined these in light of advice-seeking behaviours. Three key themes were identified in participant responses to the survey. These were experience, opportunities, and knowledge acquisition.

Experience
Just over half the sample identified experience as crucial to their employability. Participants often focused on their own need for experience, with placement opportunities being frequently identified as beneficial. Participants also often specified the need for experience relevant to their career goals, which some saw as being in short supply. In a small number of cases, there seemed to be a passive expectation of being “given” experience. One might expect that a value of experience would lead participants to seek advice from those who have experience of their desired profession. Yet only 26% of the sample indicated that they sought advice from members of their intended profession, and only 2.5% reported seeking advice from employers. More participants reported speaking to lecturers (33%) and family and friends (31.6%), despite the fact that only a few participants made it clear that these contacts had relevant professional experience. However, a number of participants were clearly aware of the importance of experience in their contacts. Only a small proportion of participants (12.3%) reported speaking to university staff (generally the careers service). While it is difficult to know exactly why uptake was low, a small number of participants were explicitly critical of perceived lack of relevant experience and knowledge in career advisors.

Opportunities
Participants (10.1%) showed some awareness of factors outside of their control. For example, a number of these participants showed keen awareness that there were limited numbers of jobs available in their chosen field. In nursing students there were mixed perceptions of the degree of funding for jobs in their profession, with some very optimistic, and others quite pessimistic. Some participants also identified barriers presented by their own resources (e.g. not being able to afford to volunteer). Two single mothers also identified challenges that had been posed by the need to manage childcare.
Knowledge acquisition
As discussed previously, students claimed that experience was important to their employability – yet this was not always reflected in their advice-seeking behaviours. Only 9.8% of the sample explicitly identified networking as likely to enhance their employability, which may help to explain this finding. Of the sample, 8.4% identified knowledge as important to their employability. While this was sometimes associated with knowing the “right” people, others also identified the value of self-knowledge. One participant in particular expressed the dilemma of needing to take action, but not knowing enough to be able to begin.

Implications
While many in the sample saw the value of experience, this does not necessarily seem to inform approaches to seeking career advice. In the present study, the formation of specific career goals does not seem to have generated strategies that involve seeking the most informed advice. At times there seemed to be a sense of passivity in students’ discussions of experience. Some students were also aware of disadvantages that they faced in attaining their career goals. It is therefore important to support students in developing autonomous strategies for building their employability that are supportive of their career goals. This could take the form of guidance or training in networking skills, to promote better access to higher quality career information.

References

DOP08
Comparing the Emotional Intelligence of Transactional and Enterprise sales people
Dan Hughes & Jo Maddocks, JCA Global
Category: Psychological Assessment at Work
Evidence for the relationship between Emotional Intelligence (EI) and sales performance ranges from strong (Kidwell et al, 2011, Jennings et al, 2007) to unconvincing (Aldosiry et al, 2016, Bryant 2005). One reason for this may be that different sales roles require different
attributes. This paper compares the EI attributes benefiting two distinctly different sales roles.

Methodology
Study 1: Transactional sales
Study 1 examined the relationship between EI and sales performance. The Emotional Intelligence Profile (EIP) (Maddocks & Sparrow, 2008) was used to assess levels of EI. The EIP measures 16 aspects of EI divided into two streams: Intrapersonal and Interpersonal EI, derived from Gardner’s (1983) ‘Theories of Multiple Intelligences’. Sales performance was measured by achievement of financial sales targets. The research was based on a sample of 254 sales consultants employed by an international recruitment consultancy based in the UK. Participants were all involved in Transactional sales i.e. low ‘touch’, higher volume, lower yield, features based Selling.

Study 2: Enterprise sales
Study 2 consisted of a sample of 79 sales people from a UK based global telecoms organisation. All of the sample completed the EIP which was correlated with line manager ratings of their work capability and sales performance.

In comparison to the first study, the participants in Study 2 were all focussed on Enterprise sales i.e. high ‘touch’, lower volume, higher yield, client account relationship management.

Hypothesis
It was hypothesised that Transactional sales would correlate more strongly with Intrapersonal aspects of EI than Enterprise sales, and that Enterprise sales would correlate more strongly with Interpersonal aspects of EI than Transactional sales.

Results
Study 1
Table 1 shows that six EIP scales correlate significantly with sales performance. Five of these are Intrapersonal aspects of EI which supports the hypothesis. These six scales are largely to do with having a clear purpose, self-belief and a drive to make things happen.

Table 1: Scale correlations with sales performance (n=254)

<table>
<thead>
<tr>
<th>EIP</th>
<th>Sales 2014</th>
<th>Scale definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Regard</td>
<td>.20**</td>
<td>The degree to which you value and accept yourself</td>
</tr>
<tr>
<td>Goal Directedness</td>
<td>.19**</td>
<td>The degree to which you relate your behaviour to long-term goals</td>
</tr>
<tr>
<td>Emotional Resilience</td>
<td>.16*</td>
<td>How easily you pick yourself up and bounce back when things go badly for you</td>
</tr>
<tr>
<td>Personal Power</td>
<td>.15*</td>
<td>The degree to which you believe that you are in charge of, and take sole responsibility for, your outcomes</td>
</tr>
<tr>
<td>Trust</td>
<td>.15*</td>
<td>Your tendency to trust others but to the right amount</td>
</tr>
<tr>
<td>Balanced Outlook</td>
<td>.15*</td>
<td>How well you manage to balance optimism with realism</td>
</tr>
</tbody>
</table>

\* = p < .05 \quad \** = p < .01

1This scale is related to Interpersonal Emotional Intelligence
2This scale correlates with Q4 performance data only

Study 2
Table 2 shows that four of the sixteen EIP scale correlate significantly with line manager ratings of performance. Each of these scales, except for Emotional Resilience, are closely
related to Interpersonal EI which supports the hypothesis. The highest of these correlations is Flexibility.

Table 2: Scale correlations with sales performance (n=79)

<table>
<thead>
<tr>
<th>EIP</th>
<th>Sales 2015</th>
<th>Scale definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility</td>
<td>.39**</td>
<td>The degree to which you feel free to adapt your thinking and your behaviour to match the changing situations of life.</td>
</tr>
<tr>
<td>Emotional Resilience</td>
<td>.25*</td>
<td>How easily you pick yourself up and bounce back when things go badly for you</td>
</tr>
<tr>
<td>Interdependence</td>
<td>.25*</td>
<td>How well you manage to balance taking yourself and taking others into account.</td>
</tr>
<tr>
<td>Conflict Handling</td>
<td>.23*</td>
<td>How well you handle conflict; how assertive you are.</td>
</tr>
</tbody>
</table>

* = p < .05 ** = p < .01

¹This scale is related to Intrapersonal Emotional Intelligence

Discussion

Results from Study 1 and 2 support the hypothesis. Transactional sales correlate more strongly with Intrapersonal aspects of EI than Enterprise sales, and Enterprise sales correlate more strongly with Interpersonal aspects of EI than Transactional sales.

Results from Study 1 indicate that higher performing Transactional sales consultants are self-confident and self-determined. They have high self-esteem and are more able to manage their behaviour, motivation and emotions to achieve their goals. In contrast to Study 2, other than Trust, no significant correlations are found for Interpersonal aspects of Emotional Intelligence.

In Study 2, Enterprise sales shows more correlations with Interpersonal scales of EI than Transactional sales in Study 1. Correlations indicate that higher performing Enterprise sales people are more likely to bounce back well from setbacks, act assertively, are not overly dependent on others and can adapt more easily and effectively to changing demands. They are more likely to work well with others, be able to collaborate effectively, work as part of a team and be accommodating to others. Overall, there appears to be a balance to be struck where Enterprise sales people need both Interpersonal EI (the capacity to adapt and fit in well with others), and Intrapersonal EI (the capacity to be self-assured and emotionally resilient).

One scale, Emotional Resilience, correlates with both sales roles suggesting that the capacity to deal with setbacks is important to sales roles more broadly.

Conclusion

This study suggests that different sales roles (Transactional and Enterprise) require different attributes of Emotional intelligence (Intrapersonal and Interpersonal EI). Other than having Emotional Resilience it may be unwise to generalise as to the attributes of sales people per se. Further research on other sales roles within different job sectors is recommended.

References


**DOP09**

Do The Fat Cats Purr? - Boardroom bankers - a thematic analysis  
**Philip Griffin & Helen Stivaros**, University of Gloucestershire  
**Category: Leadership, Engagement and Motivation**

**Background**

Current understanding of the banking world is largely confined to research and media analysis, which attempts to pinpoint the causes of the financial meltdown. This has led to an interest in profiling ex-officials, investigation of banking ethics post-crisis (Boatright, 2013) and a prevalence of quantitative studies on leadership criteria (De Hoogh & Den Hartog, 2008). Plausibly, the apparent dearth of qualitative research into current senior bankers may be due to a ‘code of silence’ (Luyendijk, 2015; Sherry, 2016), which serves to both protect the positions of those in authority and restrict access to the banking cultures in any meaningful way. The research aim was to examine how social processes and practices inherent in the banking system shaped the identities of senior bankers.

**Method**

Four individual, in-depth semi-structured interviews were carried out with a snowball sample of Chief Banking Officers from Corporate, Private Wealth, Investment and Risk sectors. To meet inclusion criteria, participants had a minimum of 25 years’ banking experience in a current or previous role at the most senior board levels. BPS ethical guidelines were rigorously adhered to with particular emphasis given to participant anonymity.

**Analysis**

Data was analysed using inductive thematic analysis and eight themes were identified:  
**Status** examines the ways in which professional standing was assimilated by the bankers and subsumed into the social worlds they inhabit.  
**Responsibility** captures how accountability ebbs and flows between stakeholders and context, resulting in the “scapegoatitus” of both bankers and the public.  
**Risk and reward** highlights the unique nature of banking; no other industry exists where rewards are so large yet personal risk so low. Indeed, a bonus the size of a London home is equated to that of a waiter’s tip.  
**Banking as an institution** suggests that banks are amorphous organisations created to “make loans to the community”. To achieve higher profits, they use pay and status to entice the brightest minds.  
**Humans as a balance sheet** illuminates the assets bankers believe they possess to manoeuvre themselves into key roles.  
**Relationships** are integral to banking. Institutions expect bankers to “cultivate relationships”, but the ownership of these is disputable.  
**Role playing in a game with big prizes** captures the essence of the banker’s role. If there is no headwind, the spoils are immense; “you are not exactly sacrificing your first born”. Conversely, during the crisis, the game was “whack-a-mole” survival.  
**Measurement** operates on two levels. Externally, measurement of success is the status and kudos enjoyed by bankers, but internally it is measured by “how much you get paid compared with everyone else”.

282
Findings
Negative stereotyping of senior bankers maybe erroneous. Upon joining the banking industry, none of the participants emulated public identities of known bankers and were conceptually unaware of a script. Their drive and sense of self is summed up succinctly: “I don’t identify with being a banker, I identify with being successful”. Their personal identity is driven by success rather than being a banker per se. They align their successful performance with that of sporting icons such as Andy Murray and Ronaldo or being on the “front page of Fortune magazine”. They are prepared to work hard, indeed the antithesis of a ‘fat cat’. Similarly, banks require successful people to extend their culture and grow profits. Arguably, the bankers’ personal and public identities are perceived to be congruent because they are successful individuals in an environment where success is overtly communicated.

Conceivably, the bankers’ behaviour is modelled upon the environment in which they operate. Compliance with institutional practices and the desire for self-betterment could reflect behaviourist theory. There is no requirement of bankers to make any personal financial investment, therefore no personal risk; however, they assume they are entitled to an inordinate amount of reward. The institutions induce allegiance by way of reward, blurring accountability. In addition, no punitive measures were put in place to balance the government bailout of the banks. Until this partisan relationship is readdressed then bankers and banks will continue to receive the spoils without attracting the normal sense of liability. It is plausible that bankers are publicly vilified because they are successful with the public’s money whilst exempt from the normal parameters of failure.

The study illuminated how banks use symbols to communicate meaning amongst employees. These symbols operate at private, institutional and public levels. One’s title, office and staff are all essentially markers of success. They imply and symbolise accomplishment, but they do not mean success. The person with a name on the CEO’s door still requires approval to order pencils. It is the institution that wields the power (Clegg & Haugaard, 2013) even at this level, and the symbols are awards for performing for the institution (Anderson et al, 2015). The banker’s professional self experiences success in terms of banking performance. The private self retains sufficient autonomy to acknowledge that, ultimately, titles are sterile.

Perhaps bankers have every reason to purr.

Implications
The findings suggest that greater transparency may dissipate the systemic scapegoating within banking. Such transparency may also combat the bankers being publically vilified, highlighting the processes necessary to regain public faith. Furthermore, the circle of bank-banker-public responsibility requires severing to determine where accountability lies. Although these findings are specific to the present study and are not generalisable to all banking institutions, they may have implications for the impact of hierarchies within financial institutions.

DOP10
Predicting derailment as a consequence of the leadership motive pattern
Christine Bunyard, KornFerry HayGroup
Category: Leadership, Engagement and Motivation
Bono et al. (2014) emphasised that there is a need to broaden the scope of derailment research by incorporating other individual difference variables, such as motivation. Within the field of motivation, research has largely supported the Leadership Motive Pattern (McClelland, 1975) with regard to positive behaviours and leadership effectiveness. However, when considering the concept of overplayed strengths from the personality literature, there are arguably disadvantages to this pattern of motivation.
With the above in mind, the current paper therefore aims to integrate the two fields of research, examining how the leadership motive pattern (i.e. a high power motivation and a low affiliation motivation) may relate to the derailment behaviours that leaders are most at risk of, based on their personality preferences.

Methodology

Participants: Analysis was conducted on data from 282 participants identified as being in leadership positions and/or on a leadership development program.

All participants remotely completed two assessments designed by Talent Q (Holdsworth, 2004) to emphasise constructs relevant to occupational performance:

1. ‘Dimensions’ personality questionnaire: a 160 item measure designed to assess key aspects of personality at work, including potential Derailment behaviours (Hypersensitivity; Isolation; Eccentricity; Iconoclast; Exhibitionism; Over-confidence; Over-dependence; and Micro-management).
2. ‘Drives’ motivational questionnaire: a 144 item measure designed to assess key aspects of motivation at work, measuring 16 motivators (Authority, Acquisition, Recognition, Professionalism; Security, Autonomy, Stimulation, Well-being; Achieving, Learning, Pioneering, Personal Growth; Positive Impact, Service, Affiliation, and Supporting).

For the purposes of this analyses, data on the ‘Affiliation’ and ‘Authority’ scales will be included, in line with the leadership motivation profile. In brief, Authority (referred to as Power for the analysis) is defined as a need for being in control, and gaining a sense of worth from seniority. Affiliation is defined as a need for affiliating with others and valuing positive social contact at work.

Results

With regard to the motivational scales, using normed scores, results of t-tests indicated that those in leadership positions rated themselves as significantly higher than the general population on the Power scale (t (281) = 16.22, p<0.01). Although the mean score on the Affiliation scale was lower than the general population, this difference was not significant (t (281) = 0.36, p = 0.72).

To explore the relationships between these motivational factors and derailment behaviours, regression analyses were carried out with both Affiliation and Power as the predictor variables, and the derailment behaviours as the dependent variables.

These results show that the combination of both Power and Affiliation have significant effects on six out of the eight derailment behaviours. However, there are noticeable differences in the amount of variance that can be explained by this combination, and the impact that each individual predictor variable has.

Taken together, both Power and Affiliation have the largest impact on the Over-dependence and Over-confidence behaviours, accounting for 20% and 15% of the variance in these behaviours respectively.

With regard to Over-dependence, Power was a significant negative predictor and Affiliation a significant positive predictor. This suggests that those with a low power motivation and a high affiliation motivation are likely to be more at risk of this behaviour. However, for Over-confidence, whilst Power was a significant positive predictor, Affiliation was not significant, suggesting that those with a higher power motivation only are more likely to be at risk from this behaviour.
The power motivation seems to have the most influence, having a significant effect on five of
the derailment behaviours, positively for Exhibitionism and Over-confidence, and negatively
for Hyper-sensitivity, Isolation and Over-dependence. It is not surprising that the power
motivation has more of an effect on these behaviours than affiliation motivation, as scores
on this scale were found to be significantly higher than the general population.

The affiliation motivation had a significant effect on only three of the derailment behaviours,
positively for Over-dependence, and negatively for Iconoclasm and Isolation. However, as
mentioned above, this need was not found to be significantly lower than the norm as
expected. Affiliation may have had more of an effect had a significant difference been found
here.

Furthermore, it is worth highlighting that, whilst Eccentricity came out as the highest risk
factor from the raw data alone, the model was not significant for this behaviour, suggesting
that other factors may be influencing higher scores for this particular behaviour.

Overall, results seem to suggest that motivation can be considered an important factor when
looking at potential derailment behaviours.

**Discussion**
The aim of the current study was to establish whether certain aspects of motivation that
typically relate to leadership effectiveness may also have implications that relate to
derailment potential, using occupationally relevant measures.

Results indicate that individuals who are more motivated by power and authority are likely to
have more exhibitionist and over-confident tendencies. Typically, ‘exhibitionists’ have a need
to command the attention of others, are inclined to exaggerate, and may make mistakes
through over-optimism. Those who are ‘over-confident’ lack a sense of their own limitations
and they can easily over-reach themselves. They may develop grandiose but unworkable
ideas, which do not adequately address the problems at hand.

On the other hand, individuals who are more motivated by affiliation and working with others
are likely to exhibit over-dependent tendencies. Typically, those who are ‘over-dependent’
have a need for careful reflection, which means that they will find it difficult to cope with
situations involving risk. They will have a desire to be agreeable to others, which may result
in facile compliance, bordering on lack of courage.

**Practical implications**
Dotlich and Cairo (2003) highlight that, whilst derailleurs can’t be eliminated completely as
they are part of our personality, derailment is preventable, and self-awareness is key to
alleviating the impact that this may have on leadership effectiveness. Therefore, by
identifying their potential derailleurs, a leader can gain a deeper understanding of the
behaviours they may be at risk of engaging in, and subsequently learn ways to manage
these.

The results of this study indicate that the factors that motivate us can play a significant role
in foreseeing what behaviours may have the potential to derail us. This knowledge can be
used to increase self-awareness, and also provides a useful means of developing tailored
training interventions.

For example, the type of support and development required for a leader who has a strong
power motivation and is at risk of over-confidence will vary greatly from that which would
benefit a leader with a higher motivation for affiliation, and is at risk of over-dependence.
In practical terms, there is likely to be considerable benefit in designing tailored development for leaders around these factors, in order to ensure motivational archetypes are taken into account, rather than following a traditional ‘one size fits all’ approach. In this way, development activities can be identified for each individual leader which will support them in self-regulating their areas of risk more effectively, and help them to recognise any controls they may need to address problem behaviours. This will not only help to increase the effectiveness of the leader, but will undoubtedly have positive implications for co-workers and direct reports also.

References

DOP11
16pf Personality Profiles of CEO’s and CFO’s
Alan Mead, Pamela Becker & Michael Stowers, PAN - Performance Assessment Network, Inc.
Category: Psychological Assessment at Work
The 16pf (Cattell, Cattell, & Cattell, 1993) has a long history of rigorous application in many specific areas of organizational psychology (Cattell & Mead, 2008). The sixteen primary scales of the current (fifth) edition have coefficient alpha reliabilities ranging from 0.66 to 0.89 with a mean of 0.75 and with 94% of scales having reliability ≥ 0.68. One of these primary scales measures Reasoning; the other fifteen scales combine to form a five factor model (called “global” scales) having test-retest reliabilities from 0.84 to 0.91 (Conn & Reike, 1994).

A leading application of the 16pf since shortly after its publication was the study of leadership (Cattell & Stice, 1954). In a review of forty years of 16pf leadership research, Guastello and Rieke (1993) found that the Leadership Potential index derived from 16pf primary scores had a mean validity of 0.46 with self-report indicators of leadership potential. Subsequent research (Conn & Reike, 1994) suggested that the leadership profile was marked by primary factors such as Social Boldness (H+), Emotional Stability (C+), and Liveliness (F+). On the level of the global scores, Extraversion, low Anxiety, and Independence were the strongest correlates.

Current study. The current study addresses the slightly more nuanced issue of comparing two top leaders: the CEO and CFO positions. This comparison is of interest because CFO’s are often candidates for CEO vacancies. However, it is common for CFO’s to have backgrounds in specific technical areas like finance or accounting; CEO backgrounds are often more varied, for example including sales or engineering. Furthermore, these two positions (as well as other top executive positions) would have been lumped together as leaders in most previous 16pf research on leadership potential.

Sample. This study used a subset of archival records identified as being from chief executives (CEO, CFO, EVP, etc.). A total of 4,283 16pf protocols were identified as chief executives based on job title, with 951 being identified as CFO and 1,670 as CEO. Organizational size was not available in this archival dataset, but the organizations probably ranged from small to large fortune 500 companies. The sample was 87.2% male,
overwhelmingly identified as white non-Hispanic (92.5%), had a median age of 49, and held a master’s (48.5%) or a bachelor’s (35.4%) degree.

**Results.** Table 1 presents Cohen’s *d* for the 16pf primary and global scales. Positive values of *d* indicate that the CEO had higher scores than the CFO. Independent-samples t-tests showed that all scales differed significantly due to the large sample sizes, so we focused on practical significance, which we defined as *d* values of magnitude 0.20 and larger. Cohen (1988) described 0.20 as a small effect and 0.50 as a medium effect. The rightmost columns show how the CEO and CFO differed. CEO’s were more extraverted, specifically more interpersonally warm (A+), socially bold (H+) and transparent (N-). CEO’s were also more independent, specifically more dominant (E+), socially bold (H+), and open to change (Q1+). CFO’s were slightly smarter (B+) and more tough-minded, specifically less warm, more utilitarian (I-), more practical (M-), and less open to change. In addition, CFO’s were more self-controlled, specifically more rule-oriented (G+), more perfectionistic (Q3+) and more practical (M-). Finally, CFO’s tended to be slightly less tense (Q4-).

While Table 1 emphasizes the differences between these roles, Figure 1 shows that the primary scale profiles of the CEO and CFO clearly have quite similar shapes (note that the sten scale is abbreviated to emphasize detail).

**Conclusions.** These results suggest that the CFO’s in this sample differed in specific ways that might impact their performance as CEO. The conscientiousness and tough-mindedness that probably serve the individual well as CFO may not provide the same strength as CEO. Meanwhile, the CFO candidate may need to modify their behavior to be more extraverted and more open-minded. Probably, the CFO role has a more limited degree of creativity and broad strategic vision; as CEO, these individuals may need an executive team that is stronger in creativity.

**Contribution.** This study is, to our knowledge, the first to compare large samples of CEO and CFO protocols using a well-known and rigorous personality inventory producing both “Big Five” and facet scores. The results should be of interest to those engaged in leadership research and practice and perhaps also to those interested in personality and work. In January, we will provide a white paper describing these findings to interested attendees.

**Limitations.** No study is without limitation and this research was limited to archival data and classification based on written job titles. Because there were about twice as many CEO’s as CFO’s, one might conclude that about half the CEO sample were from organizations small enough not to have a CFO. Ideally, these findings should be confirmed by follow-up research using a complementary methodology.

**References**


Table 1. Comparison of the CEO and CFO Personality profile for 16 primary scores and Big FiveGlobals.

<table>
<thead>
<tr>
<th>Primary Factors</th>
<th>Personality Score</th>
<th>Cohen’s d</th>
<th>CEO</th>
<th>CFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  Warmth</td>
<td>0.41</td>
<td>A+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B  Reasoning</td>
<td>-0.22</td>
<td>B+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C  Emotional Stability</td>
<td>-0.12</td>
<td>C+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D  Dominance</td>
<td>0.19</td>
<td>E+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E  Liveliness</td>
<td>0.00</td>
<td>F-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F  Rule Consciousness</td>
<td>-0.24</td>
<td>G+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G  Social Boldness</td>
<td>0.30</td>
<td>H+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H  Sensitivity</td>
<td>0.25</td>
<td>I-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I  Vigilance</td>
<td>0.07</td>
<td>L-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J  Abstractedness</td>
<td>0.58</td>
<td>M-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K  Privateness</td>
<td>-0.27</td>
<td>N-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L  Apprehension</td>
<td>0.05</td>
<td>O-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M  Openness to Change</td>
<td>0.41</td>
<td>Q1+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N  Group Affiliation</td>
<td>0.09</td>
<td>Q2-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O  Perfectionism</td>
<td>-0.13</td>
<td>Q3+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P  Tension</td>
<td>0.20</td>
<td>Q4-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Global Dimensions

| EX  Extraversion        | 0.22              | EX+       |     |     |
| AX  Anxiety             | 0.14              | AX-       |     |     |
| TM  Tough-Mindedness    | -0.58             | TM+       |     |     |
| IN  Independence        | 0.40              | IN+       |     |     |
| SC  Self-Control        | -0.34             | SC+       |     |     |

Note: N=951 for CFO’s; N=1,670 for CEO’s.

Figure 1. 16pf Primary profiles of CEO and CFO.

DOP12
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
Submission Summary
The current submission aims to inform discussions on the approach to regulation in occupational psychology by identifying and exploring the diverse and differing approaches.
adopted by comparable disciplines in a variety of countries. This will contribute to a framework in which the impact of these differing approaches can be better understood.

The submission is based upon a project conducted as part of the BPS Leadership Development Programme which seeks to establish a clear methodological framework that can be used to identify, collate, and present findings of interest on the topic of international regulatory approaches. As well as informing delegates, it is also hoped that the framework presented will guide future researchers in assessing different countries. The methods of the project included a set of questions used to identify information, along with the typical governmental, organisational, and educational resources that should be targeted.

The presentation establishes a benchmark to regulatory procedures by using the United Kingdom as an example, before exploring the approaches adopted by the relevant and comparable discipline in Australia, South Africa, USA, Brazil, The Netherlands, and Singapore respectively.

The presentation will conclude by drawing international findings together into two main themes: the role of education, and legal protection. These are directly compared against the approach adopted by the UK, allowing the presentation to identify similarities, contrasts, and differences across the international community. Recommendations are also made into possible avenues of future research.

By presenting this project to delegates, the researchers aim to introduce and inform a discussion with delegates into the current and future regulatory approaches adopted by the BPS, DOP, and HCPC within the wider context of international comparisons. Opportunities to contribute to the project will also be provided.

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

The main research underpinning the submission is a 17k word interactive report reflecting an individual project completed as part of the BPS Leadership Development Programme. This project emerges against a backdrop of hotly debated regulatory developments and amendments applied to the practice of occupational psychology in the United Kingdom. The project contributes to this discourse by identifying and evaluating the various different approaches to protection and regulation adopted by the discipline of occupational psychology (or its closest equivalent) within various countries, and explores specific areas of practice that would fall within the remit of an occupational psychologist in the UK. The final report encompasses six countries (and the UK), consisting of Australia, USA, South Africa, Singapore, The Netherlands, and Brazil.

The research was able to establish the legal situation applied to the regulation of the industry, the key organisations and how they influence the discipline, and the main areas of practice addressed by practitioners. When titles and roles of interest were identified, consideration was given to regulatory requirements in 3 main areas:

- Pre-requisite educational background
- Pre-requisite practice-based experience
- On-going CPD demands

Establishing findings from these avenues enabled the research to compare country-specific requirements against those stipulated within the UK (i.e. by the HCPC and BPS). When collating information of note on these areas, the researchers used a model of questions that included:

- Is the title ‘Psychologist’ protected?
• Are specific extensions to the term ‘Psychologist’ protected?
• Are requisite degrees classed as ‘Science’ (BSc/MSc) or Arts (BA/MA)?
• Are requisite undergraduate and/or postgraduate degrees accredited, and if so, by whom?
• How closely do comparable MScs resemble the modular structure of current UK-based BPS-accredited occupational psychology MScs?
• Which areas of practice encompassed by the title or role overlap with those of the 5 + 2 model (see next section)?
• Who is responsible for awarding titles and regulating practice?
• What are the processes, costs, and time requirements of accreditation?
• What are the requirements for maintaining an accredited status, e.g. membership costs?
• Does on-going accredited practice depend upon mandatory CPD?
• Do comparable titles in the country exist, and do they enforce similar regulatory guidelines?
• How is the protection of a title enforced? Have challenges arisen from enforcement?
• Do organisations in relevant areas of practice require specific qualifications or accreditations?

Using these questions to drive the data gathering process enabled the researchers to develop an easily repeatable research methodology that generated a range of findings in response to the project’s underlying questions. This framework can also be used to guide ongoing collaborative efforts with international colleagues, both within the EU and further afield.

2. How do you see your proposal linking with the main conference theme of Research into practice: Relevance and rigour?
The proposal is central to the conference’s main theme, as it reflects a significant body of research into how international equivalents of occupational psychology are defined, regulated, and practised. The result is a submission encompassing a broad range of relevant information from countries spread across six continents, and this provides a comparison point against the current approaches adopted for the teaching, regulation, and practice of occupational psychology in the United Kingdom.

By assessing the level of regulation required to practise in an occupational psychology-orientated role in different countries, the research is able to place nations on a spectrum of regulatory control, thereby facilitating a discussion as to the impact varying approaches and levels of regulation and title protection can have upon the success, reputation, and public awareness experienced by the industry. The result is a more informed discussion as to the appropriate level of rigour that should be demanded by UK-based practitioners, both now and in the future.

3. Why is the submission appropriate for the particular category you have chosen?
The submission is most relevant to the ‘Practical Applications’ element of the ‘Research Design, Analytical Techniques and Practical Applications’ category, as it focuses upon the regulatory criteria that must be met by occupational psychologists concerned with applying the knowledge of the discipline with clients. Particular emphasis is given to the competencies, tasks, and responsibilities demanded from international practitioners that would fall within the remit of an occupational psychologist in the UK. This enables the project to provide an international perspective on the practical applications of the discipline.
4. What do you consider to be the most novel or innovative aspects of the ideas being presented?
Despite considerable attention attuned to recent and impending changes to how occupational psychology is taught, practised, and regulated in the UK (e.g. MSc curricula, QOP (Stage 2)), there has been little focus on how other countries approach these areas. The submission’s underlying report represents the first time such breadth and depth has been collated from the international community and presented in a single succinct format. The result is a unique and valuable collection of information that offers an insightful context with which to better understand the recent and ongoing significant developments witnessed in the UK.

5. Why do you think conference delegates will find the paper or session stimulating and useful?
Whilst many delegates are likely to possess appropriate levels of knowledge on how occupational psychology is regulated and practised in the UK, an understanding of how different countries approach these issues is likely to be limited, and potentially completely absent. By presenting various differing approaches employed by countries across the world, the current submission will inform delegates about the range of alternatives that have been adopted, as well as insight into the impact these different approaches have had to the teaching and practice of the comparable discipline (e.g. levels of membership, number of practitioners, popularity of representative organisations, etc). This information could also be used to feedback into how future regulatory issues should be approached in the UK by the BPS, DOP, and HCPC and may be of practical value for those intending to work outside of the UK.

The paper will also be of specific interest to delegates who attended the DOP 2016 conference, as a poster requesting a ‘call for collaboration’ was presented and displayed for the duration. The current submission represents the outcome of this proposed project, and presenting findings from the 17k word document will update returning delegates on the project, allowing them to understand and explore the considerable body of knowledge that the report has collated.

6. What might the public find interesting about your paper or session?
Public interest will result from the considerable insight into how occupational psychology is protected, regulated, and practised in the United Kingdom, and how these aspects of the discipline compare against those in other countries. These areas are synonymous with uncertainty and limited understanding, and this is often regarded as an obstacle to the discipline in the UK (e.g. interaction between BPS and HCPC, amendments to occupational psychology MSc curriculum, impending changes to the QOP (Stage 2), etc.). By clearly outlining the approaches to regulation and practice in the UK, and placing these approaches within an international context, the submission will help to combat limitations of knowledge possessed not only by members of the general public, but by practitioners and academics as well.

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)?
Attendees will be provided with a link that will allow them to receive the full 17k word interactive report free of charge. Attendees will also be provided with details on how to contribute to the continuation of the project, along with a detailed summary outlining the underlying methodology that was utilised to gather the information.

DOP13
(POP) How does SJT response format impact performance across diverse candidates?
Rachel Driver, City University of London
**Category: Psychological Assessment at Work**

**Key points for 60-second pitch:**
The advantages of having a diverse workforce are becoming increasingly recognised. In healthcare contexts, widening access to medical education is a key to growing a diverse and culturally effective organisation. Whereas traditional selection methods - such as cognitive ability tests – have created adverse impact for candidates from Black and Minority Ethnic groups, Situational Judgement Test (SJT$s) have been argued to produce smaller differences between ethnic sub-groups (i.e. White-BME). However, it is not yet understood how SJT response format (i.e. ranking responses from most to least effective, or rating the effectiveness of each one separately) impacts performance across demographic groups. This study analysed SJT performance across ranking and rating formats and compared effects across gender (male vs. female) and ethnic (White vs. BME) groups.

**Context:**
In the interest of widening access to medical education and training, the development of empirical research investigating how SJTs impact candidate performance is important for informing best practice advice on development, design and use of SJTs in selection and assessment. It would be of interest to researchers, practitioners and current students/job-seekers alike, or anyone interested in increasing diversity in medical education.

**Study:**
In high stakes selection contexts, such as admission into medical schools, selection processes have historically relied on cognitive measures of ability (Lievens & Coetsier, 2002). There is now evidence to suggest that tests engaging a high cognitive load can create adverse impact, whereby individuals in demographic subgroups in the applicant population systematically achieve lower performance at selection (Whetzel et al., 2008).

Situational Judgment Tests (SJT$s) are reported to create lower adverse impact than traditional measures; however the extent to which SJT elements impact performance is not fully understood (Lievens et al., 2008). Recent studies have investigated the effect of specific elements of the SJT on differences in subgroup scores. In line with earlier research, SJTs with higher cognitive loading have been found to elicit greater subgroup differences than SJTs with lower cognitive loading (Whetzel et al., 2008).

It is clear that high-stakes selection decisions made on the basis of SJT performance for tests involving high cognitive loading could create severe adverse impact to applicants belonging to disadvantaged ethnic subgroups in particular (Whetzel et al., 2008).

Whilst some progress has been made to understand the effects of response instructions on subgroup performance, the effect of different response formats is not well understood. SJTs typically present the participant with a list of possible response options, which they are asked to rank in order from best (i.e. most effective/appropriate) to worst (i.e. least effective/appropriate) or to rate the effectiveness of each response option (e.g. on a scale of 1-5, see Arthur et al., 2014). It is possible that ranking and rating formats carry different levels of cognitive load, which could have direct implications for the fairness of the SJT for individuals.

There is some initial support for this suggested effect. Arthur et al (2014) compared subgroup differences across separate groups of candidates who had completed either a ranked, rate, or best/worst format SJT. Rated formats elicited smaller ethnic and gendered subgroup differences than did ranked formats. Interestingly, however, the sample were told that the purpose of their contribution was test development; it is possible that response format might effect candidates differently in a high-stakes selection context i.e. entry to medical school (J. Weekley, Hawkes, Guenole, & Ployhart, 2015).
The present study is the first to the author’s knowledge to compare ranked and rated formats within the same SJT. It investigates the effects of response format (i.e. ranking and rating) on SJT performance for an SJT that employed both rating and ranking response formats, and compares these across candidate subgroups: gender (male vs. female) and ethnic (White vs. BME).

This study will analyse data from applicants that completed an SJT during their selection process for entry into a medical training course. Ethical considerations concerning participant and client consent have been addressed; participant anonymity will be upheld in the current study as the data is in no way individually identifiable.

References


DOP14
Leadership Potential as a Group Process: Preferences in Intergroup Contexts
Fatima Tresh & Georgina Randsley de Moura, University of Kent

Category: Leadership, Engagement and Motivation

Organisations are increasingly focusing on identifying and developing high-potential leaders. However, past research has focused on leadership potential as an individual process. This research investigates the role of the group in identifying high-potentials, and the intergroup context surrounding their endorsement by the group. As intergroup collaboration and competition are fundamental for organisational success, the experiments undertaken foster an intergroup context to measure the impact of intergroup cooperation and competition on evaluations of high-potential leaders.

This research addresses the gap in the literature joining theories of leadership potential and intergroup threat. We examine whether there is a preference for potential (Tormala, Jia & Norton, 2012) for leadership candidates. Finally, we examine whether preferences and evaluations of high-potential leaders change under varying intergroup contexts (cooperation vs. competition).

Experiment one measures ingroup perceptions of prospective high-potential and high-performance ingroup and outgroup leaders during intergroup cooperation. Experiment two adopts the same measures to look at evaluations of such leaders during intergroup competition. Experiment one and two were conducted with undergraduate students, a mock intergroup context was formed by providing participants with information on a collaboration between their academic school, The School of Psychology, and another academic school, The School of Economics. The first scenario informed participants of a collaborative grant bid to benefit both schools. The second scenario informed participants of a competitive grant bid that would only benefit one school. Participants were asked to evaluate student lead applications for each school to lead on the project and represent their school. All participants evaluated a high-potential student lead applicant and a high-achieving student lead applicant. Potential and performance were manipulated using language in a personal statement and reference on their student lead applications. However, although all participants received identical applications of evaluate, those in condition one were told that the applicants represented the ingroup while those in condition two were told that the applicants represented the outgroup. Participants were then asked to choose a candidate, evaluate them in terms of their potential and performance, likelihood of success, failure and prototypicality to their ingroup.

The results indicate that the intergroup context plays a role in forming perceptions of a high-potential leader’s ability to innovate. Across contexts, high-potential outgroup leaders were perceived to be more innovative. However, only in the competitive context were high-potential ingroup leaders perceived to be innovative. We argue that a competitive intergroup context encourages group members to support an innovative leader who can produce new ideas to improve group status. However, within cooperative intergroup contexts, group members don’t endorse innovation as they strive to strengthen their ingroup identity from the identity threat they potentially face when collaborating on a project with an outgroup.

Finally, experiment three adopts a hiring simulation scenario using mock CVs whereby participant gender formed the intergroup factor, and male and female participants evaluated
either a male or female organisational leadership candidate. Each participant viewed one CV, either male or female, that were identical albeit the names to represent either a male or female candidate. Participants were asked to evaluate the candidate on 9-point Likert scales, on their perceptions of how likely the candidate was to succeed, fail, performance evaluations and expectations of past promotions.

We find an ingroup bias in support of high-potential women and support the argument that such support does not see women promoted into higher level roles. Women were more likely to recognise the potential of a female leadership candidate, more likely to perceive the female candidate as more successful and more likely to have previous promotions. However, the female candidate was no more likely to be promoted to a higher-level role than the male candidate, although their potential was recognised over the male applicant’s. These findings reflect the argument given by McKinsey (2011) that women are promoted based on their past accomplishments while men are promoted based on their potential. Although women were more likely to recognise the female’s potential, an ingroup bias effect, they were no more likely to promote them to a higher position.

Results of all three experiments are discussed in relation to group processes and intergroup threat. Practical implications call for organisations to focus on intergroup contexts when promoting high-potential employees to leadership positions on collaborative projects. Taking into consideration the context before appointing group leaders will reduce the likelihood of negative intergroup relations and thus encourage cohesive collaborations and improved performance. Furthermore, organisations need to consider the group identity of high-potential leaders, aiming to promote employees within work groups who successfully represent and defend the work group’s identity. Promoting high-potential ingroup members to leadership roles when the group requires innovation to improve their work group status will encourage support for the group leader and in turn improve performance outcomes.

Key points for 60 second pitch:
- Importance of identifying high-potential leaders for organisations
- How those high in leadership potential can benefit their groups (expectations of future performance, innovation)
- How the intergroup context, cooperation vs. competition, can influence perceptions and endorsement of high potential leaders (identity threat, status threat)

DOP15
An exploration of the relationships between resilience, psychological detachment, rumination and affective wellbeing in professional dancers
Emily Jarrett, City University London

Category: Wellbeing and Work
This is a POP submission – I am currently coming towards the end of data collection for my MSc dissertation project, and am soon to start the analysis. The results of this and a discussion of the findings will therefore be included in the poster but are not a part of this submission due to the timing. The title will be updated in light of the study’s findings, if possible.

The poster will contain: an introduction to the research, including a review of the relevant literature; research design and methodology; data analysis; results; discussion (including conclusions and practical implications). It will incorporate visual aids such as charts and figures to present the quantitative results, along with some prominent quotes from the interviews. This session will highlight how concepts such as resilience and psychological detachment can be of great use in looking at less ‘traditional’ employees such as dancers and others in the arts, calling for more wellbeing-focused research to consider these less common but highly demanding careers.
Relevance to conference theme: Whilst based on research into theoretical concepts, this session will emphasise the potential practical benefits of increasing our understanding of the psychological experience of being a dancer, both in terms of raising individual awareness and providing recommendations for companies. Incorporating a mixed methods approach allows this research both to look for relationships between theoretical concepts and to explore the depth of dancers’ experiences of these.

Relevance to category: This research looks at wellbeing in a more unusual sample compared to much work in this area. It goes beyond looking at wellbeing alone, investigating links with other mental constructs and processes (resilience, detachment, rumination).

Why this submission: There is comparatively little research on the wellbeing of dancers that focuses on aspects other than eating disorders and perfectionism. Using a mixed methods approach in particular is less common and allows a deeper insight into how the psychological constructs in question are truly experienced. Resilience is a popular concept at the moment and it is important to be looking at this not just in traditional workplaces. Delegates should find the session interesting as it brings resilience and psychological detachment into a different setting, and the findings may prove relevant for informing further investigations in other samples as well. The submission will likely appeal to the public due to the interesting sample, which will draw people’s attention, combined with a poster that is eye-catching, simple and easy to read.

Single-page handouts will be produced for the session, containing a short summary of the poster and my contact details. My 60 second ‘pitch’ will focus on the findings and their implications for practice, alongside a quick overview of the study (participants, methods) and explanations of the factors examined.

Introduction
This research examines the links between several factors in professional dancers: resilience, psychological detachment, rumination and wellbeing. Both resilience and psychological detachment have been linked to improved wellbeing, but not yet specifically in dancers.

Psychological resilience is a concept that has been explored increasingly in recent years, however little investigation has gone into its role in less traditional jobs such as those in the performing arts. Given the nature of such a career, this is interesting to examine - the tough nature of the training and practice, the exhausting requirement to be performing regularly and the uncertainty and draining effect of having to audition for work - all point to the potential for resilience to be highly beneficial for dancers.

Likewise, psychological detachment from work in leisure time is a concept that may be highly relevant in dancers: the long, late and irregular working hours and the emotional demands of performing suggest that it may be difficult for dancers to detach from their work in the little leisure time that they have. Rumination in leisure time has been found to hinder psychological detachment, in turn negatively predicting wellbeing.

Design / methodology
Participants are a sample of professional dancers, from companies or working freelance, and there are no restrictions on dance style (though this is recorded).

Participants completed an online questionnaire containing measures of affective wellbeing, resilience, psychological detachment and rumination. Six participants also took part in semi-structured interviews after this.
Some additional variables will be measured to allow for further analyses: age, gender, ranking in company and years of experience in the dance profession. The following hypotheses were proposed for the quantitative analysis:
1. Resilience and psychological detachment will be positively correlated
2. a) There will be a positive relationship between resilience and affective wellbeing
   b) Psychological detachment will moderate the relationship between resilience and affective wellbeing
3. a) There will be a positive relationship between psychological detachment and affective wellbeing
   b) Rumination will mediate the relationship between psychological detachment and affective wellbeing

Ethics: Consent was gained before the questionnaire and before interviews, as well as a full debrief at the end of each, and participants understood their right to withdraw. It was unlikely that participants would disclose any issues of concern, but there were links to appropriate support and information in the debriefs as a precaution. During interviews, participant confidentiality would not have been broken without their agreement and in extreme cases where the interviewer was seriously worried for their health or safety. Confidentiality and anonymity was maintained, through requesting participants to create a personal code that can be attached to their data instead of their name, and keeping all data stored securely with a passcode.

Analysis
Quantitative analyses will be carried out on questionnaire data. This will involve moderated and mediated regressions to test the different relationships between the variables as set out in the hypotheses.

Interview data will be thematically analysed. This will involve transcribing the interviews, and reading through transcripts to code the data. The coding process will lead to the identification of prominent themes arising in the interviews, which will be discussed in light of the quantitative findings (and vice versa).

DOP16
Designing for cognitive work in healthcare: an application of formative methods
Denham Phipps, Rebecca Morris, Tom Blakeman, Darren Ashcroft, The University of Manchester
Category: Research Design, Analytical Techniques and Practical Applications

Introduction
With interaction between diverse staff and service user roles, and tasks that vary from the straightforward to the complex, healthcare settings can provide a challenge for work system design. A specific concern is supporting the adaptive and collaborative cognitive work that often occurs in these settings (Cook & Woods, 1994). This requires methods that capture the technical and organisational dynamics of healthcare practice and translate these into requirements for work system design and implementation.

Rasmussen et al. (1994) and Vicente (1999) advocate a “formative” approach to the analysis of complex cognitive work. The basic premise of this approach is that because the sociotechnical characteristics of a work setting (the natural and the human-made processes that comprise the setting, and the activities that are performed to manage these processes) provide the context for behaviour within that setting, it is these characteristics rather than the behaviour itself that should be the initial focus for analysis. A formative approach is therefore complementary to, but different from, a “descriptive” approach that focuses primarily on the behaviour itself, such as task analysis.

The aim of our study was to use a formative method to examine the cognitive work involved in one complex healthcare task – the management of acute kidney injury (AKI) across
primary and secondary healthcare settings – and consider the insights that were obtained by applying this approach.

**Method**
Our study used a qualitative design. The primary data source was semi-structured interviews conducted by author DP with 7 pharmacists and 7 doctors, purposively recruited from three hospitals in north-west England and a hospital in the east Midlands. During each interview, the participant discussed his or her experiences of managing patients who were at risk of developing AKI, or who had developed AKI. Each participant gave informed consent to be interviewed about his or her work. With participants’ consent, each interview was audio recorded for subsequent transcription.

**Data analysis and results**
We applied the first three phases of Vicente’s (1999) cognitive work analysis to the data. For the **work domain analysis** phase, which describes the system upon which the practitioners are working, we developed an “abstraction-decomposition space” for the physiological and organisational contexts of AKI. For the **control task analysis** phase, which describes the scenarios that arise from the work domain and what needs to be done about them, we identified from the interview data the general scenarios that occur during the management of AKI, and the key decisions and actions made in dealing with them. For the **strategies analysis** phase, which describes how practitioners make decisions and carry out tasks, we identified the ways in which data is gathered and used during the scenarios in the control task analysis.

In order to ensure that the findings were consistent with the experiences of primary care professionals, we compared them with transcripts from interviews conducted by author RM with primary healthcare practitioners (12 doctors, 10 pharmacists and 8 nurses) from three geographical regions of England. The findings were reviewed by the other authors (a pharmacist and a general practitioner) to ensure that they were technically accurate and represented the accounts provided by the participants. We also presented the findings to one of the study participants (a hospital pharmacist) and two other healthcare professionals (a renal consultant and a specialist nurse) to comment on how well the findings reflected their experiences.

Through our analysis, we obtained a number of insights about the management of AKI. Firstly, it requires the practitioner to manage two “systems”: the patient’s physiological processes; and the organisation of care delivery. Both systems provide purposes and priorities to be fulfilled (for example, maintaining well-being), and various functions and objects by which they are fulfilled (for example, medicines taking). Secondly, management of the clinical situation can be characterised in terms of interplay between situation assessment and taking action; in effect, a “decision cycle” that is mediated by the work domain. Thirdly, strategies for moving between assessment and action vary according to the scenario. Explicit rules of thumb appear more prevalent in the detection of and response to AKI, while, post-episode treatment appears to be less amenable to heuristics; instead, decisions here are made with direct reference to the physiological and care delivery context.

From the findings come suggested ways in which the work system could be (re)designed to ensure effective task performance. These include representation of the patient’s state, assistance with assimilating data and choosing courses of action, and providing facilities for collaborative working. However, one question raised but not addressed by the analysis was how the different physiological and organisational effects to be achieved are prioritised in the case of a given patient.
Discussion and conclusions
Our findings demonstrate the value of using a formative analysis to examine a complex task. This provided a representation both of the physiological and organisational processes associated with the task, and of the information and actions required to manage it. We suggest further work to refine formative methods; in particular, there is a need to improve their accessibility and practical utility.

References

DOP17
Creating practical guidance including a model of change management on managing safety critical changes in the rail industry
Mary-Elizabeth Cross, RSSB
Category: Leadership, Engagement and Motivation
Change is a constant feature of any organisation or industry and the railways is no exception. The railway industry is constantly undergoing change, either as a result of maintenance and renewals, the introduction of new types of rolling stock or the implementation of new technologies. While change can be an exciting opportunity and a way to increase the capacity and safe performance of the railways, it may also be a time of dis-comfort for some and can create an environment where drivers can become confused or distracted by the change is it not well managed. To maintain the safety operation and integrity of the railway system at all times it is imperative that these changes are managed as smoothly as possible by considering the end user or operator as an integral part of the system.

Based on the scale of changes and the need to make sure front line staff are given the most appropriate information, a RSSB research project was created to better understand the risks and mitigations associated, with infrastructure, technological and operational changes and the effects of these on train drivers. The RSSB project ‘Supporting drivers on routes undergoing significant change’ aimed to look at the effects of change on drivers, how change can affect their driving performance, how briefings or training of infrastructure or technological change can be improved, what support Managers need when managing drivers who are undergoing change as well as how these all link to existing change or project management processes.

In order to establish how best to manage drivers through significant change, it was considered fundamental to first understand the issues which impact effective training and change management. Phase one of the project involved collecting data from drivers, driver managers and senior managers using interviews and workshops, and carrying out a literature review. The workshops and interviews were carried out to ascertain the main issues associated with managing drivers on routes undergoing significant change. The workshops and interviews revealed issues surrounding the effectiveness of the current driver briefings on change. The literature review focused on the main issues that impact on training such as transfer of training, knowledge acquisition and information overload.

Based on the findings from phase 1 of the research the project aimed to produce some practical and useable guidance to help manage drivers undergoing significant change. The output of this project has been a comprehensive Good Practice Guide (GPG) aimed at operational managers and project managers to help them to both increase their awareness of the impact of change on people, what their Driver’s capacities and capabilities are, and what management practises they can utilise to help drive the change.
As a practical tool provided by the GPG the authors aimed to identify an applicable model of change management to help give the audience a visual and practical model of effective change management. Change management models were seen an appropriate and practical tool to capture and simplify the theory and principles of the change management process (Calder, 2013) in a visual way to engage operational staff. Several models of change management were explored to assess their applicability to safety critical changes. A thorough review was undertaken which reduced the number of applicable models:

- Lewin’s ‘Unfreeze – Freeze model’
- Bridge’s ‘Transition Model’
- Prosci’s ‘ADKAR model’
- Kotter’s ‘8 step change model’

Upon review Kotter 8 step model and Bridges’ transition model were considered the most appropriate models of change-management processes that could be applied to safety critical changes. Lewin’s model was rejected because it was considered to be too simplistic and more suitable for smaller scale change. Research suggests that the approach advocated by this model is more focused towards facilitating change rather than providing pre-planned steps for change. The ADKAR model was not seen to be an appropriate model to apply to safety critical changes as it dismissed the emotional aspects of change and does not allow for individual differences in relation to change (Varkey & Antonio, 2010). In contrast, both Kotters 8 step model and Bridges’ transitional model view change as a transformation or transition as opposed to a simple and short process. Kotter’s model specifically provides a detailed change-management process which is intuitive with clear and easy steps to follow. Also Bridges’ transition model focuses on the individual’s reaction to change, which is seen as key in effectively managing the effects of change and in making change a positive experience.

The principles and theory of these two models were combined to form a new and amalgamated model of change management for safety critical changes entitles ‘The Amalgamated Model of Safety Change Management, 2015,’ (Figure 1). This bespoke model is based on established theory of change management and provides clear and easy to follow guidance. This model combines both the organisational aspects of change, alongside the consideration of the effects of the individual, as well as signposting to rail industry specific activities that will help to mitigate the safety performance risks posed by the change. It is therefore considered to be a useful tool that facilitates and enables effective and sustained change in safety critical environments.
Figure 1: The amalgamated model of Safety Critical change

While the steps are described sequentially and numerically, the safety change could mean that some steps are conducted in parallel or that iterations could be required, for example if step six identifies that performance is not to the desired standard then an iteration may take place back to step four to clarify the purpose, provide greater acknowledgement of the ‘letting go’ part of the transition etc. The table below describes each of these stages in more detail and maps them to Bridges’ and Kotter’s model.

The model has been included in the Good Practice Guide that is available on the RSSB website. The GPG created as an output of this project represents a collation of RSSB research and good practice relating to briefing, training and change management. It is designed to be used as a reference guide and a source of useful information to help those who work in the area of operational management, training, briefing or project management. This GPG provides information and practical guidance to anyone who needs to understand, manage or contribute constructively to the analysis, design, delivery, review or assessment of driver training and other competence management activities during periods of significant change. The GPG aims to move its users past the minimum standard as required by legislation and encourages individuals to go beyond the ‘basics’ when managing projects based on significant change. The guide also provides some tools to develop driver training and briefing. The overall aim of this guide is to highlight the different factors, both individual, process and organisational, that affect how change is managed to reduce the possibility of overload for drivers. The areas covered by the report include good change management practices regarding communication and the planning of change; how to design materials to reduce overload; how best to teach adults; improving the content and structure of the briefing itself and individual factors such as
cognitive capabilities and motivation to learn. Testing and further user feedback will be sought on the usability of the GPG and applicability of the amalgamated model of safety critical change and follow on work will be undertaken to test it more extensively as part of the implementation plan of the project.

Bibliography
RSSB (2014b) ‘Taking safe decisions – How Britain’s railways take decisions that affect safety’
DOP18
Obstacles to Motivations for Knowledge Sharing
Ebere Dike-Ugwu, George Michaelides & Kate Mackenzie Davey, Birkbeck, University of London

Category: Leadership, Engagement and Motivation

Introduction
This paper, which is part of my PhD, explores how social and organisational factors hinder identification, and prosocial and proactive motivations for knowledge sharing. Literature on prosocial and proactive motivation and on the role of identification in motivation for knowledge sharing focus on creating opportunities. The obstacles to identification and motivation for knowledge sharing have been overlooked. This paper seeks examine these obstacles in order for organisations to enhance and support knowledge sharing.

Exploring Identification formation is vital as identification sets the social context necessary for knowledge sharing among employees (Bapuji & Crossan, 2005; Nahapiet & Ghoshal, 1998) and has been linked to employee motivation (Johnson, Johnson, & Heimberg, 1999). Knowledge sharing is a form of prosocial behaviours (Gagné, 2009) which has been shown to be vital for overall employee performance (Van Dyne & LePine, 1998). Similarly, research has also shown that when employees are proactively motivated they are more likely to seek knowledge and opportunities for improving things (Crant, 2000).

Literature review
According to Social Influence Theory identification occurs “when an individual accepts influence because [they want] to establish or maintain a satisfying self-defining relationship to another person or a group (Kelman, 1958). This is attributed to the “need to maintain a favourable image within a reference group” (Malhotra & Galletta, 2003).

Proactive motivation theory purports that employees are motivated to act proactively when the job offers increased autonomy. The rationale is that autonomy increases employees flexible role orientation and role breadth self-efficacy and employees leading to increased confidence in their ability to take on extra roles (Parker, 1998, 2000)

Based on prosocial motivation employees are motivated to make a prosocial difference when the job offers opportunities for contact with the beneficiaries. The rationale is that contact with beneficiaries elicits a affective commitment as employees are more likely to receive feedback about the impact of the action (Grant, 2008).

Design
The study was conducted in a technology focussed research organisation with a network type structure. Each of the 14 participants, 9 males and 5 females, belong to teams of 10 to 15 members and works on at least one project at a time. A qualitative approach was used. 60-90 minute semi-structured interviews were conducted and data analysed was with template analysis. The preliminary results identified two major themes: Organisational structure and social interaction.

Results
Organisational structure:
All participants viewed knowledge sharing as part of their role, however organisational structures influenced participants’ motivations for sharing knowledge. Most participants had strong project identification which was attributed to the common goals shared, clear understanding of project member roles and their daily interactions. Participants worked together over significant periods of time, had shared experiences often going on trials together and were motivated to share knowledge. At this level, identification formed the basis of motivations for knowledge sharing.
In contrast, most participants experienced deidentification at the team level. This was due to organisational changes which saw a slow and steady migration to non-functional teams. These teams comprised of a loose group of people who, in theory, had common skills, attributes and common objectives. However, in practice, these skills, attributes and objectives were not clearly identified or understood. Teams were fragmented and most participants suggested the term ‘team’ was inappropriate but rather “a mixed bag of people” with no common goal. At this level, deidentification hindered motivations for knowledge sharing as participants had limited understanding of the needs of team members.

Social interaction:
Poor feedback leads to demotivation. Although social interaction mainly occurs at the project level, feedback occurs largely at the team level. Team managers perform yearly personal development assessments where employees receive feedback on their performance on projects. Acknowledgement of knowledge sharing activities are “transient” and “easily forgotten down the line”. There is no acknowledgement for the “spark that set something off” as the focus is very much on the end result. Lack of feedback presented obstacles to motivations for knowledge sharing because “If it disappears into a black hole you say ‘what is the point in doing it’”.

Poor feedback, work overload, project deadlines and lack of free time hinders proactive motivation. Employees are given opportunities to embark on mini projects of their own choice. However, the knowledge generated for these mini projects are largely “not acted upon” and “their impact” not shared across the organisation. Participants also cited work pressures as a reason for not being motivated to take up the offer.

Project practices hinder prosocial motivation. The drive for all employees to be fully utilised means they are booked on project activities for the year reasonably early. All project activities are allocated a project code and consent from team leaders required to embark on extra role activities beyond a couple of hours. Consequently, providing a day or weeks’ assistance to someone in need is often met with a “there is no budget for it” response.

Discussion
Although the analysis is still at an early stage, these preliminary results highlight some very interesting findings. Results show how organisational structures can encourage as well as hinder motivation through identification and deidentification (Pratt, 2001) respectively. They also show that when employees do not have shared knowledge they are less likely to develop shared identity which can be explained by identity formation being based on shared interest (Johnson et al., 1999). Furthermore when employees do not have shared identity they are not motivated to share knowledge which can be seen as the context within which motivation occurs (Nahapiet & Ghoshal, 1998).

The demotivating effect of poor feedback can be explained by the need for reciprocity where acknowledgement is seen as a form of a conditional gain (Hung, Durcikova, Lai, & Lin, 2011). Taken together these results show how organisations on one hand provide opportunities for motivation and on the other hand hinder motivation. They also show the need for organisations to identify their social structures and understand how these structures influence motivation.

**DOP19**
**Understanding the effect of team diversity on creativity. A perspective from the creativity literature**

**Hok Cham Keung**, Manchester Business School

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

Researchers have long suggested that diverse team composition can enhance the level of creativity in team. It is believed that teams with compositionally diverse attributes allow ranges of input, such as knowledge, personality, values and skills to interplay within a social
setting (van Knippenberg et al. 2004), which in turn promotes the production of new and novel ideas. According to the information/ decision perspective (van Knippenberg & Schippers, 2007), a diverse range of knowledge, skills, and abilities (KSAs) could act as available cognitive resources when team members engage in creative endeavor.

Although the proposition that diversity promotes team creativity makes intuitive sense, empirical research on the effect of team diversity on general team performance has repeatedly yielded mixed results (Jackson & Joshi, 2013, Milliken & Martins, 1996, Williams & O’Reilly, 1998, van Knippenberg & Schippers, 2007, Reiter-Palmon et al., 2012). For instance, more recent meta-analytic attempt has revealed a positive correlations between job related diversity and innovation (van Dijk et al., 2012, Horwitz & Horwitz, 2007), while other meta-analysis has reported a slight negative correlations between diversity and general team performance (Milliken & Martins, 1996, Williams & O’Reilly, 1998). These inconsistent have prompted researchers to further investigate the moderating variables which might be at play in the relationship of team diversity in relation to general team performance and creativity (van Knippenberg & Schippers, 2007).

Over the past decades, primary researches into the moderating variables between general performance and team diversity has been on the rise (Guillaume, Dawson, Woods, Sacramento, & West, 2013). These moderating variables span from organizational climate/culture, leadership, task characteristics, to macro societal and cultural factors. Although reviews on these factors have regularly been reported (Guillaume et al. 2015; Jackson & Joshi, 1999), researches into these moderating variables have largely used general team performance as key criterion, but not creativity or innovation as the main criterion. We argue here that the positive results observed for creativity or innovation performance can be further understood via an investigation on the unique set of moderating factors that might distinct from general team performance. According to the Hirst, van Knippenberg, Zhou, Zhu, & Tsai (in press), creativity and innovation process and output are considered distinct from general team performance criteria. These differences are often observed in the priorities of the work task, where creativity tends to emphasize for exploration, while general team performance tends to focus on efficiency. These nuances in creativity and general team performance signify a gap in the literature, and prompt for a the current interest to deepen the understanding of the relationship between team diversity and creativity.

In order to address the effect of diversity on creativity in teams, the current research aims to adopt approaches and lens from the creativity literature in understanding the relationship between diversity and creativity. In particular, attempts will be made to investigate the moderating and mediating factors that influence the relationship between team diversity and team creative outcome.

**Approach to understand the relationship between team diversity and creativity**

Existing researches on the link between diversity and creativity has mainly been rooted from the diversity literature, where dominant theories, such as categorization-elaboration model (van Knippenberg, 2004), and faultline theories (Lau & Murnighan, 1998) has been largely influential in understanding the relationships between diversity and general team performance. Given the focus of the study is on team creativity as performance criteria, the current study looks to assimilate literature of team effectiveness with the literature of creativity, namely the IPO model of team effectiveness (McGrath, 1984) with the 4P model of creativity Rhode (1961/1987) to understand the relationships between team diversity and team creativity.
Using the above conceptual framework, the current research looks to investigate the following research questions:

- What effects does different types of diversity variables (input) on creativity? Diversity variables include both surface level and deep level diversity, such as general demographics, personality, and functional expertise.
- What are moderating variables (conditions) that could influence the effect of diversity on creativity?
- Referencing from the literature on creative process, how does diversity in teams affect in each stage of the creative process (the mediators), and subsequently to the generation of creative ideas or product?

**Contribution to the literature**
The study is different to previous studies of diversity as its specifically anchors towards the performance criteria of creativity. It intends to add value to the literature by leveraging existing theories and approaches in the creativity literature to elucidate the complex relationships between team diversity and creative outcomes. Methodologically, this study will also employ more stringent definition and operationalization of creativity to elevate the much needed research rigour in creativity research. Moreover, it is the first study to the authors’ knowledge that investigates the effect of diversity on the team creative process and its subsequent creative product. This research can potentially deepen our understanding of how diverse teams can benefit as well as limit effectiveness of team creative performance. From a practical point of view, this piece of research aims to provide practical insights for businesses intended to leverage or manage their workforce diversity for higher creative performance.

**Current status of research and intent**
This research forms the basis for an ongoing 2nd year PhD study. At current stage, the literature review has been completed with a conceptual model. The next sequential step of the study is measurement selection. It is envisaged that the current piece of research would be conducted in field settings using quantitative survey method. Business proposal to contact organization for access is currently developing in progress and will be sent out to potential data providers in due course. Given the time limitation, the current submission aims to provide a conceptual piece of presentation. The author is willing to consider this submission for poster presentation, should the current stage of research does not suffice for a 20 minutes PowerPoint presentation.

**Reference**


Contents

1  Wednesday 4 January
60  Thursday 5 January
190  Friday 6 January
263  Posters
Division of Occupational Psychology
Annual Conference 2017
4–6 January: Hilton Hotel, Liverpool

RESEARCH INTO PRACTICE:
RELEVANCE & RIGOUR

Abstracts