Wednesday 8\textsuperscript{th} January

W01
Poster Snapshot Session
Theme Profession
Poster presenters will be providing a brief overview of their poster in order to showcase their work. This will take place on Wednesday 11:00 – 11:40 (W01). The traditional poster session will occur during the lunch break on Wednesday 12:45 – 1:30pm in the Regent Room.

W02
Research Excellence Framework 1 - Getting diversity at work to work: What we know and what we still don't know
Yves R. F. Guillaume, Senior Lecturer in Organisational Behaviour at the Work and Organisational Psychology Group at Aston Business School, Aston University
Theme Research

The Focal Article

Workplace diversity, in terms of gender, ethnicity, functional background or any other attributes people differ on, is often thought to increase organizational effectiveness. Diversity enables the organization to draw from a larger pool of talent, increases its capacity to innovate and make better decisions, and also allows it to access a wider customer base and to better satisfy customer needs. Yet, often diversity at work leads to less favorable work outcomes, such as more absenteeism, weaker employee attachment, more conflict, poorer in-role and extra-role performance and more discrimination.

The consequences for organizations are obvious; when diversity at work does not work, it may result in lower revenues due to missed business opportunities, higher costs in view of lower employee morale and expensive lawsuits involving employment discrimination. Getting diversity at work to work seems not only the right thing for organizations to do; it is also the strategic thing to do. Unfortunately, not only is our knowledge limited as to how, when and why diversity affects work outcomes, we still know very little about which diversity management practices are most effective. Moreover, we have failed to communicate effectively to organizations the little clear evidence that is available. This often leaves practitioners and policymakers in the dark as to what they must do to get diversity at work to work.

The focal article analyses the literature on diversity and its management, and summarizes what we know about how organizations can get diversity at work to work and what we don’t know yet. In the discussion the article points to the need for more research on how diversity at multiple levels affects work and organizational outcomes; the development of integrative theory which takes into account that diversity might not only engender separation and variety but also disparity; as well as to the need for more empirical attention to the climates or cultures that facilitate the positive effects of diversity on work and organizational outcomes. The article suggests that future research should also identify those people management practices that are most powerful in the creation of a positive diversity climate, and the factors that moderate and underlie its effects on work and organizational outcomes. The article concludes with a proposal about how this might be achieved.

The Program
The research sits in a wider program of studies concerned with how diversity affects work outcomes and how organizations can manage diversity effectively. The research so far has examined the conditions under, and the
mechanisms by which diversity affects work outcomes (Guillaume, Brodbeck, & Riketta, 2012; Guillaume, van Knippenberg, & Brodbeck, under review; van Dick, van Knippenberg, Frueh, Guillaume, & Brodbeck, 2008). The research further looked at how diversity enfolds its effects on work outcomes at multiple levels (Brodbeck, Guillaume, & Lee, 2011). Recently, the focus of the research shifted onto how organizations can create inclusive working environments that facilitate innovation, effectiveness, well-being, and social responsibility among all employees (Guillaume et al. 2013).

The Impact
The visible and potential impact of this research has centered on making the aforementioned work accessible to and discussing it with practitioners, policymakers, and organizations by means of workshops, keynotes, roundtable sessions, collaborations, and development of tools; organizing a EAWOP Small Group Conference on ‘Bridging the gap between science and practice in the area of diversity management’; and editing a special issue on ‘Getting diversity at work to work’ and sharing the insights gained with practitioners, organizations, and policymakers at a launch event that was hosted by DOP’s Diversity and Inclusion at Work Group. The work also lead to the foundation of a work group consisting of renown diversity and inclusion researchers and practitioners from the UK and across Europe that seeks to accumulate evidence-based knowledge on how to manage diversity in the workplace effectively and make the knowledge accessible to organizations and practitioners. The group is currently in the process of applying for grants and initiating research collaborations with organizations.

References


Yves Guillaume is a Senior Lecturer in Organisational Behaviour at the Work and Organisational Psychology Group at Aston Business School, Aston University. Yves is a Chartered Psychologist and holds a PhD in Management from Aston University. His current areas of research include innovation, effectiveness, and well-being in interdisciplinary and culturally diverse teams and organisations, as well as leadership and corporate social responsibility. Yves is an editorial board member and guest editor of the Journal of Organizational and Occupational Psychology Journal. His research has been published in outlets including Academy of Management Journal, Journal of Organizational Behavior, Human Relations, Journal of Occupational and Organizational Psychology, Journal of Cross-Cultural Psychology, and European
Journal of Work and Organizational Psychology. In addition to his academic work, he consults organisations in creating inclusive work environments that facilitate employee innovation, effectiveness, well-being, and social responsibility.

**W03: Panel Discussion**

**How would you like your occupational psychology, Sir? Ethical? Scientific? Evidence based? Or just as it comes?**

Richard Kwiatkowski, Cranfield University, Emma Donaldson-Fielder, Affinity Health at Work, Clive Fletcher, Goldsmiths College, Rob Briner, University of Bath

**Theme Profession**

The main purpose of this session is to provide an opportunity to consider some of the dilemmas and challenges around what it means to be an occupational psychologist in 2014 and beyond. Numerous authors have grappled with what it means to be a professional psychologist. However, we are not going to revisit the academic debate here, but rather to challenge psychologists to examine how our practice is shaped by scientific evidence, the shift of academics and training from psychology departments to business schools, the position of occupational psychologists in relation to other practitioners working in the same space, our ethical standards, and our power as professionals relative to the power of our clients.

This discussion will include short presentations and vignettes from four presenters who care passionately about occupational psychology. It includes professors and practitioners, former chairs and former apostates, Academicians and advisors, a recent ‘most influential HR thinker’ and two profiled in ‘The Psychologist’; who will confront the audience and help them examine and discuss their own practice and other’s practice in the light of challenges to working honestly as psychologists in organisations. For attendees it promises to be a challenging and thought provoking hour.

Working as a psychologist in an organisation has become increasingly difficult in the occupational/ business/ industrial/ work domain. In other branches of psychology, until very recently, roles and expertise were clear and accepted. A clinical psychologist, for example, would naturally work in a hospital setting or a clinic, be a scientist practitioner, would use evidence-based methods, as approved by NICE, would accept referrals from doctors and psychiatrists, would provide assessment using standardised measures, and therapy using a range of modalities. It has never ever been so simple for occupational psychologists.

We would all subscribe to the idea that our work is based on evidence; but is it really? How many people setting up assessment centres will evaluate them? Will we simply rely on the magic dust of a meta-analysis we vaguely recall reading about during our MSc? Or perhaps worse yet, will we compromise because the client can only afford a 15 minute interview, when we know the research evidence suggests the longer the better? “Better a 15 minute situational interview than a 45 minute discursive ramble with untrained assessors” but is that really the choice? Are we interested in the ethics of evidence? Do we want to know the evidence? If we know the evidence do we act upon it? Perhaps we always do what we’ve always done? Is this a sin of omission? Is this ethics?

It now appears to be the case that more academic occupational psychologists are employed in business schools than in psychology departments in the UK. In America this "tipping point" was discussed in a SIOP Journal in 2010; are we just a little bit behind? Does it matter? Does the business school culture inevitably influence our thinking? Is the language of customers, marketing, supply chain, accountancy, logistics and strategy that surrounds us in business schools actually influencing the way that psychology is used? It becomes a tool, used selectively, and not psychologically. Is the debate over the ‘8 areas’ moving our profession out of the psychology department and into the business school? Is this important? Does it matter? Is being a chartered scientist something to be proud of or something to avoid?
As a practitioner, in presenting a consultancy report do we downplay the psychology or emphasise it? What are our clients buying? What is the USP (sic)? Is it science? Is it being scientific? Are we pointy-heads wheeled out by the HR departments to bolster their position? We've got an ‘ology’ as Maureen Lipman might say and that means that we’re scientists. Some of the glamour of the white coat may rub off on us and our HR Masters. HR as a function probably employs most occupational psychologists, and as the CIPD has for many years proclaimed the HR profession does not have the status and influence that it really deserves at board level. So are we, however unconsciously, being used as a status prop for HR? Could that be our value to the organisation? Simply part of the political game?

And what about our ethical position? Part of the community sanction that any profession receives is based on the assumption that it will adhere to a code of ethics that places the interests of clients above those of practitioners. Do we adhere to our code of ethics, as psychologists, or do we actually shift our thinking and our behaviour in the direction of the commercial organisations that employ us? Are we more concerned about the organisation, and getting paid, then those people that our methods and processes impact? This sometimes subtle socialisation can be hard to perceive in oneself. Does it matter? How mindful are we? How self-aware are we of the subtle, and not so subtle, organisational processes that impact on our behaviour? How close to the wind do we sail? Or perhaps we are actually already in the water with the sharks, and in the words of the old joke when asked why we do not get bitten we reply "professional courtesy".

Finally, how close to power are we? Are we really - as was stated in 1960 - simply "servants of power" (Baritz, 1960). Do we function as technicians, perhaps very skilled technicians, or do we function as professionals? Are we called in to look at an organisation’s people and problems or are we employed to put together a selection process predicated on managerialist assumptions, which we never question?

Is there a shift away from the Russell Group universities running MSc courses to Universities lower down the league tables? Does this matter? As psychologists we care little about status but is it actually important? What about our peers? Are there too many people with occupational psychology degrees being produced? Or too few? Do we trust our fellow psychologists to act professionally and ethically with due regard to their knowledge base at all times? What broader planning and talent management is taking place? What is the profession itself doing to enhance its own professionalism?

References


W04: Standard Paper

Interdisciplinarity: What’s in it for Occupational Psychology?

Tom Calvard, University of Edinburgh Business School & Celine Rojon, University of Edinburgh Business School

Theme Research
Interdisciplinarity, defined in terms of the variety of ways of bridging and confronting the boundaries of disciplinary subject areas (Huutoniemi, Klein, Bruun & Hukkinen, 2010), is a topic of profound, long-standing importance in relation to the philosophy of science and the social construction of knowledge. In terms of investing in the future, we believe the time is ripe for those working in the field of occupational psychology (OP) to revisit the concept – after all, a better understanding of interdisciplinarity carries great value to a variety of stakeholders, given that it contributes to a clearer framing of issues such as: modes of knowledge production, education, publishing and the features of high-quality evidence-based research, as well as how to link research to economic innovation and policy impact in the knowledge economy.

Our paper and proposed session thus revisits the concept with three aims in mind. Firstly, to present a literature review clarifying some of the background terminology and debates surrounding interdisciplinarity in the social sciences, with particular reference to (occupational) psychology and management or business studies. Secondly, we discuss a study exploring the nature and prevalence of interdisciplinary content in a range of leading international psychology and OP outlets, presenting findings from our coding of all major articles and issues across the last five years. Finally, we conclude with some future implications and recommendations for practitioners and researchers wishing to develop their engagement with the concept of interdisciplinarity in the field of OP, with reference to the status of its own ‘eight areas’ of inquiry and expertise.

Background
Perhaps the most important questions to ask about interdisciplinarity are also the most obvious. Do we need more of it informing our research and practice? Are most of us already doing a fair amount of interdisciplinary work? If this is so, then are we aware of how much, and in what ways, and how effectively? Although interdisciplinarity is commonly used to describe general interactions between subject areas, different terminology can appear depending on exactly how subject areas are combined; ‘multidisciplinarity’ or ‘crossdisciplinarity’ tending to refer to more detached or one-sided pooled combinations, with ‘interdisciplinarity’ and ‘transdisciplinarity’ implying more mutually complex, higher-order syntheses. There is also the issue of what exactly is borrowed from other disciplines or what arises from their being combined; this can include contextual knowledge, encyclopaedic knowledge, empirically linked relationships, methodological tools, theoretical concepts or predictions, datasets and so on (Huutoniemi et al., 2010). We would argue that, whether interdisciplinarity is inherently valuable or not, what does matter is being more explicit about our levels of integration, practices and rationales when including or excluding multiple subject areas, fields or bodies of knowledge.

This is important because doing so can optimise the processes of knowledge production in a variety of ways, including avoiding ‘reinventing the wheel’ with redundant data and concept-based jargon that has already been formulated elsewhere, and in helping find solutions to messy, multidimensional societal problems that do not neatly correspond to the specialties of a single field.

Unsurprisingly, albeit a little ironically, the literature on interdisciplinarity is itself scattered widely across disciplines, and is present in uneven amounts from one discipline to another, although work often appears most explicitly in relatively generic journals dealing with social science, economy, society, education, innovation, research funding and other areas of policy. Whilst societal issues or phenomena (e.g. globalisation, internet technologies) and philosophical or paradigmatic viewpoints (e.g. postmodernism, feminism) can provide clear talking points across subject areas, it is also institutions and historical traditions that can both help or hinder the effective production of interdisciplinary knowledge in any given instance. For example, whilst funding bodies and individual research centres may be highly encouraging of interdisciplinary endeavours, the number of attractive, high-status interdisciplinary journals or career paths is still rather low, meaningful change thus remaining punctuated, uneven and conflicted (Jacobs & Frickel, 2009).

In OP, and the field of management and organisational studies, discussions of interdisciplinarity are intermittent and fairly limited, although some key issues are raised. The ‘hype and hope’ debates of interdisciplinarity have been
described, and the central problem of differing incentives to cooperation emphasised: Whilst practitioners hunger for flexible and speedy access to a broad blend of pragmatically useful knowledge areas, academics still tend to focus on commanding the respect of their peers within a narrowly single area over a prolonged period of time (Knights & Willmott, 1997). Clearly, at the academic-practitioner divide, there is a challenging tension to produce knowledge that is rigorous, relevant, evidence-based and accessible (Anderson, Herriot & Hodgkinson, 2001), although it remains an open question to what extent the appeal of interdisciplinarity can contribute to resolving some of this tension. Furthermore, for OP academics and practitioners alike, boundaries often exist for good reason, and if OP seeks to become more interdisciplinary, it is making a gamble, for whilst it may produce novel, high-impact insights, it may equally lose some of its confident legitimacy and distinctive coherence (Markóczy & Deeds, 2009; Zahra & Newy, 2009).

Current Study
Our study follows on and takes inspiration from the debates illustrated above and other recent reviews of interdisciplinarity (e.g. Siedlok & Hibbert, 2013). However, we make our contribution by focusing our attention squarely on OP, and its interdisciplinary potential as a field of the ‘base’ discipline psychology, adjacent not only to (other) social sciences, pure sciences, and arts/humanities, but also to many more neighbouring, specialised ‘sister’ fields within both psychology and business/management. As such, we are currently coding major articles across the five-year period 2009-2013, from an international (US, UK, Europe) range of outlets in OP and general psychology, including both leading journals and popular ‘trade’ magazines aimed at professional communities: The Psychologist, OP Matters, The I-O Psychologist, APA Monitor on Psychology, Annual Review of Psychology, Annual Review of Organizational Psychology and Organizational Behavior (forthcoming), Review of General Psychology, Psychological Bulletin, Psychological Review, Psychological Science, Psychological Science in the Public Interest, American Psychologist, European Psychologist, Behavioral and Brain Sciences, Scientific American: Mind. Articles are coded according to a range of relevant quantitative and qualitative criteria, including relevance to the eight areas of the DOP, interdisciplinary keywords used, extent of interdisciplinary integration, authors’ backgrounds, links to the BPS’ eleven psychology journal titles and special issues/high impact interdisciplinary topics (e.g. The 2012 London Olympics).

Within our session, we describe general trends of this analysis, which will be available at the time of the conference, and highlight some articles as case study examples of areas where levels of interdisciplinarity and links to OP are particularly strong and influential. We also critically pan across areas of research that obliquely concern themselves with organisational issues and are unashamedly interdisciplinary in their agendas or applications, including sensemaking, socio-technical systems, diversity science, behavioural or experimental economics/finance, neuroscientific inquiry, job design and economic sociology.

Conclusion: Implications for Research and Practice
We conclude our session by discussing implications for those working in the field of OP, and corresponding future challenges and opportunities around working with the concept of interdisciplinarity. There are potential issues of university reform; making structural, cognitive, and cultural changes to higher education and the feasibility or desirability of more ‘boundaryless’ career pathways. For example, campus-wide institutes and interdisciplinary modules remain key change areas worthy of attention. Other institutions and traditions such as OP-relevant journals and the ‘eight areas’ competency framework of professional development may also benefit from interdisciplinary dialogues, evaluations, guidance and linkages. Effective changes are likely to be community-driven and incremental, with robust mechanisms for subsequent learning and wider adoption and diffusion.

We finally discuss how, as OP professionals, we are well placed to appropriate in part the topic of interdisciplinarity within our own field and practice, as a source of societal and political influence. OP could potentially act as a hub for other disciplines and a greater source of expertise on the topic itself, given that interdisciplinarity raises questions connected to inherently familiar areas of OP: identity, boundaries, diversity, learning, creativity, power/politics,
cognition and other salient concepts, such as teamworking or selection. OP academics and practitioners can play a role in developing the concept of interdisciplinarity as it operates at workplace interfaces; finding a firmer home for it amidst the language of development, careers, jobs, occupations, competencies, cultures and entrepreneurial business aspirations. Theoretically, we consider interdisciplinarity as an evidence-based criterion for guiding the future research consumption of OP practitioners; and the parsimony, reliability and validity trade-offs attached to combining diverse subject areas. Interdisciplinarity already features heavily in many workplaces and industries around the world, and will continue to shape our understandings of knowledge and (social) science in the 21st century. It is perhaps a more familiar or accepted term in some organisational contexts — such as academia, healthcare, business mediation and globally active family businesses — than it is in others. Yet, it is not so much whether you practice interdisciplinarity as it is how you practice it, and this is an exciting time for OP to feature more strongly in the debate; to take stock of the issues in relation to itself and the many fields and settings surrounding it.

Selected References

W05: Keynote Session
The New Psychology of Leadership: From Theory to Practice
Professor Alex Haslam, Professor of Social & Organisational Psychology, University of Queensland, Australia

Effective leadership lies at the heart of human progress and it is generally explained in terms of the personal qualities of leaders that set them apart from others — as superior, special, different. In contrast to this view, The New Psychology of Leadership argues that effective leadership is the product of individuals’ ‘we-ness’ rather than of their ‘I-ness’, and is grounded in leaders’ capacity to Create, Advance, Represent and Embed a social identity that they share with others. This perspective forces us to see leadership, influence and power not as processes that revolve around individuals acting and thinking in isolation, but as group processes in which leaders and followers are joined together — and perceive themselves to be joined together — in shared endeavour. This talk presents evidence of these processes in action, and the results of recent research which has attempted to translate the theory of identity leadership into practice.

Reference

W06
JOOP Session 1: Getting Your Work Published
Jonathon Halbesleben, Editor, JOOP & University of Alabama

Theme Research

This session will offer attendees advice on publishing their work in occupational psychology journals. It will be led by Jonathon Halbesleben, editor of the Journal of Occupational and Organizational Psychology, who will review 10 of the
most common errors that authors make when they submit their papers along with solutions for addressing those errors. The common errors will be based on desk rejected and rejected papers at JOOP

**W07: Standard Paper**

**Black box to Glass Box: Viewing active ingredients in fitness goals**

Dr Cheryl Travers, Dr Ray Randall, School of Business and Economics, Loughborough University, Mr Harry Hogarth, School of Sport, Exercise and Health Sciences, Loughborough University

Theme Individual

When people embark on personal development journeys, often we are not privy to the intricacies of the transformational process that takes place. Development ‘makeovers’ are black boxes: we see the inputs (e.g. a new diet) and outputs (e.g. weight loss). However, the psychological processes that enable personal change (i.e. transfer characteristics) remain hidden. It is plausible that some of these processes have a significant impact on the individual beyond physical health and fitness (e.g. enhanced self-esteem) having implications for behaviour in other contexts (e.g. competitive employment market/work settings). We describe the use of a reflective diary methodology designed to capture the internal workings of a health/fitness goal-striving process attempted by a cohort of UK final year business and management undergraduates. They had recently completed an industrial placement and were contemplating their future as organisational managers and leaders. As part of an optional module entitled Advanced Interpersonal Skills, they were working on 3 development goals that were specific and challenging to them (Locke & Latham, 1990). They chose goals which they felt would have the greatest impact on them now and in the future. A large proportion (c50%) chose to work on health and fitness.

The students were preparing to enter challenging environments: junior and trainee managers require a high degree of self management and self awareness, emotional intelligence, and resilience. They also need to quickly develop empathy about the issues facing their employees and teams. As a response to the demand for more employable graduates, business schools are attempting to better prepare their students for the world of work. Employability, Transferable skills and Key Information Sets increasingly drive curriculum design and development.

In our study, goals were identified, formulated and implemented by students during the final 4 months of their university career. Via ongoing written diaries, and pre and post intervention reflection questionnaires, goal setters observed their goal setting in action, and noted their physical, behavioural, and psychological responses. This data allowed us to explore the contents of the black box of each individuals’ development intervention (i.e. the intervening psychological processes) to identify the active ingredients leading to health and fitness goal success. Keeping a reflective diary as part of a goal-setting and performance monitoring process can in itself foster personal development (Gibbs, 1988; Travers, 2013). It may be that diarising activates a number of important psychological mechanisms that have yet to be directly investigated. The processes at play may differ between individuals, according to goal choice and level of engagement in the goal-striving process. It may be that individuals, even in the same intervention, make sense of their experiences in different ways, hence triggering different active ingredients.

We focused on fitness goals because there is a large literature on the potential psychological benefits of fitness-related activity. However, less is known about the psychological processes that are activated and resources that are developed when working towards such goals. We examined whether the processes and resources activated in the pursuit of tangible health and fitness goals were linked to the development of important management competencies. Findings will address: the nature of health and fitness goals chosen; why these are deemed important by goal setters; the key drivers and perceived obstacles to goal success; the psychological processes and resources that were active ingredients enabling health and fitness goal attainment; the potential future impact of these on managerial competencies.
Methodology
Data is based on the health and fitness goals of 60 students (c50% /119) on a module exploring self awareness using a range of theory and methods. Our findings are based on a thematic analysis of the in-depth reflective diary and two pre and post intervention reflective documents (structured questionnaires). There was a varied range of engagement with the goal setting process and the quality of the data varied accordingly. Data for in-depth analysis was limited to those individuals who had fully participated in the process by engaging in frequent active self evaluative reflection. Particular attention was paid to those individuals who undertook the process of setting proximal targets and produced material such as weekly training programmes, food diaries and detailed regular accounts of progress. 20 students met these criteria such that the psychological mechanisms that were operating during the goal striving activities could be more thoroughly scrutinised. We analysed pre-intervention questionnaires framed around previous goal setting experience, and the post-intervention questionnaire to analyse progress made and the processes individuals had experienced as part of their goal setting activity. By comparing both questionnaires, it was possible to note the active ingredients of the intervention and how these were linked to the development of psychological resources that had utility in the work setting. Students were asked specifically to reflect on active ingredients present and an operational definition was offered.

Results: The results will be presented as follows:

1) What types of health and fitness goals were set?
These related to: a generally healthier lifestyle; controlling eating behaviour (e.g. disordered eating/weight control); specific targets e.g. running speed, rugby performance; managing stress and psychosomatic symptoms e.g. poor sleep; unhealthy habit e.g. excessive drinking and smoking. Goals were chosen based on the self awareness models and theories employed in the module, and also via feedback collected from friends and family. Initial reflective documents examined their current health and previous goal setting behaviour/success. Fitness goals enabled greater ease identifying objective measurement, which might be one reason why such a large proportion of the sample chose these goals. However, goal rationale provided suggested that they identified these goals as having contemporary and future importance.

2) What were the key drivers and obstacles that were identified in the goal setting process?
Drivers identified were: work life balance; self/body image; professional image; poor social comparison; feedback from others; identified health risks by doctor/genes; psychosomatic symptoms linked to stress; to increase energy, motivation, confidence, self acceptance, self esteem; management of deadlines/exams; competitive personality; poor past gym attendance; lack of discipline. A small number explicitly set out to enhance employability and future manager/leader potential, but many subsequently found that, in striving for other goals, they actually developed their competencies. Feedback from potential employers at interviews etc confirmed this. The kinds of obstacles identified related to external factors such as time, resources, lack of support, or unexpected events such as injury, but were mostly due to psychological factors such as motivation, denial of a problem, poor self esteem, poor prioritisation of health and academic demands. Some barriers came down to the goal setting process itself – i.e. lack of adequate measurement.

3) What does opening the ‘black box’ via the diaries reveal about active ingredients?
Participants’ diaries and structured pre-post intervention questionnaires revealed diversity in sense-making around intervention activities. Several active ingredients came to the fore from in-depth written reflection. In summary, the use of specific theory and techniques was highlighted as a positive in terms of actually having established frameworks and tested theories to use as a guide to action. Also, proximal targets were repeatedly reported as important to enable short term breakthroughs on the road to a more distal goal. In addition, accountability for goals (to self and to others) was a lever, and the identification and use of a support network which often aligned with feedback seeking activities.
The use of a **reflective diary approach** was key too as it served as a log of activities and outcomes which otherwise would be lost or inaccessible. **Sharing goals with others**, through disclosure, was powerful, however some said they preferred not to share due to the added pressure this placed, and because they preferred to be independent goal setters, able to attribute success to their own effort. This was affected by the personality of the goal setter to some extent. Non-sharers were especially more likely to engage fully with their own internal feedback, essentially via the diary. **Seeking feedback from experts** was seen as very helpful. There was clear evidence for the role of significant others in the success of health/fitness goals as these could provide a great deal of assistance, support and feedback. Also, reflections on goal outcomes revealed the **psychological growth aspects** of health/fitness goals, such as the development of planning skills, the sticking to a routine, the persistence over time, the growth in self-efficacy, awareness of the importance of feedback, and of what inspires and motivates. Reflection showed that these were perceived by many as the development of key psychological resources benefitting them both in the short term and longer term in their lives and careers.

**Discussion**

Young adult goal setters see health and fitness as important, both in the short and long term. The initial drivers of such goal choices are rarely to develop work-related competencies, yet these are frequently the outcome. Analysing students’ reflections, we observed that goals were viewed as beneficial, in terms of current health, image, managing stress and deadlines, reducing anxiety, but also as aids to future careers and roles as managers. For example, self-mastery, control/regulation, confidence, self-esteem, work-life balance, social networking, and managing transitions. It is clear that, aside from improving health/fitness, key psychological/emotional benefits can result, leading to psychological resources to apply time and time again.

Reflective tools can play a key role in allowing observation of the entire goal setting intervention, and in particular, the isolation of active ingredients. Researchers can thus gather previously inaccessible data to formulate theory, but more importantly, goal setters can intentionally increase their exposure to these ingredients (e.g. through seeking more feedback). Reflection also enables sense-making of the intervention mechanisms to make these more concrete. Our goal setters used their own understanding of the active ingredients to further bolster their progress, as was evident in several examples which will be presented as cases. In other words, individuals crafted their development around their own sense-making about what was helping/hindering them to achieve their goals.

The active ingredients identified by participants include a number of activities and processes already shown to improve organisational performance (e.g. feedback seeking, accountability for actions, reflecting on success/failure). In other words, striving towards fitness goals can release active ingredients that have implications for managerial competencies which may be engaged with in the future.

So, our findings further illustrate the importance of sense making in personal development activities undertaken by organisations. For example, performance appraisal processes may typically be seen as box-ticking exercises. By encouraging employees to reflect on the potential active ingredients for personal development, and to make sense of the intervention in a different way (e.g. an opportunity to develop further strengths/address key weaknesses) personal development may be maximised.

**W08: QOccPsych (Stage 2)**

**After the MSc - Thinking about the Next Steps in your Professional Training**

Karen Moore, Rosemary Schaeffer & David Carew, QOccPsych Qualification Board

Theme **Profession**

Being awarded an accredited MSc in Occupational Psychology is an exciting time for new entrants to the profession, but also one that poses a number of serious questions about future professional and career development. Currently the BPS
Qualification in Occupational Psychology (Stage 2) is the only route that enables the holder to apply for Chartered Membership of the Society and Registration with HCPC, not to mention being eligible for Full Membership of the DOP. Additional routes will become available from Autumn this year.

This session will outline who is eligible to enrol on the Qualification and what is involved in undertaking the Qualification, such as finding the opportunities for applied practice necessary to fulfil the breadth and depth requirements for the qualification and engaging a supervisor.

The session is aimed at anyone who is undertaking an MSc or who has already completed this stage and wants to know more about the professional development options open to them.

W09
Towards Organizational Fitness: A Guide to Diagnosis and Treatment.
Gerry Randell, F.B.Ps.S. Emeritus Professor of the University of Bradford, formerly Professor of Organisational Behaviour at Bradford University School of Management, John Toplis, A.B.Ps.S. Formerly Head of Psychological Services at the Post Office
Theme Profession

Part 1 History, concepts, models and thoughts for the future
This paper sets out the contents and implications of a book to be published by Gower in March 2014. The book is based on two premises, the first is that, just like people, no organisations are perfectly fit, some are very sick, so all can get fitter for their purpose. The second is that the key decision that has to be made is what has to be changed next to and within the organisation to make it fitter.

Organisations dominate our lives. From the family, through work, play, religions and government their impact on our everyday life and well-being is total. The question is how to make them more effective at serving our needs. This is the thrust of this book.

Work organisations can lose their fitness and become sick, just as people can. This is not surprising as organisations are made of people. Like people, organisations can become both physically and behaviourally sick. Physically sick when plant and equipment breaks down or the money runs out, or the markets disappear; behaviourally sick when the resources are badly managed or the staff becomes alienated, or both.

What is perhaps more surprising is just how much the behavioural sicknesses of organisations reflect the behavioural illnesses of people. People get old and tired, slow down, and become far less effective than when they were young, thrusting and energetic. So, too, do organisations. People seek ways to retain their youth and energy, to somehow compensate for the natural effects of ageing. So, too, do organisations. Organisations display fitness when they are seen to be healthy, productive, adaptive, flexible and happy places to work in. There is a ‘buzz’ about them, people want to work there, and customers seek their products or services. They are discussed, admired and even honoured.

For anything to be managed, changed, mended or treated an understanding of how it works is required. A motor car mechanic needs to know how the components of an engine work before repairing or tuning it, a computer engineer an understanding of hardware and software, a medical doctor needs to know a great deal of human physiology before treating a body. In all disciplines, competent professionals operate from a solid base of understanding how what is at the core of their profession actually works. They have the benefit of years of research that has produced data-based explanations and proven theories. It is sad that this cannot yet be said about organisational management. In business school libraries, text books abound with diagrams and models, most made up of many boxes and arrows, describing the structure and components of organisations. Beyond saying that these are 'complex systems' they provide little explanation of how organisations actually work.
This book puts forward a model which attempts to explain how organisations actually work called ‘An open system for analysing behaviour at work’. It takes in people and uses their capacities, inclinations and needs to produce goods and services etc. the output of this closed system of a work organisation. The model displays the place of the ‘treatments’ that occupational psychology has to offer to improve the fitness of organisations.

Organisations are not independent entities, they exist within a culture. If the organisation’s environment is itself sick, if the culture or society in which it is trying to exist and prosper is malevolent, it will be much harder to achieve organisational fitness. In such circumstances, what (if anything) can be done becomes a big political, sociological or even a theological issue. This is considered in another model ‘The world of work and management’.

These two models are used to produce frameworks for organisational diagnosis which can provide a structure/checklist for collecting data to enable a diagnosis to be made of what the organisation should be doing differently next.

Of course, organisational malfunction can be caused by a single individual and a diagnosis can lead to that person, or persons, being identified. The treatment then is to somehow manage that person. A further model, ‘A diagnostic model for people management’, is put forward to aid this process.

Two further models are proposed which provide a process to make a more statistically based diagnosis built around ‘A multivariate analysis system for organisational diagnosis’, MASOD. The output from this would be an ‘orgscan’ which would enable an organisational diagnostian to make a statistical data-based diagnosis on what the organisation should be doing differently next to make it fitter for its purpose.

The need for a manual for organisational diagnosis, comparable to DSM and ICD 10, is discussed.

Part 2 Organisational Diagnosis and Treatment in Practice

Since the dawn of managerial history, work organisations have sought ways to improve the performance of staff in their jobs. They have gone about this in many ways, more often than not based on the personal beliefs or philosophy of those in charge or less commendably what is currently ‘in favour’ in other organisations - the ‘flavour of the month’ fashionable approach.

In the book we detail some of the treatments for organisational ills and improving organisational health, ranging from Robert Owen’s model village in New Lanark in Scotland and his use of ‘silent monitors’ in the 1810s to Payment by Results, Quality Circles, Total Quality Management, Investors in People, and Business Process Engineering. More recently there has been a spate of books that analyse apparently successful companies and put forward what the author sees as the reasons for their success for other managers to emulate.

Then there are the TV programmes where a management guru studies an ailing company or organisation and then puts for proposals to make it better those featured have included John Harvey Jones on industrial organisations Gerry Robinson on the National Health Service, Mary Portas on shops, Alex Polizzi on family firms and Gordon Ramsay on restaurants.

Can Occupational Psychologists do better? We think that they can!

In our view any study aimed at solving problems or improving fitness should start with measures of the current state of play. Measures that may indicate problems are four possible kinds: measures of behaviour at work, of performance at work, of the attributes of employees, and of how people feel about their work.

Once initial data has been collected, current thinking seems to be that there are two possible ways forward. The first is to identify any departures from good practice. The second is to look back over time to see if there were times when things were better - or even worse - and to look for associated changes that may explain the variations. The two
approaches are not mutually exclusive and experience suggests that it will often be the case that multiple causes having multiple effects.

We have illustrated our thinking with a number of case studies. An example of departure from good practice concerns a school which was finding it impossible to recruit staff. It was clear that its problems were confined to recruitment, so the recruitment process was reviewed to see whether and in what ways there were departures from good practice. It was quickly found that the advertisement for the post said little more than ‘Teachers Wanted,’ apply to the Headteacher. No attempt had been made to explain the many attractive features of the school. When that was done in a re-designed advertisement there was a dramatic increase in the number of applicants and all the vacancies were filled.

We then give a number of examples of the investigation of problems in which the extent of the problems have varied over time. So, for example, labour turnover in a Department may have been low until a manager was replaced or a job evaluation exercise took place.

Although the approach appears systematic, in practice the interpretation of data requires flexibility and judgement. For example, if a manager of a department is changed it may be a little while before staff feel that they cannot continue working there and more time still before they actually resign.

What else can we say about the investigation of problems such as labour turnover? First, at the heart of the whole process is the term ‘diagnosis’ which is often associated with medical doctors. What can we learn from them?

Doctors often start a consultation with a phrase like ‘What brings you here today?’ and you respond. What happens next depends on what you say. It also depends on your age and your medical history. You will probably be asked a series of further questions and may even be examined.

Whether a doctor or patient it may be difficult to predict the time required to diagnosis until at least an initial of exchange information has taken place. That said, doctors can normally make the better predictions because many conditions are associated with a patient’s age and their previous medical history.

The processes involved in investigating problems in organisations seem to us to have some similarities with medical diagnosis – that is the stages of preparation, diagnosis and treatment can overlap and that the stages may need to be revisited in the light of emerging information. Indeed, in our view the four stages of (i) preparation and examination (ii) diagnosis (iii) management and (iv) monitoring, together form an iterative cycle of activities which may need to be repeated until the problem is it is resolved.

We go on to list a number of questions to inform diagnosis and management.

For example, one question is which individual or group of individuals is going to collect information? What training will they have had in the collection and interpretation of data, and to what extent will their analysis of it be systematic and impartial? We have to accept that problems often arise because of conflicts between two departments in an organisation. For example, production staff may blame personnel staff for the lack of suitable applicants, while personnel staff may say that high labour turnover is a direct result of poor management.

And which staff are going to be involved in the diagnostic, management and treatment stages? Again we know that some problems arise from the past actions and decisions of top management, and if the same managers are involved in the diagnosis they may be in denial and wish to find fault elsewhere. So when setting up a diagnostic study, one of the many issues to be considered is who should lead the various stages.

In our forthcoming book we also explore ways of improving organisational fitness. Just as sports players cannot give of their best if they have injuries, we think it important that any serious organisational problems are resolved before any
Attempts to improve fitness are made. That said we have identified five approaches to improving organisational fitness. The first is to encourage local dialogue about possible ways of improving fitness. The second is to use surveys and audits to obtain additional information about the current state of play and what might be improved. The third is to use organisational change to stimulate fitness. The fourth is to adopt a systematic ‘Top-down’ approach using a combination of methods and measures. Fifth there is the possibility of a ‘Bottom-up’ approach again using a combination of methods and measures.

Attempts to improve ‘leadership’ and ‘internal communications’ are common features of programmes aimed to improve organisational fitness, and both are discussed in some detail. The leadership literature displays that a considerable amount of research has been done on the ‘cognitive’ i.e. what a leader needs to know, and a fair amount has been done on the ‘perceptual’ i.e. what are the leader needs to see, hear, sense, and have vision with different kinds of followers in different situations. However relatively little systematic work has been done on the ‘motor’ i.e. how a leader behaves sounds and looks. These are the so-called micro-processes of leadership, and are a neglected field but for some notable exceptions by both researchers and practitioners alike.

Turning to ‘internal communications’, the emphasis in the management literature seems to be on ways of persuading staff to accept the vision and other views of top management. Without understanding the concerns of employees and their thinking and feelings, this seems to us to be both short-sighted and dangerous. Also neglected in the management literature is the issue of communications between departments in an organisation, which is so important if people in an organisation are to work effectively together.

A final comment. We came together to write the book because we believe that too many organisations are advised on the basis of personal experience and by the wish of some consultants to discover problems which can be addressed by solutions in which they just happen to have expertise. It is our view that Occupational Psychologists are well placed to take the lead in developing systematic and impartial approaches, and we see our book as part of taking the first steps in this direction.

W10: Standard Paper

**Developing Inclusive Leadership Skills: A Longitudinal Study**

Nic Hammarling, Pearn Kandola, IWP & HSBC, Lizzie Townsend, Tony Amos, HSBC

Theme Organisation

**Introduction**

For more than 50 years, organisations worldwide have been on a slow and sometimes difficult journey towards ensuring meritocracy for employees. Throughout these decades, there has been a shift in focus. The introduction of employment legislation in the UK in the 1970s resulted in initiatives focusing on ensuring equality of opportunity and a “level playing field”. The 1990s saw the concept of diversity becoming increasingly popular, spurred on by research findings which highlighted the benefits to organisations of having more diverse teams. The focus has now shifted again to one of Inclusion, with the

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recognition that there is little point having a diverse workforce, if people are not included and engaged in their day-to-day working environment.

There exists, however, much confusion about what is actually meant by inclusion, and the extent to which an inclusive culture can be genuinely created within workplace settings.

**Session Objective:** This paper identifies the skills that inclusive leaders demonstrate, and to what extent leaders can develop and improve their inclusive leadership skills. The research is conducted within HSBC.

**Proposed Format:** The session is structured to cover three key areas:

- **Part 1:** The psychological components of inclusive leadership and the competencies demonstrated by genuinely inclusive leaders
- **Part 2:** A case study of leaders within HSBC, exploring changes in their inclusive leadership behaviours over a period of 9 months, and the impact of a programme designed to develop their inclusive leadership skills
- **Part 3:** Discussion of the implications for occupational psychologists with responsibility for workplace diversity.

**Part 1: The psychological components of Inclusive Leadership**

Inclusive Leadership is often a term used without any genuine understanding of the types of behaviours that genuinely constitute inclusive and exclusive behavior, and in particular the behaviours demonstrated by those in leadership positions. In this section we will explore some of those key components of inclusive behavior, including creating psychologically safe environments\(^3\), developing psychological standing in others\(^4\) and developing servant behavior amongst team members\(^5\), as well as including a working definition of Inclusion.

**Part 2: A Case Study: Is it possible to develop inclusive leadership skills?**

In Part 2 of the session, a case study will be presented of an inclusive leadership programme that was delivered within various functions and geographical locations of HSBC. Drawing on the psychological research into inclusive leaders, the programme aims to improve leaders’ inclusive leadership skills by making them aware of their unconscious biases and giving them the tools to overcome these in their role. It was devised to help create a truly inclusive workplace where diverse talent can progress and help the organisation to better meet their customer needs.

In total, 38 senior HSBC managers were involved in the programme. Its impact was evaluated using a mixture of quantitative and qualitative methods, as well as a control group. 360º feedback from participants, their direct reports, and one level down, were compared before and 9 months after the programme. Interviews were then carried out with a range of these individuals, as well as equivalent representatives from a control group, who had experienced the programme, in order to further understand the process by which any changes occurred. The key findings of this evaluation will be presented.

**Part 3: Implications for occupational psychologists**

In Part 3 of the session, implications for occupational psychologists will be discussed. These will cover what inclusive

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leadership really looks like and how unconscious biases create a barrier to inclusion, as well as how inclusion and unconscious bias initiatives can help organisations realise the true potential of their diverse talent.

We believe that this complements many of the themes of the conference, but especially Organisation. The paper develops our current understanding of the extent to which behaviour change in managers can be developed through the use of workshops over a 9-12 month period, and in particular behaviours that reduce the impact of unconscious bias and promote inclusive leadership can be fostered.

**W11:** Short Paper

**The impact of context on “gut feel” in executive decision making (MSc/PhD)**

Nikhita Dost, City University

Theme Individual

The topic of intuition is of interest to both psychology and management researchers, due to its role in individual and business decisions. Though difficult to define, many researchers now agree with the definition of intuitions as “affectively charged judgements that arise through rapid, non-conscious and holistic associations”\(^1\).

This “gut feeling” is often viewed as unreliable, compared to rational reasoning, and subject to biases.\(^2\) However, more recent research suggests that this is not always the case. Conscious intuitive feelings arise quickly, but they are often based on experience and non-conscious processing. Using intuition has been shown to be more prevalent under conditions of uncertainty and so may be especially important when:

- Decisions must be made in a volatile environment.
- Decisions must be made quickly.
- Decisions have no clear right or wrong answer.
- Decisions are complex.

Accessing the benefits of intuitive decision making is therefore a valuable investment for managers making decisions on a strategic level, especially in today’s organisations that are continually adapting to changes in the environment\(^3\).

Though there have been recent theoretical advances in conceptualising intuition and understanding the situations in which intuition is best used, subsequent empirical research is lacking. Specifically, the role of intuition cannot be fully understood unless context is taken into account, such as organisational environment and culture, team factors, attitudes and individual differences. This has implications for the design of programs that aim to train managers on the best use of their gut feel and to improve their strategic decision making style. Simply increasing or decreasing the use of intuition may not be effective\(^4\).

This study, therefore, focuses on the way in which context impacts how managers use intuition when making strategic decisions. It specifically investigates the context of those working in human resources, via repertory grid interviews with HR Directors. Not only does this contribute to the development of current theories but also answers the call for novel approaches in investigating these questions\(^5,6\).

**The research**

**What is intuition?**

Dane and Pratt’s (2007) definition, used above, identifies several key features of intuition that are seen across the intuition literature. Firstly, “Affectively charged judgements” means that intuition is defined as the feeling of knowing. Secondly, the process underlying this feeling is quick, involves holistic processing or making of associations and is non-conscious. It is important to distinguish between the non-conscious process (sometimes referred to as “intuiting”) and
the conscious feeling of intuition. For the purposes of this study, “intuition” will refer to the conscious feeling that is thought to be a result of the non-conscious, holistic process.

A third feature of intuition is its development with experience. Theories suggest that intuiting occurs when external cues activate related information in the mind, leading to unconscious pattern recognition⁷. Intuition develops when experience causes the individual to build up mental models of specific situations and to practice processing information in certain ways. According to this model, intuiting could be thought of as “analyses frozen into habit”⁸.

In this study, therefore, intuition is defined as the gut feeling caused by quick, holistic, unconscious processing, which has been developed via experience. Due to the role of experience in developing intuitions, this study recruited executive directors who are likely to be more familiar using this type of intuition.

The need to account for context: when can you trust your gut?

Although more experienced managers have been shown to have more intuitions and use intuition more than less experienced managers⁹ there are contradictions about when intuition is best used. For example, in a survey of 281 senior managers Khatri and Ng (2000) found that use of intuition was positively related to organisational performance in unstable environments but negatively related to organisational performance in stable environments⁹. This suggests that intuition should be used cautiously in stable environments, in which more reliable information is available to analyse and make a reasoned decision. However, the cognitive literature suggests the opposite: relying on intuitive heuristics may be useful for routine tasks, in order to speed up decisions but these are unlikely to be of use in novel or uncertain situations¹⁰. There is therefore increasing need to take into account multiple contextual contributions to the way in which intuition is used and its consequences so that suggestions for best use of intuition can be improved.

There have been several attempts to combine factors impacting strategic decision making into an integrative framework. Papidakis, Lioukas and Chambers (1998) categorised these factors into decision-specific factors, characteristics of the decision process in the organisation, top management factors and contextual factors¹¹. More recently, Elbanna, Child and Dayan’s (2013) model specifically focuses on factors affecting the role of intuition in strategic decision making in Egyptian firms¹¹². Similar to Papidakis, Lioukas and Chambers (1998) a combination of decision-based, firm-based and personal aspects contribute towards use of intuition. As an addition, however, the model suggests that aspects such as peer consensus, self-confidence in intuition and other modes of processing information may influence how intuition is used and the outcomes of this in terms of decision disturbance, speed and effectiveness.

The aim of the current study is to gain a better understanding of when and how intuition is best used, via interviews based on real examples, rather than survey-based data on which such models were built.

Method

The repertory grid technique is a powerful and precise way of making tacit knowledge explicit and so is likely to give richer information about the non-conscious aspects of intuition. It rests upon Kelly’s (1955) Personal Construct Theory, which claims that individuals seek to predict events in the world. They do so by creating mental models, or personal construct systems, that are constantly changing. Essentially the underlying epistemological stance is a constructivist one: we all create and make sense of our own worlds. The repertory grid technique is a way of identifying a person’s construct system. Therefore, another benefit is it enables us to access the individual’s view of reality. Structured repertory grid interviews were conducted, lasting 60 to 90 minutes, with 10 executive HR directors in the UK, recruited via snowball sampling. Voluntary participation, anonymity and confidentiality were emphasised and informed consent was obtained prior to the interview.

During the interview participants were asked to recall six decisions they had made in the past that had been made in an
HR role, were strategic decisions, concerned with long-term planning and success of the organisation, and had an element of gut feel, defined using the above definition. They were then asked to identify a way in which two were similar and different from the third in terms of the way they made the decision. Each difference was recorded as a construct, representing a meaningful difference in how the individual makes decisions in different situations. An example of a construct is “trusted gut feel --- validated gut feel by talking to others). Finally, participants were asked to think of each construct as a scale from 1 to 5 and indicate where along the scale they preferred to be when making a decision and where they thought they needed to be in order to do a good job.

The constructs will be analysed to look for themes via thematic analysis. Interpretation will also involve identifying discrepancies between how directors preferred to make decisions how they thought they needed to act in order to do a good job. This will be completed by the end of September 2013.

Implications

Based on the models mentioned, a combination of decision-specific; organisation-based, personal aspects and other contextual factors are expected to have a role in how managers make sense of their decision-making process. It is also expected that there will be a difference between how the participants prefer to make decisions and how they think they need to behave in order to do a good job. For example, individuals may prefer to make decisions based on their own gut feelings but feel that in order to do a good job they must validate these judgements with hard evidence.

The results will have implications for improving the effectiveness of executives’ decision making styles. For example, making individuals more aware of their decision making style, strengths and improvement areas may create an understanding about which strategies to use in different situations.

The results will also aid understanding about the specific challenges faced by HR Directors, such as when making decisions about people in an organisational context. This has implications for improving decision making in human resources and can contribute to executive coaching programmes. Ultimately the benefits of improved decision making will be apparent not just for the individual but for organisations too.

References


W12: Workshop
Social Media for Beginners
Stephen McGlynn & Ciara Kelly, DOP Communications Group
Theme Profession

Never really understood the point of the whole ‘tweeting’ thing? Perhaps you think social media isn’t something for you and is just a passing fad. Come and find out some of the ways in which social media may actually be useful (or even not!) for you, your business, or your research.

During this twenty minute workshop, participants will be taken on a whistle-stop tour of various social media tools and how they can be best utilised to fulfil various aims and goals. We will explore why and how social media can be used, including purposes such as networking, marketing, collaborating with others, finding new information, and sharing ideas with the world. At the end of the workshop, participants will be aware of what tools they may able to use, and how they can get started. Tools covered will include Twitter, Facebook, LinkedIn, online videos, blogging, and several lesser known media.

W13: Short Paper
Effectively managing volunteers: the importance of the 'personal touch'
Alison McFarland City University/PeopleWise Ltd
Theme Communities

Introduction
This paper presents findings from a Master’s dissertation research project on the psychological contract of volunteers. Findings are compared with several studies in salaried organisations, with several interesting results highlighting key differences in the populations. Conclusions will be of interest to those involved in volunteering (either as volunteers or managers), as well as those interested in the psychology of non-traditional employment relationships.

The role of the voluntary sector has grown significantly in recent years, with over 40% of the British public regularly involved in volunteering (Lloyd, Agur & Kitchen, 2009) across a wide range of sectors. However, despite the societal importance of volunteering, there is little existing theoretical or empirical precedent for effective volunteer management (Vantilborgh et al., 2011). This study explores volunteers’ work-related attitudes and relationships, with the aim of helping voluntary organisations more effectively engage and retain volunteers. This in turn enables such organisations to invest more fully in our communities, within the UK and worldwide.

The study used a psychological contract (PC) approach to explore the relationship between volunteers and their organisations – ‘individual beliefs, shaped by the organisation, regarding terms of an exchange between individuals and their organisation’ (Rousseau, 1995, p.9). The study took a features approach to the psychological contract, which focuses on PC characteristics and dimensions. Previous studies demonstrated that PC features can highlight differences in job types and predict a range of attitudinal work-related outcomes (Battisti, Fraccaroli, Fasoli & Depolo, 2007; Sels, Janssens & van den Brande, 2004). These findings indicated the potential of the features approach to characterise volunteer PCs, although they have never before been studied using this approach.
The study used a mixed methods approach, with a dialectic stance, which recognizes the legitimacy of multiple paradigms, and the importance of convergence and divergence of findings for insight (Greene, 2007). The study used the research question: Which PC features characterise a volunteer’s relationship with their organisation, both in their relationships with work-related outcomes and the importance placed upon them by volunteers?

Method

The quantitative component of the study used a cross-sectional survey design. A convenience sample of $N=157$ participants completed an online survey. Participants met three criteria – a) they didn’t receive a salary for their work, b) they volunteered at least once a week, and c) they had volunteered for at least one month. This ensured they had a strong, developed relationship with their organisation.

The survey used Sels et al.’s (2004) PC measure due to its promissory and mutual focus, its high internal reliabilities and clear factor structure. The survey measured six features, each operationalised on a bipolar continuum:

- Time frame (long-term/short-term): the duration of the promises
- Tangibility (tangible/intangible): how specific and unambiguous the promises were
- Scope (broad/narrow): how much of the individual’s ‘life space’ the promises took up
- Stability (stable/flexible): how stable or flexible the promises were
- Level (collective/individual): whether the promises were regulated collectively for all volunteers, or on an individual basis
- Symmetry (equal/unequal): the extent to which a hierarchical contractual relationship was acceptable

Participants answered questions about their role, and the organisation’s role in the contractual relationship. As Sels et al. (2004) did not validate the volunteer measure for symmetry and organizational measure for level these were omitted.

Additionally, four outcome variables were measured – affective commitment, satisfaction, intention to continue volunteering (ICV) and breach – due to their prominence and importance in PC literature (Conway & Briner, 2005).

The qualitative component used a semi-structured interview design. $N=8$ volunteers from two different voluntary organisations were interviewed for one hour each. The interviews were based on the repertory grid technique, due to its ability to elicit information that is implicit and hard to articulate and its theoretical consistency with a mixed methods approach (Jancowicz, 2004). Due to participants’ mixed reactions to the technique, it was applied flexibly, following recommendations from Jankowicz (2004), with the transcripts analysed in their entirety for richness of data.

Results

![Figure 1. Findings from regression analyses.](image-url)
A series of one-sample t-tests compared volunteers’ features levels with two previous studies on salaried employees using the same measure (Battisti et al., 2007; Sels et al., 2004). The findings demonstrated that volunteer features were more short-term, intangible, broad in scope, flexible and individual in level than those of salaried employees.

A series of hierarchical regression analyses assessed the relationships between features and work-related outcomes. The findings (Figure 1 – non-significant relationships excluded) highlighted the important contribution of several features on outcomes, most notably scope.

Finally, a template analysis was carried out on the interview transcripts. This technique was selected due to its epistemological flexibility, utilising pre-selected a priori codes alongside meaning arising from the data, which highlighted inconsistencies and expanded existing knowledge (King, 2007). The original template’s a priori codes were based on the ten feature variables in the quantitative component. During the four rounds of coding, the template was modified by inserting new codes, deleting irrelevant codes and broadening the existing code scope. The final template can be found in Appendix 1.

**Conclusion**

The findings had several important applications for the effective management of volunteers.

1. **Treatment of volunteers:** Having a broad scope, i.e. treating volunteers with personal support, respect and appreciation, and facilitating their personal investment in the organisation, led to positive organisational outcomes. Some volunteers suggested that this was equivalent to receiving a salary. Additionally, the ‘structural power’ theme in the interviews emphasised volunteers’ concern with the demonstration of status equality.

2. **Attitudes towards professionalisation:** Given increased pressures on voluntary organisations to professionalise, the findings regarding tangibility and time frame were interesting. The survey found that intangible organisational promises with a long-term time frame led to more positive outcomes, which suggests that aspects of professionalisation such as the facilitation of career development opportunities (long-term time frame) for volunteers should be encouraged, but those relating to making practices and procedures more tangible may not be welcomed. In addition, these themes did not feature strongly in the interviews, suggesting that this is a gap that has not yet been identified in voluntary organisations.

3. **Ensure good “fit”:** Findings regarding stability and flexibility were mixed and inconsistent in the quantitative results. The qualitative results provided elucidation for this inconsistency, highlighting the importance of combining organisational reliability in keeping promises, with the flexible facilitation of “fit” – matching volunteers’ skills, abilities and values, with their organisational roles. In addition, volunteers were inflexible regarding important issues such as their values and motivations, so fit should be facilitated during the selection/onboarding process in order to align expectations.

4. **Understand volunteers’ motivations:** The ‘multiple agency’ theme arising from the interviews indicated that volunteers’ primary psychological contract is with their own motivations for volunteering, which is stronger than the
contract with their specific organisation. This finding suggests that expectations should be aligned between a
volunteer’s motivations, and what the organisation can provide, in order to prevent inadvertent breach.

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Governance and Management: Implications for volunteers Using psychological contract theory. VOLUNTAS:

Appendix 1: Final template
1. Time frame
   1.1. Volunteer->Organisation
      1.1.1. Long-term
   2. Scope
      2.1. Organisation->Volunteer
         2.1.1. Respectful
            2.1.1.1. Appreciative
            2.1.1.2. Individualised treatment
            2.1.1.3. Don’t take for granted
         2.1.2. Provision of support
            2.1.2.1. Task-related
            2.1.2.2. Person-related
            2.1.2.3. Administrative
            2.1.2.4. Facilitating learning/growth
      2.2. Volunteer->Organisation

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2.2.1. Integrated identity
2.2.1.1. Values/goals
2.2.1.2. Shared ownership
2.2.1.3. Merged with life
2.2.2. Respectful
2.2.3. Supporting colleagues
3. Stability
3.1. Organisation->Volunteer
3.1.1. Facilitate “fit”
3.1.1.1. Commitment
3.1.1.2. Skills/experience
3.1.1.3. Culture
3.1.1.4. Contribution to purpose
3.1.2. Allow withdrawal
3.1.3. Organisational stability
3.1.3.1. Retaining core aims
3.1.3.2. History
3.2. Volunteer->Organisation
3.2.1. Sensitivity
3.2.1.1. Organisational needs
3.2.1.2. Skills/experience
3.2.1.3. Learning
3.2.2. Particularism
3.2.2.1. Purpose
3.2.2.2. Processes
3.2.2.3. Environment
3.2.2.4. Reflecting contract’s core
3.2.2.5. Enjoyment
4. Tangibility
4.1. Organisation->Volunteer
4.1.1. Implicit
4.2. Volunteer->Organisation
4.2.1. Unwritten
5. Power distribution
5.1. Organisation->Volunteer
5.1.1. Formality
5.1.1.1. Informal
5.1.1.2. Minimal bureaucracy
5.1.1.3. Group spirit
5.1.2. Symmetry
5.1.2.1. Hierarchically flat
5.1.2.2. Involvement/dialogue
5.1.3. Level
5.1.3.1. Status equality
5.2. Volunteer->Organisation
5.2.1. Need for structure
  5.2.1.1. Organisation
  5.2.1.2. Decision-making
  5.2.2. Respect for leadership

6. Multiple agency
  6.1. Underlying motivations
    6.1.1. Faith-based
    6.1.2. Duty
    6.1.3. Helping community
    6.1.4. Providing purpose
  6.2. Organisation(s)
    6.2.1. Unclear boundaries
  6.3. Sponsors
    6.3.1. Decision-making
    6.3.2. Distraction
    6.3.3. Respect

W14: Short Paper

Engagement psychometrics: assessing intrinsic motivation to facilitate two-way exchange

Roland Tarleton Arkadia Research & Training Ltd

Theme Organisation

This paper explains the unique relevance of the Elemental motivation psychometric to employee engagement.

Intrinsic motivation is what drives people from within, so Elemental aims to define the kind of work situation they are best suited to from a motivational point of view. In simple terms this means not putting a technical specialist in a managerial role (not driven to be a manager). In relation to employee engagement, Elemental is assessing what they want from the job, and hence where they will be motivated to perform at their best.

Several decades of research on intrinsic motivation show that there are two common themes running through the various theoretical approaches: identifying with the nature of the task and encountering appropriate challenge. Elemental is therefore in two parts which present an objective view of what you want to do (satisfying needs) and how you want to do it (the goals you will set yourself).

To see where this comes from, look for example at Wanous (1977), a paper on organizational entry from the individual’s point of view: organizations must attempt to match the opportunities they provide with individuals’ needs for personal fulfilment. And going back even further, Miles (1965): employees should be meeting their own personal goals at the same time as organizational goals. What we’re seeing here is that the history of research on intrinsic motivation is very similar to research on employee engagement – Elemental is assessing individual differences in needs and goals in order to define the kind of work situation in which the individual will be motivated to perform to best effect.
Part 1 *(identifying with the nature of the task)* was derived from factor analysis of the ‘big three needs’ to produce seven needs in three categories, with each relating to a particular type of role:

- **Achievement – specialist** *(do not get involved with)* other people/systems)
- **Independence – consultant** *(seek support from)* other people/systems)
- **Structure – maintainer** *(make use of other)* other people/systems)
- **Affiliation - team worker** *(seek support from)* other people/systems)
- **Systems Power – generalist** *(make use of other)* people/systems)
- **People Power – manager** *(use of other)* people/systems)
- **Personal Power - project leader**

This is the *what you want to do* part which helps organizations to answer questions about where to place people to best effect. For example, it becomes very obvious whether or not they should promote a technical specialist to a managerial role, and which graduate recruits will thrive in a structured environment and which will react against it.

Part 2 *(encountering appropriate challenge)* is about the ‘goals’ individuals will set themselves *(how they will want to do it)*. This is based on three fundamental dimensions of career striving: *belief in self, belief in control over situations, and where priorities lie overall*:

- **Getting things moving - self-starting** *(belief in self)*
- **Delivery - goal-focused** *(belief in control over situations)*
- **Personal success – entrepreneurial** *(striving for personal success vs operational)*

What we have here is self-esteem, locus of control, and resultant achievement motivation, three fundamentals from many different theoretical approaches. In relation to what employees want from the job, they tell us for example to watch out for those who score low on Self-starting because they may be slow to show their true potential, and those who score high on goal-focused because they stop listening to others once their minds are made up, and those high on Entrepreneurial because they may lose sight of current objectives.

So how does all this relate to employee engagement? In practice, managers readily become skilled in discussing Elemental profiles with their staff so that employees feel that they are where they want to be and the managers are equipped to make best use of them. This kind of assessment may therefore be considered an essential prerequisite for engagement: *employees must see that their line manager is taking notice of what they want from the job in order to feel engaged with the organization*.

With regard to the theory, Elemental is assessing ‘self-concept relating to work’ *(seeing the job as what you should be doing)*. ‘Meaningfulness’ depends primarily on the fit between self-concept and the role (May et al, 2004), and this is the most important driver of engagement for all employee groups’ *(Kingston Report 2010, p.24)*.

May et al also point out that engagement is most closely associated with job involvement and ‘flow’. Job involvement results from ‘the need satisfying abilities of the job’ and ‘the degree to which the job situation is central to the person and his or her identity’, and flow is defined in terms of successful experience with challenging tasks. Hence Elemental assesses *identifying with the nature of the task and encountering appropriate challenge*. 

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To conclude, the benefits are that this is a truly psychometric assessment of what employees want from the job. It therefore accounts for individual differences with more detail than would be available from any other source, and provides HR departments and line managers with objective information to establish a meaningful dialogue.

W15: DOP Chairs Address, Almuth McDowall

W16: Keynote Session
Leadership: Investing in the Past or the Future?
Professor Keith Grint, Professor of Public Leadership & Management, Warwick Business School, UK

Traditionally we assume that the contemporary period is the most complex and dynamic in history. As a result we need not look to the past for lessons but rather focus on - and invest in - the future. This talk suggests the opposite on both aspects, that since the industrial revolution there has never been a period of stability and that we need to understand the patterning of the past if we are to make adequate preparations for the future. This template will be used to understand the particular developments in management and leadership over the last 100 years.

W17: Symposium
Gender bias at work: its history, manifestations and remedies
Convenor: Binna Kandola
Theme Communities

There are four papers in this symposium examining gender bias. The first paper sets the scene by taking a historical perspective, and attempting to provide answers to how the gendered organisations we see around us came to be. The other papers examine manifestations of gender bias in organisations today. The second paper looks at stereotyping—both the descriptive sort and the prescriptive. Prescriptive stereotypes are possibly the more damaging as they carry a distinct motivational element which indicates what people believe men and women should be doing. Contravening stereotypes carries penalties which are harsher for women than they are for men. The third paper looks specifically at how stereotypes play a part in how we select people for roles. This includes not just the interview process but the criteria that are established for a role and whether this may influence or bias decisions. The final paper looks at leadership. Much is said about the ‘different ’ styles of men and women but this paper, with its huge sample of people who have taken the OPQ shows how there are no differences in results. The first contribution will be 15 minutes in length with all others 20 minutes. Five minutes of questioning will be allowed at the end of each paper. We will invite further contributions by having the audience work in small groups to discuss manifestations and solutions, with a final wrap up and concluding comments from the chair. This is a paper with a mix of academic and practitioner contributions. The papers have a great significance for practice as gender bias remains not only one of the biggest issues facing organisations but also one of the biggest blind spots. This symposium is designed to help occupational psychologists to become better equipped to deal with this emotive subject.

Paper 1: Gender bias: a historical perspective
Binna Kandola, Pearn Kandola
The division of labour between the genders today is not the result of “natural” differences between the genders, nor does it represent some sort of natural order. It is in fact a continuation of a very long-standing view about what men and women should be doing at work and at home. In other words it is a social construct, or a set beliefs about the genders at work, created and perpetuated by us. The results of these long held beliefs can be seen today in the way work is organised.
What we consider today to be work is relatively new. Also, the notion of a job as a separate part of life, or as an identity that individuals inhabit on certain days of the week, certain hours of the day and in certain settings, is a comparatively recent phenomenon.

Hunter-gatherer societies made no distinction between work and non-work. The division between these types of activity is socially constructed, rather than natural. Hunting and gathering were certainly fundamental to existence, but neither was regarded as work:

Would the Neanderthal have the same way of thinking as those of us who were reared in households where the nearest thing to hunter-gatherers are those whom we describe as the breadwinners? (Donkin 2001 p9)

Women carried out a far greater range of roles before the Industrial Revolution than after it, up to the present day. In agrarian societies, men and women both carried out what is now considered men’s work and women’s work. Women could look after pigs and chickens, manage kitchen gardens and orchards, and keep the proceeds from their sales. Men were responsible for grain and cattle because these were more valuable commodities. The demarcation doesn't arise from different abilities, but from status. Over time, such informal divisions become solidified as traditional roles.

It is true that women have typically carried out the lower paid, lower status work, but there was more interchangeability before the Industrial age. In the 13th century it would not have been unusual to see women employed as carpenters, masons and coopers. By the 16th century they were practically non-existent in these occupations. (Simonton 1998). The reason this occurred was due to the rise of the guilds.

The guild system organised trades and crafts around entry conditions and quality standards. The origins of guilds can be traced back to the first century AD and the Collegium Fabrorum – the guild of smiths – in Chichester. Such organisations live on in our contemporary professional associations. Someone seeking to ply a controlled trade would have to go through the stages of apprentice, journeyman and master.

Guilds developed in many forms throughout Europe, with the common aim of jealously guarding access to skills. These organisations did not just control entry into professions, but regulated wages and set standards for quality. In this way, the establishment of guilds provided part of the foundations needed for regular trade. Whilst women and girls were allowed into some guilds, the range of occupations was much restricted and the training provided much shorter in length. The better paid and higher status trades became male strongholds. (Grint 2005).

The formal separation of work and leisure begins with the Industrial Revolution, a massive and rapid social change which effectively split people's identities between home and workplace. This social upheaval is an important context for the development of gender:

[It] is impossible to fully understand the emergence and development of the sexual division of labour in organisations from the inside. We have to go outside, to examine the family and patriarchal structures in society as a whole to shed light on internal issues.

Before the Industrial Revolution, there was little in the way of formal division of labour, by gender or any other criterion. Work was not conducted or imposed by any coercive authority. With all production carried out by hand, most tasks were carried out independently and performed in the family setting. People worked to their own rhythms and sold their goods at market. “Work/life balance” wasn't an issue because work and life were not distinguished from each other. The “nine to five” didn't exist because no one was tied to the clock.

The Industrial Revolution heralded not only changes in production methods but changes in attitudes to work too. The Industrial Revolution also led to the systematic removal of women from the workplace. This was achieved by a
combination of changed societal attitudes towards the appropriate roles for men and women, new legislation and the role of the unions.

Before the Industrial Revolution women were to be found working inside or outside the home, in the same occupation as a man, typically as his assistant, but also working in a different trade altogether or indeed any combination of the above.

During the Industrial Revolution women were to be found working in four principal areas:

- Traditional occupations such as spinning
- Assisting men in their work
- The less profitable industries where women were used as cheaper workers to keep costs down
- The industries and roles that were less skilled and which needed little training.

In other words the roles assigned to women were not as prescriptive or narrow before the Industrial Revolution as they were after it.

Traditional forms of work and ways of working were replaced by new methods and new occupations which organised themselves into the professional bodies we see around us today. Engineers, accountants, architects, lawyers and so on developed institutions which served as a means of advancing technical skills and knowledge but also served as barriers to entry for any newcomers. Formal education requirements were needed to enter these professions, creating another barrier to women. These changes took place while women were being removed from the workplace, so it is no surprise that these occupations were, and to a great extent still are, male dominated.

The development of work since the Industrial Revolution can be seen as a steady process of formalisation and systematisation. The evolving rules about work, about who should be doing what and how, developed in an apparently more objective and “scientific” manner than before industrialisation. By the late 19th century an entirely new class of profession was being created, and one that is easily overlooked: management. In a 50 year period from 1880 to 1930 the USA was instrumental in inventing management. In 1880 the shelves of the New York Public Library held no books on management. By 1910, it held 240. The first management school opened in Philadelphia in 1881. But we can be more specific still: management is the creation of American engineers. (Shenhav 2002)

The consequences of the way work has developed and been constructed is the gendered organisation. This impacts the structures we see in the workplace, the career choices men and women make, pay and the way we expect work to be carried out.

Women’s career choices are more limited and more restricted than men’s which is due to long held views about what it is appropriate for men and women to be doing at work. This is both the cause and the effect of the gendered division of labour that we see playing out in today’s workforce.

These views impact the career choices of boys and girls from an early age. If a child sees certain roles being carried out by one gender or another it will exert an influence on the child’s occupational choices. Children learn from a young age the gender of the person they expect to be carrying out certain roles. Since work is such an important part of our lives, these observations and decisions are critical for our subsequent life paths. (Gottfredson 1996).

Economists have pored over remuneration data for very large cohorts in the UK and although gender pay gaps were clearly evident, they had to conclude with mild frustration that the reasons for this imbalance “remain in a way unexplained”. This puzzling inexplicability could be interpreted as their failing to see a rational reason why gender pay
gaps exist. The reason an explanation eludes them is simply that the cause is not rational but emotional. The phenomenon of unequal pay is not rooted in facts about work, but in beliefs about the inherent value of men and women at work.

Organisations increasingly expect their employees not only to do a good job but to identify with the brand. They must not only understand customers but be consumers themselves: to sell the brand at every opportunity and to act as ambassadors for the company. This was not always the case. When the term “greedy institutions” was coined in the 1970s it referred to monastic life and military organisations that expected to own you body and soul. These organisations put pressure on their members “to weaken their ties or not to form any ties with other institutions or persons that might make claims that conflict with their own demands” (Coser 1974 p. 6).

Today's new generation of companies based on disseminating information and knowledge have been compared to monasteries. Anything which demonstrates a lack of devotion or commitment will be treated with suspicion and as a result will be viewed negatively. This is how flexible working is seen: it is a deviation from the norm and is for the individual’s benefit not that of the organisation.

This way of working – full-time, at the workplace – is a model that suits men and fits in with the breadwinner role established in the 19th century. But becoming a working parent does not just create work-life balance problems; it creates work-life conflict.

The gendered organisations that we see around us today are not in other words the result of natural and enduring differences between the genders but are constructs that we have created and which we can change, if we have the motivation to do so.

Paper 2: The impact of descriptive and prescriptive stereotypes on women at work
Jo Kandola, Pearn Kandola

Theme Communities

Stereotypes are thought to be one of the main contributors to bias, both conscious and unconscious. However, outside of academia, little attention is given to what we mean by stereotypes; their different forms and how these lead to different discriminatory behaviours. Furthermore, to date little attention has been given to how the different forms are likely to require different interventions.

From birth, children learn the roles men and women take in society, with different expectations being placed upon each sex. By two years of age children know about gender stereotypes (Hill & Flom 2007). Not surprisingly then, by the time we reach adulthood and the world of work we have very ingrained beliefs about the differences between men and women and the roles they should be associated with. These mental associations are stereotypes.

Gender stereotypes fall into two classes: descriptive and prescriptive (Eagly, 1987; Glick and Fiske, 1999). Descriptive stereotypes describe what women and men are like – the traits each gender is thought to possess. Prescriptive stereotypes concern beliefs about what men and women should be like and provide guidance on the behaviours it is and is not appropriate for men and women to engage in (Burgess & Borgida 1999; Eagly & Karau 2002; Heilman 2002; Rudman & Glick 2002). Whilst there is overlap in the content of descriptive and prescriptive stereotypes the behaviour each type of stereotype invokes when violated is quite different.

Stereotypically, women are thought to be caring and warm, thus possessing communal traits enabling them to look after the home. Men are decisive and competitive, possessing agentic traits enabling success at work (Eagly, 2000).

In male sex-typed roles or leadership positions it is agency that is valued and thus men are naturally favoured. Descriptive stereotypes trigger questions over a woman’s competence to perform in such roles; there is a ‘lack of fit’
between the perceived job requirements and the traits a woman has (Heilman, 1983, 1995). As a consequence she fairs worse than her male counterparts when pay, performance evaluation and promotion are considered (Heilman et al. 2004; Lyness & Heilman 2006; Swim et al. 1989).

Even when a woman proves her competence, and the research suggests that they need to work harder than men to do this (Biernat & Fuegen 2002; Lyness & Heilman 2006), prescriptive stereotypes then kick in to further hinder her progression.

The deeply ingrained beliefs about the roles men and women should (and should not) do lead to penalties and ‘backlash’ when violated (Rudman & Glick 2002). For example, when women chose not to help a colleague they were evaluated more negatively than men who chose not to help (Heilman & Chen 2005). The prescribed stereotype is that women should help. When women display agentic traits they are rated as less socially skilled and less likeable than an equally presented men (Rudman 1998; Rudman & Glick 1999; Rudman & Glick 2002). The prescribed stereotype is that a woman should not behave in such a way. Violating prescribed stereotypes has been shown to lead to reduced liking of women. Being disliked will bias performance ratings, hinder access to social networks, reduce special career opportunities and negatively impact salary recommendations (Heilman et al. 2004). So when a women shows she does possess agentic traits and thus can be successful in male-sex typed roles she is penalised for not behaving ‘womanly’.

Whilst such prescriptions and associated penalties also apply to men (Costrich et al. 1975; Moss-Racusin et al. 2010) this only typically occurs when the positions they seek are female gender-typed which is something that seldom happens (Heilman and Eagly, 2008).

The mechanisms behind descriptive and prescriptive differ and consequently the approach needed to address them needs to differ too. Descriptive gender stereotypes are faulty mental associations about how we think men and women are different. Because they are beliefs we hold to be true we are unlikely to be aware of the impact they have on decision-making. The best way to combat them is to raise awareness of them. By bringing unconscious stereotypes to conscious attention, we can question their validity.

In contrast, prescriptive stereotypes are based on ideologies about how men and women should be different. They aim to maintain status differences and dependence between the genders (Glick and Fiske, 1999). As such, there is likely to be a motivational component to them. Merely raising awareness of their existence is unlikely to prove effective. According to Devine et al (2002) reduction of prejudice is a multistep process. One crucial step is having a desire not to respond in a biased manner once you are aware of your biases. Accordingly, those with higher internal motivation not to be prejudiced exhibit lower levels of bias (Devine et al. 2002; Klonis 2005) and are more willing to engage in strategies to overcome their bias (Plant & Devine 2009). Future interventions therefore need to consider individual motivation to overcome bias in order to have a broader impact on discrimination.

References


Paper 3: Gender bias issues in selection interviews

Therese Macan, UMSL

Theme Communities

Employment interviews are one of the most popular methods to assess and select applicants. Organizational interviewers want the opportunity to meet the candidate. Applicants expect to have the chance to explain their abilities. Unlike many other selection techniques, the social nature of the interview provides an opportunity for applicant characteristics, notably gender, to play a role in affecting judgments and hiring decisions. Prejudicial attitudes and stereotypes, as well as other interviewer characteristics can affect interviewers’ perceptions. Many countries have laws to prevent discriminatory practices during the selection process yet discrimination claims demonstrate that bias is still occurring. In the US, for example, sex discrimination was the third most frequently filed charge by the Equal Employment Opportunity Commission in the 2012 fiscal year or about 30 per cent of all charges. Given the prevalence of gender bias, Dipboye and Macan’s (1988) interview process model is used to provide a framework by which to examine the various paths potential biases may enter, even for interviews that are structured. Thus, this discussion is organized around the three phases of the interview process model: pre-interview, interview, and post-interview.

Even before interviewers meet applicants, in the pre-interview phase, they typically have access to candidate information and make judgments based on materials available (e.g., resumes, applications, test scores, letters of recommendation, social networking profiles). Therefore, bias may enter the selection system at the pre-interview phase. One type of study focused on this issue is the “resume audit,” in which resumes are sent to employers in response to actual job ads. The content and quality of these resumes are typically controlled, with only group membership varying, and the dependent variable is rate of callbacks for interviews. Riach and Rich (2006) found that in the English labour market men were less likely to be called back for “female occupations,” whereas women were less likely to be called back for “male occupations.” In an Australian sample, Booth and Leigh (2010) found a bias in favour of women for call-backs to occupations in which the percentage of females is 80% or more, and no significant difference in gender for less female-dominated occupations. Also of importance and further complicating matters is the finding that gender-biased words used in job ads reduced women’s appeal for the job (Gaucher, Friesen & Kay, 2013). Thus, qualified women may be opting out of even applying for some jobs.

Still when candidates apply and survive the screening process, interviewers’ pre-interview impressions can influence the interview phase where the actual social interaction takes place. In this phase, both interviewers’ cognitive processing of information and their behaviours during this exchange can affect the interview process. For example, interviewers’ pre-interview impressions influenced what information they recalled during the interview and also how that recalled...
information was interpreted and causally attributed (Macan & Dipboye, 1994). Moreover, upon the initial encounter of another person, automatic preferences and stereotypes may activate immediately, effortlessly, uncontrollably, and oftentimes unconsciously. Even if pre-interview expectations have been controlled by removal of group-identifying information, automatic biases can affect interviewer behaviour. Hebl, King, Glick, Singletary and Kazama (2007) found that women posing as applicants asking about job openings experienced more interpersonal discrimination (i.e., were treated in a more hostile manner) when ostensibly pregnant than when not pregnant. Also, working mothers have been perceived to be less competent, less committed to and involved in their work, and less flexible for advancement than fathers (Correll, Benard, & Paik, 2007; Heilman & Okimoto, 2008; King, 2008). Thus, evidence also suggests that pregnant women and working mothers may face discrimination in hiring contexts.

Due to the activation of stereotypes associated with the candidate’s group, the interviewer becomes primed to act in accordance with the stereotype (a phenomenon called “assimilation”). Automatic stereotype assimilation and automatic avoidance behaviour have been demonstrated to create self-fulfilling prophecies in stranger-to-stranger interactions. Compounding this issue is that perceivers also typically require few pieces of perceived stereotype-consistent information to make stereotype-consistent trait inferences about an individual. Conversely, they require a large number of counter-stereotypic pieces of information in order to make counter-stereotypic trait inferences (Biernat & Ma, 2005). In the job interview, interviewers aim to determine what type of employee the applicant would be. Thus, drawing trait inferences about the applicant may be an important component. If interviewers are both ready to perceive ambiguous information in stereotypic ways, and if few pieces of evidence are required to “confirm” the interviewers’ stereotypical expectations of the applicant, then automatic prejudice may produce expectations that are difficult for stereotyped applicants to overcome.

Ultimately, after this social exchange, hiring managers must make decisions about candidates in the post-interview stage. Candidates’ interview performance and the interviewer’s attention to and memory of the interview can be influenced by group membership. Thus, by the time this third stage is reached, the decision-making process may have already been affected. During this decision-making period though there are additional biasing processes that may enter the interview as interviewers make ratings: shifting standards, status characteristics, and constructed criteria.

According to the shifting standards model, members of groups for which interviewers hold more negative stereotypes may actually receive higher or similar performance ratings on subjective rating scales (e.g., “very good”) compared to equivalently qualified members of more positively perceived groups. This process may obscure discrimination when ratings on subjective response scales are examined. Two applicants of different subgroups may receive ratings that, on the surface, look equivalent; however, when a hiring decision has to be made between the two, interviewers may tend to favour the member of the more positively viewed group. One such result was found by Cunningham and Macan (2007). They found interviewers rated pregnant and non-pregnant applicants similarly on a subjective scale assessing perceived qualifications. However, when the participants were required to decide which of the two applicants would be offered the job, the pregnant applicants were chosen significantly less frequently. Furthermore, it has been found that women, compared to men, may be more likely to make the “short list” for a job opening but less likely to receive the job offer (Biernat & Fuegen, 2001).

A second different approach, the status characteristics model states that raters may believe members of negatively stereotyped groups must perform above and beyond the levels required for groups who are viewed positively in order to be perceived as equivalent. For example, the same work products tend to be perceived as higher quality when attributed to men than to women (Swim, Borgida, Maruyama & Meyers, 1989) and people tend to believe that men will be more competent than women on novel tasks (Balkwell & Berger, 1996).

The third form of bias that may enter the post-interview stage relates to a tendency to construct criteria in a way that favours the preferred candidate. Several empirical studies have documented constructed criteria effects. For example,
Uhlmann and Cohen (2005, Experiment 1) found decision makers weighted information more heavily depending on which piece of information favoured the preferred candidate when examining female applicants for the position of police chief.

Researchers continue to examine the effects of applicant gender on interviewer judgments in a variety of ways. Studies examined overt discrimination in the interview, for instance, by measuring the differential evaluations of applicants’ interview performances based on group membership. In addition, more subtle forms of discrimination have also begun to be explored by integrating the implicit attitude research into the interview process (Macan & Merritt, 2011). Thus, this area of research is ripe for examination. Some research questions still to be examined include: What role do implicit attitudes play in interviewer judgments? Do these findings generalize across cultures and different countries? And, once we understand further the underlying processes operating in interviewer judgments, can we find effective approaches to lessen them?

References


**Paper 4: What does big data say about the reasons for the gender imbalance at the top of the organisations?**

**Eugene Burke,** Chief Science & Analytics Officer, CEB-SHL;

**Theme:** Communities

This contribution draws on the SHL Talent Report in 2012 drawing on 4 million data points covering potential, skills and motivation across 17 industry sectors and 205 countries and territories between 2006 (pre Big Financial Crisis or BFC) and 2011 (well into BFC). That report is based on valid measures of talent and potential (using the Occupational Personality Questionnaire, Verify Cognitive Ability Tests and Motivation Questionnaire) and data across 10,000 clients worldwide.

One of the key topics addressed in that report is diversity from an essential business perspective and in light of the dawning demographic shifts in the world’s workforce as the boomers exit and the new generations, and fewer of them, populate the workplace and assume managerial and leadership positions.

As noted in a 2010 report by the European Commission: “As Europe collectively strives to recover from the recent recession and build a platform for future growth and stability ... One crucial resource for future growth lies in the untapped economic potential of women and their full integration into the decision-making process in all areas of the economy is crucial.” Yet, and while in the US and UK workforces the gender split is nigh on 50:50, women remain under-represented in certain sectors, on boards and in senior roles. While the exact numbers may vary, most reports are consistent in showing that women are far less likely to hold a senior position in either public or private sector organisations. A just released global survey cited the proportion of women holding senior positions has dropped to 2004 levels at 1 in 5.

The analysis and results shared in this contribution goes beyond surveys and perceptions to look at the potential and motivation of men and women to answer three questions:

- Is there a substantial difference in the leadership potential of men and women?
- Is there a substantial difference in the motivational factors associated with achieving a senior position?
- Are there other psychological and talent factors that may help to explain the gender imbalance at senior levels?

In short, our analyses show that there is no meaningful difference in the leadership potential between men and women - a mere -0.8% in the proportions of men and women ranking at the highest level of the SHL Talent Analytics Leadership Benchmark. So, in terms of the means or personal resources to be effective in a leadership role, that doesn’t explain the imbalance.

What about the motive or motivational profile associated with succeeding to a senior position? Our analysis identified 6 motivational factors strongly associated with achieving a senior position. Those higher on this index are 3 times more
likely to reach a senior or executive position. The difference on the index was a mere 3 percentiles slightly in favour of men.

Not means and not motive, so one would suspect that a key driver is opportunity, but even if the opportunity is created for more women to succeed to a senior position, would they take it? Our data suggests not from two perspectives. A survey in support of the report conducted in the UK in 2012 obtained responses from women in the workforce such as “When you see it [the C-suite] up close... It’s not clean at the top. Motives are not always enterprise-related. It’s more about personal agenda.” and “Members of the executive management team above me are all men and I feel they see strong women as a threat.”

This concern with politics at the top resonated in our data when we compared four motivational factors showing the largest differences between men and women. Power showed the largest difference between men and women when we looked at the motivational factors that distinguish those holding executive positions. While the difference between men and women is modest, it is in favour of men and contrasts with Ease and Security, which holds greater motivational value for women. There is also a clear contrast between Recognition, stronger for women, and Fear of failure, stronger for men (these motivational factors will be explained in detail in the presentation).

So, what are the key take-aways from our analysis and what does occupational psychology big data say to organisations about the gender imbalance?

Given that men make up around 76% of senior positions globally, the type of culture one can expect at the C-suite level and the level of mismatch between the motivational drivers of women and senior positions suggests some very clear issues in terms of the psychological barriers confronting women in succeeding to senior positions.

The importance of individual differences is key in assessing motivational patterns and strengths, so it is important to highlight that not all men or all women are motivated to succeed in the same way. However, our data suggests that if the C-suite is dominated by those who are more motivated by Power and Fear of failure, then this environment will be a natural turn-off for people wanting a constructive environment where they will be recognised for achieving. Our data shows that the people who are most likely to experience that turn-off are women.

That means the culture of the C-suite or perceptions of that culture have to change if it is going to attract aspiring female leaders. There’s been much talk about the need for values-driven and authentic leadership, and the time has come for organisations to make that a reality. The research we have cited from those such as McKinsey shows that is the type of leader women want to work for and to be. Not only are women more likely to value Ease and security and Recognition, they are likely to reflect those motivational factors in the way they manage and incentivise others.

The development and preparation of people for senior roles must take into account that motivational factors are going to be especially important transitional hurdles for women, though our data also recognises the need for attention to development of male leaders too.

For either gender, an organisational shift from a culture framed by Fear of failure to one founded on Recognition for contribution and performance will be a stronger attraction for

Ultimately, it shouldn’t be about really about gender (or even generations), but about the best person for the job and having managers who know how to leverage differences effectively. 76 million American Boomers are set to exit the workforce in the coming years, a trend that will be followed in other mature economies. That means many organisations will have to face a simple fact – there is going to be an even bigger shortage of talent.

A shortage of talent means a rethink. That rethink will have to include re-framing the world of work and many of the assumptions we hold today about that world will have to be discarded. But, discarding one set of assumptions for
another set of assumptions will not serve organisations well. There is a need to develop clearer and more evidence-based perspectives on people and their talent. Organisations would be better served by understanding where differences matter and what those differences mean for employee performance and engagement.

This contribution will outline the data sources and the evidence supporting their validity as well as the methodology used to create the benchmarks and conduct the analytics underpinning the results to be shared.

References:


W18
Student Prize for Excellence (including prize presentations by DOP Chair Almuth McDowall at the start of the session)

W19: Symposium
Sustaining communities of good work
Prof. Angela Carter, Institute of Work Psychology, Sheffield University Management School, Tallinn Technical University, Estonia, and Just Development.
Theme Communities

Aim: To demonstrate to professionals and the public the role OPs can have in enabling sustainable good work practices that introduce and develop young workers.

Overview of the symposium
For OPs to enable good work that is at the core of sustainable communities both individuals and organizations require support and development. Using the organising framework (see below) this symposium will explore the development of key attributes of good work in communities and how this can be sustained. Papers will be given in pairs (with new and mature OPs) demonstrating unifying generations and enabling sustainable development.

Figure 1: Organising framework of the symposium

The symposium Chair will facilitate each session taking questions and points of discussion from the audience leading to a final facilitated discussion session.
Paper 1: Building Individual Futures


ASPIRE students (Years 7 to 13) have been introduced to ‘Skills for Success’; the notion that success doesn’t just rely on being cognitively intelligent, it is equally important to be emotionally intelligent. This builds on workshops delivered by external partners and uses one-to-one coaching sessions with an external professional (e.g., DWP as part of their “Community 10,000” initiative as well as the Met Office).

The benefits of the programme are great for all involved. For the students they are ready for the world outside education and develop the confidence to “have a go”, understand themselves and recognise strengths, abilities and development needs. The Coach Volunteers feel they have a hand in developing the next generation and can pass on their experiences and skills and promote their business and career paths; promoting, recruiting and succession planning within their own organizations. The approach produces a sustainable future for all: students, employers, professionals and education. The short-term programme evaluation is very positive and we will have two years of evaluation to examine in January 2014. We will describe the programme, its evaluation along with some of the findings and changes.

Paper 2: Building sustainable organizations

Hannah Ashworth, Talent management consultant, Croydon Council. Gina Palermo, Talent Q & Alan Bourne, Talent Q.

2.1: E2E – Education to employment

Building on successful developments of apprenticeship schemes in London the national focus has shifted from apprenticeship targets to quality and partnership working to support young society. This paper introduces an organizational intervention to get young people into work. The findings from an evaluation carried out using the TOTADO model (Birdi, 2006) will be discussed along with implemented changes to the scheme.

I will share the good practice of a public-private partnership model that has had a positive impact on the employment and skills of local young people through the supply chain. Other local partnership engagement activities will be outlined going beyond the organization’s own scheme and targeting ‘work readiness’ of students that are still in full-time education through links with local colleges.

I will describe the use of a career counselling model (Savickas, 2005) that is useful for young people in today’s workplace. The model builds on the notion that careers have changed significantly, are less stable and need to be self-directed (e.g., protean careers; Hall, 2006). Career Construction Theory (CCT, Savickas, 2005), grounded in Adler’s notion of Individual Psychology uses narrative and storytelling to raise awareness of an individual’s life themes and apply these to current and future situations. This work has yielded positive outcomes with apprentices looking for their next steps in work. I will offer some evaluation of this approach and draw cross sector comparisons of engaging young people at work.

2.2: Hold your horses! Are UK employers rejecting younger candidates too swiftly?

This paper explores how UK employers are typically profiling their requirements for roles in behavioural terms, and what this may mean for younger people and their chances of getting a job. To provide an objective view of what employers are typically looking for in recruits, a total of 1,069 role profiles created by Level B-trained users from over 50 UK employers were extracted from Talent Q’s database. These profiles are regularly used by employers to assess a candidate’s match to their requirements using a 15-trait work-based personality assessment (Dimensions). An aggregated role profile of employer’s requirements was created from this dataset, and compared against a database of over 102,000 recent candidates completing the personality assessment. Each trait showed no significant adverse impact with age and trained HR users apply the assessment to inform interview processes rather than making screening.
decisions. Nevertheless, some significant differences were found at the overall role profile level for the under 20’s age range in particular.

Taking the aggregate profile from the total sample of 1,069, the under 20’s age group were likely to fit within the aggregate employer profile in 36.9% of cases. This went up to 46.8% of cases for 21-25 year olds, and 43.3% for 26 years and over. So, whilst the 21-25 year old group appear to often fit employer requirements, those younger appear to be less well positioned against typical employer requirements. Looking more closely at the underlying trends, bearing in mind responses to personality assessments can change over time; these data may give a view of how personality develops as people go through life as well as the impact of any generational changes in outlook at societal level.

This paper will look at the age ranges in more detail and suggest there is a significant risk that employers reject many candidates under 21 who are only just away from reaching a peak in terms of developing key workplace behaviours. In addition, candidates (20-25 years) may also have negative outcomes if employers emphasise traits which tend to develop later in careers. When assessing younger people in particular, this has clear implications for employers in terms of how they determine the key behaviours and competencies that matter in their organization. There is also a duty incumbent on OPs to advise their clients appropriately on the interpretation of assessment information to ensure good quality and unbiased decision-making looking at role requirements in the round, not just ‘one competency at a time’.

**Paper 3: The importance of employment assessment interventions to enable effective access and participation in the labour market.**

**Sue Gould**, Sheffield, Department for Work and Pensions & David Carew, Chief Psychologist DWP Psychology Group & a newly appointed Government Psychologist (as yet not known).

Building communities of good work

False starts, involuntary job separations and limited career expectations or progression may mean that security in the labour market is less than optimal. This reality has life-long consequences for individuals, organizations and society at large. These factors, along with the opportunity to access good work, enables individuals to fulfil their potential and build sustainable communities where people live and work. A key facilitator central to helping young people to find appropriate work that both meets their interests and their abilities is access to employment assessment (EA). In itself EA is a specialist area where OPs have a lot to offer. This paper makes a case for the employment assessment approach as a labour market intervention that plays a key role in helping individuals find, sustain and flourish in employment. The paper concludes with a consideration of the challenges and opportunities to enhance the focus and quality of employment advice to increase the possibility of successful labour market participation in young people.

Facilitated panel discussion - how can OPs take this work forward?

These sessions will be followed by a facilitated discussion between the speakers and the audience about how OPs can take this work forward and contribute to building sustainable communities of good work.

**References**


W20: Short Paper

A Situational Judgement Test for Values based selection in banking

Stuart Martin, Work Psychology Group, Anna Koczwara, Sara Reading & Fran Campalani, Royal Bank of Scotland

Theme Organisation

The Royal Bank of Scotland (RBS) is operating within a complex environment of culture change, media scrutiny and competition for top talent. They seek to introduce an innovative assessment approach to attract and recruit applicants who possess the attributes that best complement the Bank’s Values and vision for the future. Further, RBS seeks to offer an outstanding candidate experience and further the Bank’s social mobility agenda. A new style of Situational Judgement Test (SJT) was designed to provide a highly engaging preview of life at RBS for both graduate and apprentice populations, as well as targeting key Values and behaviours. Pilot analysis (n=127) revealed a final test of 57 items (α=.817). No significant differences were found in terms of socioeconomic indicators. The SJT goes live in August 2013 whereby candidate feedback will be evaluated.

Introduction

The global recession has cast a spotlight over the culture of banking. Causes are complex; however the factors of short-term thinking, lack of analysis and inadequate risk control are deemed as key contributors (Kandola, Challenger & Clegg, 2013). In response, RBS is investing for the future by ensuring that principles such as risk control and ethical decision-making are more explicit than ever before.

The RBS Early Career unit is dedicated to the recruitment and management of graduates and apprentices. A key objective is to attract, recruit and invest in those who possess the attributes that best complement the Bank’s vision for the future. To do this, the Bank’s Values must be embedded within selection processes and the overall candidate experience. Candidate experience is a workstream in itself. It draws together RBS’s aims to create for candidates an open and positive encounter that reflects the way the Bank treats its customers.

The workstream also aims to broaden the Bank’s diversity, particularly in terms of social mobility, for both graduate and apprentice populations. The popularity of apprentice schemes has now permeated the service industry, as opposed to skilled industries only. Traditional methods that select apprentices, such as the use of A levels, are becoming increasingly incongruent with the social mobility agenda (Kirkup et al., 2008). A more pioneering solution is required in order for RBS to invest appropriately.

These issues raise key questions for Occupational Psychologists. How can we assist organisations to find valid and reliable solutions to these challenges? A competency based approach is challenging when assessing graduates and apprentices who may have limited work experience from which to draw behavioural examples. Moreover, traditional selection filters often offer the candidate little insight into organisational culture and values.

The challenge

RBS identified opportunities to improve the Early Career selection process. Firstly, the Bank’s Values were to feature...
prominently. These were developed through thousands of interactions with customers and staff and crystallise RBS’s priorities into key principles, such as *Serving Customers* and *Thinking Long Term*. Secondly, a new competency framework has recently been developed to improve alignment between new hires and the changing culture of the Bank. The competencies translate the Values into behavioural themes such as *I Do the Right Thing* and *I am Open Minded* which should guide assessment criteria. Further, data showed a high attrition rate following the first stage of selection. It was vital to rejuvenate the candidate experience with an engaging and relevant preview into the RBS working culture. In summary, the Early Career team sought a valid, reliable and highly engaging selection filter for both graduates and apprentices, that would support the Bank’s social mobility agenda. A bespoke SJT style assessment was considered a highly suitable vehicle with which to achieve these aims.

**The proposed solution**

SJT s are designed to assess individuals’ judgement regarding situations encountered in a target role. Candidates view a set of hypothetical but relevant scenarios and are asked to make judgements about possible responses. These are scored against a predetermined key.

This project intended to design and implement a bespoke SJT for RBS Early Career for a number of reasons. SJTs tend to assess attitudes and values rather than knowledge, hence they are appropriate in the selection of graduates and apprentices who may have limited work experience. They can be tailored to test for the desired values and behaviours. Content and answer keys can be carefully considered to portray relevant activities, priorities and working culture. Evidence strongly suggests that SJTs are met typically with favourable applicant reactions (Chan & Schmitt, 2002) and high perceived face validity (Clevenger, Pereira, Wiechmann, Schmitt & Harvey 2001). SJTs have been shown to have moderate to good reliability and predictive validity (McDaniel, Hartman, Wetzel & Grubb 2007), incremental validity over cognitive and personality measures (Patterson, Baron, Carr, Lane & Plint 2009) and reduced adverse impact over cognitive tests (Lievens, Buyse, & Sackett 2005).

**Research design and methods**

The SJT was required to be launched by 1 August 2013 for graduates, followed by an October launch for apprentices.

**SJT specification**

According to best practice SJT design (McDaniel et al, 2007), a test specification was developed through interviews with key RBS stakeholders (n=6). It was established that:

- a single test would operate for graduates and apprentices, because the career pathway for apprentices is based on high potential and aligns with that of graduates over time
- the test should take about 20 minutes, whilst being reliable and an effective differentiator; this would allow a realistic business preview without over-burdening candidates
- five competency domains (including ‘I do the right thing’ and ‘I help others succeed’) and the RBS Values would be tested for, guiding content and answer keys
- the test should use a 4-point rating scale of appropriateness (1 = very appropriate, 4 = very inappropriate) to ensure it is easily understood whilst providing sufficient data points

**Test development**

Interviews were held with subject matter experts (SMEs) (n=8) using Critical Incident Technique methodology (Flanagan, 1954) to generate example scenarios and possible responses. 39 scenarios (267 items) were developed. An example is shown below.
Since joining RBS you have been working on a new product called SimpleBank that will improve the way customers do their banking online. You and your team are very proud of having created something together that will make a difference for your customers. You have been given an opportunity to present to other RBS departments an overview of how SimpleBank works, to inform them of the ground-breaking work your team has been doing and what the benefits are to customers. You have just given the presentation and have received positive feedback by those in attendance. John, who works in another department, approaches you. He disagrees with many of the points from your presentation. You disagree with what he is saying.

How appropriate are each of the following responses in this situation?

A. Inform John politely that he is incorrect, and that you do not appreciate being spoken to in this way
B. Politely challenge John’s criticism, using the knowledge you have gained from working on the presentation
C. Quickly attempt to change the topic of conversation away from John’s criticisms
D. Ask John more about why he disagreed with many of the points from your presentation

To help ensure content and face validity, these were reviewed by stakeholders to agree content and answer keys, using the competencies and Values to reach agreement. This included RBS’s ‘Yes’ checklist to ensure content was appropriate by asking questions such as ‘Will this decision keep the assets of the bank and our customers safe?’ Some initial content was rejected based on this, or if answer keys were not agreed on.

Piloting
The pilot test was completed by RBS graduates (n=182) with a view to piloting on apprentices later in the year. Pilot data were collated and scored electronically. Demographic data were also collated which included socioeconomic based questions. 54% of the sample was male, 45% was female and 1% did not specify. In terms of ethnicity, 65% described themselves as White, 12% Asian, 5% Chinese, 2% Black, 8% as other and 6% did not specify.

Results and data analysis
After data cleaning, analysis was run on n=127 cases. Some items were rejected due to poor correlation with the other items, impact on reliability or item difficulty. Final test content and keys were ratified with stakeholders (18 scenarios, 57 items). These set showed an encouraging level of internal reliability (α=.817) and effectively differentiated.

Very few group differences were found. No significant differences were found regarding socioeconomic indicators, suggesting that the SJT successfully aligns with the Bank’s social mobility aims.

Discussion
The pilot provided initial evidence that the SJT is an effective, reliable and efficient method with which to assess the key attributes required. It suggested that SJTs can be exploited to assess the values and priorities of a complex organisation such as RBS whilst conveying its working culture. Encouragingly, initial evidence supports the social mobility agenda by showing no significant differences in terms of socioeconomic factors. Analysis of live data and candidate feedback, and piloting on the apprentice population, will take place in Autumn 2013. Future plans include a predictive validity study to examine the relationship between candidates’ SJT performance and subsequent workplace performance.
These findings hold wider implications beyond the banking sector. The popularity of apprenticeships continues to rise and big questions are being asked about the currency of selection criteria such as A levels. Moreover, other professions are finding themselves in the ethical spotlight (e.g. nursing). This project identifies a highly promising approach with which to implement assessment that is engaging, reliable, valid, fair, values based and supportive of social mobility.

References


W21:
OPiPP (Occupational Psychology in Public Policy) Panel Session

**Why the NHS needs OP: Implementing Culture Change in the World’s Fifth Largest Employer**
Convenors: Emma Donaldson-Feilder, Convenor of OPIPP & Antonia Dietmann, OPIPP Member
Theme Communities

“In the end, culture will trump rules, standards and control strategies every single time, and achieving a vastly safer NHS will depend far more on major cultural change than on a new regulatory regime” Berwick Review.

The reviews commissioned in response to the events at Mid –Staffordshire NHS Foundation Trust conclude significant culture change is necessary to improve patient safety in the NHS. Occupational Psychologists (OPs) are ideally placed to advise on how best to implement the changes recommended. OP expertise is useful to specific strands of work, for example: developing leaders; the structure of teams; development of staff; ensuring on-going learning of staff members and institutions; whistleblowing; representation of patients and carers on boards; restoring trust in organisations; employee engagement and wellbeing, as well as to the task of managing change in a large, multi-disciplinary organisation. This session will bring together an expert panel and audience of OPs and other stakeholders to discuss how OP evidence and expertise can help.

W22: Short Workshop

**Challenging Professional Ethics or How to get struck off without really Trying**
If you practice psychology you must act ethically. But do you know what that really means in day to day practice? Is it just sticking to a code? And do you know what acting ethically or according to a code of conduct means to the HCPC, or the BPS, or your clients or your peers? Expect to be challenged; expect information, vignettes, interaction and gratuitous advice. Are you fit to practice? What can you do if someone complains? Can anyone help? What might it cost? The author has presented on professional ethics at the BPS annual Conference, to the DOP Leadership Group, to Counselling Psychologists, to Senior Educational Psychologists and has been invited to the 2013 Clinical Psychology Conference. He is the former Chair of the BPS Ethics Committee this will be a short interactive session that will possibly surprise you, may make some look for their insurers number, and will lead others to thoughtfully question their practice.

This will be a short (one hour) interactive session. It will be of particular interest to practicing psychologists and those who teach them. Occupational Psychologists do not tend to have the formalised institutional structures or the socialisation into practice that other groups have, and therefore may find themselves particularly vulnerable.

W23: Workshop
Managing work-life balance - a workshop for practitioners
Gail Kinman, University of Bedfordshire, Almuth McDowall, University of Surrey
Theme Organisation

To share best practice and frameworks for interventions. We will present delegates with case studies of WLB interventions. These will be based on our personal experience of practice and research, as well as derived from other interventions that have emerged from the peer reviewed literature and the public domain. Each case study will be reviewed by small groups of delegates in terms of: (a) evidence-base; (b) ‘face validity’; (c) fitness for purpose; (d) acceptability by organisations and employees; (e) potential generalisability to other organisational contexts.

Practitioners will also be invited to reflect on their own practice situations, giving delegates the opportunity to engage with prominent academics and experienced practitioners in the field. We will also provide delegates with tips for further reading and professional development.

The findings will be used to inform the content of a factsheet, which will provide occupational psychologists with a "tool-box" of evidence-based strategies to help their clients manage the work-home interface more effectively. In 2012, the WLB Working Group published three factsheets (targeted at employees, managers and coaches) which covered the risk factors for work-life conflict and the potential impact. These factsheets were very well received and are currently used widely by practitioners, employees and organisations.

W24: Standard paper
Multimedia SJTs – can you really have it all?
Hannah Ablitt, CEB SHL, Alison Hollamby, CEB SHL, Nadia Johnson, Barclays Bank
Theme Organisation

SJTs have long been viewed as a valuable assessment tool, and organisations are increasingly recognising the benefits they can bring to the table for selection and development purposes. The current job market is a competitive
environment, so companies must set themselves apart from each other as being unique places to work, offering great opportunities to their employees. This means that companies are contending for the best people, who will set their organisation ahead of the game, and in this arena the SJT is really proving its worth. If a company invests more in their talent management processes, how do they ensure return on investment in their people? Answer: organisational and role fit are key. SJTs can help to solve part of this puzzle.

**Why is this important in the context of investing in the future of both organisations and individuals?**

We know that SJTs can identify those with the best organisational and role fit if designed in a scientific way and they enhance the candidate experience as more enjoyable type of assessment to complete. They provide a realistic preview of the role, allowing candidates to self-select out; they are comparable in validity to more traditional assessments and they are fair too.

Furthermore, when SJTs are subject to the same scientific rigour for test construction that are applied to other, more traditional assessments, we can make comparisons in terms of reliability and validity. This is possible as long as the design process includes as exact definition of what behaviours are to be measured; which is achieved by applying a clear, construct driven approach, to ensure confidence in the tool’s robustness.

So we know that the SJT is a valuable tool in terms of what it measures and how it can enhance the assessment process, but what is really setting the SJT apart in terms of its value to organisations in the 21st century, is its flexibility for customisation.

Organisations are able to dictate the shape they wish their SJT to take; from the image they want to portray to the tone of voice the SJT is written in, to the deployment method of the SJT – be that text-based or Multimedia (e.g. videos or animations). This flexibility gives organisations the opportunity to communicate their culture and brand to the candidate through every stage of the assessment process. In short it can set the tone of the employee's experience with that company from the first click of a button within a recruitment process. Since companies will want to retain rejected candidates as customers, it’s important to get this right!

**How can we achieve this?**

While we have a growing body of evidence showing that SJTs developed using the construct-based approach are not compromised by customisation in terms of contextual changes and localisation into different languages, the Multimedia component has, so far, been the missing piece of the puzzle.

Multimedia SJTs are the newest addition to the SJT arsenal and this diverse option for an assessment is becoming more popular. Multimedia SJTs are in a strong position in terms of applicability to the 21st century and value in organisation; in the war for talent, organisations must embrace innovation to set themselves apart from the competition in order to attract the best talent. With the development of technology, the social media and online gaming world, organisations are now being faced with the challenge of how to engage this new generation of candidates. Further, this generation expects an application process to be accessible, straightforward and interactive (e.g. Can I access this online using my ipad? Can I track the progress of my application? Can I see the relevance of the application to the role? Is this a place I want to work?).

However, can the shiny, new, technologically advanced Multimedia SJTs still retain the integrity of the text-based SJT? Is it possible to have both flashy packaging and scientific rigour – essentially, in the world of the SJT, is it possible to have it all?

This paper argues yes. We deal with questions such as: What scientific process do you follow? Can you provide a text-based equivalent that deals with any accessibility issues? What type of multimedia do you choose if you want to use the test globally? In this session, we will share with our experience and evidence from client case studies that a well thought
out, robust process can deliver multimedia assessments that not only engage candidates, but have equivalent validity and reliability to a text-based version and other more traditional styles of assessments.

We are joined by a client from the banking industry to present a case study and describe their journey into the world of Multimedia SJTs. The client invested in video-based SJTs for 3 roles at different levels across the business. This project used cutting-edge technology in order to produce SJTs that accurately portray the brand and values, and create a highly engaging assessment environment for candidates. Most importantly however (from a psychometric view point!), analysis on the measurement properties of the video SJTs, showed that they work in the same way as the text-based versions. This area has not been researched before and no study has looked into this. We will report the design process of this research, analysis and results found but essentially, the reliability and validation criteria are comparable which has been a large question for this area.

W25: Workshop
Social Media: Strategy and Skills
Ciara Kelly & Stephen McGlynn, DOP Communications Group
Theme Profession

Aimed at those more familiar with social media, this workshop will present some tips and tricks on how you can improve the effectiveness of your social media strategies. We will explore some of the reasons you may wish to use social media, and how you can tailor and coordinate your approach to effectively meet your goals, without taking up unnecessary time!

We will introduce some tips on best practice for Twitter and LinkedIn, share ideas on blogging and online videos, and discuss how writing for the web requires a different approach to that expected in print media. There may also be the opportunity to discuss coordinating between different platforms, and using social media for collaboration. This session is limited to a maximum of 20 people, and so the exact content of the session can be tailored to the needs of the group.

W26:
Careers Surgery
David Carew, Chief Psychologist, DWP
Theme Profession

A chance for early career psychologists to ask questions about getting into the profession and hear about the experiences, advice and views on career planning of David and private sector colleagues.

W27:
Workshop
Using Psychology to Promote the Value of Occupational Psychologists
Danica Giles, Influence at Work UK
Theme Profession

Given that psychology has provided so many impressive insights on the influence and persuasion process, it seems rather ironic that when seeking to persuade others of the value their insights can bring to an organisation psychologists do not appear any more influential than other professions also seeking to promote their cause. This might be especially true of occupational and organisational psychologists, who often struggle to be acknowledged as experts both within their organisations and with potential clients.

This workshop will address this issue by equipping each attendee with ethical techniques that they can apply to become a more effective influencer. The session will review Six Universal Principles of Persuasion identified by social psychologists, in particular Robert Cialdini, that, when employed ethically, can influence others in entirely non-coercive
and cost-efficient ways. Each attendee will learn and practice how to apply these scientifically validated principles to specific situations they face in their organisations such as writing persuasive proposals, building trust with colleagues and developing relationships and networks. The session will be hands-on and practical, generating specific ideas and actions that can immediately be put to use to increase the likelihood of success with future influence challenges.

1. Main psychological theories, models and research underpinning the session
The Six Universal Principles of Persuasion presented in the session are based on social psychological research into the influence and persuasion process (e.g. dual process models, social influence theory). An overview of the research underpinning the six principles can be found in Cialdini (2009).1

2. Link with the main conference theme Investing In The Future and the strand Theme Profession
Occupational and organisational psychologists often struggle to be acknowledged by their organisations as experts who have valuable insights to offer. One important investment that can be made in the future of our profession is for all members to become more adept at persuading others of the immense value that our profession can bring to the organisations we work with.

3. The most novel and innovative aspects of the ideas being presented
One of the most novel and innovative (and even motivating) aspects of the ideas being presented in this workshop is how small changes informed from persuasion science can lead to big differences in effectiveness. Equally important for this audience is the fact that these small changes are informed not from best practices or simple guesses but instead from a body of social psychological research conducted over the last six decades.

4. Aspects of the session conference delegates and the wider public might find most informative and stimulating
The aspects that I believe delegates will find most informative and stimulating are that these small changes do not require the investment of additional resources or a change in strategy but instead small shifts of words used in a proposal, the timing of a request, or a simple contextual or environmental shift when delivering a message. Our profession is continually being challenged to show its ROI. This session will prove how even a basic understanding of persuasion science can significantly deliver more ‘R’ for much less ‘I’.

5. Materials for attendees
Attendees will be given a credit card sized tip card summarizing the six principles as well as giving access to further free online resources such as video animations, podcasts and reports.


W28: Short Paper
Increasing the use of evidence-based personnel policies (EBP) in Ministry of Defence through action research
Guro Rogstad, Ministry of Defence
Theme Research

Evidence-based policies (EBP) are a set of methods that inform policies rather than impacting on the actual policy aim by highlighting a rationale, rigorous and systematic approach to policy decision-making. Critical to facilitate the increased use of EBP is that policy makers understand the value of evidence, know what type of evidence is available, know how to access the evidence, and how to critically evaluate it. The participatory action research model used by the UK Ministry of Defence (MOD) is one way to ensure the collaboration of researchers and policymakers is robust and that the value and type of evidence is known to them so that EBP is fostered. This approach helps increase EBP for Service personnel through the use of key personnel statistics. As a result the embedding of personnel statistics in policies have
increased and the policymakers become intelligent customers of evidence, "educated" in the use of data to support EBP.

**Current use of evidence in government and organisations**

The push to increase the use of EBP in the UK government got under way with Tony Blair's administration in 1997 and was seen to replace traditional ideologically-driven decision-making with more modern and rational policies. However, the idea of using evidence to inform policy is an old concept and can be traced back to the ancient Greece, where Aristotle suggested that rulemaking should be informed by different kinds of knowledge (Sutcliffe & Court, 2005). Since the late 1990s the emphasis on EBP as a concept has been pushed by the UK Government, with our current Conservative government being no exception. Extending EBP was a key action in the Civil Service Reform Plan of June 2012 and the Open Public Services White Paper of July 2011, and in March 2013 the Chief Secretary to the Treasury, Danny Alexander, and the Minister for Government Policy, Oliver Letwin, announced the What Works Centres, a new initiative in the form of a world leading network of robust and comprehensive evidence centres to guide decision making on public spending. This push towards further use of EBP comes under the Government's policy of transforming government services to make them more efficient and effective for users.

According to Sutcliffe and Court (2005), EBP is a set of methods that inform policies rather than impacting on the actual policy aim by highlighting a rationale, rigorous and systematic approach to policy decision-making. Critical to facilitate the increased use of EBP is that policy makers understand the value of evidence, know what type of evidence is available, know how to access the evidence, and how to critically evaluate it (Davies, 2004). This is in addition to ensure there are robust communication pathways and interaction between policymakers and researchers where there is hoped to better use EBP.

**Participatory action research approach**

This is where the utility of action research shows itself. Action research is described by French and Bell (1999) as the cornerstone of organisational development, and its usage in improving the quality of policies to foster evidence-based policymaking is recognised. The authors define action research as "... the application of the scientific method of fact-finding and experimentation to practical problems requiring action solutions and involving the collaboration and cooperation of scientists, practitioners, and laypersons." (ibid: 131). Kurt Lewin, the social scientist, believed that action research would contribute to greater knowledge about causes and dynamics, create a need for greater collaboration and joint inquiry between researchers and practitioners, and create richer data and workable, practical solutions (Lewin, 1947). As such, action research works as a process to foster organisational development that involves robust EBP.

Being a well-known approach to problem solving (Shepard, 1960), participatory action research is one of the most common forms of action research in organisational development. It is characterised by a methodology that is collaborative and a client-consultant inquiry. Ministry of Defence is focused on ensuring that its policies are evidence-led, and lately the participatory action research model has been followed by researchers sitting centrally in MOD to improve EBP. Motivated by cross-Government emphasis on EBP, the need to provide rationales for personnel policies that can stand up to scrutiny from external bodies such as the Office for National Statistics and tests for financial backing by the Treasury have all pushed the interest for evidence-based policies.

**Policymaking in MOD using AFCAS**

While in the past the cooperation between central MOD researchers and personnel policymakers mostly focused on ensuring the right questions were asked and then leaving it to the policy teams to embed the statistics in their policies, in 2013 there was a shift towards strengthening this relationship to improve the implementation of the statistics across more policy areas and increasing ownership of data within the policy areas. One example of this shift by which the researchers have been an integral part of the diagnostics of and solutions to understanding personnel issues, close working with policymakers who take action on the evidence is with the Armed Forces Continuous Attitude Survey
(AFCAS), which is Ministry of Defence's annual attitude survey of its serving population. The survey has been going since 2007 and are sent annually to short of 30,000 Regular Service personnel asking close to 350 questions about their satisfaction with and knowledge of a range of policies covering among others remuneration, welfare, health and wellbeing, support to families, equipment, job factors, Reserves, leadership, and career. It has particularly provided weight to policies in the last 3 years with the start of tracking trend data. Its statistics are used throughout the year for tracking and developing policies for a range of smaller and larger Defence programmes including the New Employment Model, tracking of commitments under the Armed Forces Covenant, informing pay and remuneration policies through the Armed Forces Pay Review Body (AFPRB), and providing equality and diversity statistics for the Service Complaints Commissioner (SCC), in addition to being used by each of the branches of Defence for their individual Service policies.

PAR methodology
Adequate embedding of the AFCAS statistics in personnel policies has required a shift towards a closer collaborative approach between the AFCAS researchers and policymakers where there are ongoing consultations year round to secure buy-in. This also helps to provide policymakers with more rounded views of the impact of their policies.

Being a year-long cycle, the first step involves identifying the status quo of personnel policies and understanding policymakers’ data requirements, their intended usage of the data, and links to overarching strategic personnel plans and Defence personnel programmes. This sets the scope and objectives for what data is required and ensures early buy-in and collaboration between the researchers and policymakers, with survey items formed on the basis of what key policymakers require to either track or develop a new policy. Davies (2004) suggests that one way to increase policymakers’ buy-in is to increasing their ownership of evidence by being project owners. In UK Defence personnel policies this is currently done by setting policy teams as data owners for specific AFCAS items. An ensuing dialogue between the researchers and each policy teams takes place at regular intervals throughout the year to sense check whether any changes or additions to policy requirements have altered the need for the statistics, assist in working up a embedding plan where the statistics and other evidence can help shape or form policies, create an analysis plan that will yield statistics to the level required by policymakers in understanding the issues and, importantly, maintain policy interest in using the statistics once ready. Figure 1 depicts the action research process used to embed the AFCAS statistics in central personnel policies.

![Figure 1. Participatory Action Research Model used by central MOD researchers](source)

Implications for using participatory action research in policymaking

While helping MOD create improved EBPs, the use of AFCAS statistics through the participatory action research approach also fosters an attitude change in policymakers, as they are actively involved in the research process. Indeed, Lewin (1943) believed that the best way to change attitudes is by having recipients actively engaged in the change process. As such, the approach can be seen both as a process to improve EBPs as well as being a goal in its own right by promoting change, as suggested by Greenwood et al (1993). Thus, the implications for the increased focus on evidence in Defence personnel policymaking through participatory action research is on one side the improved ability for policies to stand up to scrutiny by external bodies and departments and to cultivate attitude change in policy makers, while on the other, and equally important, is the improvements in personnel policies and by extension, improvements in Service personnel's and their families' lives.

Conclusion

By way of using the principles of participatory action research does MOD contribute to an increase in evidence-based personnel policymaking in the UK Government. AFCAS statistics are an important mean to understand Service personnel's views of Service life and in the past few years there has been a strengthening between researchers and policymakers in embedding this evidence into the development and tracking of personnel policies by using action research principles. However, only embedding these statistics in policies is not sufficient to create robust EBPs. Sutcliffe & Court (2005) highlights that the type of evidence used during the policymaking process and how this evidence is subsequently embedded in policy should influence policymaking, alongside policymakers experience and expertise, judgement, resources, values, habits and traditions (Davies, 2004). Continued emphasis by the researchers on creating data ownership of specific areas in AFCAS alongside consultations and feedback to policymakers throughout the project cycle and an implementation and usage plan agreed at the start of the consultations contribute to a constant improvement of personnel policies. While EBP continues its upward trajectory as part of Defence's policymaking with continuous and further focus on action research needed for the future, there also needs to be an improved understanding of how other contextual and behavioural factors influence the quality of public policies.

References


Opportunities for Career Development in Charities

John Toplis, Independent Consultant

Theme Communities

This paper is based on the author's long association with a recruitment consultancy which specialises in charitable and other not-for-profit organisations. As well as placing candidates on a fee-earning basis, the consultancy has developed a scheme whereby senior managers in a commercial organisation undertake voluntary work as trustees as part of their career development. Advice is also given to individuals interested in working in the sector. These opportunities may be of some interest to Occupational Psychologists and their clients. However, possible placements and other opportunities need to be assessed with care. For example, the majority of charities are small, and this can mean that the expertise of their staff and any mentoring that they offer may be less than perfect.

Measuring the impact of training and development workshops: an action orientated approach

Richard Stockill, OPP

Theme Individual

Training and personal development activities have long been seen as integral to an organisation's success. Indeed, despite current economic pressures the UK Commissions Employer Survey, published in 2012, estimated that £49bn was spent on training in the previous year. With a price tag such as this it doesn't seem unreasonable for organisations paying for training and development to ask the question 'what's the impact been?'

Demonstrating the impact of training has been a debated topic for many years. The choice of evaluation criteria, the dependent measure used to operationalise the effectiveness of training or development, is often a key decision. A wide range of models and taxonomies exist; yet despite this range, often the most straightforward and practical model are used (Van Buren & Erskine, 2002), most typically Kirkpatrick's (1967) hierarchy. Patel, 2010 cited in Salas et al (2012) found that over 90% of companies surveyed measured trainee reactions, over 80% measured trainee learning, over 50% measured on-the-job behaviour, and nearly 40% measured results.

Kirkpatrick proposed four levels of evaluation:

Level 1 - Reaction - Captures the trainee's affective and attitudinal responses to the training
Level 2 - Learning -Assesses the trainee's ability to demonstrate mastery of terminal performance objectives in the training environment
Level 3 - Behaviour - Measures extent of on the job performance
Level 4 - Results - Determines the benefit to an organization

While this model is commonly used it does come with a number of limitations (Giangreco, Carugati, Sebastiano, 2010). Considerable efforts have been made to establish links between each level but little has been found. For example, how a person feels or what they think about their training and the relationship this has to learning, changes in behaviour and organisational results is not clear. In addition to this the choice of criteria used can vary with some criteria inevitably being more accessible and accurate. Understanding the relationships between different criteria would inform the choice of evaluation criteria used. Whilst much work has been done to explore the relationship between evaluation criteria, far less work has been done to establish the relative merits, or accuracy, of different criteria such as measures of performance or of business outputs (Randal, Ferguson, Patterson, 2000).

Previous work has suggested Kirkpatrick's model implies that all measures should be collected after training has been completed (Bates, 2004). Unfortunately little work has been carried out to look at when these criteria should be taken

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(Lally, 2010). For example at what point during a development project should we measure a person's performance and how should this be done. Common to the practice of scientific investigation is the use of a pre-post design, with data being taken at different periods in time. This approach allows comment not just on current criteria but change over time which would offer a more potent argument for the impact of a training or development programme.

This study made use of the Kirkpatrick model to inform the choice of differing types of criteria to be used, and also used a pre-post design to look at change in criterion measures. This gave an opportunity to examine some of the previous findings on the Kirkpatrick model in an applied context.

**Key questions**

What are the relationships between differing levels of data collected to measure training impact?

What relationships are there between individual characteristics and differing levels of data collected?

What benefits are there from using multiple measures over time?

**Design section with methodology**

**Participants**

Participants in the study comprised a heterogeneous sample of 93 employees (30 men and 44 women). All were employed within a medical device distribution company. The average length of service in the organisation was in excess of ten years. Participants came from all areas of the business from Director level to Warehouse Staff. The sample was drawn from employees taking part in a development workshop on Communications. This workshop formed part of a wider organisational development strategy.

**Measures**

Participants completed a series of self report measures before and after taking part in the development workshop. Measures used include the UK version of the MBTI personality tool, a series of behavioural anchored rating scales on organisational competencies and also training evaluation forms. A sample of managers also completed ratings of their direct reports.

**Data analysis and results**

Relationship between levels of training data:

Correlation was used to look at the relationship between training experience and subsequent behavioural change, and business outputs.

No relationship could be established between either a positive training experience or belief in the value of the training, and subsequent changes in behaviour.

Correlation was used to look at the relationship between training experiences and business outcomes. As shown in table 1 below, for some business outcomes a moderate relationship was found.

<table>
<thead>
<tr>
<th></th>
<th>Productivity</th>
<th>Quality improvements</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>positive training experience</strong></td>
<td>0.15</td>
<td>0.35*</td>
<td>0.24</td>
</tr>
<tr>
<td><strong>belief that training would have an impact</strong></td>
<td>0.47*</td>
<td>0.45*</td>
<td>0.30*</td>
</tr>
</tbody>
</table>
**Impact of personality on levels of training data**

Independent T tests showed no significant difference in personality type on either how a person experienced the workshop or if they thought there would be any subsequent impact from it.

Independent T tests did show a significant difference between the personality characteristics of Extraversion and Introversion on the competence of Influence ($t = -2.11$, $df = 43$, $p < 0.04$, two tailed). Cohen’s effect size was used (Cohen, 1988) to determine if observed differences were not only statistically significant but also meaningful, a small effect size was shown ($<0.50$). This suggests any difference in a person’s ability to influence is unlikely to be noticeable between different personality types in most situations.

Independent T tests showed no significant difference in personality type on whether the person noticed an impact of the training on a range of organisational outputs such as productivity, revenue, efficiency.

**Impact of training on behaviour change**

Using self ratings on a series of competency scales small increases were seen across the five week period between pre and post measures. Paired sample T tests were used to investigate the difference further. While all competencies showed an increase in behaviour only teamwork showed a significant difference ($t = -2.53$, $df = 44$, $p < 0.02$, two tailed). Using Cohen's $d$ a small effect size was shown ($<0.50$). This suggests a likely difference in behaviour but one that may not be noticeable in the everyday workplace.

**Value of competency measures used**

Correlations between self report ratings and manager ratings showed favourable relationships, as shown in table 2 below. Competencies which might be considered less visible such as innovation showed little or no correlation. Competencies such as influence were not shown to correlate at all; this may be due to the nature of influence and the perception of it. For example, if a manager were being effectively influenced would they be aware of it?

<table>
<thead>
<tr>
<th></th>
<th>Communications (self rating)</th>
<th>Innovation</th>
<th>Influence</th>
<th>Teamwork</th>
<th>Client Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td>0.8*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussion with Conclusions

Previous research has not substantiated significant links between the levels in Kirkpatrick’s model (Holton, 1996). Links between these levels was examined as part of this work. A relationship between positive experiences of training and improvements in the quality of work was found; this supports a previous study (Allinger, et al, 1997). This current work also highlighted that a belief in the impact of the training leads to subsequent increases in business measures such as productivity, quality and revenue. These findings suggest that while liking the training or development work may be important, believing it will have an impact is important. Implications of these findings are for both training design—clarifying with delegates expected outcomes, also training evaluation—reactions form content measuring belief in the impact.

Previous research has shown differences in personality with regards training experience and subsequent business outputs such as performance (Salas et al, 2012). Typically the tools used for such research are broad spectrum tools with many elements. Often training and development work will use narrow spectrum tools due to their accessibility. This current work used a narrow spectrum tool, the MBTI tool, and found the characteristics of Extraversion and Introversion did show a difference in behaviour change. Implications for future work could include focusing on how narrow spectrum models of personality account for changes in behaviour following training or development.

Previous work has suggested Kirkpatrick’s model implies that all measures should be collected after training (Bates, 2004). Assessment criteria taken solely after a training or development workshop does allow an understating of the level at which the criteria is for that specific time. It does not give an appreciation of how someone has changed. This research would argue that applying a pre post design alongside Kirkpatrick’s model extends the ability to both identify useful criteria and to design more insightful evaluation methods. One step further, and an area which this current work did not look at, is the added value of a control group. This would afford greater certainly to the question of whether it was the training and development work that caused any changes.

The time period within which changes in behaviour are seen has been suggested in previous work at around 12 weeks (Lally, 2010). Due to organisational needs this study used a four week window between the initial training programme and completion of follow up measures. This current work did show a favourable increase in behaviour, however, as might be expected within the timeframe this was a small change. Implications are for more longitudinal work to observe and report on the lasting effects of training for people. The study also found unforeseen impacts on improvements to teamwork. This may be increased awareness in how people work together. Implications for future areas of research might be the reporting of unintended the impacts.

This study made use of an existing competency framework as a self rating measure for Kirkpatrick’s third level, behaviour. Using manager ratings on their direct report and comparing them to the reports ratings findings were that a strong degree of agreement existed. While only a dozen managers were asked to rate their reports this findings does concur with previous work on the accuracy of self assessment ratings (Randal, Ferguson, Patterson, 2000).
for research and practice are that further work be carried out to establish the validity of using self assessment ratings and the value of competency frameworks as part of this. Using such approaches where available offers a simple criteria for evaluation.

In summary, this study supports the practice of considering closely the criteria and methods used to evaluate training and development work. Using multiple models and evaluating any criteria chosen during a project offers opportunities to improve not just current projects but also to inform future evaluation projects. In doing so this will show the value of Occupational Psychologists and help in answering the question 'what's the impact been'?

This study is currently ongoing with more data being collected over the next eight weeks. This will allow further clarification of the findings here.


**W31**: Bitesize Paper

**Differences observed when implementing Assessment Centres – Best practice vs Questionable methods**

**Nigel Evans**, Nigel Evans Consulting Ltd

**Theme** Profession

**Nature of Session**

This submission has a strong applied element, which focuses upon practice observed within Assessment Centre implementation across a select sample of consulting companies based within the UK.
Aims
The purpose of the session aims to give a practical ‘in the field’ spotlight on what is actually happening in Assessment Centres on a case basis. It is intended to fit into the stream of Theme Profession, specifically with the intention of raising the standard of Assessment Centre Practice.

Agenda
Assessment Centre Methodology Summary – reference to classic texts e.g. Ballantyne and Povah (2004) and best practice guidelines e.g. BPS (2012).

Background to study – noted observations over a 10 year period in Assessment Centre implementation from the author whilst working as an assessor with 8 medium sized consulting companies based within the UK.

Case observations will include –
Competency Definitions. Redesign vs use as given.
Assessors. Psychologists vs Non Psychologists.
Training. Trained vs Untrained
Support staff. Nominated Administrators vs No administration support
Role Players. Use of Trained Actors vs Assessors hamming it up.
Assessor Ratios. 2:1 vs. 1:3
Exercises. Bespoke vs Off the shelf.
Psychometrics. Expert users vs Untrained personnel in test use.
Scoring. Unified scoring systems vs Multiple scale scores.
Weighting. Actuarial vs Guesstimates
Results feedback to Hiring/Promotion Panel. Live discussion vs Distant reporting

Summary key messages and insights
There is a large bandwidth of practice – ranging from what could be classified as ‘Best’ to ‘Questionable’.
Illustrations of best practice show what is possible to achieve within an organisational context.
Raising the awareness of issues within Assessment Centre Implementation by practical example is intended to raise standards in the longer term, with Occupational Psychologists taking the lead.

Clear links are made to the existing standards of BPS Test User Qualifications and ISO 10667, and the emerging work on Assessment Centre standards.

Questions Addressed
1. What are the main psychological theories, models and research underpinning your session?
Assessment centres have enjoyed a reputation as the superior method of assessment of individuals for selection and development. Assessment methodology is well established e.g. Woodruffe (2000) with specific research insights ever emerging e.g. Putka and Hoffman (2013). However, assessment centres are plagued by practical issues that tend to limit their effectiveness. The observations from the session will provide illustrations of these issues to then be referenced where possible to assessment theory and modelling.

2. How do you see your proposal linking with the main conference theme of Investing In The Future, and what makes it apt for the particular strand you have chosen (Investing in the Profession)?
Assessment Centres have a long history of acceptance as the ‘right thing to do’ to within selection and development of employees. For organisations to get the intended benefits the future Profession should give guidance on best practice
implementation, and be clear of the risks where intended practice is questionable. This session highlights some of these areas through practical illustration.

3. **What do you consider to be the most novel or innovative aspects of the ideas being presenting?**

The idea of the psychologist not being a pawn but a trusted advisor an organisation’s Assessment Centre implementation has been stressed before, however concrete examples of best vs questionable practice does wonders for illustrating what is achievable and acceptable. The relatively novel aspect to the session is that the author is independent and, within bounds of confidentiality, this free to give examples of questionable practice without prejudice.

4. **Which aspects of your session do you think conference delegates and potentially the wider public will find most informative and stimulating about your session?**

The frank ‘war stories’ of an assessor to provide a platform for practical suggestions of improving practice in Assessment Centre implementation. The links to quality assurance in Assessment Centre implementation for individuals and organisations with reference to BPS Test User Qualifications and ISO 10667 should also be comforting for the public.

Electronic copies of slides will be made available.

**References**


**W32: Standard Paper**

**Evidence-based Practice in Practice - The Practitioner as Scientist**

Claudia Nuttgens, Independent Occupational Psychologist, Prof Rob Briner, Bath University, School of Management

**Theme Research**

The paper will be presented jointly by a practitioner and academic. The practitioner, who is also a Chartership supervisor, has held convenor positions on the DOP committee for both the Awards and Recognition, and the Science and Practice Strategy Groups. They feel they have had to compromise their professional integrity many times over the years in the name of client satisfaction! The academic, who has taught on OP MSc programmes for many years, is also strongly committed to finding ways of developing evidence-based practice.
This presentation and discussion is designed for all practitioners, but especially those who have a nagging sense that they would like to increase the efficacy and relevance of what they do for clients. It will be useful for those who struggle to access research that is relevant to their field, and who find the idea of evaluation daunting. The first 20 minutes of this session will focus on very practical advice and guidance for increasing the extent to which what we do as practitioners can truly be said to be evidence-based. We will also explore how we can build stronger bridges with our academic colleagues, not just as users of their outputs, but also to encourage new research in areas that are relevant to our practice, and work in collaboration on important research projects. Following this presentation the second 20 minutes will be spent discussing the ideas raised and generating new ideas and enthusiasm for moving further down the road towards a more evidence-based approach to practice.

The specific topics that will be discussed include:

- Evaluation and validity studies: How can we encourage clients to put into place simple mechanisms for measuring the benefits of what they ask us to implement, and how do we ensure that the methods we sell to our clients are evaluated? We will use examples from learning and development, and assessment projects, to illustrate the simple and effective approaches that can be used.

- Accessing research: We will list all the different ways in which a non-academic can access robust and useful research, including the internet, conferences and events, DOP & BPS resources and other publications.

- Working in partnership with academics: We will discuss how to approach academics to tap into emerging research and work in collaboration for the benefit of clients

- Using DOP outputs and events: We will list describe some of the ways in which practitioners can use what the DOP does to enrich their practice, including volunteering, getting involved in public policy consultations, attending events and accessing outputs from DOP working groups.

- Qualification in Occupational Psychology (Chartership) and HCPC CPD requirements: We will touch on how the new and developing processes can be the new approach to the Qualifications in Occupational Psychology and the requirements for CPD from the HCPC and explore how this encourages a sustained evidence based approach

- Working with clients: Given evidence-based practice distinguishes us from other consultants how can we explain this to our clients? What are the implications for how we market ourselves? How can we collectively ‘educate’ out clients about how occupational psychologists go about their work as professionals and how it is different from the way others approach their work?

- Working with other occupational psychologists: How can we support each other to work in an evidence-based way?

**W33:** Standard paper

*Knowing You, Knowing Me; it’s the best we can be.*

**Kim Bradley-Cole, CPsychol, University of Reading, Dr Bernd Vogel, University of Reading, Prof Pam Denicolo, Universities of Reading and Surrey.**

Theme **Individual**

This ESRC funded study used a Personal Construct Psychology (PCP) approach with interview based repertory grids to discover the nature and organisational value of followers’ implicit theories of authentic leadership. It explores how subordinate leaders define the spectrum of authentic leader behaviours and how those behaviours combine and contribute to different kinds of leader-leader relationships, as well as impact on their own leadership identity (N=25 middle/senior UK managers employed in matrix organisations of +250 employees).
Research purpose
Leader authenticity and moral character is presented as a panacea to the recent economic crises’ (Kaiser & Hogan, 2010) and lack of confidence in contemporary leaders (Sparrowe, 2005). However, despite the extent of conceptual papers and range of constituent propositions (see Gardner, Cogliser, Davis & Dickens, 2011, for a review), authentic leadership research lacks breadth of empirical exploration and validation (Caza & Jackson, 2011) and is criticised for being ideological (Ford & Harding, 2011). Also, although research increasingly recognises that leaders evolve their referential identities within social relationships, most studies persist in theorising about static, internalised and enduring features of the leader alone (DeRue, Ashford & Cotton, 2009) and followers contributions are still rarely represented (Pastor, Mayo, & Shamir, 2007).

In response, this study adopted a constructivist and interpretivist perspective to understand how subordinate leaders make sense of authenticity and its impact on proximal relationships. It focused on the domain of leader-leader relationships to deepen our understanding of:

1. The realm and utility of authentic leadership (Luthans & Avolio, 2003),
2. Its contribution to relational leadership and high-quality leader-leader relationships (Dutton, 2003) and,
3. The impact of experiencing authentic leader-leader influence relationships on subordinates own leadership identities (Haslam, Reicher & Platow, 2011).

Methodology
Kuhnert and Lewis (1987) first argued that using a constructivist approach “liberates researchers from a static view of leadership”. Meindl, Ehrlich and Dukerich (1985) considered leadership as an emergent property of followers’ social constructions and stressed the criticality of understanding when and under what conditions such construals occur. More specifically, Sparrowe (2005) argued that real authenticity, as opposed to pseudo-authenticity, is a purely perceptual phenomenon that can only be attributed to an individual by others.

The essential assumption, or ‘fundamental postulate’, of PCP (Kelly, 1955/1991) is that people are governed by a need to make sense of the world (in essence to make it more predictable). Kelly defined a leader as “one who performs any one of the variety of jobs which are popularly recognized as leadership jobs” (p.101) by followers. In other words, he viewed leadership as a role that is conferred on a person based on the construct systems of other people, predominantly those that agree to follow. This fits with Eden and Leviatan’s (1975) proposition that followers use ‘Implicit Leadership Theories’ to interpret leader behaviours against “an underlying conceptual structure” (p.740). Therefore, in order to understand the leadership phenomenon through a PCP lens, one needs to investigate how followers construe both the person as leader and the act of leadership.

Study Design
The study explored subordinate leaders’ lived experiences across a spectrum of proximal leader relationships to understand their beliefs about;

- Authenticity of the person and ‘authenticating acts’ of the leader,
- Characteristics of different types of leader-leader relationships,
- Contribution and relative importance of authentic behaviours to high quality leader-leader relationships,
- Contribution of authentic leadership to subordinates own leadership identity.

Sample
Cross-company/cross-functional sample of 25 (13 male/12 female) middle to senior level managers (functional manager to board director), with +10 years corporate experience (aged 35+ years) and +5 years man management experience gained within larger organisation/s (>250 employees). Spans 13 industries and 12 functions.

Procedure (main study):

1. The focus of the repertory grid was to explore participants’ work relationships with different leaders across their career span in the context of how personally enabling they perceived their dyadic relationship to be/have been, along with how they construed three conceptual leader types (ideal, worst and authentic).

2. The semi-structured interview was conducted to draw out personal meanings attached to constructs. A process of ‘laddering’ was employed to ensure that the elicitation of stable, superordinate constructs was exhausted (Fransella, 2005), which are most likely to be implicit and unconscious in structure. Laddering involves structured questioning and probing of each construct to understand the underlying motivation for choosing to describe the construct in the way they have. Structured interview questions included exploration of the influence of age and gender on perceived leader authenticity, leader impact, role models and most enabling leader behaviours.

3. The analysis involved clustering, ranking and interpreting the constructs using RepGrid5 and SPSS. The transcribed interviews were analysed using NVivo9, paying particular attention to the use of varying language to describe similar constructs, along with analysing cross-participant responses to the structured questions. The qualitative analysis process took an Interpretative Phenomenological Analysis (Spinelli, 2005) approach and involved the researcher immersing themselves in the world of the participant to gain perspective on how they utilise their constructions to make sense of their own realities.

Results
The interviews resulted in over 80 hours of transcribed tape and a total of 495 elicited constructs (prior to aggregation), of which 326 related to the perceived behaviours of an authentic leader. Findings indicate that;

Authenticity:

- Authenticity is a positive leader attribution that provides an essential platform for building high-quality work-relationships, but it is not the whole solution.

- Followers are active agents/constructors of authenticity in others based on their interpretations of ‘authenticating acts’.

- The authenticity of a person is judged by behaving honestly, consistently and with good intent (free from impression management).

- It is a narrower idea than the checklist of ideals offered by the main theories at present.

- State versus trait: both contribute, but authenticity is more ‘enabled’ by context/situation, above being ‘achieved’ intra-personally.

Authentic Leadership:

- Authenticity is essential to good leadership: of the leader behaviours ranked for their performance enabling quality, 83% were associated with authentic leadership.

- Leader authenticity enables subordinates to ‘be Me’ – i.e. bring the real me to work, be a whole person.
• It improves performance through better proximal relationships and increased trust: “If you work with an authentic leader it takes away the worry and you can focus on the job”.

• The moral component of authentic leadership is crucial, which is contra Shamir and Eilam’s (2005) view. It is about ‘doing the right thing’ (which is not necessarily the same as the fair thing for all).

• Culture is a limiting factor: being authentic is perceived by respondents as risky and not valued by organisations. “It’s difficult to pull off” because you need to be brave to be authentic, but organisations want people who fit.

• The ability to behave authentically is perceived as being linked to age (when you have reached a certain level, gained respect, have less to lose, or are too old to care), then you can be brave and stand out.

• Gender is an issue: authenticity is related to prototypical perceptions of leadership.

Discussion
This study challenges existing beliefs and brings greater clarity to the domain of authentic leadership by exploring some of the fundamental questions arising from the opposing conceptual arguments presented by the main theories. It deepens understanding of what it means to behave authentically at work; to be an authentic leader; and the psychological value of those behaviours in the development of high-quality leader-leader relationships. A more detailed discussion of the study’s contribution to the leadership research agenda will be provided in the paper presented at the conference.

Practical contribution
This research will be of interest because it utilises a novel and complex research methodology to illuminate the role and experiential value of authentic leadership for organisations. It encourages debate around whether organisations should be continuing their effort on identifying leaders who have the potential to display authentic behaviours, or should focus more on creating environments where authentic relationships are enabled. Also, improving understanding of effective leader-leader relationships will enable organisations to enhance performance by developing actionable insight into the relational dynamics within the leadership hierarchy itself.

References:


W34
To PhD or not to PhD, that is the Question...Is there a Doctor in the house...?
Keith Grint, DOP Keynote, Warwick Business School, Alice Eagly, Northwestern University & Fiona Beddoes-Jones, The Cognitive Fitness Consultancy
Theme Profession

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 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.

W35: Workshop
Evidence based practice in support of an ethnicity initiative in a Fortune 100 company
Dr Joanna Fitzgerald, Navigate Organisation Ltd and Warwick Buisness School, D Tuitt, Confidential client, Rob Briner, Bath Uni, E Kenny Birkbeck Uni
Theme Communities

A case study of evidence-based practice in the strategy and implementation of ethnicity based networks in a fortune 100 company as the basis for the participants understanding and interrogating how to take an evidence-based approach in Organisational Psychology Practice
The ongoing use of an evidence based approach to Organisational Psychology practice, to support client decision-making throughout the life cycle.

Background and approach

Workshop whose purpose is to share a rich picture of evidence-based practice, and use this as case illustration as the basis for the participants understanding and interrogating how to take an evidence-based approach in Organisational Psychology Practice. The workshop is divided into three sections designed to be a total of 90 minutes in length:

- Session 1 - 20 minutes, lead by an academic
- Session 2 - 40 minutes, lead by client and practitioner
- Session 3 - 30 minutes, combined session with all three presenters engaged

Considerable reference material will be used and the citations are appended to this proposal. These citations cover both the relevant literature on evidence based practice and the that of relevant to the ethnicity driven social innovation in a large corporate context.

As this workshop will use some pair working and general discussion, audience numbers are not constrained, but the intended discussion will work most effectively with maximum number of 40. We will need a projector, 3 flip charts and other presentation-based material.

Themes covered:

- Future of our communities
- Future of our profession
- Future of organisations

Learning outcomes from this workshop

- Increased theoretical understanding of evidenced based practice and management.
- Practical illustration of the challenges and opportunities in applying these evidence based principles in client organisations.
- Increased understanding of how to apply these principles in Organisational Psychology practice

Session 1: What is an evidence-based approach to practice? 20 mins

Evidence-based approaches to practice have been adopted in a number of areas of practice for some time and have more been considered in relation to industrial and organizational psychology. The idea of using evidence of various types in practice is of course not new though evidence-based practice approaches more thoroughly describe what using evidence in practice entails.

Evidence-based organizational psychology can be defined as:

“...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 et al., 2009, p. 19)

This is represented in the diagram overleaf, which shows that practice decisions should be based on and the need to integrate evidence from each of these four sources of evidence.
Evidence based practice, in practice, is not about ‘perfection’ but, rather, is about trying to incorporate disparate types of evidence in a critical and thoughtful way. There may be a lot of good quality evidence or little evidence. This can be either the availability of evidence from the literature or from the specific client context.

The process of decision-making and action may be quite linear or very iterative. The evidence may guide action directly or inform practitioners that little is known or that evidence is mixed. For any particular problem or challenge some forms of evidence may be seen as more relevant and more important than others and weighted more heavily.

Whatever evidence is available and however it is used what remains the same is the attempt to make decisions through using different sources and different types of evidence in a “conscientious, explicit, and judicious” way.

Session 2: Using evidence in a case illustration - 40 minutes

This will be co-led by the client owner of the initiative and the consultant practitioner psychologist who provided strategic and coaching advisory services. The session is based on 4-year UK case study into an ethnicity driven series of interventions in a large global matrix organisation. The presentation of this case study addresses two parallel strands:

- The organisational story as it unfolded, from the perspective of the accountable leader, through all stages of strategy formulation and implementation and illustrating the key decision points.

- The ongoing use of an evidence based approach to Organisational Psychology practice, to support client decision-making throughout the life cycle.

Practitioner approach

The call for an improved approach to evidence based practice in psychology drew parallels with medical practice and the ways in which knowledge is fed into the day-to-day medical process of decision making, in the best interests of the specific patient. Equivalent ethical and competence obligations also sit firmly on the shoulders of Occupational and Organisational Psychologists, manifested in being regulated by the Health and Care Professions Council. It is also these obligations that make our practice distinct from so many others that would operate in this domain.

Working as a psychologist practitioner means we need to have a full picture of what it means to engage in ethically driven, evidence based practice through the full client implementation life-cycle. Evidence based practice in this context was the conscious and deliberate commitment to use, and be seen to use, psychological evidence, integrated with
contextual evidence, continuously through the initiative decision-making life-cycle to support the health and wellbeing of this initiative and the people associated with it.

For the purposes of this session, we identify 19 significant client decision points, many of which needed to be processed concurrently and each of which was supported with the substantive deployment of evidence, sometimes that being the evidence that there is no evidence, as is often the case in innovation.

Case context
The client leader in this context was asked to take on leadership of the establishment of the UK ‘Black Network’ and this case study presentation takes a few key vignette examples of leading this work, explores the decision points that emerge throughout leading an initiative of this nature and examines the use evidence deployed to enable and support real time the ongoing decision making that maintained the health of the initiative.

The specific case in this presentation is of an ethnicity driven change initiative within a Fortune 100 company. At the time this initiative started, the majority of the ‘diversity’ literature published was around gender, and although ‘unconscious bias’ and ‘intersectionality’ are making their way into the diversity discourse as a potential mechanism to widen the scope, ethnicity is still a clouded area. Within this organizational context there was a well-developed black executive group in the USA, governing a black council which was also USA based. The council was charged with creating and supporting a network structure for minority African heritage employees throughout the USA. The activity of each network was funded via the Diversity and Inclusion budget, but the whole Black structure within the business headed up by a Black head of a substantial business division and who was responsible for the supply chain diversity.

For several years this USA based Black Executive Structure had been attempting to establish a UK based black network but with little success, ostensively due to the cultural differences between the USA and UK in the discourse Central to this difference is the wide range of identities and cultural stories of Black and Minority Ethnic people in the UK. In addition the evidence around the availability of career opportunities for ‘people of colour’ in these two contexts was significant.

Client vignettes
For the purposes of this paper we have selected three vignettes to present, each of which tells the organizational story and also presents the challenges involved in using psychological evidence as the underpinning approach to consulting support:

Client perspective on doing evidence based management
Vignette 1 is taken from the start of this initiative and tells the internal story of establishing sponsorship, stakeholder understanding and defining strategy. It addresses the fact that there was very little specific academic evidence linked to the use of ethnicity networks so describes how wider literature on networks and social capital, support for psychological safety and positive identity was used in strategy design integrated with detailed local knowledge of the context and stakeholder responses in shaping the approach.

Vignette 2 comes from the peak of the initiative just after the 2011 riots in Tottenham. Two factors are significant here. The first is that the major event for this network was planned in this locality and the other is the impact of academic data collection from the members for persuasion and the backlash that needed to be managed due to the different perspectives and how evidence can be used to manage emerging responses and reactions to planned initiatives.

Vignette 3 comes from the completion of the 3-year initiative when there was a major change in sponsorship arrangement internally and all the associated political issues that need real time decision support.
Session 3 – Plenary interrogating what has been learned about evidence-based practice from this case illustration and how the lessons learned can be applied. 30 minutes

In general the case demonstrates that evidence-based practice is not a ‘cook book’ approach but rather requires great sensitivity to context and process. It is not about getting everything ‘right’. Rather, it is about adopting a set of principles or approaches to doing practice, and to enabling a client manager to develop the skills and understanding to be supported by the use of evidence, rather than it being a dependency upon ‘external expertise’. In addition, evidence-based practice not only connects organisational psychology practice with science and scientific thinking but also, crucially, connects practice to the ethical responsibilities of organisational psychology practitioners.

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66


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W36: Workshop

Using a reflective goal setting approach to develop ‘softer’ skills

Dr Cheryl Travers, Dr Ray Randall, School of Business and Economics, Loughborough University

Theme Individual

It would be better if those attending have some working knowledge of goal setting theory (Locke & Latham 1990, 2013) and theories of Reflection (e.g. Gibbs, 1988)

Structure of the session

It is proposed that the workshop will have five key sub-sessions:

1) An introduction to the workshop, aims and objectives.
2) A brief summary of models of goal setting, reflection and the use of diaries as employed by the workshop leaders in their research and work
3) Illustrations of our uses of reflective goal setting methodology and cases from practice. This will include showing the impact of theory, coupled with practical approaches, in terms of aiding self awareness and personal development, particularly with interpersonal ‘softer’ skills.
4) Attendees will be given the chance to work together in small groups (groups of 3 best) to devise all aspects of goals – theoretical basis, practical techniques, goal statements and key measurement indicators - for particular behaviours requiring change that they may be presented with, by clients for example.
5) Summary of main insights gained from the workshop and transfer of learning to practice

Learning objectives and outcomes

By the end of the workshop attendees will have:

- Had a whistle stop refresher tour of goal setting theory and reflection
- Obtained a clear understanding of what we refer to as reflective goal setting
- Gained insight into how these key theories can be translated into practice regarding key interpersonal skills
- Considered other theories and models that may support the development of specific interpersonal skills (e.g. social comparison theory)
- Been introduced to the use of a reflective diary methodology
- Put what they have learnt into practice with some applied examples whilst working in small groups
- Gained practical skills into the use of reflective goal setting with interpersonal skills development
- Be better able to set own goals or support others in setting goals at work or seeking to enhance employability

Specific content taught

Specific learning will include: Goal Setting Theory, models of Reflection, with brief summaries of other selected interpersonal skills-related theories (e.g. social comparison theory, transactional analysis, MBTI) and practices (e.g. Johari Window, Social Mirror, Visioning, Role models etc).

Input will also address the use of a reflective diary methodology.

Teaching and Learning Methods Used

Some chalk and talk, but mainly interactive, with audience contribution, and working in small groups to devise goals for selected behaviours. These will be provided by the workshop leaders in the form of flash cards etc. But a group could choose to work on a goal area of their choice.
Target Audience
The workshop leaders are both Occupational Psychologists working as senior lecturers/academics in a Business School. Both are driven by the practical application of theory, and evidence based learning. They both design and run skills based modules and carry out consultancy within organisations. One is the Director Of Executive Education in her Business School, and so is focussed on the practical application of her work to industry.

We envisage, therefore, that the workshop will be suitable for similarly focussed academics and teachers of Occupational Psychology, as well as practitioners in the field of personal development and CPD. It would also be useful for anyone considering their own development.

It may also help some researchers consider ideas for future research, especially in terms of creative data gathering approaches.

This workshop is a good example of the reciprocity of theory into practice, and practice informing theory.

Level of Expertise Required
None really, other than a basic knowledge of goal setting theory and reflection ideally.

Qualifications obtained

W37: Short Paper
Overview of a Practical Test Adaptation Process and Lessons Learned
Lucy Burgess, HL & Eric Popp, SHL
Theme Individual

The need to make multilanguage versions of ability tests, personality questionnaires and a variety of other assessments available to multiple cultures continues to grow. Localisation is the process of culturally adapting and translating assessment content in such a manner that it measures the relevant construct (e.g. ability, skill, personality trait) equivalently in the source and target cultures, aids in making appropriate personnel decisions and appears indigenous to the target culture.

Although the many reasons for adapting tests are clear, e.g. allowing comparative assessment across cultural and language groups, reducing the need to develop new tests and achieving fairness in assessment, processes and guidelines for preparing tests adaptations and establishing equivalences between versions have not always been well documented (Hambleton, 1993, 1994; Hui & Triandis, 1985; van de Vijver & Hambleton, 1996). To address this, the International Test Commission (ITC) began a project in 1992 to develop a set of guidelines for adapting tests. The most recent version of these guidelines was made available in 2010. Whilst these guidelines are extremely comprehensive, it is the responsibility of the test developer to select the methods and standards for adhering to each of the guidelines. Therefore, part of the challenge of designing a test adaptation process was to develop a practical approach which would address the guidelines and spell out the criteria for ensuring that each step was achieved to a sufficient level. The ultimate aim of this was a process where following the completion of each step to the required standard, we could expect any instrument adapted using this process to perform in an equivalent way across language and cultural groups.

This paper will provide an overview of the practical approach we have developed for test adaptation, as well as a discussion of the kinds of issues that can result from poorly executed localisation work.

Assessment Adaptation
In order to promote the use of methods that consistently result in high quality localised assessments, we employ a standard process based on best practices and practical guidelines. The guidelines we adhere to provide a description of the steps involved in localisation as well as criteria for determining when each step has been satisfactorily completed.
The guidelines are informed by our past experience in localising assessments as well as reviews of the quality of currently localised assessments.

Two broad stages of localisation are required. The first stage is the adaptation of the materials from the source culture to the target culture. The second stage is the statistical confirmation that the adapted material is functioning in the target culture as expected. The more thorough of a job that is done in the first stage the more confident we can be that the findings of the second stage will be positive.

Hambleton (2005) makes an important distinction between test adaptation and test translation. Whilst test translation is the more frequently used term, test adaptation is a broader term and is more reflective of what should happen when preparing a test for use in a second language and culture. Test adaptation includes all of the steps from deciding whether or not a test could measure the same construct in a different language and culture, to selecting translators, deciding on appropriate accommodations to be made, adapting the test and checking its equivalence in the adapted form. Translation is only one of the steps in the process and since translators need to find concepts, words and expressions that are culturally, psychologically and linguistically equivalent in a second language and culture, it is clear that the task goes well beyond, and is in fact different to providing a literal translation of the test content.

Because the detail involved in the initial adaption and statistical confirmation stages is likely to be less readily available than that involved in translating material, we will focus on these stages in more detail.

Initial Adaptation and Cultural Review phases

Initial phases of adaptation include content standardisation, which involves making the conventions used in the assessment content uniform across the material, and content decentering, which is the process of removing or modifying culturally specific material in the source content which would not be readily familiar in other cultures (van de Vijver, F. J. R & Poortinga, Y. H., 2005). Following this content is reviewed and adapted for the target culture and then subject to construct and job review.

Translation Phase

The goal of the translation process is to put the content in the target language in such a way that the natural flow and feel of the target language is achieved while the original meaning, relevance and difficulty level of the content is maintained.

It is important to note that a literal word-for-word translation of the source content is not the best way to achieve this goal (Hambleton, 2005; van de Vijver & Poortinga, 2005), and this will be discussed further in the section on lessons learned. However, there are several elements that are key to achieving the goal of the translation process stated above. These elements include the selection and training of qualified translators, a pre-translation review and discussion of the content, the translation, translation review and resolution, and the final translation confirmation.

Statistical Confirmation

This stage provides statistically based scientific evidence that the localised assessment is functioning as expected in the target culture and examines how the assessment compares between cultures. In addition, it serves to build a body of evidence supporting the various uses of the localised assessment. The primary uses are informing personnel decisions in the target culture, supporting validity transportability between cultures, contributing to global norms, and comparing scores across different cultural versions of the assessment.

Lessons Learned from Previous Test Adaptations

Through our own experience of test adaptation, and by applying the principles of a best practice approach to the review of existing localised assessments, we have built knowledge of the kinds of issues that can result from poorly executed localisation work.
Selecting and Training Translators

The skill of the translators is a large determinant of the quality of the final product. Thus, it is important that the selection process for translators ensures that they meet certain qualifications. It is also important that translators are trained in the basic nature and purpose of material, the importance of preserving the content meaning over literal translations and common sources of translation error. The results of an inadequate selection process can include poor visibility as to the competence or qualifications of the translators, phases of the work being conducted by translators who are not accustomed to or qualified to conduct these steps and even translation being undertaken by non-native speakers of the target language.

Adaptation Steps

If the steps leading up to the translation and the translation itself are not done adequately, a number of problems can arise with the translated material. Issues identified through reviews include mistranslated words, use of inappropriate (e.g. uncommon) words and ambiguous, confusing and misleading wording, e.g. words/phrases with more than one meaning in the target language.

Literal Translation

Earlier reference was made to the fact that literal translation is not desirable. A word-for-word translation can lead to issues such as poor sentence construction, unnatural phrasing and lack of fluency. Translated text should capture the same meaning as the source text but unless careful thought is given to the selection of words and phrases in the target language, there can also be problems such as differences in word difficulty and differences in the strength of the expression between the source and target languages.

Review

Experience shows that the translation of any material is subject to error, e.g. incorrect spelling and grammar, omission of words and other typographical errors. Thorough review is essential, not only to check the quality of the translated material but also to proof read final versions and 'sign-off' the content for release to market.

Conclusion

We have developed a standardised adaptation process to both help ensure compliance with sound scientific principles and to allow for flexibility in delivering localised assessments. We have used our learning from conducting reviews of localised assessments as well as from past experience to feed into these processes and we will continue to enhance our processes through further experience in test adaptation.

We hope that this paper will be useful in providing an overview of the most thorough and systematic approach that we are aware of.

References


This paper will describe an approach to assessing leadership judgement that uses the principles of dynamic assessment (DA). It will show a technique for assessing a leader’s accuracy of judgement when dealing with a range of decision making situations. The model of leadership underpinning the approach has been developed from theory, particularly the work of Vroom and Yetton (1973) and Hersey et al (2000). Lauchlan and Carrigan (2013) has been the principal source for integrating the assessment of leadership judgement with DA.

If an assessor wishes to determine how far a person’s leadership judgement deviates from the norm, a properly standardised psychometric measure will be employed, such as Hogrefe’s Leadership Judgement Indicator (LJI). However, if the purpose of assessment is to establish the extent to which the person can improve their performance with feedback, and how amenable or resistant they are to such support, then a DA approach is indicated. Kaufman (1994) argues that the two approaches are not alternatives but provide supplemental information. The former gives summative assessment data (summarising the person’s leadership judgement at one point in time), whilst the latter offers formative assessment (informing about next steps in the person’s leadership development). Both are relevant when Individual for both can be used to good effect in assessments for selection and development.

There are many different methods that occupational psychologists (OPs) use to assess a person’s leadership capability. DA is a relatively recent methodology that is increasingly used in educational psychology but there is a dearth of evidence to show that it is used by OPs. However, DA can provide a valuable adjunct to, for example, standardised assessment, behavioural observation, 360° assessment and criterion based interviewing. Indeed, the DA approach described here lends itself particularly well to providing the basis for a patterned behaviour description interview (PBDI) which, as Orpen (1985) shows, typically have predictive validity coefficients in the r=0.48 to r=0.61 range.

The defining feature of DA is that the person being assessed receives feedback on their performance as they proceed through the assessment. DA seeks to actively change the person’s level of performance in order to assess whether they improved with help and the extent to which they were resistant or amenable to change. Thus, if a person can respond positively to help, and improve their performance, it can provide information about their potential as a leader. This is different from standardised assessment, which does not allow interaction with the person in a way that would influence performance and hence invalidate the findings.

The approach in question uses an online software program, named the Leadership Judgement Assessor (LJA), which includes a Vroom-like algorithm that can provide a person with feedback on the quality of their thinking within seconds. For example, the person is asked to choose a good example of a time when they have used Directive leadership (‘I make the decision based upon my own ideas’). The LJA then poses a number of key situational questions about the scenario,
to which the person must respond with a ‘Yes’ or a ‘No’. The LJA then provides the person with feedback about whether their stated approach of using Directive leadership is in accord with the logic they used when answering the Yes-No questions. If it does not, the person is given feedback to reflect upon why and so develop their approach for the next scenario entered.

The LJA, as a DA methodology, is based upon the principle that it is possible to glean important information about person’s leadership judgement by interacting with them during the assessment process. Intervention is embedded within the actual assessment itself and, with the LJA, allows the person to develop their thinking about leadership as they progress.

By the time the person has entered eight scenarios (that are good examples of times when they have been Directive, Consultative, Consensual or Delegative), they will have provided a wealth of information about the extent to which they are able to flex their leadership style according to the needs of their team and the task to be undertaken.

The LJA collects data about the person’s response to feedback, providing a clear record for all that can be scrutinised later. Making the person’s thinking overt, by recording their passage through an algorithm, and feeding this back to them, makes learning and adaptation much easier. This process also allows the software to record the evolution of the person’s thinking. This overcomes a common problem when attempting to bridge the gap between DA theory and practice; the problem of reporting on the findings later and communicating on them in a manner that allows decisions to be made about placement, training and development. It also allows the person an opportunity to offer a presentation on their learning; it also provides the assessor with evidence that can scored and which can facilitate a follow-on PBDI.

This paper will illustrate use of the LJA with brief case study evidence. It will show the utility of the approach and how it enhances perceptions of procedural justice when used in assessment for selection settings alongside other more traditional approaches. A recent LJA completer stated, "This is the exercise I enjoyed the most!" The person went on to applaud its perceived fairness. This is in accordance with PBDI research, which clearly confirms that PBDI enquiry has high perceived fairness. Research into procedural justice has shown that applicants who perceive selection practices as fair may view the organisation in a more positive light and may be more likely to accept offers of employment and recommend the organisation to others.

This perception is assisted because the LJA has been developed to adhere to the following features of DA:

- The person clearly understands what they are trying to learn;
- They quickly appreciate what is expected of them;
- They are given feedback on the quality of their thinking;
- This enables them to perform better as they continue;
- The information provided is comprehensive enough to signpost continued improvement, beyond the assessment;
- They are given an opportunity to comment on the utility of the help provided and to justify their comments;
- They are in total control of their speed of working, their preparation and how they approach every new challenge as they proceed.

A pdf of the PowerPoint slides used during the presentation will be available to attendees.

1. Introduction

Internet supports all areas of human interaction, however; the omnipresence of this phenomenon could have a double-edged sword impact in our lives. Thus, evidence suggests that some individuals can lose control over the use of the Internet, and end up with a pattern of internet use that is also characterized "by preoccupation, conflict, withdrawal symptoms, and use of the Internet as a coping strategy" (Meerkerk et al., 2010: 729). This has been coined Compulsive Internet Use (CIU). Because of the high reliance that we have on the internet in our work and personal lives, we are faced with the challenge of identifying risk factors that make individuals vulnerable to develop a pattern of problematic usage. In this study we build on David's cognitive-behavioral model to examine those drivers in a sample of employed and recently unemployed individuals. Since the ultimate aim of this paper is to explain how work and technology can affect well-being, this paper fits in the investing in the future of individuals strand.

1.1 Drivers of compulsive Internet use: theoretical model

Davis (2001) explores the drivers of CIU from a cognitive-behavioral perspective and distinguishes between proximal and distal Internet drivers. The proximate drivers are enough to produce the problem on their own and are closely linked to the cognitive-behavioral manifestations of CIU. Conversely, distal drivers refer to the necessary condition for the problem to arise, but on their own are not sufficient to cause CIU. In this study we conceptualize hours of usage, employment condition and emotion stability as distal drivers. In early CIU studies, high Internet use was an obvious indicator of the problem (Greenfield, 1999). Nevertheless, high usage might result with positive outcomes under specific life circumstances. For example, high engagement in online gaming in older adults was found to result in better well-being than older adults who did not play (Allaire et al., 2013). Thus, high usage seems to be a necessary yet not sufficient cause for CIU. Another distal driver that will be considered is the unemployment condition. The economic crisis has contributed to a highly unstable employment landscape, with many people experiencing job loss or struggle to access the job market following graduation. For those who either lost their jobs or struggle to access the job market for the first time, the Internet has become a central tool to locate job opportunities. Although we cannot hypothesize that unemployed individuals are going to experience a higher level of CIU, we expect those in unemployment to engage on significantly higher number of hours outside work than those in employment, which is a proxy for CIU.
Hypothesis 1 Unemployed individuals spend significantly more hours of Internet usage than those in employment.
Researchers have also associated individual differences with CIU. In Meerkerk et al.’s (2010) study, impulsivity and high sensitivity to punishment (associated with avoidance behavior) were CIU predictors. High sensitivity to punishment is conceptually related to low emotional stability (i.e. neuroticism), and other studies have revealed significant correlations between CIU and neuroticism. However, in Buckner et al.’s study (2012) with working adults, low emotional stability was not significant in predicting CIU. Thus, we conceptualize this variable as a distal predictor.

Hypothesis 2 Emotional stability is positively correlated to greater Compulsive Internet Use
In Davis’s (2001) model, proximal drivers are distorted cognitions that result from the interaction between the underlying pathology and the exposure to technology. We believe that the necessary condition of an underlying pathology leads to a rather limited focus, instead we suggest that examining more adaptive yet potentially problematic variables could triggering this problem. Griffiths (2010) cites long working hours as one of the main triggers of technology abuse. Working long hours, beyond what is expected in order to meet reasonable work goals is a central element of ‘workaholism’. Workaholism includes a cognitive dimension of obsession with work or ‘working compulsively’ and a behavioral dimension of ‘working excessively’ (e.g. Schaufeli et al., 2009). In Davis’ (2001) model the main addiction predictors are distort cognitions. Workaholism involves distort cognitions and associated behavioral responses to the extent to which the individual fails to identify a reasonable stop to his/her work. This link between addiction to work and addiction to technology could mirror other patterns of compulsive behaviors. In short, we expect workaholism to be a key driver of compulsive Internet use.

Hypothesis 3 Working compulsively and excessively is positively associated with CIU beyond emotional stability.

2 Methods

2.1 Procedure and participants
We gathered data through an online survey and worked with an existing online panel (N=516). In order to address issues with sample representativeness, we selected respondents to participate if their age was between 18-65 (M= 41.7, SD= 14.5). We also ensured that the sample was balanced in terms of gender (male=259, female=257) and employment (employed=260, unemployed=256).

2.2. Survey design and data analysis
The survey contained validated scales for the relevant variables of the theoretical model, socio-demographic variables (gender, age, job occupation, highest qualification achieved) and some ad-hoc questions relevant to the study. The previously validated scales were Meerkerk et al.'s Compulsive Internet scale (2010) α= .94; Emotion stability scale (Gosling et al., 2003) α=.61; Workaholism (Schaufeli et al, 2009) with α=.73 for working excessively and .79 for working compulsively; and Life satisfaction ( Pavot & Diener, 1993) α=.89. Regarding data analysis we first estimated the cut-off point of compulsive versus non compulsive Internet users and tested the impact of socio-demographic variables on the two levels of compulsive Internet use. Then, we used Structural Equation Modeling (SEM) to test the hypothesized relationships among latent variables with AMOS 20.

3 Results and Discussion
The study of compulsive Internet use has focused on young segments of the population so far, and there are a limited number of studies using causal analysis which allow testing the role of different variables simultaneously. The innovative aspects of this study are that we addressed these gaps by using a sample of working age individuals in order to provide a representative prevalence figure. We also took into account the impact of macro-economic variables by attending to their employment conditions. Descriptive analysis evidenced a high proportion of individuals with a compulsive Internet use in a sample that had an average of 41.7 years old (63.4%). These figures suggest that compulsive Internet use is not just a risk for young individuals. Flirting online was the main online activity associated
with CIU. Furthermore, we used a confirmatory approach to test the theoretical framework for CIU development with a specific emphasis on analyzing the cognitive-behavioral proximal drivers. The model tested with SEM achieved a good fit (X/df =2.40, CFI=.946; GFI=.913; RMSEA=.052) and the hypothesized relationships were confirmed. Thus, unemployment was confirmed as a distant driver. To the best of our knowledge, this study is the first to evaluate the prevalence of CIU with a representative sample including equally employed and unemployed individuals. Although we found no differences on CIU regarding employment status, unemployed individuals were the highest Internet users (6-9 hours or more) compared to employed ones. Since previous studies have found hours of usage as a proxy of CIU (e.g. Young, 1999), we identified this high usage as a potential risk factor. This is particularly relevant due to the high unemployment rates following the economic recession in the West. We also confirmed that working excessively was a proximal driver of CIU based on the strong association with CIU even when controlling for emotional stability. Interestingly, working excessively was positively related to life satisfaction; whereas, working compulsively was negatively related. These findings are in line with Bonebright et al.'s (2000) study, who found that enthusiastic workaholics experience high work-life conflict yet high levels of life satisfaction. This, however, is a double-edged sword, due the strong relationship between working excessively and CIU.

3.1 Practical applications, limitations and future research
Experiencing unemployment and difficulty to access the job market puts individuals' mental health at risk including depression and anxiety. We demonstrated that this can also result in the development of maladaptive Internet use patterns, which could even worsen their mental health. In view of this, development of healthy Internet use guidelines for this sector of the population is crucial. Regarding CIU in employed individuals, organizations seem to focus on the extent to which individuals lose working hours using the Internet for personal purposes. However, those individuals who work long hours and use technology to work outside office hours are overlooked, mainly due to their success. We urge companies not to underestimate the risks involved in encouraging working excessively. Thus, it could be that the higher damage to the companies comes from over-achievers who are somehow encouraged to work long hours. Further, it is necessary for organizational cultures to continue developing and enhancing work-life balance and proactively engage with risk assessment regarding technology use and workload beyond mere control mechanisms. Limitations of this study include the risk of common method bias, also this is a cross-sectional study so we cannot determine the drivers' different contributions over time. Future studies should include a longitudinal design. In conclusion, we have demonstrated that CIU is a problem that is not just restricted to student and young sectors of the population, but that unemployment is a potential risk factor. Importantly, working excessively can be both a source of life satisfaction and the strongest predictor of CIU.

References


W40: AGM

Thursday 9th January

T01 Keynote Session

**Women As Leaders: Negotiating the Labyrinth**

Alice Eagly, Professor of Psychology, Management & Organizations, James Padilla Chair of Arts & Science, Northwestern University, USA

In many nations, women have gained considerable access to leadership roles and are increasingly praised for having excellent skills for leadership. Consistent with this shift, cultural stereotypes of leaders and managers have become less masculine in recent decades. Although the women who occupy leadership roles differ only slightly from men in leadership style, these differences recommend women as leaders and managers. Nevertheless, more people prefer male than female bosses, and research has demonstrated that women can still face impediments to attaining leadership roles and barriers to success as occupants of these roles. This mix of women’s apparent advantages and disadvantages reflects progress toward gender equality as well as the lack of attainment of this goal.

Alice Eagly is Professor of Psychology, James Padilla Chair of Arts and Sciences, Professor of Management & Organizations, and Faculty Fellow in the Institute for Policy Research, all at Northwestern University. She received her Ph.D. from the University of Michigan and has held faculty positions at Michigan State University, University of Massachusetts in Amherst, and Purdue University.

Her research interests include the study of leadership, gender, attitudes, prejudice, and stereotyping. She is the author of several books and numerous journal articles and chapters in edited books. Her most recent book is *Through the Labyrinth: The Truth About How Women Become Leaders*, co-authored with Linda Carli. She has won many awards, including the Gold Medal for Life Achievement in the Science of Psychology from the American Psychological Foundation and the Distinguished Scientific Contribution Award from the American Psychological Association. She is a member of the American Academy of Arts and Sciences.

T02: Big Data Panel Session

**What is so Big about Big Data?**

Convenor: Ian Bushnell, University of Glasgow & DOP Chair Elect
Panel: Max Blumberg, Goldsmiths University, Eugene Burke, CEB-SHL, Michal Kosinski, University of Cambridge - Psychometrics Centre and Richard Kwiatkowski, Cranfield University.

Each panellist will have 10 minutes to present their views on big data and the role of it in Occupational Psychology. This will then be followed by questions from the convener or the floor on what has been presented. The session will close on general questions on the potential future applications of big data and its applications in other fields.

Eugene Burke, CEB-SHL
Big data has entered the vernacular of business as evidenced by a recent Radio 4 Bottom Line programme on that very subject. In the analytics community, the conversation has moved on to Big Insight and the focus has shifted to how issues are surfaced, how the right data is pulled together and how the insights from analytics are communicated. In a recent CEB survey, 85% of business leaders said that more analytics was not leading to better decision making specifically on talent issues. When we turn to occupational psychology and the opportunity that Big Data and Talent Analytics offers for us, there is a communication gap between our science and the understanding of organisational leaders that needs to be bridged. An example of how that gap can be bridged will be shared through a case story of how analytics helped a CEO resolve people issues in his business.

Max Blumberg, Goldsmiths University
As a form of descriptive research, big data can provide useful and often rapid insights into “organisational status quo”. It cannot, however, readily deliver organisational change available to occupational psychologists via experimental and explanatory research. This session will argue that a combination of big data insight and theory-based experimental research are both necessary prerequisites for effective organisational change.

T03: Symposium
Trust matters: The how, why & for whom of Organisational level trust
Prof. Rosalind Searle, Co-director of the Centre for Trust & Ethical Behaviour (CETEB), Coventry Business School, Coventry University
Theme Organisation

Research shows the benefits of high trust for organizations. Evidence indicates it can offer a competitive advantage for firms (Barney & Hansen 1994), while employees who trust their employing organization are more committed, work harder & more cooperatively, sharing their knowledge & problem solve more effectively (e.g., Coyle-Shapiro, et al. 2002, Fulmer & Gelfand 2012).

In contrast, those with low trust may reduce their work effectiveness (Dirks & Ferrin 2001), engage in counterproductive behavior (Bies & Tripp 1996), or decide to leave (Robinson 1996). The last decade has seen the erosion of internal & external stakeholders’ trust in organizations (Child & Rodrigues 2004). The numerous scandals from a variety of industries have raised questions about the reputation of some organizations, seriously challenging their trustworthiness. This symposium explores organizational trust from a variety of different perspectives: customer, employee and leader.

We begin with a paper from a consumer perspective, a meta-analysis of over 96 different studies (combined n = 41009) to identify & discern the antecedents of organizational trust. We also consider the moderating impact of national cultures on these antecedents, highlighting important differences for firms operating across multiple contexts. We assess the influences of two sets of factors including shared sentiments (similarity, reputation, & relationship history) & shared actions (communication & information exchange). Our two key moderators of trust consider culture (Asia, North America, & Europe), & relationship type (B2B or B2C). In papers 2 and 3 attention shifts towards HR issues. In paper 2
our focus is recruitment & selection using evidence from a multi-method study of applicants’ perceptions (n =244). Through qualitative study two key components of trust are compared - confidence & vulnerability. Then using quantitative survey method study applicants perceptions of their selection experiences are shown to influence their perceptions of organisational trustworthiness, which in turn influence overall trust. Paper 3 explores employees’ perceptions of the employment relationship through a qualitative study (n =30) to assess the impact of psychological contract experience & its breach. Last, paper 4 examines how managers play a key role in influencing employee trust in the organisation via their trust-building behaviour through a cross-sectional, multi-foci study (N = 201).

Paper 1: Trust and organisations: A meta-analysis of the key antecedents of organizational trust from the customers’ perspective

Dr. Ann Marie Nienaber, Centre for Trust & Ethical Behaviour (CETEB), Coventry Business School, Coventry University, Prof. Rosalind Searle, Co-director of the Centre for Trust & Ethical Behaviour (CETEB), Coventry Business School, Coventry University

Purpose
This paper uses meta-analysis to examine the different antecedents of organizational trust, & discern the key ingredients for trust cross culturally. 96 studies conducted between 1991-2011 are included which examine trust from a consumer perspective, comparing trust antecedents in an Asia North America & European context (N-combined of 41009 respondents).

Methodology
A comprehensive search identified 96 studies (1991 to 2011) that focus on organisational level trust, nor interpersonal. We included only those reporting the sample & effect size (Hunter & Schmidt, 1990). Adapting Fulmer & Gelfand’s (2012) model of organizational trust we assess the impact of the five most frequently mentioned antecedents including: shared sentiments (comprising similarity, reputation, & relationship history) & shared actions (including communication & information exchange). Our moderators of trust comprised culture (Asia, North America, & Europe), & relationship type (B2B or B2C).

Findings
Our meta-analysis confirmed a strong correlation for shared actions & sentiments influencing organizational trust, with reputation (r = 0.456) & cooperation (r = 0.432) having strong influences. Our moderator analysis confirmed the importance of both culture & stakeholder group.

First, reputation was shown as more relevant in the Asia context (r = 0.669) than Europeans (r = 0.385) or North America (r = 0.303), while relationship history is less important in Asia (r = 0.172) than other cultures. Similar findings emerged for communication & information sharing. In Asia communication plays an important role, while information sharing is more relevant for North America & Europe. This finding becomes even more important when considering stakeholder type: our meta-analysis shows communication is very significant in the B2B market (r = 0.555) in Asia, but less so in B2C market (r = 0.208), whereas, information sharing shows the opposite effect; It is more important in Europe & North American B2B market than the B2C market. Finally, similarity between the partners seems to be more critical in an Asia culture in B2C markets (0.469), while it is more relevant for the North American B2B markets (0.312).

Implications to science/research
The research indicates the distinct antecedents of organizational level of trust in different cultures. We discuss the value of comparative studies which take global concepts, such as trust, & examine their distinct character in different contexts. An agenda for further research is considered.
Implication for practice
Key differences are identified for those building consumers’ trust, especially how shared actions & sentiments have a stronger influence on organizational trust in the collectivistic cultures, (Asia), than in more individualistic (North America & Europe). The strong positive influence in Asia cultures of reputation is underlined, and brand reputations discussed. We consider the challenge of retaining rather than restoring trust in this context. In contrast, we examine why little attention appears to be paid towards relationship history between parties in Asia; we consider how length of relationship is might not be an important factor to enhance trust. Further, we raise the distinct impact of communication, which is important for all cultures in the B2B market, but more significantly in Asian B2C market.

Paper 2: Trust and pre-entry: the role and importance of trust in recruitment and selection
Prof. Rosalind Searle, Co-director of the Centre for Trust & Ethical Behaviour (CETEB), Coventry Business School, Coventry University, Dr. Alison Legood, Centre for Trust & Ethical Behaviour (CETEB), Coventry Business School, Coventry University

Purpose
Human Resource Management (HRM) policies & practices are amongst the most influential areas for trust development (Robinson & Rousseau 1994). Recruitment & selection is a pivotal HR policy area (Searle & Skinner 2011). Yet while high levels of trust are common in the early stages of the employment relationship (Robinson 1996), few studies have considered applicants’ trust in the organization during the pre-employment stage.

Methodology
We draw from application attraction research, using a multi-method approach with recent applicants (n=244). First, we consider the influences for organisational trust through qualitative coding using template analysis of open-ended responses to differentiate between two under-explored aspects of trust in the organisation – confidence & vulnerability through. Second using quantitative survey data comprising items from Bauer et al.’s (2001) selection procedure justice scale (SPJS) hierarchical regression analysis is utilised to identify whether perceptions of procedural justice during the selection process significantly influenced employees’ trust in the organisation, & whether these relationships are mediated by perceptions of the organisation as a trustworthy entity.

Findings
We extend insight into organisational trust & pre-entry more generally. In our qualitative analysis four distinct themes are identified: For confidence, we reveal the impact of these processes on the applicant, personal ability, & dimensions concerned with the job role itself. In terms of vulnerability, the dominant theme is internally-derived & concerns uncertainty.

Evidence from the quantitative survey shows that over 87% of applicants have at least moderate trust the organisation they are applying to, confirming the importance of trust within applicant attraction.

Hierarchical regression analysis shows that positive perceptions of procedural justice during the selection process significantly influence respondents’ reported trust in the organisation. We test the direct & indirect relationships between the predictor (procedural justice perceptions) & outcome variables (overall trust) through the mediator (trustworthiness perceptions) using Preacher & Hayes’ (2004) approach. We find no significant direct route, but confirm high levels of fair treatment significantly predict perceptions of organisational trustworthiness (β = .07, t (234) = 2.1012, p < .05), & as expected, organisational trustworthiness positively predicts overall trust (β = .77, t (234) = 8.0961, p < .00).

For covariates, we identify a surprising significant negative relationship between smaller organisations (< 50 employees) & lower perceptions of organisational trustworthiness (β = -.61, t (234) = -2.1012, p < .05). While at odds with typical findings of trust an organisation, this underlines the importance of HR as a critical context to examine trust.
Implications to science/research
We outline the significance of HR practices as a key context in which to study organisational trust. We consider its value in helping to differentiates trust into distinct elements concerning confidence & vulnerability. The importance of controlling for individual difference, especially propensity to trust, is reviewed & evidence of its significance as mediator discussed.

Implication for practice
We confirm the importance of recruitment & selection in developing organisational level trust and show the merit of applicants’ fair treatment during these processes. The delivery problems facing smaller organisations are raised, highlighting how these process might produce a decline in trust. We reflect on the steps those with few, if any, HR staff might take & the consequences of more amateurish procedures for would-be employees early trust.

Paper 3: Experiences of emotion though an employment relationship lens: the important role of trust
Dr. Michelle McGrath, University of Winchester

Purpose
How are the sense-making processes surrounding workplace emotions informed by perceptions of the employment relationship? Psychological contract theory offers a unique perspective of the employment relationship & has often been used as a theoretical lens to explain various work related attitudes & behaviours. An understanding of how this specific relationship lens is linked to experiences of emotion, however, is lacking. The current study aimed to address this gap; using Rousseau’s (1995, 2011) conceptualisation of psychological contracts, specifically the distinction between transactional & relational contract types, it examines how the sense made of emotion surrounding promise experiences (broken & exceeded promises) is linked to perceptions of contract type.

Methodology
Qualitative interviews with 30 full-time employees from a variety of organisations & occupations were analysed using thematic analysis.

Findings
A sense-making approach (Weick, 1995) was applied to the analysis which found that the emotional experiences of broken & exceeded promises were made sense of through employees’ perceptions of contract type. Within the sensemaking process there was also an important role of trust perceptions in the organisation which differed in relation to the contract type employees perceived they held.

Implications to science/research
This exploratory study offers preliminary evidence of the link between psychological contract perceptions, emotional experiences & perceptions of trust in the organisation – A finding which requires further exploration, specifically in relation to the potentially mediating, or moderating, influence organisational level trust could be playing in the relationship between contract perceptions & emotional experiences.

Implication for practice
This evidence offers organisations a more detailed understanding of how actions towards their employees, in this case through their execution of previously made promises & the extent to which employees can trust in their organisation to do this, influence the way in which their employees are experiencing emotions in the workplace.

Originality/value
The unique perspective taken in this research provides important theoretical contributions to the psychological contract literature; identifying specific contract types as a lens through which employees experience emotion in the workplace. It
also contributes to the call for a more significant understanding of the links between employees organisational level trust perceptions & emotional experiences.

**Paper 4: Investigating the Role of Managerial Trustworthy Behaviour for Organisational Trust**

**Dr. Alison Legood**, Centre for Trust & Ethical Behaviour (CETEB), Coventry Business School, Coventry University & **Dr. Geoff Thomas**, Aston Business School, Birmingham

**Purpose**
This paper investigates how trust between a manager and employee may be leveraged to influence employee trust in the organisation that the manager represents. It is proposed that the extent to which a manager engages in trustworthy behaviours (such as behavioural consistency and open communication) will influence the subordinate’s perceptions of the organisation as a trustworthy entity via its effect upon trustworthiness perceptions and trust in the manager. Furthermore, a potential boundary condition of this relationship relating to the managerial position of the manager is proposed.

**Methodology**
A cross sectional, multi-foci design was adopted for this research and participants were 201 employees within a public sector organisation who completed a 10 minute online survey. Serial multiple mediation and multiple regression were the main forms of analysis used.

**Findings**
The findings support the research hypotheses as trustworthy behaviour was found to predict organisational trust and this relationship was mediated by trustworthiness and trust in the manager. The results support the view that the manager does act as an organisational agent and their behaviour is able to influence employee trust in the more distal referent of the organisation. Furthermore, support was found for the moderating role of managerial position on this relationship. The link between different facets of trustworthy behaviour and organisational trust was found to vary as a function of managerial position; namely when managers were more senior the relationship was stronger.

**Implications to science/research**
This research contributes to the trust-building literature, an area currently lacking in empirical study, through investigating the link between employee trust in the manager and the organisation. Furthermore, this research provides support for the view that the immediate manager, by virtue of their proximity to the employee, where their behaviour can be readily observed, serves as a critical cue for employees when judging the trustworthiness of the organisation.

**Implication for practice**
The research highlights how targeting the behaviour of managers to facilitate organisational trust is one tangible and manageable way organisations can drive trusting perceptions. Furthermore, this research identifies which behaviours are particularly critical, and at which level of the hierarchy are such trustworthy behaviours most impactful.

**Originality/value**
The interplay between interpersonal trust and organisational trust is not well understood. This research sought to address this gap in our knowledge through identifying how trust translates from the interpersonal level to the organisational level, via trust-building processes.

**References**


T04: Bitesize paper

Understanding career success from employee and organisational perspectives: a case study of males in two female-dominated occupations.

Kazia Solowiej, Catharine Ross, Jan Francis-Smythe, Worcester Business School, University of Worcester & Catherine Steele, School of Psychology, University of Leicester

Theme Individual

Gender differences in career success is a widely researched area and has a strong focus on the notion that males value objective criteria for success (e.g. salary, promotions, advancement) in comparison with females who regard subjective criteria (e.g. work-life balance, satisfaction, helping others) as more important. However, previous research has called for further study of the influence of organisational context on career success, as the impact of context on male and female career choices and the opportunities that confront them is relevant to modern career research (Lawrence &
Tolbert, 2007). Specifically, gender research on career success provides assumptions that do not necessarily account for males and females who work in occupations that are not associated with specific objective or subjective criteria for success, e.g. gender segregated occupations. To date, studies have shown disadvantages and discrimination experienced by women in male-dominated work-places (e.g. Dann, 1995; Demaiter & Adams, 2009), yet little is known about career success and opportunities available to males in female-dominated occupations. This is an important area of study as these occupations are not often associated with objective factors the literature suggests are important to males, e.g. salary and hierarchical advancement. In light of this, the research adopted a qualitative, case study design to explore personal definitions of career success from male employees working in two female-dominated occupations (primary school teaching and administration), and to determine whether career interventions available are helping or hindering their achievement of success. Preliminary findings of the evaluation of male definitions of career success and career interventions available suggest that there may be a mismatch between personal perceptions and organisational assumptions about success. Whether or not career support/interventions are helping or hindering males to achieve career success will be discussed and recommendations for organisations to support the achievement of career success for males in female-dominated occupations will be considered.


T05: Bitesize Paper

Tracking the Impact of Anticipated Organisational Change upon Sleep Quality, Psychological Health and Well-Being at Work

L.F. Neale, M. Moss, C. Hardy and S. Wolfson  Northumbria University

Theme Individual

Prior research into organisational change has demonstrated that it can have consequences upon occupational health, well-being and sleep quality (i.e. Bamberger et al., 2012; Greubel & Kecklund, 2011). The intention of this project was to track the impact of a large restructure within one organisation from the anticipation stage; before the change had been fully implemented (time point 1) to after it had been first put into place (time point 2) to one month post change (time point 3). Participants were all volunteers from the chosen organisation and were sent an e-survey to their email account at 3 time points: January/February 2013, March 2013 and April 2013. After completion of each survey participants were invited to complete a 14 day sleep diary in order to further assess the effects of the organisational change upon sleep quality. The findings of this research will be outlined with preliminary results indicating that the well-being measures of job satisfaction and disengagement become significantly more negative from time point 1 to time point 2. Both of these measures were also significantly more negative from time point 1 to time point 3. Furthermore, anticipation of the next working day becomes significantly more negative from time point 1 to time point 3. These findings highlight the importance of the early anticipation stages of organisational change as they suggest that job satisfaction and disengagement significantly decrease up to the point when change is first implemented, and furthermore that they do not improve one month after this. This is particularly important as according to the theoretical framework, the circumplex model of affect (Russell 1980, 2003) adapted for occupational research, job satisfaction and engagement are “pleasant” indicators of occupational well-being that are potentially important for top job performance (Bakker, 2011).
These findings have implications for the planning and implementation of organisational change programmes within organisations.

References


**T06: Bitesize Paper**

**Communal goal orientation as a predictor of newcomer proactivity**

Kenny Wee Tong Tan, National University of Singapore, Al Kin Chung Au, National University of Singapore, Helena D. Cooper-Thomas, University of Auckland

Theme Individual

**Introduction**

Be proactive - the first rule in the popular self-help book "The Seven Habits of Highly Effective People" - is endorsed by empirical research showing that employees who take the initiative to make things happen, rather than wait for things to happen, tend to enjoy greater success in organizations. Positive outcomes range from good performance to enhanced wellbeing (Parker, Bindl, & Strauss, 2010). Such proactivity is especially crucial for newcomers, who have just begun their journeys in a fresh environment. Indeed, proactive newcomers have been found to adjust well to the socialization process (Ashforth, Sluss, & Saks, 2007). Given the potential benefits associated with proactivity, it is therefore imperative to examine factors that drive newcomers to participate actively at the workplace.

While socialization scholars have identified both individual (e.g., proactive personality) and organizational factors (e.g., socialization tactics) to be determinants of proactive behaviors, there has been less work considering newcomers' personal preferences to be proactive (Gruman & Saks, 2011). This is in spite of the goal-driven and intrinsically motivated aspects underlying proactive behaviors (Parker et al., 2012).

In a separate line of research, Fang, Duffy, and Shaw (2011) recently applied the social capital model to newcomer socialization, and posited that proactive behaviors serve to help employees attain useful social resources through coworker interaction. Despite this and other research suggesting that forming relationships with coworkers is an important determinant of behaviors (Kammeyer-Mueller, Wanberg, Rubenstein, & Song, 2012), there has been little scholarly scrutiny in the area of social mechanisms in newcomer socialization. Together, we aim to address these two gaps in the socialization literature by introducing a new variable - communal goal orientation.

Conceptualized as a goal preference to connect and communicate with coworkers on a personal level in the organizational context, we expect that newcomers high in communal goal orientation would seek out interactions with coworkers in order to form good relationships in the workplace. Such interactions include seeking feedback on one’s job role and observing the work environment for information that could facilitate coworker bonding. Our main research objective is thus to test the novel hypothesis that communal goal orientations would uniquely predict proactive behaviors (especially those involving coworker interactions), even after controlling for individual differences that were previously found to influence proactivity (Crant, 2000).

**Research Design**

Participants and procedure
The data were collected from 185 National University of Singapore students enrolled in a summer internship program. The interns undertook a wide variety of projects in 135 organizations. The respondents completed two waves of online survey, once at the start of their internship, and the other two weeks after completion of the internship. The average duration between the surveys was 2.5 months. Fifty-six percent of respondents were female and the average age was 22 years. All variables were measured at time 1, with the exception of proactive behaviors which were measured at time 2.

Main variables

Communal goal orientation. We developed a seven-item communal goal orientation scale for this study. We first identified important social motives and outcomes in the work domain, such as "the opportunity to develop close friendships in my job" (Feldman, 1976; Morgeson & Humphrey, 2006), and applied these social motives and outcomes in the context of VandeWalle's (1997) goal orientation scale. Responses were provided on a 7-point scale with anchors, 1 (strongly disagree) to 7 (strongly agree). A sample item is, "I am willing to take the initiative to get to know my coworkers personally" (α = .88).

Proactive behaviors. The proactive behaviors at work include feedback-seeking, monitoring, and networking. The feedback-seeking measure was developed by Ashford and Black (1996). A sample item is, "Solicited critiques from my supervisor". The three-item monitoring measure developed by Hughes (2006) was used, and a sample item is, "Paid close attention to my colleagues to learn appropriate behaviors". The networking measure was assessed using three items revised by Paterson (2011), and a sample item is, "Started conversations with people from different areas of my workplace".

Control variables

Learning and performance goal orientations. We adapted the learning and performance goal orientation measures developed by VandeWalle (1997).

Personality variables. Extraversion (Gosling, Rentfrow, & Swann Jr, 2003), openness to experience (Gosling et al., 2003), desire for control (Ashford & Black, 1996), and proactive personality (Crant & Bateman, 2000) were measured.

Self-efficacy. We used the socialization specific self-efficacy scale developed by Gruman, Saks, and Zweig (2006), and respondents rated their job confidence levels in the task, role, work group, and organizational domains.

Demographics. We also controlled for one's gender, age, previous work experience (in months), duration of internship (in days), and pre-entry knowledge (Breaugh & Mann, 1984).

Results

We conducted CFA to test if communal goal orientation was distinct from learning and performance goal orientations. The hypothesized three-factor measurement model provides an acceptable fit to the data ($\chi^2 = 162.43$, $df = 74$, $\chi^2/df = 2.20$, CFI = .93, RMSEA = .08), and had a significantly better fit than two other comparison models, including a one-factor model, $\Delta \chi^2 = 373.04$, $\Delta df = 3$, $p < .01$, and a two-factor model with learning and performance goal orientations loading onto the first factor, and communal goal orientation loading onto the second factor, $\Delta \chi^2 = 14.28$, $\Delta df = 2$, $p < .01$.

Next, we tested if communal goal orientation was distinct from extraversion, openness to experience, desire for control, and proactive personality. The hypothesized five-factor measurement model provides an acceptable fit to the data ($\chi^2 = 274.25$, $df = 142$, $\chi^2/df = 1.93$, CFI = .91, RMSEA = .07), and had significantly better fits than other four-factor models where communal goal orientation was combined with either extraversion $\Delta \chi^2 = 84.10$, $\Delta df = 4$, $p < .01$, openness to experience $\Delta \chi^2 = 46.52$, $\Delta df = 4$, $p < .01$, desire for control $\Delta \chi^2 = 268.86$, $\Delta df = 4$, $p < .01$, or proactive personality $\Delta \chi^2 = 233.14$, $\Delta df = 4$, $p < .01$. 86
Last, we conducted hierarchical regression, where proactive behaviors were regressed on learning and performance goal orientations, extraversion, openness to experience, desire for control, proactive personality, self-efficacy, gender, age, previous work experience, duration of internship, and pre-entry knowledge in Step 1, and communal goal orientation in Step 2. Communal goal orientation explained 3.3% of the variance in proactive behaviors above and beyond the other variables, $\beta = .22$, $\Delta F (1, 171) = 8.23$, $p < .01$. In total, the variables explained 30.8% of variance in proactive behaviors, adjusted $R^2 = .256$, $F (13, 171) = 5.86$, $p < .01$.

Discussion

Our findings supported our hypothesis that communal goal orientation is a unique predictor of proactive behaviors, and is consistent with previous research showing that affiliative motives influenced employees' helping behaviors (Chiaburu, Marinova, & Lim, 2007). The findings also provided strong evidence that communal goal orientation is distinct from existing dimensions of goal orientations and personality traits.

The current research presents a new perspective to understanding the antecedents of newcomers' workplace behaviors, and is likely to interest delegates who may not be exposed to the significance of social elements in the workplace. We would like to highlight that proactive behaviors are not only motivated by newcomers' intentions to reduce uncertainty in their new work environment (Ashforth et al., 2007), but also driven by their goals to socialize and interact with colleagues. It is our belief that introducing communal goal orientation to the workplace and showing its unique influence on proactive behaviors would inspire practitioners and researchers alike to pay greater attention to the individual's social motives that are likely to play a critical role in employee development - an outlook that coincides with the conference theme "Individual."

Our study also has practical implications for organizations in that they should devote more resources into selecting those with a communal goal orientation and fostering the social aspects of the on-boarding process. This will in turn encourage proactivity, enabling organizations to reap the benefits of having proactive employees. We hope that future research could examine and extend the influence of communal goal orientation to other socialization outcomes. In conclusion, this paper is an initial step towards a comprehensive understanding of the social mechanisms underlying proactive behaviors among newcomers.

Note. No additional materials will be made available.

References


**T07:** Tribute to J. Richard Hackman – A Giant of Our Profession [1940 – 2013]

Pauline Willis, Lauriate Ltd

J. Richard Hackman, [Harvard University Edgar Pierce Professor of Social and Organizational Psychology](https://www.harvard.edu/), was an award winning teacher, researcher and practitioner of Industrial/Organisational psychology who very sadly died on January 8th, 2013. Richard’s work is both well-known and influential both within and beyond the boundaries of our profession. Richard’s work has provided inspiration as well as practical tools for harnessing human potential by leaders, consultants and coaches in a wide range of organisations from Military to Music. The key focus of his lifelong passion for psychology in organisations was not only understanding what it is that makes teams effective, but how they can be supported in practical terms to perform at their best. Richard’s research and practice led him to explore how organisational dynamics, rather than the personality or style of the leader was fundamental to team success.

Those who are newer to the profession of Occupational Psychology may be less familiar with Richard’s legacy, so this session will offer key insights into both the man and his work. For those who knew Richard personally or his work in more depth will be invited to share their own memories and personal reflections.

**T08:** Symposium

**Performance, leadership and other perceptions?**

Professor Angela Carter, University of Sheffield, Tallinn Technical University, Just Development
This symposium of experienced Occupational Psychologists and post-graduates will explore issues of performance management, gain insights from recent research and examine topics such as appropriate performance perspectives, relationships with leadership and variance in times of change in panel discussion.

The symposium will open by examining individual, group/team and organizational performance and the purposes of measuring performance. Three papers will follow and the session will conclude with a chaired panel discussion with the delegates.

**Paper 1: Creating effective performance management: Are we fighting a losing battle?**

**Juliette Alban-Metcalfe**, Real World Group Ltd & Adjunct Associate Professor, Centre for Enterprise and Sustainable Business, University of Southern Queensland

Academic literature suggests a healthy use of PM with a strong research tradition (e.g., Den Hartog, Boselie, & Paauwe, 2004). However, the Human Resources (HR) literature suggests that PM is no less of an issue than it was in the past. In other words, organizations generally haven’t yet cracked the thorny issue. Indeed, the issue is becoming even more pressing and complex, with employee satisfaction with PM at low ebb (e.g., Pulakos, 2009).

PM is increasingly recognised as not only a means of keeping an individual’s performance aligned with the organization and its aims, but also as an opportunity for line managers to spot and act on developing talent and potential among their direct reports (e.g., Alban-Metcalfe, 2013). The reasons why PM is essential for aligning people with the organization seems not to need explanation – however, in terms of developing talent and potential, this is increasingly important as evidence grows of the need to focus on individuals’ career aspirations and demonstrating that they are valued for their strengths in order to engage them in the workplace (e.g., Saks, 2006), and the demands of new generations of employees (Parry & Urwin, 2009).

Client demands from large organizations demonstrate line managers are generally not comfortable either with traditional PM or with the newer approach of focusing on developing talent at the same time. Enlightened HR leaders request both aspects of performance management are tackled, attempting to address issues of line managers being “too soft” and not tackling poor performance, as well as taking the time to spot and develop their employees’ strengths.

Organisations are at risk of missing the most fundamental issue: if the culture does not support both aspects of PM, efforts to increase skills among individual managers will be unsuccessful. For example, research shows that people are afraid to tackle poor performance for fear of getting it wrong, being accused of unfair behaviour (or sexism, racism) (e.g., Tackey et al., 2001). It is also increasingly accepted that leaders’ attention is largely focused (in this case, actively developing others) on what they see the most senior managers attending to (e.g., Alimo-Metcalfe and Alban-Metcalfe, 2008). Therefore until organisations focus seriously on changing the culture of the wider organisation – specifically attending to the behaviour of the most senior managers – they are fighting a losing battle in trying to strengthen PM among their leaders.

**Paper 2: Examining perceptions of performance management: Before making decisions**

**Tolulope Busola Oluwafemi**, Sheffield University Management School

In a telecommunications company where performance is measured using the traditional top-down and self-appraisal approach; capturing feedback from other stakeholders (i.e., multisource feedback technique, MSF) is greatly desired. The use of MSF has increased in recent years (Pfau & Kay, 2002) and it has become essential to organisations interested in appraising individual effectiveness accurately and comprehensively (Carlson, 1998). With the aim of improving the current performance measurement system in the telecommunications company, a study was undertaken with 11
managers (one Managing Director, five senior managers, four middle managers and one first-line manager) taking part in face-to-face individual interviews.

This paper demonstrates the good practice of asking the managers to recommend the appropriate stakeholders to measure their work performance (Fletcher, 2005). Managers felt the current performance measurement system needed an upgrade to involve their customers/sponsors for the main reason that these stakeholders fund their projects and receive the finished projects. For many of the managers, getting to know the value, impact and efficiency of their work is vital. Also, important to the managers is the inclusion of feedback from the members of the team they manage as some of the responses suggest a relationship between performance and management.

Line managers are also regarded as essential in rating performance as they see individuals’ work the most, understand why staff do what they do, and have the final say on the performance grade that the manager gets. Other stakeholders include peers, the management team and other members of the unit’s staff.

The main areas of concern related to: making sense of ratings in a multisource system and providing performance consequences (or rewards). Key questions include: Who should have the final say on performance grade? How do you ensure an underperforming employee who is bitter about being placed on a performance development plan does not provide negative feedback about their manager? How do you ensure that your raters (other than your line manager) understand the value and impact of what you do? While the findings from this research may not be generalised directly to other industry sectors they contribute to increasing knowledge about PM.

**Paper 3: Adapting to perform in the “busiest store on the high street”: Retail store managers’ adaptive job performance and continuous learning**

Andrew Smith, Human Work Systems Limited.

Psychologists have long sought to define and describe individual job performance (e.g., Viswesvaran & Ones, 2000). A number of taxonomies (e.g., Campbell, McCloy, Oppler & Sager, 1993) have been suggested, classifying behaviours that constitute job performance; behaviours which are under the control of the individual and contribute to the goals of the organisation. Many of these taxonomies generalise between roles and industries; such as managerial roles. It has however been acknowledged (Fraser & Zarkada-Fraser, 2000), that retail managers’ behaviours have not been adequately described, and that generic ‘operationally-focused’ management models lack specificity. A more accurate description of behaviours associated with retail manager performance is desirable, particularly as managers’ performance has been clearly associated with an organizational unit (i.e., individual store) performance (Netemeyer, Maxham III, & Lichtenstein, 2010).

The present study was based in a large and expanding retail chain operating in the UK. The organizational stakeholders wanted to better understand managers’ job performance at the behavioural level, and how managers learn and adapt to better perform in their roles.

Employing a qualitative perspective, the study comprised of three phases. Firstly, an inductive, ‘bottom-up’ approach was taken to describing managers’ job performance within the organization. Finding adaptability to be important for managers to perform well in their roles, the second and third phases sought to further investigate the ‘adaptive’ aspects of performance; ‘the proficiency with which a person alters his or her behaviour to meet the demands of the environment, an event or a new situation’ (Pulakos, Arad, Donovan & Plamondon, 2000). Establishing adaptive aspects of performance was also argued (Campbell, 1999) to develop the established taxonomies, situating job performance within the contexts of learning and organizational change.

The results from the second and third phases are expected to further describe retail manager performance in terms of
adaptive performance requirements, and how these link with individual learning and organizational changes, both immediate and longer term.

T09: Standard Paper
The Goldilocks principle - too much, too little, or just right?
John Hackston, OPP Ltd, Swati Kanoi, University of Oxford
Theme Research

Introduction
Life isn’t linear. We need food to live, but too much is bad for us; too little rain and no crops will grow, too much and they spoil. Just like Goldilocks in the three bears’ house, we don’t want too much, we don’t want too little, we want it just right. Personality is often discussed in similar terms and so it is not surprising that practitioners have often assumed that personality scales will relate to job performance in a nonlinear way. For example, both too much and too little Neuroticism may be associated with lower levels of job performance (Huy et al, 2011). This assumption underlies a number of common approaches to using personality questionnaires in selection, from the search for an 'ideal profile' to more structured techniques such as danger-zone profiles, qualification grids, and profile matching (Kulas, 2013). Yet empirical research has frequently failed to find evidence of curvilinear relationships between job performance and personality scales or has found only very slight nonlinear effects (Whetzel et al, 2010). There is also some limited evidence that 'derailing' personality characteristics may show a nonlinear relationship with job performance (Benson and Campbell, 2007).

This study uses the relationship of personality (as measured by a personality questionnaire) to manager and self-ratings of performance (as measured by a 360° feedback questionnaire) to investigate the extent to which nonlinear models offer an advantage over linear models. The implications for practitioners are discussed, with examples of to how to use the output for danger-zone profiles and other practical techniques. Much of the existing literature has been theory based, and this presentation seeks to close the practice-theory gap.

Methodology
Sample
Managers attending 5-day leadership development programmes at the Center for Creative Leadership between April and December 2006 were asked to take part in this study. Those who volunteered (N=279) rated themselves, and asked others to rate them, on their job performance by means of a 360° instrument (Benchmarks; CCL, 2001). Following the programme, participants completed the 16PF personality questionnaire (Russell and Karol, 2002) online. The sample was 58% male, 81% white and 45% had a minimum of a bachelor’s degree.

Analyses
Each of the 16PF dimensions was compared with composite ratings derived from Benchmarks; these comprised self- and boss ratings of leadership, derailment, promotability, and performance. For each, bivariate correlations with the primary factors of the 16PF were computed. The primary factors were chosen as the focus of attention rather than the Five Factor Model as practitioners will typically use the former rather than the latter in real-life selection situations. Linear and nonlinear regressions were then carried out in order to establish which of a series of models best fitted the data. The models tested were those found in other psychological research (linear, quadratic, cubic, power, S, logistic and exponential). For each relationship, the model that best fit the data was identified. Where a model demonstrated a change in R2 which was less than 0.01 over a simpler model, the simpler model was preferred (Whetzel et al, 2010).

Results
The linear correlations are presented in Table 1 below:
Table 1: Bivariate Correlations of 16PF Primary Factors with Benchmarks Data (N=279)

<table>
<thead>
<tr>
<th>16PF</th>
<th>Leadership</th>
<th>Derailment</th>
<th>Promotability</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self</td>
<td>Boss</td>
<td>Self</td>
<td>Boss</td>
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<td>A</td>
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<td>.03</td>
<td>.07</td>
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<tr>
<td>C</td>
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<td>.10</td>
<td>-.16 **</td>
<td>-.07</td>
</tr>
<tr>
<td>E</td>
<td>.15 **</td>
<td>-.07</td>
<td>-.13 *</td>
<td>.09</td>
</tr>
<tr>
<td>F</td>
<td>.18 **</td>
<td>-.01</td>
<td>-.10</td>
<td>.05</td>
</tr>
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<td>G</td>
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<td>-.12 *</td>
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<td>H</td>
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<td>-.14 *</td>
<td>.05</td>
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<td>M</td>
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<td>.21 **</td>
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<td>Q1</td>
<td>.08</td>
<td>-.01</td>
<td>.04</td>
<td>.07</td>
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<tr>
<td>Q2</td>
<td>-.08</td>
<td>.09</td>
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<td>-.07</td>
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<tr>
<td>Q3</td>
<td>.07</td>
<td>-.07</td>
<td>-.09</td>
<td>.00</td>
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<tr>
<td>Q4</td>
<td>.03</td>
<td>.05</td>
<td>.08</td>
<td>-.09</td>
</tr>
</tbody>
</table>

** - Significant at the 0.01 level; * - significant at the 0.05 level.

Table 2 below shows the best-fitting regression model for each relationship, where a statistically significant relationship exists.

<table>
<thead>
<tr>
<th>16PF Factor</th>
<th>Leadership</th>
<th>Derailment</th>
<th>Promotability</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self</td>
<td>Boss</td>
<td>Self</td>
<td>Boss</td>
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<tr>
<td>A</td>
<td>NS</td>
<td>NS</td>
<td><strong>R²=.016</strong></td>
<td>NS</td>
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<tr>
<td>C</td>
<td>Linear</td>
<td>NS</td>
<td>Linear</td>
<td>NS</td>
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<tr>
<td>E</td>
<td>Linear</td>
<td>NS</td>
<td>Linear</td>
<td>NS</td>
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<tr>
<td></td>
<td>R² = .016</td>
<td>R² = .017</td>
<td>R² = .064</td>
<td>R² = .018</td>
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</tr>
<tr>
<td>F</td>
<td>Linear</td>
<td>NS</td>
<td>NS</td>
<td>Quad.</td>
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<tr>
<td></td>
<td>R² = .031</td>
<td></td>
<td></td>
<td>R² = .072</td>
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<tr>
<td></td>
<td></td>
<td>Linear</td>
<td>NS</td>
<td>Linear</td>
</tr>
<tr>
<td></td>
<td>R² = .025</td>
<td></td>
<td></td>
<td>R² = .053</td>
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<td>G</td>
<td>NS</td>
<td>Linear</td>
<td>Linear</td>
<td>Quad.</td>
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<td></td>
<td></td>
<td>R² = .014</td>
<td>R² = .025</td>
<td>R² = .044</td>
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<td>Linear</td>
<td>NS</td>
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<td>R² = .035</td>
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<td>R² = .019</td>
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<td>Cubic</td>
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<td>I</td>
<td>Cubic</td>
<td>NS</td>
<td>NS</td>
<td>Logistic</td>
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<td></td>
<td>R² = .030</td>
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<td></td>
<td>R² = .015</td>
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<td>L</td>
<td>NS</td>
<td>Linear</td>
<td>Cubic</td>
<td>Cubic</td>
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<td></td>
<td>R² = .020</td>
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<td>R² = .049</td>
<td>R² = .055</td>
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<td>M</td>
<td>NS</td>
<td>NS</td>
<td>Linear</td>
<td>Cubic</td>
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<td></td>
<td>R² = .042</td>
<td>R² = .054</td>
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<td>N</td>
<td>NS</td>
<td>NS</td>
<td>Cubic</td>
<td>Cubic</td>
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<td></td>
<td>R² = .043</td>
<td>R² = .035</td>
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<tr>
<td>O</td>
<td>Linear</td>
<td>Exp/Log</td>
<td>Logistic</td>
<td>Quad.</td>
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<tr>
<td></td>
<td>R² = .023</td>
<td>R² = .015</td>
<td>R² = .015</td>
<td>R² = .024</td>
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<td>Q1</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>Cubic</td>
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<td></td>
<td></td>
<td></td>
<td>R² = .040</td>
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<tr>
<td>Q2</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>Quad</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>R² = .034</td>
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<tr>
<td>Q3</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
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<tr>
<td>Q4</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
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</tbody>
</table>

NS = Not significant

**Discussion**

The results of this study provide some limited support for nonlinear relationships. Of the 36 significant results, 20 are explained better by nonlinear relationships than by linear. Some personality scales, such as C (Emotional Stability) and E (Dominance) consistently demonstrate linear relationships; others show a more mixed picture. All the significant relationships with "leadership", both self and boss, fit well with a linear model, but the best fitting relationships with boss ratings of derailment are nonlinear; other ratings show a mix of linear and non-linear. The findings for derailment are broadly consistent with Benson and Campbell (2007).
Although there is some evidence for nonlinearity, for the most part this offers only modest returns over a linear relationship. For example, the quadratic relationship with factor F (Liveliness) would account for 7.2% of variance in the self-rating of promotability; the linear relationship would account for 5.8%. There are however a small number of relationships where using a nonlinear relationship would offer more significant returns. For example, a linear relationship between M (Abstractedness) and boss rating of performance accounts for only 0.3% of variance, whereas the nonlinear (cubic) relationship accounts for 5.4%. Nonlinear relationships give the greatest utility where little linear relationship exists. Where a strong linear relationship is present, nonlinear models may give a slightly better theoretical fit to the data, but add little incremental value and involve unnecessary complications in using personality questionnaires in selection.

Most practitioner approaches to using nonlinear relationships assume a straightforward curve whereby those who are best at the job will have broadly mid-range scores on a personality scale, but less good performers will have high or low scores (not too much, not too little, but just right). Danger-zone profiles or qualification grids will typically use standard scores such as Stens or Stanines. The evidence from this study suggests that this may be a somewhat simplistic approach. Some relationships, while not linear, may 'plateau' rather than changing direction, such as a number of the relationships with factor O (Apprehension). Using Stens or other 'chunked' standard scores can reduce variance and obscure the nuances of a curvilinear relationship.

In our presentation, we will demonstrate how the findings of this study can be used by practitioners, utilising techniques such as:

- Danger-zone profiles - we will illustrate how the shape of the regression curve can be used as a guide for where to put the borders of danger-zones
- Qualification grids - using the shape of the curve to estimate what weighting is given to any one sten score in predicting job performance
- Specification equations - showing how the output of nonlinear regression can be used to produce equations to predict job performance without assuming a linear relationship.

The focus here will not simply be on the results of the current study, but rather on how to apply the techniques to other studies and real-life selection processes, giving the occupational psychologist or HR specialist a new addition to their toolkit. In an interactive session, we will take delegates through this process in small groups, giving them the opportunity to apply it to their own selection questions. We will make a guide to the approach available during the session; copies will also be available electronically, along with copies of the presentation slides. We will also illustrate how these techniques can be applied to other areas - the complex relationship between personality and age, for example. In doing so, we would hope to demonstrate how by research we can help organisations to make better selection decisions.

References


Background and Overview

Managers and employees are becoming increasingly aware that environmental sustainability is a key workplace activity that can enhance corporate image and meet triple-bottom-line accountabilities (Vanclay, 2004). There is a growing interest within the occupational psychology community regarding enacting pro-environmental behavior (PEB) change amongst employees (e.g., Ones & Dilchert, 2012; Unsworth, Dmitrieva, & Adriasola, 2012). This attention is evident through a number of recent journal special issues, e.g., the February 2013 Journal of Organizational Behavior issue on Greening Organizational Behavior (Andersson, Jackson, & Russell, 2013). Despite this interest however, there is still a need to increase the level of research and practice examining how psychological approaches and tools can be used to help promote PEB at work (e.g., Bansal & Gao, 2006; Osbaldiston & Schott, 2012). There is a real opportunity to draw upon our profession’s considerable expertise in supporting behaviour and culture change gained in other areas, e.g., health and safety, and to make a marked impact on the challenge of reducing the environmental impact of modern organizations (Davis & Challenger, 2009).

Environmental psychology has demonstrated that individual behavioral issues are key to reducing energy use and waste generation (e.g., Steg & Vlek, 2009); however, at present, the majority of organizational interventions in this domain fail to take individual behavior into consideration (e.g., Bansal, 2003). The aim of this workshop, therefore, is to explore how psychological tools, techniques and approaches may be harnessed to promote and sustain PEB within the workplace. In particular, we discuss how occupational psychologists can use their existing professional expertise to design and evaluate interventions directed at promoting PEB.

The workshop will include a short initial presentation by the organizers showcasing three research studies that have examined different psychological approaches to promoting and understanding workplace PEB. The first study examines how goal setting, feedback and pre-existing attitudes interact to predict employee performance in an organizational environmental program. Data (1346 survey responses) was drawn from a single UK production plant of a global car manufacturer. The second study describes the use of leadership role modeling and behavioural prompts to influence employee energy behaviour within a large hospital. Survey data was collected across the hospital using a pre-test (312 respondents), post-test (278 respondents) field study design and complemented with overt energy audit data. The third study focuses on the role of organizational culture and leadership in influencing work PEB within an oil and gas company. The study followed a mixed-methods design with both survey (210 responses) and interview (30 employees) data collected across onshore and offshore settings. The organizers’ research and practical experience in the area will demonstrate the opportunity to apply a range of psychological approaches to this problem. We hope to promote delegate interest in this area by challenging audience participants with real-world case studies that require
them to identify relevant behavioural issues and design psychological interventions that would support PEB change. The practical small group task will help delegates to understand the similarities between promoting PEB and other forms of behavioural change, as well as highlighting some of the specific difficulties and differences that the topic poses.

Delegates will be asked to present their particular case studies back to the whole group. The approaches and techniques that delegates have identified and applied to their case studies will be used as the basis for a facilitated discussion that will build upon the practical task. The discussion will explore the challenges and opportunities for future research investigating PEB and also the business opportunities that this holds for occupational psychologists. The organizers will seek to emphasise the linkages between existing areas of practice and the promotion of PEB. The main themes and opportunities will be captured by the organizers and compiled as a road map for future research and practice. Both the case study materials and road map will be available to delegates after the event.

Workshop Objectives:

- Raise awareness of how psychological tools, techniques and approaches may be harnessed to promote and sustain PEB within the workplace.
- Challenge delegates to draw upon their own expertise and apply psychological techniques to design interventions addressing real-world case studies.
- Stimulate thought and discussion regarding challenges and opportunities that environmental sustainability poses for occupational psychologists.
- Build a road map for pursuing pro-environmental behaviour change.

Workshop Activities:

- Research Showcase Presentation, drawing on the organizers’ own research and practice to illustrate a range of applied psychological approaches to PEB.
- Case Studies Task designed to apply delegates’ own expertise and knowledge to real-world case studies involving environmental issues. This workshop will involve delegates breaking out into small groups to work together to design interventions that address the case studies.
- Case Study Presentations will provide delegates an opportunity to present back their ideas. This will promote learning across the various scenarios posed and intervention approaches employed.
- Facilitated discussion to highlight the opportunities, challenges and linkages that environmental sustainability poses. Delegates will be asked to consider how as a profession and as individual psychologists we can apply our skills to this area. A road map for moving forwards will be compiled.
- A conclusion and final thoughts will summarise key themes and discussion points and suggest ideas for continuing discussion going forwards.
- Twitter feed of key points arising from the workshop. Used to help engage with interested parties outside the workshop and to provide a summary for delegates to refer to post-session.

Post-event Activities:

- The case studies and road map will be hosted on the organizers’ website.
- Conversations can continue over Twitter post-workshop.

Outcomes:
New ideas for approaching and designing organizational interventions directed at encouraging workplace PEB.

An appreciation of how behavioural and psychological tools and techniques may be applied to enhance organizations’ environmental initiatives.

Greater understanding of the links between PEB and wider occupational psychology.

A roadmap for moving forwards.

Teaching case studies that will be hosted online for wider use.

A readily accessible twitter summary of the key points from the workshop.

**Target Audience and Benefit:**
The focus of this workshop is on understanding how psychological behaviour and culture change techniques may be applied to this highly topical area of practice. We seek to challenge delegates to consider how they can leverage their existing skill-sets and knowledge to help make an impact in this area and by doing so we will illustrate the research and business opportunities that are already open to them. The workshop should appeal to a wide range of delegates. It would be of benefit to researchers, practitioners and students due to its: showcasing of relevant research and evidence underpinning PEB change; identification of future research opportunities; generation of practical interventions that may be used in applied research studies or professional practice, and; discussion of opportunities for applying existing skills to a new problem domain. The mix of presentations, practical tasks and discussion will promote interaction amongst delegates, learning from shared experiences and maintain interest through the session.

**Link to Theme and Strand:**
The workshop directly addresses the conference theme of “investing in the future” and “investing in the future of the organization” as it concerns environmental sustainability, core to future growth, prosperity and security of both our communities and businesses. Reducing the environmental impact of organizational activities is acknowledged as central to achieving environmental sustainability (e.g., Crane, 2000) – developing a greater awareness of, and increase in practice focused on, promoting workplace PEB will support this. This area also poses a significant business and research opportunity for organizations and our profession for the future.

**References:**


T11
Focus group
Marketing our profession: what should the DOP be doing?
Stephen McGlynn, Andrew Clements & Elizabeth Adams, DOP Communications Group
Theme Profession

Does Occupational Psychology have a PR problem? Many of us have lost count of the times we are mistakenly confused with occupational therapists. Is this something that the DOP should be trying to resolve? This session will provide a forum for members to discuss, debate and challenge some of the ways in which the Division may market our profession. The facilitated discussion will pose various questions and will feed into the strategy of the DOP Communications Group.

The promotion of our profession is often a hot topic among our members, and for the past two years, our membership survey has highlighted that we need to be doing more to promote ourselves in the mainstream media. Can we agree on what defines our profession? What are the key things to promote about occupational psychology? To whom should we be targeting our efforts? Is it the best way to spend our members’ money? Come and have your say!

T12: Careers Forum Career Opportunities for Occupational Psychologists at all stages of their career
Theme Profession

T13: Workshop
Improvisation Skills for Facilitators
Julia E. Knight, Independent & Harry Puckering Independent
Theme Profession

Facilitating groups and leading workshops or training courses are common activities for Occupational Psychologists. Whilst we typically have well-developed interpersonal skills and a good understanding of how to create a positive environment to promote learning, developing the ability to feel comfortable dealing with situations as they arise and being able to face uncertainty with confidence is not always easy. Understanding the nature and principles of improvisation, as well as the practice of these can be seen to be a core skill for occupational psychologists who facilitate workshops and courses.

This workshop, designed and delivered by an Occupational Psychologist and a management trainer who are also performing improvisers, offers the opportunity to work on spontaneous expression and group work through structured improvisation exercises that demonstrate the principles of improvisation. Developing the ability to improvise and adapt ‘in-the-moment’ can help facilitators to become more responsive and spontaneously expressive.

The primary focus of the workshop will be to demonstrate the application of improvisation principles to facilitation. In addition, many of the exercises that the group will practise are also directly transferable to team-based workshops either as ‘warm-ups’ or more specifically to improve aspects of team-working.

Rationale
Interest in improvisation tools and techniques has been growing in recent years in the business world as the ability to 'think on your feet' has become a valued competency. Most of the leading business schools in the US now teach
improvisation skills as a core module on their MBAs (see CNN link) and there are any number of TED talks available on the subject. So far, so fad! But in addition, there are also a number of academic studies that have demonstrated the positive impact of training in improvisation skills. For example, Vera & Crossan (2005) have demonstrated that training in improvising techniques contributed to improved team performance and subsequent innovation. Dow et al. (2007) demonstrated that delivering theatre-skills workshops to trainee doctors resulted in a significant improvement in their clinical empathy skills, and Kirsten (2008) showed a significant improvement in the climate for work group innovation in a health care management team that had received improvisation training against a comparable control team that had not. More recently, Tabaee (2013) studied the impact of improvisation training on leadership skills and has developed a model of improvisational leadership. Her thesis outlines the importance of being able to improvise in today's fast-moving and uncertain business environment and to feel confident making decisions 'in the moment'.

The skills that are developed through practising improvisation have been likened to 'mindfulness' as effective improvisation depends on "being attentive and alert to what is happening in the now" (Vera & Crossan, 2005). Mindfulness has received much attention recently and has been linked to improved psychological well-being, increased adaptability and awareness of emotion (Gulik, 2009). There is also a strong link with the concept of 'flow' (Csikszentmihalyi ) as the merging of action and awareness during improvisation is conducive to entering a flow state.

In terms of process, the workshop follows Lewin's model of change, so that participants are encouraged to firstly 'unfreeze' their usual behaviour, then to explore and adapt before 'refreezing' into a new state. This typically provides participants with a clear framework as well as giving them permission to try out new ways of behaving in a safe environment.

Who is it aimed at?
Practitioners who have experience in facilitation, running workshops and training, and who want to develop their ability to 'think on their feet' and to take a more creative approach to their work with groups and teams.

Note: Whilst there is nothing strenuous involved in the session, participants should be prepared to take part in physical exercises involving movement. We can usually accommodate participants with physical disabilities, but would require advance information/discussion to ensure that suitable adjustments can be made to the workshop.

Learning outcomes

On completion of this course, it is expected that participants will have:

- Explored the principles of improvisation and their relevance to facilitation skills
- Identified new patterns of behaviour that can help them to deal with uncertainty and new situations
- Practised techniques that promote effective team working
- Discussed how they could use their experiences to increase their effectiveness as a facilitator / trainer

Outline of content, learning methods and assessment

- Warm up work, where participants break out of their usual patterns of thinking and acting
- Exercises drawn from theatrical and comedy improvisation: participants practise unplanned communication and group interaction in a low risk and fun environment to explore new and different ways of thinking and to make sense of current and familiar ways of operating
- Learn new perspectives on team-working through practice, reflection and theoretical input
- Plan and decide how to carry the learning into professional practice, incorporate the learning into participants' self-concept and on-going approach at work.

- Participants will be provided with a short handout containing a summary of the key principles and exercises covered, as well as a list of resources and references

References


T14: Short Paper

Development and validation of a Situational Judgment Test of Psychological Flexibility

Lara Montefiori, Goldsmiths University of London, Sam Sheppard, Goldsmiths University of London & Kenexa (an IBM company)

Theme Individual

The construct validity of situational judgement tests (SJT) has been widely debated, with many sceptics criticising the method. At the core of the debate is whether demonstrating construct validity on its own is un/satisfactory if we are not able to understand what test takers are essentially responding to. Also, it is not clear whether SJTs are an assessment method or a construct, such as judgement for instance (e.g., Brooks & Highhouse, 2006). In addition to this, SJTs are multidimensional measures that often have uninterruptable factor structures (Chan & Schmitt, 2006; Guenole et al., in press), and it is often difficult to understand how the respondent has interpreted the question and therefore what trait has elicited their response. For these reason, calls have been made for a construct-driven theoretical approach when designing SJTs (Whetzel & McDaniel, 2009), with the hope that this will improve their construct validity.

The current study adopted this type of approach. A rigorous process was undertaken to saturate the content of SJT response items and stems in behaviours representing different levels of psychological flexibility. The research was based on seminal work by Motowildo and colleagues (Motowildo et al., 1990; Motowildo et al., 2006; Motowildo et al., 2010), who looked at the accentuation effect. Their hypothesis, when applied to SJTs, means that if a respondent strongly expresses a particular personality trait (e.g., conscientiousness), it is assumed that they would opt for the SJT response option that is most representative of such trait. Consequently, in regards to the current study, a highly psychologically flexible respondent would choose the response option that best reflects his/her level of the trait. The findings of from our survey broadly supported this hypothesis. Analyses revealed that SJT scores correlated with existing
measures of psychological flexibility, and with all of our outcome measures, namely, general mental health, and employee engagement.

Motowidlo and Beier suggested that SJTs represent two facets of a respondent’s knowledge: their Implicit Trait Policies (ITPs; well-established beliefs about the general effectiveness of certain behaviours, e.g., hard work pays off); and their job specific experience (gained from learning the consequences of different actions in previous work situations). The current research tested this assertion with a moderation model; thus, shedding light on possible ‘measurement error’ caused by job specific knowledge. This was achieved by asking respondents to rate how familiar each item stem (situation) seemed to them, i.e., had they had previous experience of the situation. This meant we were able to test whether the answer was based on their job specific knowledge or on their underlying behavioural tendency. Interestingly, when the scoring format was altered to only include SJT scores from unfamiliar scenarios, a single factor model gave the best fit to the data. This was one of the study’s main goals. To our knowledge this technique has not been used before, and single factor models from SJT scores are extremely rare.

Different ad hoc scoring procedures were carried on the SJT to maximise its construct validity. This procedure demonstrated that when the respondents were instructed to select the response option that they were most likely to perform, the test had better predictive validity compared to instructions of selecting the most and least effective options. These findings concur with those of Ployhart and Ehrhart, who found that behavioural response options produced the highest correlations with personality constructs, whether effectiveness rating were mostly correlated with General Mental Ability. Our results question the value of Motowildos’ findings for they are based on effectiveness ratings rather than behavioural response options.

This paper will be suited for the strand “Individual” as it will enable a more accurate evaluation of a personality trait that has been demonstrated to correlate very highly with health and organisational outcome. This is particularly important because Psychological Flexibility is extremely amenable to training through therapy, therefore, by providing a more accurate assessment tool, our SJT will contribute to the development of individual health and workplace potential.

T15: Workshop
Would You Be An Even More Successful Occupational Psychologist If You Knew More About Business?
Michael Wellin, Business Transformation Ltd
Theme Profession

The implicit belief of many occupational psychology practitioners is that expertise in occupational psychology, with relevant personal skills will equip them to be successful. This is reflected in the curriculum of many occupational psychology Masters courses, which focus almost exclusively on developing occupational psychology knowledge and skills. This workshop challenges this assumption and proposes that to be a really successful occupational psychology practitioner it is also essential to have and use basic business knowledge and skills. The workshop will provide a practical opportunity for participants to practice and reflect on the business skills they need to engage with and work more successfully with line managers.

Workshop Goals and Outline

The workshop will be divided into three components, each related to one of the workshop learning goals:

1. Clarify the role and business thinking of a typical line manager
2. Explore how occupational psychologists can influence line managers through talking their language
3. Define the most important business knowledge and skills that are important for occupational psychologists success.
The workshop is recommended to last 60 minutes, with approximately 10 minutes devoted to goal one, 35 minutes to undertake and review the conversation skills practices that participants will experience to achieve goal two, and 10 minutes for goal three. The final 5 minutes will be for wider discussions and questions. This workshop could easily use 90 minutes if this were available. The workshop will be designed to run for up to a maximum of say 60 participants - but would still achieve its goals with 12 participants.

How this Workshop links to the conference theme of Investing in the Future

The profession of occupational psychology faces major competitive challenge from related professions including Human Resource Management, Organization Development, etc. all of which seek to gain the attention, interest and buy in from line management. To be successful as professionals we need to go the extra mile to engage with and influence line managers more than our competitor professions.

Attending this session will enable occupational psychologists to clarify the importance and value of their business knowledge and skills, and how these can contribute to their own, and our profession’s success. Specifically this session provides an opportunity for occupational psychologists to learn more about how line managers think, use this in skills practice sessions, and then reflect on the most important business skills they need to become even more successful.

Because this session is about individuals and our profession’s success it is particularly relevant to the conference strand about ‘Theme Profession’

Novel and Innovative features of this workshop

From experience of previous BPS Occupational Psychology conferences this workshop will be a radical departure from most conference sessions because it focuses on how our profession relates to the business of our clients, rather than just focusing on our professional expertise.

In the present business climate most organisations decisions on whether to use occupational psychologists, whether as consultants or employees, is that they make a difference to organization performance and effectiveness. Our contribution as a professional depends on us placing our expertise within a business context. To do this we need to know about and demonstrate our understanding of business.

In contrast to most conference sessions which are primarily about psychology, this workshop is about how psychologists can develop business thinking, knowledge and skills to better understand, engage and influence our ultimate clients - line managers and directors.

Workshop Content

Workshop Component 1.

The first part of the workshop about the role and thinking of a typical manager will be based on the published work of two world renowned management guru’s; Peter Drucker and Henry Mintzberg. Their management frameworks (with respectively 5 and 10 components) will be presented briefly, and integrated by the workshop leader for the purposes of facilitating the workshop.

The thinking behind this first workshop component is that understanding the role of a manager provides important insights about how psychologists can most effectively engage with and then influence line managers.

The facilitator will draw on his experiences of working with senior managers in large and small organizations to illustrate the different dimensions of management that he presents.
Workshop Component 2.
This will provide a structured opportunity for skills practice in conducting conversations between occupational psychologists and line managers. Different topics will be suggested to participants, who will be invited to work in groups of three to conduct these conversations. In each skills practice session one person will be the occupational psychologist, the second will be a line manager, and the third will act as observer. By having three skills practices each participant will have the opportunity to experience and learn from each of the three roles.

Examples of possible topics that will be suggested to participants for skills practice include:

- A conversation between an occupational psychologist and a line manager about the business benefits that can be obtained from using advanced assessment methods e.g. behavioural interviews or assessment centres.

- A sales meeting when an occupational psychologist seeks to find out the business goals of a line manager and translate these into people goals and agenda with the line manager, to which the psychologist can contribute through relevant psychological interventions.

- A discussion between a psychologist and line manager about the business case for implementing culture change across an organization. The psychologist will seek to demonstrate how culture change will create business value.

These provisional topics will be refined once the go ahead for the workshop is given, and each will be turned into a half page brief for the line manager and one for the occupational psychologist in the skills practice sessions. The brief will be structured, but allow opportunity for individuals to shape their role and the brief to reflect their own experience and expertise.

A form will be provided for the observer to give feedback to both the occupational psychologist about their behavior and effectiveness, and to the line manager about the realism with which they fulfilled their role.

After the skills practices are completed participants will be invited to share their reactions about the experience, and reflect on their learning. The workshop facilitator will seek to draw out common themes from the feedback comments.

Workshop Component 3:
This will build on the conclusions from the skills practice and provide ideas about business skills that are particularly important for psychologists, and which could contribute to the types of discussions participants experienced.

Particular business knowledge and skills that will be emphasized are likely to include:

1. Understanding the contribution of business organizations to society
2. Sales skills - based on identifying and selling to client needs
3. Finance for non financial managers - P & L, calculating human costs, etc
4. Understanding the market, market segmentation, brands and route to market
5. Fundamentals of Business Strategy, SWOT, Boston Matrix, etc.
6. Operations and Process Management,

Psychological & Management Theories Underpinning the Session

The input and thinking about the role of a manager, and managers thinking will be based on the work of two gurus Peter Drucker, and Henry Mintzberg. Examples of their books include
Some references about wider business knowledge are shown below. When the workshop is given the go ahead we will refine the texts referred for their relevance for occupational psychologists.

CBI - Confederation of British Industry. See website www.cbi.org.uk


"Good Strategy Bad Strategy" - Richard Rumelt, 2011, Profile Books

T16: Workshop

**Telling stories about the developing to your best potential – an interactive workshop on transitions from MSc to the grown up world of OP**

L. F. Neale, Northumbria University, A. McDowall, University of Surrey

**Theme** Profession

The work of the 8 areas project board is showing that the DOP should be more proactive at engaging with education providers and current students as well as recent graduates. This workshop will address this by engaging attendees in an interactive session to record positive experiences and highlights to feed into a best practice guide drawing on the principles of ‘Feed Forward’ (Kluger & Nir, 2006, McDowall et al., submitted) in small group work. Feedforward is a strength focused way of structuring interviews and conversations to allow participants to reflect on positive experiences, the emotions and conditions facilitated with these, and reflections on what the implications are for future goals. Such an approach to facilitation will give participants the opportunity to reflect on positive experiences and experience strengths-focused facilitation first hand, as well as actively contributing to best practice. In the second half of the workshop, we will present delegates with key summaries of data gathered from a recent DOP survey of recent graduates and current students and subsequent focus group. We will present delegates with challenges offered in the data, such as the need to balance core OP skills and professional skills within a one year curriculum, and work towards joint recommendations to address these.

**Objectives**

The objectives are to:

a) Engage current MSc students and recent graduates and proactively seek their input into current DOP activities
b) Use a future oriented and positively valanced approach to understanding relevant experiences
c) Draw up recommendations for best practice
d) Convene a fun and stimulating session which will give participants first hand experience of using ‘feedforward’ in a group setting.
Satisfied trainees make for satisfied employees: A study into the relationship between perceptions of training and workplace attitudes

Michal Tombs, University of South Wales

Theme Individual

Training is often used as a point of entry for new personnel and many organisations offer structured initial training in order to skill their employees. The challenge for those who recruit and train new personnel is to conduct evaluations that demonstrate a return to organisations from their training investment (Aguinis & Kraiger, 2009). Return on investment does not only relate to employees’ performance on the job, but also desirable workplace attitudes such as organisational commitment and job satisfaction that have been found to relate positively to organisational effectiveness. Organisational commitment is an important variable in explaining work-related behaviour because of its assumed impact on performance. This is because “a committed employee is one who will stay with the organisation through thick and thin, attend work regularly, puts in a full day (and maybe more), protects company assets, and who shares company goals” (Meyer & Allen, 1997, p.3). Job satisfaction is another important workplace variable due to its associations with issues that are of high concerns to organisations such as commitment, absenteeism, and staff turnover (Ostroff, 1992).

Evidence now exists on the importance of trainees’ perceptions of training (i.e., reaction, fulfilment) for the development of such attitudes (Tannenbaum, Mathieu, Salas & Cannon-Bowers, 1991) but less is known on how employees’ perception of training support post-training contribute to this development (Bartlett, 2001). This study attempts to address this gap in the literature by exploring the link between trainees’ perceptions of training and the support provided by the organisation post-training with (1) organisational commitment and (2) job satisfaction.

The theoretical framework that guided this study is centred on the psychological contract and the employment relationship, which is embedded in the context of social exchange theory (Blau, 1964). To this end, training is viewed as a management practice that can be controlled or managed to elicit a desired set of unwritten, reciprocal attitudes and behaviours. Thus employees, who believe that their employer is supportive of their training needs, are more likely to hold positive attitudes towards the organisation, with a stronger sense of satisfaction and attachment to it. On the basis of this theory, the study sets to examine the following:

1. Employees who are satisfied with the training provided to them upon joining the organisation are more likely to be satisfied with their job and feel committed to the organisation as they feel that the psychological contract is met.
2. Employees who feel supported by their line-manager and their co-workers for engaging in training activities post initial training are more likely to be satisfied with their job and committed to their organisation. Again, this is because they are likely to feel that the psychological contract is met.

Method

Sample

The present study was conducted in collaboration with the Training & Development Division of a Police Constabulary within the UK. Data from a sample of 159 newly recruited Police Community Support Officers (PCSOs) were collected. However, as often expected in applied research, especially in longitudinal investigations, the final sample size for which data were available across the two time points reduced to 95 (60%). Average age was 27.66 (SD = 7.80; range 19-51), 45 were men and 92 described themselves as white. Twenty seven participants took up the post because they wanted to be PCSOs. The majority (i.e., 72%) wanted to eventually train as Police Constables.
**Design and Procedure**

The role of a PCSO is dependent upon completion of a successful probationary period of one year. Initially, new recruits are required to attend and complete a 16 week initial training programme, which introduces them to the organisation and their role. Once completed, they are posted to a Police station where they continue ‘on-the-job’ training and mentoring. The study therefore followed a longitudinal questionnaire design. Trainees were asked to complete a questionnaire upon completion of the 16 week initial training course, asking them to rate their satisfaction with training and provide some demographic data (i.e., age, gender, reason for applying for job). Half way through the probation period (approximately 6 months into the role), a second questionnaire was sent to the Learning & Development Unit and was distributed to participants from this central location. Questionnaires were sent with stamped addressed envelopes to be returned directly to the researcher.

**Materials**

The questionnaires consisted of established measures that were adapted for the context. All items required participants to indicate on a Likert scale ranging from 1 to 7 (in gradations of 1) how much they agreed or disagreed with statements (1 = strongly disagree to 7 = strongly agree). A complete copy of the items and measurement source can be obtained upon request.

**Measures of Trainees’ Perceptions of Training** - Seven items measured trainer support (e.g., ‘The trainer gave me specific guidance as to how I could improve’), four items measured trainees’ support (e.g., ‘As a group of trainees we tended to study together and support each other’) and 11 items measured Training Organisation and Processes (e.g., Communications concerning the activities in the training centre were clear and adequate’). The focus of these measures was on examining the extent to which trainees were satisfied with the support provided by the trainer and other trainees and with the manner in which the training was organised.

**Measures of Support Post-Training** - Ten items measured line-manager’s support for training (e.g., My manager can be counted on to provide me with specific feedback regarding how well I am performing my job) and five items measured co-workers’ support (e.g., Co-workers can be counted on to help me develop the skills emphasised in training programmes). These measures were concerned with the extent to which trainees felt that their line managers and co-workers enabled them to use what they have learn during the course and supported them in further developing within their role.

**Measures of Workplace Attitudes**: An eight item measure was used to assess organisational commitment (e.g. I am proud to tell others that I am part of this organisation) and job satisfaction was measured by a three - item scale that assessed participants’ general satisfaction with their job (e.g., ‘Generally speaking, I am very satisfied with my job’).

**Data analysis and Results**

Descriptive statistics were computed for all variables, followed by internal consistency reliability estimates and inter-scale correlations. All scales reached adequate reliability ($\alpha \geq .70$) and participants had relatively high mean scores on: organisational commitment (Mean = 43.05, SD = 7.15, range 8 – 56, midpoint 32) and job satisfaction (Mean = 16.86, SD = 3.69, range 3 – 21, midpoint 12). Inspection of the bivariate correlations revealed that all satisfaction with training variables and organisational support for training variables correlated significantly with organisational commitment. Similarly, all but Training Organisation and Processes correlated significantly and positively with job satisfaction.

Examination of the effect of trainees’ perceptions and post-training support on organisational commitment and job satisfaction was then conducted using hierarchical regression analyses. Trainees’ perception of training variables were entered in step 1 together with the control variables of age, gender, and reason for joining. Post-training support variables were entered in step 2. When the step 1 variables were entered into the regression equation, the model explained 21% of the variance in organisational commitment with trainees support and trainer support emerging as
significant predictors. When Step 2 was included and the remaining support variables were entered into the regression equation, the model increased to 43%, and the effect of trainer support diminished. Trainees support during training ($\beta = .22$, $p < .05$) and co-workers post-training support ($\beta = .49$, $p < .001$) emerged as significant predictors of organisational commitment. The same procedure was conducted to examine the predictors of job satisfaction and here the step 1 model explained 19% of the variance in job satisfaction with none of the variables emerging as significant predictors. When the post-training support variables were entered into the regression equation, the model increased to 37%. It was post-training line-manager’s support ($\beta = .30$, $p < .01$) and co-workers support for training ($\beta = .30$, $p < .01$) that emerged as significant predictors.

**Discussion and Conclusions**

This study was set to examine the impact of new recruits’ perceptions of training and post-training support on workplace attitudes. Perception of training focused on trainees’ evaluation of a structured initial training phase that examined levels of satisfaction with trainer support; trainees’ support; and satisfaction with the way the training was organised. Post-training support focused on the support provided by the line manager and co-workers in the workplace after the training course. Overall, results suggest that the social context during and post training can influence trainees’ feelings of job satisfaction and organisational commitment. In particular, it was trainees’ perception of support by other trainees and support for training provided by co-workers that influenced organisational commitment. The development of job satisfaction was strongly associated with the support given post-training by the line manager and co workers. This provides further evidence for the importance of training fulfilment (Tannenbaum et al., 1991) and perceived support for training (Bartlett, 2001) for such important workplace attitudes.

Despite some study limitations (e.g., the use of self-reports, difficulty in interpreting causality, generalisability of results) these findings have both theoretical and practical implications. Training is a common point of entry into the organisation and training programmes are often the main socialisation process for new employees (Tannenbaum et al., 1991). Results illustrate the importance of establishing a positive perception toward training within organisations, paying particular attention to the social environment. The findings that these social processes are related to commitment and satisfaction should encourage those responsible for recruitment, selection, and initial training to put
more emphasis on (1) the socialisation aspect during initial training of newly recruited employees and (2) on ensuring that trainees are provided with effective post-training support from line-managers and co-workers.

References


T18: JOOP Session 2: Paper Feedback Session

Jonathon Halbesleben, Editor, JOOP & University of Alabama

Theme Research

The goal of this session will be to provide direct feedback to potential authors on a rough draft by an experienced journal reviewer. Interested authors submitted a full draft of their paper to Jonathon Halbesleben in November 2013. Authors were notified of their acceptance in the session in December. Accepted authors will be paired with a member of the Journal of Occupational and Organizational Psychology editorial board. The board members will review the paper and then meet with the author to discuss the feedback. In addition, the JOOP editor will read all submissions and provide feedback if desired. Participation in this session does not ensure publication in JOOP; however, authors may be encouraged by the editor to submit their work for consideration.

T19: Short Paper

A Meta-Analysis of the Effectiveness of Executive Coaching at Improving Work-Based Performance and Moderators of Coaching Effectiveness

Rebecca J. Jones, Aston University. Stephen A. Woods, Aston University, Yves Guillaume, Aston University

Theme Individual

The use of executive coaching has continued to grow over recent years and shows no sign of slowing, however, the lack of conclusive evidence regarding the effectiveness of executive coaching is one of the most frequently cited problems in the field of executive coaching research (Grant, Passmore, Cavanagh & Parker, 2010). An increased understanding of the antecedents and processes involved in maximising coaching effectiveness is important as organisations can then make informed decisions on when and for whom executive coaching is most appropriate. By understanding whether executive coaching is effective and when this effectiveness is maximised (i.e. under which conditions), coaches are then able to ensure they can make evidence-based refinements and improvements to their coaching practices.

The purpose of this meta-analysis is to synthesize the existing research on executive coaching effectiveness in order to examine which coaching properties impact on effectiveness. As in other areas of applied psychology, meta-analyses are
crucial for enabling advancement of scientific knowledge through the accumulation of results of multiple empirical studies (Ellis, 2010). To date, a specific meta-analysis of executive coaching effectiveness has not been conducted, a gap that is addressed by this paper.

**Method**

**Literature Search.** A range of search strategies were utilised to identify all relevant studies. Firstly various electronic databases were searched using the search terms (coaching) and (effectiveness or outcome or impact or influence or evaluation). In addition to this database search, a manual review of the reference lists of all of the articles identified in the database search and also the reference list of all relevant reviews was completed.

**Criteria for Inclusion.** To be included in the meta-analysis, studies had to meet five criteria. First, the study had to examine executive coaching effectiveness; therefore any studies which included any other forms of coaching or solely non-work based outcomes were excluded. Secondly, studies had to have been conducted within an organisational setting therefore all participants were employees. The third criterion was that sample size was reported. Fourthly, a correlation or other statistic that could be converted into a correlation must have been reported between coaching and the outcome variable. Finally the dependent variable had to be an individual or organisational level outcome.

**Data Set.** Applying the above criteria to the literature search resulted in a total of 24 studies being identified (n = 2724 individuals). The average sample size of these studies was 113, with a range from 8 to 1361.

**Description of Variables.** All useable studies were coded on a number of specific variables including:

- Multi-source feedback - whether coaching was accompanied by multi-source feedback (excluding any studies where multi-source feedback was utilised solely as an outcome measure and not part of the coaching process).
- Type of coach - was the coach external or internal to the organisation.
- Coaching format - studies were coded as either face-to-face coaching or 'alternative' coaching format. Alternative coaching format was the category created for any format not solely face-to-face. This included telephone, internet and telephone and face-to-face combined.
- Coaching technique - if the study stated that a particular technique was utilised in the coaching process (e.g. the GROW model).

**Meta-Analytic Procedure.** A requirement of a meta-analysis is the independence of the data (in this instance the performance outcome). Where studies provided more than one outcome variable, the correlations of that outcome were averaged so that no-one study provided more than one correlation to the meta-analysis. Once aggregated, correlations of outcomes were calculated, the procedure outlined by Hunter and Schmidt (1990, 2004) for conducting meta-analysis for d values correcting for sampling error was followed.

**Results**

We report our results in two sections. Firstly overall effectiveness is examined followed by an analysis of the impact of the various moderator variables on effectiveness.

**Overall Effectiveness of Executive Coaching.** Our first set of analysis examines the overall effect size of executive coaching when all outcomes were combined. This was found to be $d = 0.35$ ($K = 24$, $N = 2723$).

**Moderators of Executive Coaching Effectiveness.** For the moderator of executive coaching effectiveness analysis, we further broke down the sample where possible (i.e. a minimum of three studies were required for each category) into each of our moderator variables.
Multi-Source Feedback. Firstly we examined whether multi-source feedback had an impact on the effect size of overall effectiveness when it was utilized as part of the executive coaching process. Contrary to our prediction, executive coaching that did not use multi-source feedback \( (d = 0.55, K = 13, N = 693) \) demonstrated a larger effect size than executive coaching that did use multi-source feedback as part of the coaching process \( (d = 0.18, K = 6, N = 1599) \).

Coaching Technique. Our second moderator variable was coaching technique. Our coding revealed that the majority of studies did not specify whether a specific coaching technique was or was not used \( (K = 10) \) and we were unable to gain this information by contacting the authors of these papers. For the studies where this information was present, we found that studies utilising a specific coaching technique, approach or method had an effect size of \( d = 0.05 \) \( (K = 5, N = 237) \), smaller than the effect size of studies that did not use a specific technique \( d = 0.20 \) \( (K = 9, N = 1785) \).

Format of Coaching. The next moderator to be examined was the format of coaching. We categorised coaching as either being delivered face to face or alternative, where the alternative category grouped together all other formats of coaching (telephone, internet or telephone and face to face combined). For overall effectiveness, our analysis revealed that coaching conducted using alternative formats \( d = 0.41 \) \( (K = 6, N = 295) \) had a larger effect size than face to face coaching \( d = 0.27 \) \( (K = 11, N = 1872) \).

Type of Coach. Next we examined whether the type of coach (either external or internal to the organization) had an impact on the effectiveness of the coaching. Once again, contrary to our prediction, it was studies where an internal coach was utilized that had a larger effect size. For internal coach the effect size was \( d = 0.69 \) \( (K = 6, N = 209) \) compared to \( d = 0.19 \) \( (K = 15, N = 2047) \) for studies that used an external coach.

Discussion

Our analysis has demonstrated that executive coaching has a positive impact on performance. However the magnitude of this impact appears to vary dependant on the type of outcome considered and when particular conditions are compared.

Overall Effectiveness of Executive Coaching. The overall effectiveness of executive coaching varies depending on the type of outcome considered, however the effect sizes obtained for overall effectiveness can be classified as a medium effect (Cohen, 1992). We believe that this result has positive implications for the effectiveness of coaching and the likely return on investment for organizations utilising coaching. This effect size appears to be comparable to those obtained for other types of organisational interventions. For example, in their meta-analysis of the training effectiveness literature, Arthur, Bennett, Edens and Bell (2003) obtained effect sizes ranging from 0.60 to 0.63. Whereas Powell and Yalçın (2010) found an averaged effect size of just 0.24 for managerial training interventions in research conducted from 1952 to 2002.

Multi-Source Feedback. The effect size for coaching without multi-source feedback was much larger than coaching with multi-source feedback. This finding may be explained by the limited attention of individuals. The presence of the discussion of multi-source feedback results within the coaching session may distract attention away from the elements of the coaching process which make it effective.

Coaching Technique. We found that the effect size for coaching that did not use a specific coaching technique was greater than coaching that did use a specified coaching technique. This may be because it is the coach's freedom to tailor their approach, technique, manner and style to the individual coachee's personality and circumstances that make it so effective. Perhaps using a specific technique restricts the coach and impacts on their ability to effectively tailor their coaching to the coachee’s needs.

Format of Coaching. Our analysis revealed that it was alternative format coaching that was more effective than traditional face to face coaching. Our category of alternative format included predominately telephone coaching but
also some telephone and face to face combined and some internet coaching. Perhaps coaching over the telephone facilitates an environment in which the coachee feels comfortable to confide in the coach and disclose or discuss potentially difficult or sensitive subjects.

Type of Coach. Our findings; that internal coaches have a far greater effect on outcomes than external coaches; is perhaps our most interesting finding given the scale of the external coach industry. A potential explanation is that internal coaches may have a greater awareness of the organization’s culture and climate which then equates to an improved ability to coach the individual on issues relevant to their own workplace.

Conclusion
Our results demonstrate overall coaching has a positive impact on work-based performance. The moderators that appear to have the greatest impact on performance are using an internal coach and not including multi-source feedback in the coaching process. Although our findings should be treated tentatively, they do highlight the importance of completing further research in this area to ensure that executive coaching is refined and delivered based on a firm evidence-base.

References


T20: Short Paper
Prison Officer’s and Control & Restraint: “The alarm goes, just run!”
Clare Notley, Kingston University
Theme Organisation

Since there is currently a lack of research on the experiences of prison officers involved in the use of C&R this study will aim to fill this gap in research by exploring whether this is a job role requirement that is stressful for them.

The purpose of this research is to use Interpretive Phenomenological Analysis to explore, consider and analyse the experiences of stress and burnout in prison officers in relation to the use of Control & Restraint (C&R).
Control & Restraint was introduced to the prison service in 1983 as the ‘approved method for dealing with violent prisoners’ (Hart & Howell, 2004:17) In their research Hart & Howell (2004) reported that prison officers believed that the C&R method was an improvement on the previous one which had been less regulated and resulted in ‘unnecessary injuries to both staff and prisoners’. (Hart & Howell, 2004: 17) Currently the C&R technique, which is regulated by Prison service Order 1600, can be used with any person in prison of either gender, aged 15 or above.

Research was conducted with prison officers employed at a UK prison. Four prison officers were interviewed using a semi-structured interview schedule since this framework provides space to capture the feelings, thoughts and perceptions of the participant while allowing the Researcher to maintain some focus on the area of interest. (Taylor & Bogdan, 1998) Kvale (1996) suggests that with a sensitive topic face to face contact can help build trust between the researcher and the participants, while providing participants with the opportunity to seek clarification and reassurance. (Silverman, 2000). As the Researcher judged that this topic may be a sensitive one for prison officers, this was felt to be an appropriate research method to use. Research findings were explored and analysed using IPA

Introduction

Interest in work-related stress is determined both by theory and by the desire to understand the impact of stress on the individual. (Triplett & Mullings, 1996) The definition of stress can be complex and as a general term can be taken to include both stressors, events or conditions that produce stress, and strain, an individual’s response to a stressor. (Beehr, 1998). Within this study C&R may be viewed as a stressor, however it is the response of individual prison officers that this research is interested in capturing and exploring. Burnout is more easily understood as ‘a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do “people work” of some kind’ (Maslach & Jackson, 1981:240) It is specifically characterized by emotional exhaustion, depersonalization and reduced personal accomplishment.

A review of research on prison officers suggested that there are a number of things that are known about the relationship between prison officers, violence and stress, particularly in relation to its impact on well-being, likelihood of burnout and job satisfaction. For example, Auerbach, et al (2003) found that in comparison to other occupational groups correctional officers produced high scores on physical demands and danger. Moon & Maxwell (2004) found that perceptions of work dangerousness were positively associated with job dissatisfaction; Lambert, Hogan, Zjiang and Jenkins, (2009) found that perceived dangerousness of the job was linked with increasing chances of burnout and Keinan & Malach-Pines (2007) found that the possibility of being physically hurt was positively associated with job stress, burnout, and higher scores for a wide range of psychological and physical symptoms. Brough & Williams (2007) found that the possibility of violence by offenders was negatively associated with job satisfaction and Armstrong & Griffin, (2004) found that in comparison to other prison service groups such as admin and treatment staff, prison officers had higher stress levels which may suggest a link to their specific role. Although it is possible to make inferences from the literature about prison officer’s perceptions of violence and dangerousness, currently it does appear that there is a lack of research which specifically considers prison officers in relation to the use of C&R and stress and burnout.

However research from other occupational groups, for example, psychiatric nursing, does highlight the specific impact on staff of the use of physical restraint and may provide some insight into the experiences of prison officers. For example, Bonner, Lowe, Rawcliffe & Wellman (2002) found that staff were re-traumatised by the repeat of violent incidents and expressed ethical concerns and distress regarding the use of physical restraint, Bonner et al (2002) also found that staff expressed terror in relation to particularly serious incidents such as colleagues being attacked. by Lee, Gray, Gournay, Wright, Parr & Sayer (2003) found that some staff reported that their most recent experience of restraint was demeaning and stressful and required sick leave afterwards.
Nevertheless developing a greater understanding of the experiences and responses of prison officers to the C&R process, including gaining a greater understanding of whether there is a relationship between the use of C&R and stress or burnout would be helpful at both an organizational and individual level. Therefore, this study aimed to address the following questions:-

• How do prison officers talk about their experiences of control and restraint?
• What do prison officers say about the effects of stress and burnout in relation to their experiences of control & restraint?
• How do prison officers talk about the impact of control & restraint on their wellbeing?

Method
Data for this research was collected using face to face semi-structured interviews which were recorded and transcribed by the Researcher.

Potential participants for the research were initially identified through the use of a prison-based electronic recording system used to record Control & Restraint incidents. Officers were approached by the Researcher and provided with information in relation to the aims of the study and were given opportunities to ask questions about the research before committing to participating in the study. In order to maintain homogeneity in the sample, inclusion and exclusion criteria were applied by the Researcher. For example, male prison officers were included if they had:-
• Experience of using Control & Restraint
• At least one year’s tenure

In relation to the sample size, the more idiographic emphasis proposed for this research means that smaller sample sizes are acceptable and in determining the number of participants to be used the Researcher has drawn upon recommendations from Smith, et al (2009) which suggests a sample of between three and five participants. It was hoped that the open-ended nature of the interview questions would yield sufficient, rich and varied data to make research outcomes of interest (Rapley, 2001).

Analysis of the interview data was based on the underlying philosophy of IPA. Data is firstly explored using an idiographic and iterative process. This means that the analysis will initially focus on individual cases in turn, drawing as much detail from each as possible, by getting ‘wrapped up’ in the data (Eatough & Smith, 2006:120) before moving onto a comparison of the transcripts. The comparison stage, which utilizes a more nomothetic approach, will enable the Researcher to identify similarities and differences that exist between prison officer accounts as well as converging and diverging themes (Smith & Osborn, 2008).

In order to ensure credibility and trustworthiness in the research findings the Researcher made a commitment to using verbatim reporting and transparency throughout the research process. A reflexive diary was kept by the Researcher for the duration of the research and data analysis process.

Results
Preliminary results suggest that prison officers do experience stress in relation to the use of Control & Restraint. However there are a number of factors which are likely to influence the experience of stress in officers and there was evidence of both similarities and differences in officer’s accounts.

Discussion and Conclusions
Findings will be discussed at the conference in light of implications for the organisation, policy and practice.

References


T21: Short Paper
How evidence-based are occupational psychology academics in their research practices?
Rob Briner, School of Management University of Bath
Theme Research

Evidence-based practice (EBP) simply means trying to use more, more relevant, and the best available evidence in making practice decisions. While definitions and approaches vary across fields the basic principles are pretty much the same. A definition of evidence-based management, which can also be used to define evidence-based organizational psychology (OP), is as follows:

“Evidence-based management [or organizational psychology] 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, p. 19)

OP academics are also practitioners – of teaching and of research. But to what extent are OP academics themselves evidence-based in their own practices? A survey of 400 academics in US business schools (where most OP academics now work both in the US and UK) Bedeian, Taylor, & Miller (2010) asked whether respondents had any knowledge of any members of faculty engaging in a range of behaviours that represent scientific misconduct. Almost 80% or respondents said they knew colleagues who withheld methodological details or results or who selected only those data that supported the hypotheses under investigation. Over 90% reported that colleagues developed hypotheses after the results were known. Clearly, such behaviours are not only unethical they are not based on scientific principles.

It appears that such behaviours may be wide-spread and a recent analysis by Kepes & McDaniel (2013) outlines a range of other practices which, they argue, creates an body of scientific findings which we cannot trust. Some of the most dubious practices are described below:

Dubious practice 1 - Publishing mostly only positive findings: Even a very basic description of the scientific process would tell us that what researchers are supposed to do is ask a question or pose a hypothesis, collect data to address it, and report what they find - whatever the result. However in OP it is very difficult to publish papers in which the hypotheses are not supported. Not only that, the percentage of supported hypotheses in journal articles has been steadily increasing over the past few decades. But why should this be? Clearly not because OP researchers are developing psychic powers. Rather it is a consequence of the informal policies of journal editors, journal reviewers, and perhaps more broadly a desire within the scientific community to present research as making progress and new discoveries rather than emphasizing what we don’t know by reporting negative or null findings. What this bias towards publishing only positive results means is that the strength and consistency of relationships as reported in the literature are likely to be exaggerated. In other words, the published literature reports probably only very small percentage of all the existing data relevant to a specific question and the data it does report are likely to provide skewed positive support for hypotheses and already established relationships.

Dubious practice 2 – Very difficult (almost impossible) to publish straight replications: Again, a basic knowledge of science tells you that replication is important. Researchers conduct a study and get some particular results. But do other researchers who conduct an identical study get the same results? And does conducting the same study in a different setting get the same results? Without doing replications it’s difficult to know how confident we can be about
any particular findings. But publishing straight replications is almost impossible in OP as journal editors and reviewers tend to see only ‘original’ research as a contribution to knowledge.

Dubious practice 3 – Hypothesizing after the results are known (or HARKing): This practice, only too familiar to most researchers (including MSc dissertation students), involves doing some preliminary analysis to see what’s going on in the data and then creating hypotheses or questions that the data will positively answer. This is essentially doing science backwards, violates basic principles of science, and creates even more positive findings and more supported hypotheses. As Kepes & McDaniel (in press) point out it is not just individual researchers working on their own who decide to engage in HARKing but are often advised to do this by supervisors, colleagues, journal reviewers and journal editors.

Dubious practice 4 – Using null hypothesis significance testing (NHST): The problems with NHST are well-established (e.g., Gigerenzer, Krauss, & Vitouch, 2004). Some of these are a consequence of the widespread misunderstanding amongst researchers of what it is logically possible to conclude from the results of NHST (e.g., that failure to reject the null hypothesis means the null hypothesis is supported, or that statistically significant findings indicate positive support for the alternative hypothesis). Other problems are more fundamental and so much about misunderstandings. Of particular relevance here is that significance tests draw an arbitrary and extremely fine line between findings that are deemed to be of interest or seen as important and finding that are not. Related to this problem is that because one of the main determinants of statistical significance is sample size obtaining a slightly larger sample can turn what are effectively the same results from being non-significant to significant. Another problem is that NHST asks questions to which we don’t really want to know the answer. In general, we are interested in how much or the extent to which one variable or intervention affects an outcome of interest. NHST does not tell us about the effect size and only about statistical rather than practical significance. This means the much of the academic literature draws arbitrary distinctions between what are presented as important or unimportant findings and rarely considers the strength or practical significance of any effects found. So looking across the literature it may be possible to find dozens of studies showing statistically significant effects which are trivial.

But why do academic researchers engage in such practices? Perhaps the best explanation is that they, like practitioners in other fields, have espoused values and goals that differ from the implicit values and goals which drive their behaviour. These are outlined in the table below:

<table>
<thead>
<tr>
<th>ESPOUSED GOALS OF OP RESEARCHERS</th>
<th>IMPLICIT GOALS OF OP RESEARCHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>To advance scientific understanding</td>
<td>To advance career</td>
</tr>
<tr>
<td>Using the best research techniques</td>
<td>Use whatever techniques will get you published</td>
</tr>
<tr>
<td>Publishing all results and replications – unbiased</td>
<td>Publishing (mostly) only positive results, no replications</td>
</tr>
<tr>
<td>Focus on what’s important</td>
<td>Identifying ‘new’ or trendy topics – creating empires</td>
</tr>
<tr>
<td>Being honest about existing evidence</td>
<td>Exaggerating how much we know</td>
</tr>
<tr>
<td>To disseminate all our evidence and make publically available</td>
<td>Locking up our evidence behind publishers’ paywalls</td>
</tr>
<tr>
<td>Collaboration &amp; cooperation</td>
<td></td>
</tr>
</tbody>
</table>

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Competition for resources, slots in journals, between universities

These implicit goals create barriers and incentives which shape researchers’ behaviours away from the developing scientific understanding. There are also strong parallels with the reasons why OP practitioners may find it difficult to practice in an evidence-based way.

Several solutions have been proposed and some of the most important involve academia returning to its core values and goals. Other solutions, however, include developing open-access journals, allowing the publication of replications in journals, moving away from null hypothesis significance testing, and introducing a two-stage journal submission process in which journal articles are refereed solely on the basis of their rationale and methods – once accepted the results are then included.

Whenever OP academics point out that OP practitioners are not particularly evidence-based it is important that they too recognize their own limitations in this area.

References


**The cost of kindness? Emotional labour, empathy and wellbeing in nursing**

Gail Kinman, University of Bedfordshire, Sandra Leggetter, University of Bedfordshire

Theme Individual

The term "emotional labour" refers to the effort involved in managing feelings when the work role specifies that particular emotions should be displayed, whereas others should be hidden (Morris & Feldman, 1996). Although most employees perform some degree of emotional labour, it is intrinsic to the role of "helping" professionals such as nurses (Williams & Stickley, 2010). Engaging in empathic relationships with service users and their families is also a pre-requisite for nursing. Empathy refers to the ability to adopt the perspective of another person and to be concerned about their welfare; it underpins compassionate, person-centred care and is genuinely therapeutic in its own right (Hojat, 2007). It is argued that the requirement to be empathetic is a form of emotional labour for helping professionals, as some effort is likely to be involved in maintaining an empathic manner in what can be challenging interpersonal situations (Larson & Yao, 2005).

Most systematic research on emotional labour has been conducted in the service sector. Performing emotional labour can be beneficial for employees as well as enhance the service they provide (Bolton & Boyd, 2003). Nonetheless, there is evidence that sustained emotional labour can be detrimental to wellbeing, as the effort involved in managing feelings appropriately can impair job satisfaction and psychological wellbeing (Ashforth & Humphrey, 1993). Research with social workers and other helping professionals suggests that engaging in empathic interactions with service users has
many positive outcomes for both parties, but it can lead to distress and compassion fatigue (Kinman & Grant, 2011; 2013).

Performing emotional labour and engaging empathically with service users are fundamental aspects of nursing, but little is yet known about the implications for the wellbeing of nurses themselves or the factors that might protect or exacerbate their effects. This study utilises the job demand-resources model (Demerouti et al., 2001) to examine relationships between emotional labour, empathy and emotional exhaustion and strain-based work-life conflict in nurses. This model maintains that job demands (in this case, the need to perform emotional labour and engage empathically with service users) have the potential to deplete employees' wellbeing. In contrast, job resources, are protective factors that are intrinsic to the individual or his/her environment that have the potential to offset the negative impact of job demands. The triple-match principle, arising from this model, indicates that the likelihood of finding an interaction between job demands and resources in predicting strain is increased when the three variables are closely matched within either the physical, cognitive or emotional domains (Chrisopolous, Dollard, Winefield & Dormann, 2010). This study tests this principle by focusing on the emotional domain: i.e. the role played by emotional support in the relationship between emotional labour, empathy and both emotional exhaustion and strain-based work-life conflict.

Insight into these issues is particularly important in the light of the recommendations of the Francis Report (2013) that emphasises the need to improve patient-centred compassionate care. The findings of this study, therefore, have the potential to inform interventions to not only protect the wellbeing of nurses, but also enhance the quality of care they provide. Accordingly, the study links with several conference themes: investing in the future of employees, organisations and society in general.

Method
Three hundred and fifty-one nurses completed an online questionnaire. Zapf et al's (1999) emotional labour scale and Davis's (1983) measure of empathy were utilised. Maslach et al's (1996) measure of emotional exhaustion and Carlson et al's (2001) strain-based work-life conflict scale were utilised. Workplace emotional support was assessed by a scale developed for the study.

Findings
Significant positive relationships were found between emotional labour and both outcome variables: emotional exhaustion (p<.001) and work-life conflict (p<.01). Emotional support was negatively associated with emotional labour (p<.01), emotional exhaustion (p<.001) and work-life conflict (p<.01). No significant relationship was found between emotional labour and empathy. Empathy was positively associated with emotional exhaustion and emotional support, but no significant association with work-life conflict was found. Some evidence was found that emotional support moderated the relationship between both emotional labour and empathy and emotional exhaustion (p<.001 and p<.01).

Discussion and implications
Although emotional labour and empathy are fundamental requirements of the nursing role and likely to enhance outcomes for service users, they have adverse implications for the wellbeing of nurses. The findings of this study highlight the negative impact of emotional labour experienced by nurses on work-related wellbeing that extends to the home domain. Evidence was also found that empathy may also be a risk factor for wellbeing. Some support for the triple-match hypothesis emerged in that emotional support moderated the positive relationship between emotional labour and empathy and the outcome of emotional exhaustion. Further research is required to develop interventions to enhance emotional support to help nurses manage the emotional demands of their work. More insight is also needed to inform interventions to help nurses deliver compassionate, patient-centred care, whilst maintaining emotional boundaries to protect their personal wellbeing.
T23: Short Paper

The effectiveness of increased time as a reasonable adjustment in timed ability tests for candidates with a disability
Sean Keeley, IBM, Jo Parkes, IBM
Theme Individual

The Equality Act (2010) requires employers to make ‘reasonable adjustments’ where a disabled person would be at a substantial disadvantage in undertaking an assessment. Organisations such as The Joint Council for Qualifications [1] and Ofqual have set very specific definitions of what is meant by reasonable adjustments and what form these reasonable adjustments might take. Where employers prefer to have the same process for all applicants, a timed test administered under the same conditions as when it was standardised is preferred.

For candidates with dyslexia, ‘reasonable adjustment’ can take the form of modifications to the test environment or to the assessment’s appearance but usually the reasonable adjustment comes in the form of increases in the time limits for an assessment.

References


Most candidates receive extra time of 25% but this is dependent on having documentation which shows a Statement of Special Education Needs relating to secondary (sometimes further education), or an assessment carried out, preferably from Year 9 onwards, by a specialist assessor confirming a learning difficulty relating to secondary or further education. The specialist assessor must confirm that the candidate has at least one below average standardised score which related to speed of processing (this can be speed of reading, reading comprehension, writing, or specific cognitive processes which has a substantial adverse effect on speed of working).

This 25% extra time is the general standard used by organisations when giving timed assessments to candidates with dyslexia (Bartram and Coyne, 2003) although there is no explicit reason for this being applied to most psychometric assessments. One abiding question is how effective is this additional time in providing reasonable adjustment. A small number of studies have investigated the impact of timed versus untimed conditions for students with disabilities. Alster (1997) showed significant improvements as did Huesman and Frisbie (2000). Brooks, Case and Young (2003) showed that allowing additional time on tests gave no demonstrable advantage to non-disabled students.

This paper looks at the increase in obtained score based on the additional time, comparing this with standard time limits while comparing the observed increase in obtained score for disabled candidates with candidates who do not report a disability.

Method
Participants
Group A comprised a group of 98 candidates who indicated themselves as having a disability when applying for a graduate level role for a local authority. The disability mentioned was dyslexia and all of the candidates had documentation to establish what reasonable adjustments need to be provided if these candidates were required to undertake testing. The usual adjustments were the use of colour filters, and the provision of extra time.

Group B comprise a group of 98 candidates who did indicate themselves as not having a disability and had applied to the same graduate level roles as the candidates in the first group.

Group A and Group B were matched on a variety of biographical details (age, gender, ethnicity, educational level, nationality); this was to eliminate other sources of score variation while recognising that not all possible sources had been covered.

Tests
All candidates took the same assessments, three tests from Kenexa’s Infinity Series. These tests were:

- **Infinity Graduate and Managerial Level Logical Reasoning (LRT):** a measure of inductive reasoning, which assesses a person’s ability to evaluate the patterns and trends in information, without reference to written text or numerical data.

- **Infinity Graduate and Managerial Level Numerical Reasoning (NRT):** a measure of deductive reasoning, which assesses a person’s ability to evaluate information presented in various statistical tables and charts, to answer numerically-related questions.

- **Infinity Graduate and Managerial Level Verbal Reasoning (VRT):** a measure of deductive reasoning, which assesses a person’s ability to reason with information presented in a verbal format.

All test takers are required to complete a short practice test prior to completing an Infinity Series Graduate and Managerial tests, in order to allow them to become familiar with the test format.

These assessments are timed, administered online and scored automatically.
Procedure
All candidates in Group A and Group B were asked to complete the tests using the test limits normally set (the ‘original time’ condition). Candidates submitted their responses once they had finished all of the questions or the time limit set had run out.

The extra time was then applied (an extra 25% of the standard time limit). Again all candidates in Group A and Group B were asked to continue the tests until they had completed all of the questions or the extra time had run out. They again submitted their responses. This should be seen as the ‘reasonable adjustment’ applied for candidates with dyslexia in general.

In this way, candidates obtained two scores for each assessment, a score based on standard test limits, and a score based on extended time limits (the ‘extra time’ condition).

Results
Scores were expressed as standardised scores (T-scores) based on a general Public Sector norm group.

The average increases in T-score for Group A were 1.10, 3.92, and 1.93 for LRT, NRT, and VRT respectively.

The average increases in T-score for Group B were 1.47, 3.06, and 4.33 for LRT, NRT, and VRT respectively.

With the extra time, the increases for Group B were much greater for the VRT, slightly better for LRT and slightly worse for NRT.

From the original time to the extra time condition, the differences in mean scores between Group A and Group B on VRT have accordingly reduced from 5.57 T-scores to 3.17 T-scores, the difference on LRT slightly reduced from 1.52 to 1.15 and the difference on NRT slightly increased from 1.99 to 2.66.

These results are obviously affected by the relative speededness of each assessment. Most candidates from Group A finished the VRT before the original time expires. Few candidates finish the NRT hence the greater overall improvement in performance across both groups. Many of the candidates finish the LRT (both Group A and Group B) so the improvements are less but tend to have a greater effect on low-scoring candidates.

Table 1: Means (in T-scores) for Groups A and B for Original and Extra Time Conditions

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
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<tbody>
<tr>
<td></td>
<td>NRT</td>
<td>VRT</td>
</tr>
<tr>
<td>Original</td>
<td>51.1122</td>
<td>51.1020</td>
</tr>
<tr>
<td>Extra</td>
<td>54.8469</td>
<td>53.0306</td>
</tr>
<tr>
<td>Difference</td>
<td>+3.7347</td>
<td>+1.9286</td>
</tr>
</tbody>
</table>

When comparing the mean scores for Group A with the original time limits and the mean scores for Group B with the extra time, the differences are very small. For NRT, Group B have scored slightly higher (+1.07 T-scores) on NRT, almost identically on LRT (-0.05 T-scores) and lower on VRT (-1.25 T-scores).

Conclusions
This study probably creates more questions than answers them. When assessments are timed, the reasonable time...
adjustment seems to have some of the desired effects in that the differences between the groups are generally lower. The findings might support the hypothesis that the reasonable time adjustment seems to be achieving its intended purpose but the general trends may hide big individual differences.

Extra time has had less of an effect than might be expected but this is due to the fact that many of the candidates (particularly those in Group A) finished the test in the original time limit and the additional time will have no effect.

The NRT seems a much more speeded assessment that the other two so the overall increase across both groups is greatest.

Almost all of the candidates in Group A finished the VRT in the original time and when the extra time was applied, all but four of the candidates for either group had not completed the test. The extra time has had a greater effect on the VRT for Group B where reading speed, speed of processing written materials, and speed of reading comprehension is vital, these being part of the definition of dyslexia.

The increases in LRT were smaller but similar for both groups. This may be due to the progressive increase in item difficulty and the fact that candidates may be meeting their ability threshold. In this case, power rather than speed seems to be the major determinant of test score.

Of speed of processing is the major reason for the differences between candidates with or without dyslexia, than the use of timed assessments should be avoided and untimed assessments used. There is still the logistic issue, for example, of how to ‘time’ a proctored session where candidates have different time limits or the need to provide rooms for candidates needing extra time. This study suggests that the extra time provided does lessen the possible disadvantage that timed assessments present for candidates with dyslexia but not remove the issue. This ‘reasonable adjustment’ does have a real effect and may be sufficient in most cases but not all.

The introduction of CAT-based systems (which generally use and should use untimed assessments) would seem to offer the best solution. As CAT systems adapt and modify themselves to the candidate, the need to make a reasonable time adjustment is unnecessary. Stone and Davy (2011) outline the advantages of CAT in reduced seat time, more tailored assessments, removing the need to adjust time limits and the ability to modify the assessment itself if need be. This makes it a more useful tool in accommodating all candidates. The greater measurement accuracy of CAT and the ability to reduce test times (while paradoxically having untimed assessments) are likely to increase candidate motivation and reduce test fatigue (Linacre, 2000).

Another issue is the actual effect that reported dyslexia has on scores. On a total group basis, the scores obtained in the original condition by Group B would not be evidence of the need to ‘adjust’ the time limit. The ‘dyslexic’ group has scored within 0.45 of an SD of the norm group used and only 0.55 of an SD lower than the ‘non-dyslexic’ group.

For NRT, which seems a very speeded assessment, the increase in scores was very similar for both groups. In this case, the extra time may be insufficient due to the nature of the assessment. Accordingly blanket policies to deal with time (i.e. give an extra 25% of the time) may be insufficient.

Almost all of the candidates in Group A and Group B finished the VRT in the extra time; the differences are not then purely due to differences in speed of processing but in other areas (which may be related to other issues relevant to dyslexia).

References


T24: Short Paper

An Evaluation of the DOP Leadership Development Programme

Dr Doyin Atewologun, School of Business & Management, Queen Mary, University of London, A O'Hare

City University London, A Mount, City University London

Theme Profession

This session will present the evaluation outcomes of the Division of Occupational Psychology’s first Leadership Development Programme (LDP). The LDP evaluation strategy was based on by Kraiger, Ford and Salas’s (1993) framework. This model divides post-intervention activities into three outcomes: cognitive, skill-based and affective. The session will describe the theoretical framework used for evaluation, the mixed methodology approach, the results and the lessons learnt for leadership evaluation and development in the voluntary sector.

The LDP evaluation strategy was based on by Kraiger, Ford and Salas’s (1993) framework. This model divides post-intervention activities into three outcomes:

1. Cognitive: Has knowledge changed or increased as a result of this intervention?
2. Skill-based: Has task proficiency improved or job-related skills improved?
3. Affective: Has motivation increased as a result of training?

Findings from the 16 interviews and 30 questionnaire responses collated over 9 months will be presented.

Links with conference theme

This session is highly pertinent to the conference’s themes. It fits with Theme Profession. The LDP was initiated because the DOP Committee identified a need to develop a leadership pipeline to assure the Division’s future and offer skills enhancement to support the development of its leaders. It was also perceived that a structured leadership development process would provide formal skills and training to develop the pipeline and incentivise OPs to work within the DOP. Overall, this suggests the significance of evaluating how much progress has been made towards addressing these needs.

Additionally, the Committee recognized the need for understanding how leadership can be galvanized when working with and for volunteers. Delegates were recognised by their active participation in the DOP committees and working
groups. Thus, this session is also relevant to the theme of Research as it describes a method for evaluating leadership development in a unique context in which the voluntary sector is examined simultaneously with the work context. Last, as its findings link directly to the impact of leadership development on the DOP institution, and delegates’ employers, the session offers insight to the Future of the Individual and the Organisation.

**Novel/innovative aspects**
This session will be of interest to DOP practitioners as well as researchers. Learning outcomes were evaluated against the recently launched Leadership Capability Framework for Occupational Psychologists. This is first explicit attempt to develop talent for the Division and is an opportunity to apply Occupational Psychology ‘science’ to itself. From a theoretical perspective, leadership literature has paid little attention to leadership in positions of ambiguous and indirect power, such as when leading volunteers in a professional association. However, there is increased focus on leadership enactment rather than the ‘Great Man’ leadership theories. The voluntary context is a unique one for examining informal leadership (in line with current theories about the distributive nature of leadership).

**What delegates may find most informative**
It is anticipated that delegates will be particular interested in the shift in leadership behaviours identified as a result of this longitudinal evaluation, and the similarities between work and DOP domains.

**Attendee material**
Electronic copies of slides and the full Leadership Evaluation Report will be made available.

**Methodology and Design**
Eight delegates participated in the LDP. The evaluation entailed a mixed methods, longitudinal design, comprising questionnaires for delegates, and interviews with delegates and nominated raters within and external to the DOP.

**Evaluation forms**
Delegates completed an evaluation questionnaire anonymously at five time points over 9 months - at the beginning of the programme, immediately following each of the three residential modules and following completion of the year-long programme. The first and final evaluation questionnaires contained similar questions relating to cognitive, skill-based and affective training outcomes. The final questionnaire also contained questions about transfer of learning back to the DOP as well as the delegates’ workplace. The questionnaire immediately following each module contained questions about the content and delivery of the module. In total, 28 questionnaire responses were collated.

**Interviews**
Three to six months after the final module, one to one interviews were conducted with delegates and nominated raters (peers, subordinates and managers within the DOP and their workplace). In total, 16 interviews were conducted.

**Findings**
**Evaluation forms**
Prior to the LDP, delegates self-appraised their skills, understanding, motivation, confidence and motivation in relation to leadership. Post each module, delegates completed a module evaluation form in which they rated the programme. Delegates consistently evaluated the program as 4 (range 2- 5), indicating they valued and gained from the LDP. Delegates also had scope to indicate how they wished to develop over the course of the LDP. Post-LDP, delegates responded to similar statements. Overall, delegates reported that their competencies improved throughout the course of the LDP. The data collected in this small sample suggests that the LDP had the desired outcome on targeted areas (full data will be shared at the presentation).
Interviews

Five LDP delegates and 11 raters were interviewed over a period of 3 months. Quotes refer to LDP delegates (D), their colleagues (C), direct reports (DR), peers (P), and managers (LM) inside (DOP) and outside of the DOP (Org).

1. Cognitive outcomes

Delegates spoke generally about acquiring new knowledge and learning as a result of their experience on the LDP. Specifically, participants felt that they really benefitted from learning about the DOP and this learning helped them to be better in their role within it. For example,

“…appreciating the way the DOP works…and knowing that you can do things… that’s been one of the big realisations for me.”

Delegates also shared that while they were already familiar with a lot of the leadership literature, the LDP helped them to develop more strategies and techniques of using and applying the models in the work that they did both inside and outside the DOP.

2. Behavioural outcomes

Generally, delegates and their raters alike stated that the LDP delegate had the ‘ability to lead’ before the LDP. This was reflected in the quantitative data, which indicated minimal changes in motivation to lead and confidence in effectiveness and commitment to being an effective leader. What the qualitative data indicate in addition to this, however, is that the programme helped delegates to polish or hone their skills. One rater described this as “polishing a diamond,” and a delegate said “my capabilities have become more fine-tuned.”

The evaluation interviews suggested that delegates learnt how to apply their knowledge more effectively by being able to judge situations and apply themselves more effectively:

“[… used LDP by learning to read the situation and to understand when a contribution is needed and when to provide a valid and useful contribution.”

Additionally, delegates were reported to become more proactive in taking on leadership roles - putting themselves forward in groups, being active rather than passive in discussions, and being more willing to “step up” and vocalise ideas or support for others:

“[… may have previously taken a more passive role with familiar people, but now […] may be a bit more active in assuming a role of responsibility when dealing with the official working group.”

3. Affective outcomes

Regarding motivational or emotional changes, all interviewees mentioned how the LDP had brought about a shift in confidence:

“A lot of what I did comes back to developing the confidence, engaging people, being able to say no.”

“[…] would certainly seem more confident now than […] was previously and that’s around talking with people and interacting with people.”
Linked with developing greater confidence, another affective outcome of the LDP appeared to be a belief in self-agency, which led to proactivity to do something different or change something that wasn’t working. One delegate spoke about unhappiness in their job and how they took the initiative to talk to their line manager, resulting in them taking on new work that gave more variety and experience. The delegate commented that they “would not have done that before [the LDP].”

Another outcome concerned emotions about the Division. Interviewees cited developing a greater commitment to DOP, its values, goals and objectives as a result of participating in the LDP. This was often attributed to understanding the DOP better:

“The LDP gave us the opportunity to discuss issues relating to the DOP and BPS outside of an agenda-led meeting... In the LDP, we came out with some really good ideas that we’re now able to take away and we’re all putting into practice and you don’t get the opportunity to do that anywhere else in the DOP.”

Discussion & Conclusion
The findings from both survey and interview data from LDP participants and their colleagues, direct reports, peers, and managers inside and outside of the DOP strongly indicate that the LDP contributed to positive outcomes in all three areas. The interviewees in the present evaluation identified cognitive outcomes in delegates’ knowledge of the DOP and BPS, and having strategies for leading and practicing. This manifested in the delegates’ ability to lead and the subsequent results that they achieved because of this. Notable in both interview data and anecdotally from the residential sessions was the realization that delegates knew very little about the DOP structure and its relationship with the BPS. This raises questions regarding the extent to which leadership expectations within structures are clarified in voluntary roles. It also potentially suggests the presence of stronger individual desire to lead, as the formal structures that would typically support the development of leadership in paid employment are not clearly as established in voluntary roles.

While delegates had previous knowledge of leadership theories and practices, the LDP appeared to give them the opportunity to practice their knowledge and apply the models from academic literature. The outcome fits with Anderson’s (1983, 1987) theory of skills development that distinguishes between declarative and procedural knowledge. While LDP delegates had the declarative knowledge in the theory and facts around leadership, the LDP offered them the opportunity to gain procedural knowledge through the various group and individual tasks within the programme. In parallel, participants also demonstrated procedural knowledge in their work outside of the DOP that benefitted their organisations. This indicates the ease of transfer of leadership between domains, and suggests potential for investigating and developing organizational leadership skills in individuals who may not be seen as leaders at work but may demonstrate leadership in the community (e.g. church, civic society).

Limitations & Future Research
One major limitation was the low response rate. Half the delegates returned their final feedback form and no post-module 2 forms were retrieved. Additionally, three delegates were unavailable for post-programme interviews. Timing may have played a role in this as feedback was requested after a time lapse following the final module. Additionally, there were some practical challenges with commencing the evaluation strategy, which may have contributed to this. Future programs should implement evaluation as soon as possible after the final LDP module and seek multiple ways to keep delegates and their raters engaged in the evaluation process. The evaluation of the second LDP cohort is currently underway. An update will be provided to attendees.

T25: Keynote Session

Recent Models of Psychological Health Applied in the Workplace: A Research Journey into Perfectionism, Perseverative Cognition, & Acceptance-Based Therapy
Dr Paul Flaxman, Senior Lecturer in Psychology, City University London, UK

This keynote presentation describes a research programme focused broadly on understanding and enhancing employees’ mental health. Dr. Paul Flaxman will begin by summarising recent debates in the perfectionism literature, and will outline why these debates have important implications for understanding underlying vulnerabilities for psychological distress among working populations. Paul will focus on the distinction between a type of perfectionism ('perfectionist strivings') that may have adaptive consequences, and a type of perfectionism ('evaluative concerns') that is reliably associated with poorer mental health, higher stress reactivity, and behavioural ineffectiveness. The presentation will also consider the potent role played by worry and rumination, reporting the results of recent research showing that continuing to worry about work in one’s leisure time is one of the mechanisms linking perfectionism to impaired well-being. Finally, Paul reports on his long-standing research interest in adapting developments in cognitive-behavioural therapy for use in workplace settings. In particular, he will describe the strong emergence of a mindfulness-based approach, known as acceptance and commitment therapy (ACT), which Paul and his collaborators have translated into a brief psychological skills training programme suitable for delivery in the workplace. Paul will report on a series of intervention studies conducted by his own and other research teams that have found this type of training to be consistently effective in improving employees’ psychological flexibility and mental health.

T26: “Secrets of Success” Careers Panel
Convenor: Kate Mackenzie-Davey, Birkbeck, University of London
Theme Profession

Your opportunity to hear from a prominent psychologist, a mid-career psychologist and an MSc student about their perspectives on what it takes to be successful in our profession, including insights on what has shaped their career paths. Following the introductions there will be an open discussion exploring the early, middle and top stages of the OP career.

As occupational psychologists we all make career choices, but how do we ensure the right ones for us? From the beginning of our Q Occ Psych training and beyond, how do we select organisations and projects that will energise us and play to our strengths, talents and motivations? How do we decide upon our career path and specialisms; should we be an academic, a practitioner or both? Should we work in an organisation or be an independent advisor? What works best at different stages in our careers?

Discuss with the panel and share the secrets for success.

T27: Research Excellence Framework 2
Impact Case Study: Applying Socio-Technical Principles within Engineering
Prof Chris Clegg, Socio-Technical Centre, Leeds University Business School

To this day socio-technical theory maintains that both social (e.g., behaviours, culture, working practices) and technical (e.g., technologies, information systems) aspects of a system must be jointly optimised in order for it to function effectively. In 1976 Albert Cherns published the first set of principles of socio-technical design (Cherns, 1976, 1987). Clegg (2000) later extended Cherns’ principles to further guide system design, attempting to provide a more integrated approach and one that reflects significant long term changes in technologies and working practices. In this presentation, Chris Clegg describes recent work conducted by members of the Socio-Technical Centre using socio-technical theory to help redesign the new product introduction system in a large multi-national engineering company.

T28: Standard Paper
Computerised Adaptive Testing (CAT) - The best way forward in testing

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Increasingly, psychometric testing is moving away from the paper-and-pencil testing model (or from online administered versions of paper-and-pencil tests) to forms that are designed with technological and mathematical advances at their heart.

OPs are most often seen as the gatekeepers of advice and knowledge on psychometric testing and how it can be used effectively, efficiently and in the fairest possible ways. Computerised Adaptive testing (CAT) is not a new concept but it is unfamiliar to the vast majority of OPs. OPs need to have knowledge in this area as the major test publishers are all looking at using CAT for most new assessments.

This presentation is a starting point rather than an end. It is not a basic level paper as some of the concepts are mathematically complex. However the intention is to ensure that delegates understand what CAT is generally.

We will briefly give an outline of how CAT works, with simplified real-life examples, advantages and disadvantages associated, and where CAT is going next.

We are not showing the actual assessments we have worked on as we are not trying to sell a product or service. The intention is to arm OPs with enough information or knowledge to understand how CAT can be useful to them and their colleagues, clients and customers.

**WHAT is CAT?**

**CAT (or Computerised adaptive testing)** is a sophisticated test delivery method that creates and delivers a customized test for each examinee using computers, aiming to measure various psychological constructs such as ability, achievement, attitude and personality traits in the most efficient and effective ways.

**CAT** successively selects questions so as to maximise the precision of the test based on what is known about the candidate from previous questions. From the candidate’s perspective, the difficulty of the exam seems to tailor itself to his or her level of ability. For example, if a candidate performs well on an item of intermediate difficulty, he will then be presented with a more difficult question. Or, if he performed poorly, he would be presented with an easier question. Compared to static multiple choice tests where everyone is required to take a fixed set of items regardless of their ability (or construct) levels, CATs require fewer test items to arrive at equally precise measures.

**Simplified worked examples of how CAT works**

We will present a series of worked examples of how a particular CAT assessment might work, comparing different response patterns. We will also show a worked example of the effect of time limits on assessments, and how very different patterns of answering can result in similar scores.

**WHY and WHEN was it developed**

The first adaptive testing (not computerised) was developed in 1905 by Alfred Binet. He needed a test which could cover a wide range of ability so it needed to adjust to the ability level of the candidate. The first CAT systems were developed for the US Army (CAT-ASVAB) and the first CAT version of the Binet tests was developed by David Weiss in 1973.

Developments in psychometrics (IRT) and computer technology have made CAT systems easier and cheaper to develop. CAT is used by very large organisations requiring increased test security and mass administration (historically this has been military and governmental organisations, educational establishments and licensure/certification boards). The costs associated with developing CAT systems have meant that CAT assessments have not been available for general selection or development testing until recently.
The advantages of using CAT

There are many advantages recorded in the literature with regard to CAT (Linacre, 2000; Rudner, 1998).

The adaptive nature of these assessments means that CAT tests are **shorter in duration** (around 50% shorter in terms of time, and up to 65% shorter in terms of questions presented). These CAT tests are most likely to be administered unproctored but both on-site and off-site testing time will be reduced. Overall CAT tests are much **more accurate** (i.e. more reliable) than conventional static cognitive ability tests or even tests in which items are administered randomly from a large item bank (Dainis, Grelle, & Hurst, 2009). Many CAT series use a minimum reliability equating to 0.8 for each test instance.

**Test Security** is also increased by the use of CAT. Item exposure is reduced because fewer questions are administered. By comparison with non-CAT versions of these assessments, this might reduce the number of questions presented from 20 items for a fixed NRT test to 8 items for a CAT version. This means that each candidate sees fewer questions and only sees questions which equate to their ability level. The methods used to score CAT assessments also mean that efforts to access a large number of items can be dealt with. A maximum number of items per administration is set and test sessions may time out if excessive time is taken over the test as a whole or over individual items.

If test items do become over exposed or compromised (through cheating or piracy), these items can be deleted from the item bank without the integrity of the whole item bank being affected. One of the advantages of the CAT methodology is that items can be deleted and new items can easily be added to the total item bank. Replacement and alternative items are constantly being trialled and added to the item banks for these assessments.

Despite the sophistication and complexity of CAT scoring, **scores** for test takers are **immediately available**. This is due to the fact that the ability level (which will be represented by a particular score or theta value in this case) needs to be calculated after every question, to calculate the next question administered.

Another possible unexpected advantage is **increased motivation**. Linacre (2000) mentions increases in the motivation of candidates during CAT testing sessions. During the assessment, the test takers might feel discouraged if the items are too difficult or, on the other hand, might lose interest if the items are too easy. As CAT assessments adapt themselves to a test taker’s ability level, this enables the test taker to achieve their most accurate and highest score possible.

The shorter test time is also likely to **increase the test taker experience** by reducing the chances of test fatigue which should result in a reduction in drop-out rates i.e. the number of test takers who leave the assessment unfinished.

**Calculating CAT Scores**

The calculation of CAT scores is founded on principles of Item Response Theory (IRT); at the heart of IRT are mathematical functions that estimate the probability of a specific test taker answering a particular item correctly (Wainer, 2000). IRT is based on the observation that the ability trait under measurement is not synonymous with the test score (Lord, 1980). The latter depends on the characteristics of a particular assessment task (e.g. difficulty, content), while the ability trait is independent across assessments by different tasks. This observation is operationalized by a mathematical model that explicitly links performance on the task (typically comprising ability test items) to the unobservable ability trait. This strong theoretical premise imparts a property which is of great usefulness for item-banking (and adaptive testing) applications: model-parameter invariance. It comprises two related concepts: (1) the item invariance of candidate ability, and (2) the group invariance of item parameters. The first of these, is of particular practical significance, as it means candidates’ ability estimates are independent of the particular set of items used to estimate it (Hambleton, Swamination & Rogers, 1991). For tests developed using Classical Test Theory (CTT), this is not the case. For CTT, estimates of a test taker’s ability are dependent on the particular set of items used to estimate it. Estimates of the psychometric properties of items are fixed in relation to the sample group used (the psychometric
properties of the items are based on the people tested) and estimates of item psychometric properties are fixed in relation to the other items in the test. CTT cannot be used easily to develop item banks.

The most frequently used score estimation procedure is Maximum Likelihood. This derives the most likely ability level of a respondent given their responses to the items with which they were presented. The algorithm used to estimate the Maximum Likelihood of the score is known as the Newton-Raphson Method.

In general, the process starts with an arbitrary level of ability, calculates the probable responses to the items in test given this level of ability, compares these expected responses to the actual responses of the respondent, and adjusts the ability level accordingly. This process continues until the expected responses match the actual respondent response vector very closely.

A variety of termination criteria (i.e. rules which CAT uses to know when to stop administering test items) are used. The major consideration is the accuracy of the measurement and all CAT systems set specific SEMs which need to be met, much more stringent than for most static tests.

**Possible disadvantages of CAT**

Real life reduction in testing time may be lower than expected. For example, candidates who answer randomly take longer. Candidate perception of different test lengths and timing in proctored conditions may lead organisations to fix a standard time for a test or require that a fixed number of items is administered.

Certain items can become overexposed quickly (that is why item banks need to be large and a method of updating the bank is necessary). This is particularly true of ‘middling’ difficulty items.

CAT should not be timed but they are often timed for logistic purposes. A practical consideration for proctored administration is how long the testing sessions should last if they are essentially untimed. Also, there is need to deal with candidates finishing at highly differing times.

Potentially, there is a greater opportunity for candidates to cheat in unproctored situations as there is greater time for cheating to occur. Some developers have tried to control for this with generous time limits but there are problems with this as a solution.

**Future developments using CAT**

CAT will provide better ways of assessing individuals more quickly and more accurately

- Use of psychometric testing with candidates with a disability
- Better measures of GMA (General Mental Ability)
- Huge items banks covering a wider range of ability level across cognitive constructs (e.g. deductive reasoning, inductive reasoning, memory, perceptual speed and accuracy)
- Use in personality assessment and employee engagement

**References**


The Division of Occupational Psychology has for the past two years, been at the forefront of pilot programmes and set-up of a European Specialist Certificate in Work and Organizational Psychology, to be awarded by EFPA and EAWOP. The Europsy Specialist Certificate will represent a European-wide recognized standard for work and organizational psychologists, enabling international recognitions of training and practice preparation and experience in the field.

In this workshop, the steering group leading the UK pilot and scoping for implementation will share updates about the project and its progress, and explain the value of Europsy recognition for UK Occupational Psychologists.

There is also an opportunity for you to contribute. Implementation of the Specialist Certificate in the UK requires us to demonstrate that our divisional membership want to be part of the EFPA drive to recognize standards internationally. At the workshop, you will therefore be able to:

- Pre-register for the Europsy Specialist Certificate in Work and Organizational Psychology (your application will be processed as soon as we gain BPS approval for awarding the certification in the UK)
- Find out how to apply for the Basic Europsy Certificate now
- Contribute your views and feedback to this important professional development
An introduction and review of the research methodology; (3 minutes)

the 6 megatrends (about 2 minutes per trend)

the implications for leadership (8 minutes).

For the interactive section, we will use a short survey we have developed (also available on line) to help participants rate their own organisation against the implications of the megatrends and determine where they may need to take action to help their organisation be proactive in meeting the demands of the megatrends.

The Research
See Attachment 1 - Figure 1 - The Leadership 2030 Research Process

The Leadership 2030 research process

We examined different methodologies around the best way to classify and look at what was happening and decided upon foresight research. Foresight analysis is robust, cross-disciplinary, scientific research, focused primarily on social science. The same rigorous criteria apply to this field as any other science: relevance, logical consistency, simplicity, clarity of premise, narrative an presuppositions, and a practical value to everyday life (see references).

Once we knew that we would be using foresight analysis, we decided that the most fruitful way to analyze the changes occurring would be to identify the current megatrends in global society.

The concept of a megatrend was first introduced by John Naisbitt in his 1982 book Megatrends. It is important to understand that a megatrend is not a short-term trend of the sort that characterises the clothing and FMCG (fast-moving consumer goods) industries. These can be short-lived and are often localised in nature. Rather, a megatrend is a long-term, transformational process with global reach, broad scope, and a fundamental and dramatic impact.

More specifically, there are three dimensions that define a megatrend: time, reach, and impact. See Attachment 1, Figure 2- The three dimensions defining a megatrend.
We recruited a research partner to help with the early analysis, which would identify the global megatrends driving the changes being perceived by the business leaders we work with. We chose as our research partner Z_Punkt, a German foresight company regarded as the European leader in the field of long-term foresight analysis.

Working with Z_Punkt, we initially identified around twenty megatrends, all regularly cited as having a significant impact on societies and economies. As we honed our understanding of these, we zeroed in on six megatrends that are creating and will continue to create the greatest shifts in the business environment.

This took us into the next phase of our research: canvassing business leaders’ opinions about and insight into these six megatrends. We analysed the views of thousands of employees around the world on their organizations’ leadership practices from a variety of Hay Group data sources. We also conducted hundreds of informal conversations with business leaders and academics about the megatrends, as well as presenting dozens of speeches, lectures, and workshops in which we discussed the issues at hand. In addition, we analysed hundreds of articles and studies on the megatrends.

We carried out our analysis megatrend by megatrend. This enabled us to understand the causes and consequences of each one in great detail, on three important levels: the business environment, organisations, and leaders and their teams. We also examined how the megatrends interacted. We then reviewed our databases and organisational research to hone in on what the changes would mean for organisations and leaders.

**The findings**

The megatrends will have a profound impact on organisations and will require ‘altrocentric’ leaders - leaders that are able to bring together a wider diversity of individuals to create boundary spanning teams. At the same time there are several fundamentals of human psychology that mean organisations cannot be leaderless nor will competency modelling and psychometrics be meaningless in this new world.

**References**


T31: DOP Leadership Development Programme (LDP)
The Outcomes of the DOP LDP Project on Articulating our Profession’s Values
Dr Doyin Atewologun, Queen Mary University of London, School of Business & Management
Theme Communities

In 2012, the DOP Leadership Development Programme (LDP) inaugural cohort embarked on a project to articulate and assess the profession’s appetite for a set of values to which members would ascribe. The eight LDP participants discussed and developed eight values (An Evidence-Based Approach; Authenticity & Integrity; Growth & Development; Inclusive and Adaptive; Making a Difference) and accompanying behavioural indicators. The values were tested with a wide array of work, occupational and organisational psychologists and feedback collated. This session will present the personal experiences of one of the LDP participants in discussing, developing and testing values with the wider professional community. The session will also share the outcomes from the feedback gained from recent and long practicing Occupational Psychologists, assessed through the yearly DOP survey, in-depth interviewees and group discussions with DOP 2012 conference attendees. The Values Project is currently being reviewed by the 2013/2014 LDP cohort. Updates on this will be provided and feedback on the project sought from session attendees.

T32: Workshop
Engaging with the media
Andrew Clements, Ciara Kelly, Elizabeth Adams & Stephen McGlynn, DOP Communications Group
Theme Profession

This workshop will introduce basic skills that can help you engage with the media in sharing your research or expertise. Over the course of forty minutes, we will present techniques in writing press releases, finding the story in your work, developing and maintaining contacts and relationships, and navigating broadcast media such as TV and radio interviews. We will also be discussing some of the ways in which the BPS and DOP can facilitate your media activities, and how you may be able to help the Division in responding to emerging news stories. There will be the (optional) opportunity for participants to consider and work with their own research in this workshop, and receive some feedback and input from the DOP Communications Group.

T33: Standard paper
Reconciling Job Analysis and Criterion-related Validation Data
Rainer Kurz, Rab MacIver & Peter Saville; Saville Consulting
Theme Research

Introduction
Salgado et al. (2003) amongst others demonstrated validity generalization for measures of General Mental Ability (GMA). For personality scales validity generalization is only claimed historically for Conscientiousness (Barrick & Mount, 1991), and more recently also for Emotional Stability (Barrick, Mount & Judge, 2001). For other personality scales validity has been found only for certain types of jobs and criteria.

The purist nature of the Big 5 may be too coarse to serve as a useful framework for validation work and job profiling. Bartram (2005) showed through a meta-analysis sizeable point-to-point validities as well as impressive personality composite validities against overall performance criteria. A weakness of Bartram (2005) however is the use of negative
weightings for ‘competencies’ and overreliance on multiple regression based weights. Both are inadvisable when predictor and criterion data got ipsative influences, and if the only validation source are line managers.

This study reports on the importance of 15 job profiling constructs across more than 1000 roles. It contrasts the finding with results of a validation study where 12 behavioural disposition constructs were available to predict overall performance.

Research objectives
The objective of this study was to document the importance of the behaviour, ability and global sections of a job profiler tool, the validity of 12 behavioural styles predictor scales and synergise this information to support assessment decision-making.

Methodology
The job profiler tool used is an online questionnaire that features 36 behaviour, six ability and three global performance items that are rated on a seven-point rating scale, from ‘Unimportant’ through ‘Important’ to ‘Critically Important’. Raters completed the questionnaire on one of 1009 target roles as incumbent, boss, report or stakeholder. Item ratings were averaged within each rater group and then across all rater groups used for a role. Satisfactory scale reliabilities around .70 were expected. In line with research on the criterion space an overall Importance PCA component with loadings for all Sections was expected, as well as ‘Task vs. People’ and ‘Alpha vs. Beta’ bipolar components in an unrotated solution. Following Varimax rotation, these were expected to either resemble Alpha, Beta and a cognitive factor, or People, Task and a cognitive factor.

On the criterion-related validation data conservative unit weight validation results were readily available across a mixed occupational group. All participants (N=308) completed a 40 minute online self-report questionnaire with 216 questions that were answered in a dynamic rate-rank format. The criterion measure was an external rating on a 3 item global performance scale by a participant-nominated rater.

Results
Reliabilities of the job profiler three-item scales were satisfactory ranging from .67 to .88 with a mean value of .78. On the 1 (‘not important’) to 7 (‘critical important’) rating scale the highest mean values were found for Structuring Tasks and Processing Details constructs at the heart of the Big 5 Conscientiousness. These were followed by Evaluating Problems and Investigating Issues constructs associated with the analytical (i.e. GMA) aspects of Openness. Ability scales had the lowest importance ratings.

<table>
<thead>
<tr>
<th>Competency Sections (Psychological Constructs)</th>
<th>r</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Behaviour Importance Rank</th>
<th>Behaviour Validity Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluating Problems (Openness)</td>
<td>.80</td>
<td>5.31</td>
<td>0.85</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Investigating Issues (Openness)</td>
<td>.68</td>
<td>5.32</td>
<td>0.73</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Creating Innovation (Openness)</td>
<td>.88</td>
<td>4.59</td>
<td>1.14</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Building Relationships (Extraversion)</td>
<td>.76</td>
<td>4.91</td>
<td>0.95</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Communicating Information (Extraversion)</td>
<td>.84</td>
<td>4.79</td>
<td>1.11</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Behaviour Area</td>
<td>Importance</td>
<td>Validity</td>
<td>Reliability</td>
<td>Rank</td>
<td>Factor</td>
</tr>
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<td>----------------------------------------</td>
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</tr>
<tr>
<td>Providing Leadership (Extraversion)</td>
<td>.87</td>
<td>4.96</td>
<td>1.19</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Showing Resilience (Emotional Stability)</td>
<td>.74</td>
<td>5.05</td>
<td>0.90</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Adjusting to Change (Emotional Stability)</td>
<td>.81</td>
<td>5.10</td>
<td>0.82</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Giving Support (Agreeableness)</td>
<td>.82</td>
<td>5.19</td>
<td>0.90</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Processing Details (Conscientiousness)</td>
<td>.80</td>
<td>5.45</td>
<td>0.87</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Structuring Tasks (Conscientiousness)</td>
<td>.67</td>
<td>5.50</td>
<td>0.72</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Driving Success (Conscientiousness)</td>
<td>.74</td>
<td>4.93</td>
<td>1.05</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Working with Information (GMA)</td>
<td>.72</td>
<td>4.49</td>
<td>1.04</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Working with Things (GMA)</td>
<td>.82</td>
<td>3.02</td>
<td>1.28</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Performing at Work (Global Performance)</td>
<td>.76</td>
<td>5.16</td>
<td>0.92</td>
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</tr>
</tbody>
</table>

To compare the content validity (‘Importance’) of the 12 Behaviour areas with the criterion-related validity of a matched predictor questionnaire, each section was ranked on its respective metric. Driving Success and Providing Leadership motivational constructs were the top contributors to validity but showed low importance across roles. Processing Details, Structuring Task and Evaluating Problems were the top construct in terms of importance but had lower validity. The validity rank based composite (integer weight of 13 minus rank applied) achieved a raw validity of .31 (N=308) that was marginally higher than that of a unit weight composite (.30) and lower than a Great 8 Total composite (.32). Inverting the criterion-related validation weights resulted in a substantial validity loss but the weighted average raw validity of .13 was still statistically significant (N=308) at the 1% level.

When entered into a Principal Components Analysis three factors emerged with Eigenvalues >1 accounting for 46 per cent, 13 per cent and 9 per cent of the variance respectively. All Sections loaded on the first unrotated component, indicating the presence of an overall Role Importance factor across the criterion space. The Adjusting to Change Section showed the highest loading (.83) and Working with Things the lowest (.30). The second component contrasted ‘Task’ with ‘People’ role requirements. The third component contrasted Alpha with Beta constructs.

Following Varimax rotation the first factor ‘Promoting Change’ represented an expanded Beta construct covering Extraversion, Openness and Achievement-related behaviour requirements. The second factor ‘Demonstrating Capability’ represents a competence or capacity construct associated with evaluation abilities and dependable behaviours. The third factor ‘Working Together’ corresponds broadly to Digman’s Alpha construct. It has Agreeableness and Conscientiousness loadings at its core.

**Discussion**
The results show that importance and validity of behaviour constructs can diverge considerably. In the light of validity generalization research minimum thresholds can safely be set for Conscientiousness and General Mental Ability requirements, and also for other areas where there is role specific evidence through job profiling. With competency constructs it becomes feasible to assign weights according to their validity in the prediction of overall performance. Differential weighting seems to make little difference to the validities obtained but could much increase the face validity.
of a solution beyond a unit weight total. Particularly valid in this study were motivational constructs related to Need for Achievement and Power.

Further research is required to differentiate between job levels and sectors to build up a more comprehensive picture of the validity of aptitude and personality constructs in the prediction of job success.

The factor analysis results indicate that the Promoting Change factor is at the heart of role requirements. It is connected to Extraversion (especially the Need for Power facet) and Openness constructs as well as the Need for Achievement facets of Conscientiousness. Demonstrating Capability related to General Mental Ability, Openness and Conscientiousness requirements. Working Together related here to Agreeableness and Dependability facets of Conscientiousness. Emotional Stability role requirements.

Conclusions

Investing into the future of our profession the discussions concerning a general factor of personality may be framed more fruitfully as a method of aggregating various personality variables into a single predictor that can be used for screening and decision-making. Such a composite score should build on the body of validity generalization knowledge, content validity as demonstrated through role profiling and empirical validation work. At any stage in the process it should be feasible to unpack the composite score to a more detailed level desired, and to apply cut-off rules that are content and face valid.

References


Interactivity:

• Generating facets/sub-themes of the Big 5

• Spot check on Validity Generalisation of dispositional variables

• Audience estimates of likely validity rankings

Applications for decision-support

T34: Symposium

Workplace Disablement: adjustments and conceptualizations to lessen the disabling effect of work

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Mr Christopher Rossiter, University of Surrey
Theme Communities

This ninety-minute symposium will present researcher and practice papers in relation to 'nonvisible' impairments, reasonable adjustments, and the effects of disability on carer-employees. This is designed to highlight some of the key areas both employers and practitioners may wish to consider in relation to meeting their duties under the Equality Act (2010), which appears to be a limited area of practice and a nascent field of research. This symposium is timely given the increasing number of disabled people, as the Labour Force Survey shows that 46.3% of working-age disabled people were in employment compared to 76.4% of working-age non-disabled people (ONS, 2012).

Three interrelated short-papers are proposed:

- The Equality Act provides a relatively clear definition of disability, yet conceptualisations in the literature provide a more dynamic perspective. This presentation will present qualitative data from a recent expert consultation on the term hidden or nonvisible impairments. A content analysis identified four themes; impairment type, impairment effects, attitudes and perceptions, and disclosure, as being key to understanding impairment visibility. Findings suggest that the ambiguity surrounding a lack of visual cues presents unique challenges, which have received little attention in the literature. Student presentation. Duration: 20 minutes

- This practitioner perspective will examine reasonable adjustments; the duty on employers to support disabled people. Drawing on the cases of dyslexia, dyspraxia, Asperger’s syndrome and ADHD, the speakers will address how diagnostic assessment results can highlight underlying reasons for the difficulties experienced in the workplace, how appropriate adjustments are defined and what employers need to know about good practice in this area. Practitioner presentation. Duration: 25 Minutes

- The effect of disability on carers is also an under studied area related to Work-Life Balance. This presentation looks at the case of mothers of children with autism. Exploring the demands on mothers from the family and work domain. By using a narrative approach, findings suggest that social support, child diagnosis and workplace flexibility were considered integral to maintaining a healthy WLB. Student Presentation. Duration: 20 Minutes

Following the presentations, the speakers will form a question and answer panel chaired by a practitioner member. Given the interrelated nature of work in this area this session will provide a more effective means of engaging the audience than questions after each presentation. To close a 10-minute discussion will be given by a leading Occupational Psychologist, who will highlight this areas importance, and foster dialogue of how, as a profession, we can make an investment in the future of all disabled workers.

References


Paper 1: The Impact of Nonvisible Impairments on Disabled Employees: the Conceptualizations of Experts

Christopher Rossiter, University of Surrey

The empirical study of the employment of disabled people is a nascent area for IWO Psychologists. Harlan and Robert (1998) argue that a range of literature on organizations and work is only loosely connected with the study of disability, disabled people and the disability studies field. Societal attitudes perpetuate disability as an individualistic deficit. However this does not address the structural or procedural elements of an organisation, which are laden with normative assumptions; which is the normative expectation of non-disability.

Disability studies uses the concept of impairment to differentiate between being disabled, that is societal oppression of disabled people, as a social minority (Oliver, 1996); with the experiences of impairment effects which relates to the
impact of biological, psychological or cognitive states on one’s experience. When such impairment effects are nonvisible they pose a challenge to stereotypical notions of disabled people as those using wheelchairs, or who have visual impairments. Yet the Equality Act duties include a far wider and diverse number of impairment types. Many impairments are nonvisible (Foster and Fosh, 2006) such as mental and chronic illnesses and specific learning difficulties. There is a suggestion that the extent to which impairment is visible influences the reaction by others, such as coworkers or supervisors (Vickers, 1997).

However, little consideration has been paid to a ‘nonvisible construct’; to what extent can different impairment types be considered visible or nonvisible? What are the implications of visibility versus non-visibility for employees, organisations and the policies that underpin legal duty?

As the basis of a systematic review this study consults a group of subject matter experts to further our understanding of the extent to which one can delimit impairment visibility and in how such distinctions may need to inform consideration of the literature and primary research. To this end our key aim was to determine relevant review questions and search terms to identify the extent this has been addressed in primary research to date.

Method

Subject matter experts (n=29) were recruited from a range of professional backgrounds. Including Academics (n=9) from management, IWO psychology, disability studies, occupational health (OH), occupational therapy (OT) and vocational rehabilitation (VR); Policymakers (n=7) from governmental and disabled peoples’ organisations; and Practitioners (n=11) from human resources, OH, OT, private consultants and needs assessors. Finally disabled people (n=2) were included, both with self-reported nonvisible impairments.

Participants were identified through publications, professional networks and social media and invited to attend a semi-structured interview of between 45 minutes and one hour. These were conducted either face-to-face or via Skype and recorded for later transcription and analysis.

Content analysis was applied to the interview transcripts. This method allows replicable and valid inferences to be made from data, with the purpose of providing knowledge, new insights, and a representation of facts (Krippendorff, 1980). The aim is to attain a condensed and broad description of the subject matter and then group these by concepts. This was achieved by reading through the text, highlighting and making notes to generate broad and distinct themes.

Findings

Coding interview transcripts identified the following four themes:

Theme One: Impairment Type

When asked how to define a nonvisible impairment participants drew upon specific impairment types as examples, including broader categories like sensory or mental impairments; which may include visual or auditory impairments, and depression or psychosis. In addition specific impairments like Multiple Sclerosis, Arthritis, Parkinson’s disease, asthma, cancer, and HIV/Aids. This is a broad range of impairment types encompassing not only chronic illness but also physical impairments. This diversification is important to the nonvisible construct as it suggests that a number of impairment types are included beyond those identified in the current literature. Impairment severity and environmental context also play a role, which adds further complexity.

Theme Two: Impairment Effects

Effects were described in relation to ‘pain and fatigue’ and could be either ‘physical or cognitive’ (Academic 1). These effects, in relation to visibility, highlighted the changeable nature of impairment over a working day or longer periods. The progressive nature of some impairments might not be visible initially, yet the effects of pain, fatigue or reduced energy levels may still be apparent. Talk of the ways in which impairments are either not exclusively nonvisible or are
variable were common across the data set; ‘what people really struggle with is fluctuations, where you’re OK one minute and no the next’ (Academic 9) and ‘fluctuating conditions are very difficult, especially if there effects are not visible. One bad day followed by several good days make people think what’s up with her’ (Policymaker 2). This is unique for disabled people for whom their impairment has no outward visible sign, as it is these effects that can play a significant role in their experiences, particularly if such fluctuations occur frequently.

Theme Three: Perceptions and attitudes
Participants noted negative views on the need to ‘prove your disability, as employers can sometimes view this as an excuse’ (Academic 3). Disability is seen as a weakness, liability, and cost to employers, which may present difficulties for disabled people to secure employment and reasonable adjustment. The impact of an organisations culture, structure and policies were also cited as being relevant to maintaining perceptions and attitudes. This is relevant given the scepticism surrounding disability generally, and the lack of any overt and / or consistent signs related to the nonvisible and fluctuating nature of impairment effects.

Theme Four: Disability Disclosure
Disclosure is a principal difference between those with visible/nonvisible impairment. Disclosure is a process of informing others of one’s disability status, to access reasonable adjustments or invoke legal rights. However ‘if you don’t disclose your employer can’t help you, but if you think your employer won’t help you, you won’t disclose’ (Academic 7). This disclosure conundrum is most relevant to those with less visible impairment effects, due to the lack of a visible indicator and therefore the potential to ‘pass’ (Academic 9) as a nondisabled person. Disclosure processes are not a singular step in a working context, rather impairment is ‘foregrounded and backgrounded depending on what’s going on around you’ (Academic 9). Disclosure may therefore be considered a dynamic on-going process, which involves appraising one’s environment as to whether disclosure is ‘safe’ (Policymaker 1).

Discussion
The four themes relate to specific types of impairment, the direct or indirect effects of one’s impairment status, the perceptions and attitudes of others particularly in relation to supervisors and the process by which an employee declares their disability.

What these findings suggest is that nonvisible impairments are associated with specific impairment types, and that because of fluctuations the visibility of any impairment may change. This suggests something of a contradiction in that a much broader range of impairments could be nonvisible, depending on short-term fluctuations and or longer-term progression. A visibility shift may therefore by temporal and situated, affect individuals in different ways and present ambiguities or inconsistencies in a working environment. How this affects disabled people and to what extent supervisors or organisational structures and policies can anticipate and adapt to these needs is less clear. In addition given the lack of consideration of the visibility of impairment little research exists in this area. This potentially is cause for concern as most disability-related research is impairment focused. However drawing on specific impairments as exemplars can bridge the gap between understanding impairment effects and visibility with work contexts.

If one accepts the points made earlier from Harland Robert (1998), that organisations are structured in relation to normative assumptions, then one may deduce that disability is a constructed difference. The findings suggest that to what extent nonvisible impairment effects are legitimised are related to the attitudes of others, particularly supervisors, and that such attitudes may be associated with broader aspects of an organisation such as its culture. Given what as already been discussed about the extent of flux in impairment effects it may be argued that the visible aspect has an additional impact via the evaluation of others, such as supervisors. In this way the ambiguity in lacking persistent and overt characteristics deepens an individualistic-medically orientated view. The resistance or disbelief of other people is directed solely at the individual in this regard, encompassing not just their disability status but also their character in terms of faking or exaggerating these claims.
The process of disclosure provides a practical example of these issues. An individual with a visible impairment is not likely to need to disclose, as this would be apparent to other people. When such impairment effects are nonvisible, employees must foreground their disability potentially exposing themselves to stigma, attitudes and stereotypes; which have already been substantiated as being negative in relation to impairment nonvisibility (Goldberg, Killeen and O’Day, 2005). What this suggests is that if employers perceive disclosure, and any subsequent request for reasonable adjustment, is illegitimate because a person does not appear to be disabled, they may be rejected. However what factors influence the decision to disclose, how this process is managed, and any additional outcomes is not clear. For example to what extent does foregrounding one’s impairment and the subsequent reactions to it, impact on workplace relations, employee affectivity or managerial transactions, is not clear. Although the perceived risks of disclosure, in relation to negative reactions are better understood (Goldberg, Killeen and O’Day, 2005).

Taking an IWO psychological perspective is a novel approach to the study of disabled people in employment, and one that provides an insight on the impact of disability at different levels of the modern workplace. The conceptualisation of disability in relation to visibility is not new, yet the extent to which the implications of the areas discussed above are understood, is very limited. Therefore fruitful future research may further address the attitudinal barriers, and the antecedents, faced by disabled people associated with impairment visibility, disclosure and foregrounding.


Paper 2 :The Identification and Implementation of Reasonable Adjustments
Nancy Doyle, GeniusWithin, Cheryl Isaacs, GeniusWithin, Helen Bartimote, Helen Bartimote Consulting

The Equality Act 2010 legally protects people from discrimination. It has replaced previous anti-discrimination laws (including Disability Discrimination Act 1995) with one single act. Employers are under a duty to make reasonable adjustments to overcome barriers experienced by people with neuro-diverse conditions such as dyslexia, dyspraxia, Asperger’s syndrome and ADHD. This practice paper outlines how diagnostic assessment results can help understanding of workplace difficulties and how to define and implement appropriate adjustments. A case study will be presented which follows the diagnostic and workplace assessment process.

Section 1: How diagnostic assessment results can highlight underlying difficulties experienced at work:
Using the Wechsler Adult Intelligence Scale (WAIS- IV) as part of a full diagnostic (or differential) assessment allows insight into why certain work tasks and situations are difficult for employees with hidden disabilities (SpLD/neurodiversity), and helps employers put into place relevant, targeted and cost-effective support and adjustments.

Psychologists must understand what cognitive capacities the subtests of the WAIS-IV assess, in addition to the
composites of these subtests. Results from the WAIS-IV form only part of the profile, with other considerations including self-reported difficulties, and work and educational history. The WAIS IV provides information on four main areas of cognitive ability which are used for the purposes of neurodiversity assessment as opposed to focusing on an overall IQ score. Lichtenberger and Kaufman (2009) highlight the following primary cognitive capacities as demonstrated through the subtests within each of these four areas:

Table 1:

<table>
<thead>
<tr>
<th>Verbal Comprehension</th>
<th>Perceptual Reasoning</th>
<th>Working Memory Tasks</th>
<th>Processing Speed Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retrieval of verbal information from long-term storage</td>
<td>Reasoning with visually presented non-verbal stimuli</td>
<td>Initial registration of stimuli</td>
<td>Visual processing speed</td>
</tr>
<tr>
<td>Retrieval of word meanings</td>
<td>Reasoning with visual quantitative information</td>
<td>Mental manipulation of stimuli</td>
<td>Motor processing speed</td>
</tr>
<tr>
<td>Retrieval of facts from various content areas</td>
<td>Reasoning with conceptually related concrete visual stimuli</td>
<td></td>
<td>Visual-motor processing speed</td>
</tr>
<tr>
<td>Reasoning with conceptually related words</td>
<td>Reasoning with conceptually related abstract visual stimuli</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasoning with real-world cause-effect relationships</td>
<td>Reasoning about how to integrate visual elements to create a model</td>
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</table>

When an assessment is completed and a profile of the employee’s cognitive ability is available, links can be made between difficulties and personal strengths. Discussions between the employee, manager and psychologist may highlight the following:

Verbal Comprehension: An employee who is experiencing difficulties with expressing themselves verbally and communicating their ideas will tend to have lower scores on these tests. They may also find understanding the range of vocabulary of others difficult.

Perceptual Reasoning: Dyslexic employees very often show significant strengths in this area. They will often excel on work tasks that involve the co-ordination of images, and using abstract information. Conversely, employees with dyspraxia often find such tasks more challenging especially if they also require effective fine or gross motor control.

Working Memory: Working Memory difficulties effect attention to auditory stimuli and processing auditory information quickly. It is a fundamental area of difficulty for employees with dyslexia. Paying attention to names, numbers, phone messages and listening in meetings / lectures will be difficult for low scoring employees.

Processing Speed: Employees with low Processing Speed scores will tend to have weaker organisational abilities and skills. Working methodically with speed, quickly learning a routine and hand-eye coordination difficulties will be present on a day-to-day basis. This area of cognitive ability is often seen in both dyslexic and dyspraxic employees.

A full diagnostic assessment allows for the employee to ascertain the degree of difficulty and understand the reasons
behind this, as well as providing a useful platform, when used in conjunction with a workplace assessment, to decide what adjustments may be appropriate.

Section 2: How appropriate adjustments are defined and implemented, what employers need to know and how communication surrounding this should best take place

The process of a Workplace Needs Assessment (WNA) helps define reasonable adjustments. WNA should reflect a detailed analysis of:

1) The individual’s experience, difficulties and strengths.

2) Current performance assessment from the point of view of the employer and in comparison to peers.

3) The work context, including the workspace, technology and tools used as well as the type of interaction with others (e.g. written, verbal etc).

The recommendations should be based on addressing gaps between an individual’s experience and the expectations of the role, taking into consideration the limitations and opportunities for adjustments made possible by the work context. It is critical to get adjustments right, as the adverse impact on performance can result in dismissal. Adjustments tend to fall into the following categories:

Table 2:

<table>
<thead>
<tr>
<th>Assistive Technology</th>
<th>Strategy Coaching</th>
<th>Ergonomics</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Laptops</td>
<td>• Extra time</td>
<td>• Environmental noise management</td>
</tr>
<tr>
<td>• Spellcheckers &amp; auto-correct</td>
<td>• Memory skills</td>
<td>• Adaptive pens, mouse, keyboard</td>
</tr>
<tr>
<td>• Text-to-speech &amp; Speech-to-text software</td>
<td>• Organisational skills</td>
<td>• Double screens for computer work</td>
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<tr>
<td>• Mind mapping software</td>
<td>• Timekeeping</td>
<td>• Reading stands</td>
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<td>• Adaptive use of everyday software</td>
<td>• Dyslexia awareness</td>
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<td></td>
<td>• Working to strengths</td>
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<td></td>
<td>• E-learning</td>
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Assistive technology requires training to create proficiency and therefore may be an expensive option. An assessor needs to take into consideration job task requirements in order to justify such an investment. Prescriptively recommending costly equipment may not be as appropriate as strategy coaching, which should be delivered by a Psychologist or Corporate Business Coach appropriately experienced in this setting. Research published at the 2012 DOP conference (Doyle, 2012), showed that clients and their managers most frequently request support for Memory (91%) Organisational Skills (78%) Time Management (72%) Stress Management (67%) and Spelling (67%). Coaching delivered by Psychologists and Corporate Coaches resulted in a performance improvement of 48% in just 9 hours over 2 months. Ergonomic considerations should also explore changes that be made for free or at minimal cost. Due to the phonological
deficits associated with Dyslexia and the hyper-sensitivity to noise, background noise can be very inhibiting. By avoiding the middle of an open plan office or the photocopier, huge gains in productivity can be achieved.

The assessment can be pivotal in managers and clients’ understanding of the issues. They may incorrectly attribute difficulty to individual rather than environmental factors. A full report outlining recommendations should be prompt and accessible, i.e. avoid technical jargon and not too complex for the client’s reading age. Once the adjustments have been set in place, employers should consider that capability cannot be reassessed until after any coaching is completed and for new processes and technology to become automated.

Section 3: A typical case study for a dyslexic individual, where following a diagnostic and workplace assessment a range of varied support was provided. Case Study - Ann

Following on-going performance issues, Ann was asked to attend a meeting with her manager and H.R. After hearing that Ann had been experiencing significant issues with memory, organisational skills and structuring the H.R manager suggested that this may be linked to dyslexia.

Ann’s diagnostic assessment identified above average verbal and reasoning abilities and below average working memory abilities. Her literacy attainment highlighted typical dyslexic difficulties with phonetic awareness, which affected her spelling and reading comprehension, which meant Ann struggled to retain information. People had seen her as a problem solver who was always able to ‘see the bigger picture’. A subsequent WNA identified a number of strategies to help her in her role as an Office Manager:

• An auditory spellchecker to allow Ann to ‘hear’ difficult words when spelling and reading.

• Mind-mapping software to enable Ann to write documents in a visual way before turning them into linear versions.

• Text-to-speech software that would assist Ann to proof-read her own work as she would constantly read what she thought was there rather than what was actually written which had caused a number of problems.

• A Dictaphone so that Ann could quickly record information throughout the day and come back to it later.

• Coaching sessions to help Ann develop strategies for managing her own time, workload and personal organization helped her to define important vs urgent and guidance on how to communicate her dyslexia to others.

• Moving Ann’s desk to the corner of the office to decrease visual and auditory distractions and considering when home-working might be appropriate

• Strategies for attending meetings and recording key information i.e. templates with heading such as Who, What, When to ensure pertinent points are captured.

• Employer guidance about what to consider when working with someone with dyslexia (including asking them what they’re needs are!)

After meeting with Ann, the assessor also met with Ann’s manager to ensure that he understood why the recommendations were being made, to reach consensus over a way forward and to answer any questions he might have. The manager reported to feeling ‘in the dark’ over the issue and was keen to support Ann now that he understood what to do.

Ann was sent a comprehensive report outlining the full reasonable adjustments recommendations. Ann was given software training to ensure that she was able to use the equipment to the best of her ability. One year later, Ann
reported feeling like a ‘new person’ and had felt that she had progressed a great deal. Her performance had also improved and she felt a greater understanding of her strengths allowed her to more easily accept her weaknesses.

References:


Julia Fernando, University of Surrey

Ensuring workers maintain a healthy work-life balance (WLB) is essential for employee satisfaction and an organisation’s long-term success, and thus a key concern for employers, above work-related stress. WLB is an ongoing process, largely contingent on an individual’s subjective perception of balance and their wider cultural and socio-economic context (Lewis & Cooper, 2005). Many working parents face the difficulty of juggling the demands of their family whilst also continuing to engage in work. The literature to date has begun to consider how caring for a dependent can implicate WLB, but it has narrowly focussed on parents of neurotypical children.

Conversely, working parents of children with life-long intellectual disabilities that have gradual symptom onset such as Autism Spectrum Disorder (ASD), are reported to be susceptible to higher rates of workplace burnout and psychological disorders (Olson & Hwang, 2001) owing to greater home demands. Therefore it is unsurprising these parents often struggle to maintain a healthy WLB and over time, are more likely to become disengaged in the work domain relative to working mothers of neurotypical children.

There is a seemingly reduced level of employer empathy experienced by parents of children with behavioural difficulties, compared to those with a physical disability. This can be attributed to the invisible nature of intellectual disabilities; without a diagnosis of ASD, difficulties can only be made apparent through social interaction with the child (Lewis, Kagan & Heaton, 2000). Receiving a diagnosis of ASD is therefore crucial for any working parent, providing them a sense of clarity about their child’s difficulties and access to support from local services. It also enables them to enter into a legitimate conversation with their employer about their child’s difficulties and invoke legal protection under the UK’s Equality Act. Employer empathy rests on their understanding of an employee’s situation and so this open communication is integral to the maintenance of WLB.

The present study sought to explore the WLB in mothers of children with ASD and through the use of a narrative approach, investigate how this might change throughout their life. The research aim was therefore to highlight the unique WLB trajectory of parents with children diagnosed with a non-physical disability and to better equip employers in supporting these individuals in the workplace.

Design
The present study challenges the stereotypical idea of a ‘dependent’ by exploring WLB through semi-structured interviews of mothers (n=9) caring for a child with a disability; namely Autism Spectrum Disorder (ASD). Participants were recruited through an online parent support group and were required to have been employed during the period of their child’s diagnosis of ASD between the ages of 4-16 years.

Given that WLB is not a static phenomenon and fluctuates in line with life events, data was collected using a narrative approach (NA) which enables the study of accounts over time. NA offers a life-span perspective of an individual’s experience, allowing them to retrospectively reflect on their life and retell their experiences in story-form. This method of interviewing is frequently used in clinical settings to explore a parent’s journey of their child’s illness or disability,
from trauma to recovery (Crossley, 2000). As a child’s ASD has life-long prognosis with gradual symptom onset, it can be hard to establish specific points of ‘trauma’ or ‘recovery’ in parents. Nonetheless, narrative interviewing is unrestricting and thus allows participants the freedom to liberally reconstruct their life story whilst still preserving the richness of their account. NA is not only concerned with what information is shared but also the tone and form. Together, these principles make take a holistic approach to interviewing that is fitting for the exploration of a general WLB trajectory in the context of having a child with ASD.

As the topic of conversation was particularly emotive, it was felt that participants would be most comfortable discussing such themes within familiar surroundings and so all interviews were conducted within their own homes. The interview began with the researcher asking the participant to share with them an uninterrupted account of their experiences as a working mother with a child with ASD. Participants were then granted full control of the interview with minimal questioning on the researcher’s part. All interviews were recorded and later transcribed and made anonymous for further analysis.

The analysis focused on the stories’ content as opposed to its form; that is language used by the story teller or the medium by which the story was given. The present study on the other hand, focussed on the details of the experiences recounted, mindful of narrative tone (does the narrative end on a happy or sad note?).

**Findings**

NA detailed a shared fluctuating trajectory of balance and strain, which emerged across all accounts, according to the mothers’ WLB wants and needs. These experiences fell into five distinct life chapters that were centre on their child’s ASD diagnosis.

Narratives began with a happy ‘life before children’ chapter, followed by a period with children when their child started displaying behavioural difficulties with no causal explanation. This ‘pre-diagnosis’ stage led to a focus on their child receiving their ‘diagnosis’, followed by feelings of bereavement and transition. The next chapter ‘post-diagnosis’ saw a shift in tone from surrender, to a fight for access to support services. Finally participants reflected on the changes they have experienced and discuss the present ‘balancing act’ between work and home.

Transition periods were found to trigger particular uncertainty in participants and thus greater work-life conflict. The ambiguity of their child’s difficulties in the years before their child’s diagnosis meant they were unable to explain their reduced ability to keep up with work-related commitments. Lateness, absence and poor performance on tasks were attributed to the employees’ lack of dedication to their role. In reality these difficulties were rooted in the stressors stemming from their home environment and strain associated with their child’s ASD.

It was found that there was greater employer empathy following the diagnosis of their child’s ASD that led to greater flexibility, and this in turn contributed to overall WLB improvement. They were also offered more support from local services such as respite care, special schooling and transport services for their child.

All accounts illustrated that establishing and maintaining WLB required a reprioritisation of work-life demands, with their child’s welfare dominating all other commitments. With their child’s ASD at the forefront of their priorities, these mothers exhibit reduced investment of time and energy into the workplace.

‘Then throw her autism in the mix and then it’s like... what balance? In the end you have to accept that it’s a job. It’s just a job. It’s not a career... not anymore.’

All accounts touched on variables which eased the strain associated with parenting a child with ASD. Given that all mothers also had one other neurotypical child, they were able to draw comparisons between working whilst parenting a child with special needs versus one who does not. It was noted that the needs of their child with ASD were more
complex and demanded greater flexibility on the mother’s part. They were found to frequently leave work in order to attend school meetings, deal with meltdowns and attend medical appointments.

In general familial and marital support, early diagnosis of their child’s ASD and greater workplace flexibility were universally considered instrumental to healthy employee WLB.

**Discussion**

The use of the word ‘balance’ must be used tentatively when describing work and life interaction. As noted, WLB is the subjective perception of harmony in the work and life domain. This does not necessarily suggest equal allocation of energy to either domain.

The mothers all claim to have, over time, developed coping mechanisms and have established a more manageable WLB. All however, report having become less motivated and disengaged from work. This suggests that reprioritisation has led to the demotion of ‘work’ in WLB. Illustrated by declining promotions, being reluctant to engage in CPD training, being inflexible with working hours and a reduced involvement with fellow colleagues outside work. They had managed their WLB effectively through the tipping of the scales almost entirely in the direction of ‘life’.

Behavioural difficulties related to ASD are known to become more pronounced as a child enters puberty and early adulthood. As detailed in the interviews, the children will always be considered dependent, as their needs arguably grow with age. For this reason, these mothers will always have dependents relying on full-time care. Aware of this prospect, they claim that they have had to detach themselves from work in order to limit the amount of stress they encounter on a daily basis. Although an effective coping mechanism, this detachment is reportedly involuntary; all participants associate work with the preservation of their sanity and an escape from the encompassing world of autism.

For this reason, it is essential that employers are made more readily aware of the difficulties experienced by these valued employees caring for dependents with disabilities. There is much ambiguity in the diagnosis process of ASD and so this demands greater vigilance and attentiveness from employers, who can be open to the possibility that not all disabilities are immediately apparent or diagnosable. In this way, the offer of flexibility must not be entirely contingent on a formal diagnosis of a child’s disability, but should be left to an employer’s discretion, which would satisfy legal non-discriminatory duties.

These findings also challenge the stereotypical idea that a dependent is a child, will later grow into an independent adult, allowing the employee to reinvest their energy back into employment. ASD is a life-long diagnosis and as depicted through an analysis of these narratives, these challenges do not reduce or get easier over time. For this reason, an active communication between employer and employee which encourages a legitimate dialogue on these issues is needed in the workplace.

These findings also succeed in reiterating the importance of WLB in employee satisfaction. Future WLB research should continue to consider the experience of working parents of children with disabilities of all natures; both physical and intellectual. Practically, the lubrication of organisational structure will mediate clearer communication practises in the workplace and this will ensure the needs for flexibility in employees, akin to the mothers in this study, are identified and met.

**References**


T35: Symposium

Assessment Centres: Getting it Right

Convenor; Helen Baron, Independent Consultant

Theme Profession

Work is ongoing through the DOP Science and Practice group to develop a set of standards for the delivery of Assessment and Development Centres. Their purpose is to set out a minimum standard of acceptable practice as well as to encourage best practice. This is a key area of expertise and practice for occupational psychologists and an understanding and dissemination of evidence practice will contribute to the future of our profession.

This symposium aims to illustrate the need for standards through 5 papers - case studies and a survey of current practice. The case studies are descriptions of actual practice and illustrate the practical issues that arise in implementing centre technology in real world situations. There are examples of both good and poor practice from a number of perspectives. In addition one organisation describes the process and benefits of undergoing certification against an existing standard of practice (ISO 10667).

Participants will gain a perspective of the different approaches to implementing assessment centre technology as well as an understanding of standards of good practice and how they can be implemented in real life situations.

One theme of the papers is that even when superficially practice seems to be good, there may be underlying problems which reduce the quality of the assessment data provided by the centre. The survey provides examples of wash-up sessions where evidence is weighted by the seniority of the assessor and a case study of an over engineered centre illustrates that good practice cannot be achieved without in depth consideration of the assessment need, the stakeholders and other factors. It is not sufficient to nominally tick the relevant boxes in designing a centre.

Another theme across the different papers is the challenges of achieving a desired standard of practice within real world constraints. Time and resources are often limited and the practitioner needs to be creative in finding an assessment solution that meets at least minimum standards within the given limits. Equally the practitioner needs to consider when to challenge the assumptions of those who commission assessments. One case study describes the difficulties of implementing a large high stakes assessment procedure with great speed without compromising standards.

The papers also illustrate elements of best practice which participants may wish to incorporate into their practice. A case study discusses positive action initiatives in an assessment centre context and provides examples of different approaches and some indications of their effectiveness. The importance of articulating and adhering to explicit standards of practice is illustrated in a number of the papers.

Within the 2 hours of the symposium, following the papers time will be allowed for discussion of the issues raised and sharing of views on approaches to good practice.

Paper 1: Assessment Centres: Robust Measurement Machines or Complex Social-Administrative Systems?

Chris Dewberry, Birkbeck College

Assessment centres are generally viewed as systems for accurately and comprehensively evaluating the performance of candidates in relation to several job-relevant dimensions. Put simply, they are construed as machines for measuring
potential performance. As a consequence, the literature on assessment centres is dominated by research on their psychometric properties, particularly their construct validity (Jones & Born, 2008; Kolk, Born, & van der Flier, 2002; Lance, Foster, Nemeth, Gentry, & Drollinger, 2007; Schultz, Konig, Hubner, & Stempfle, 2008) and predictive validity (Dilchert & Ones, 2009; Gaugler, Rosenthal, Thornton, & Bentson, 1987; Meriac, Hoffman, Woehr, & Fleisher, 2008). Furthermore, suggestions for improving the performance of assessment centres typically focus on measurement issues, such as improving the training of assessors so that they are better able to focus on candidate performance in relation to dimensions (e.g. Krause and Thornton(2009))

As well as being measurement “machines” assessment centres can also be construed as complex social-administrative systems. Examples of the social processes involved in assessment centres are assessors meeting with, and talking to, candidates when these candidates are not performing in exercises; and assessors talking informally to each other about candidates. Examples of administrative issues are finding and booking appropriate in which to assess candidates, and ensuring that exercises start and end on time. Currently little is known about the nature of these social and administrative processes, including the extent to which they may be dysfunctional and undermine the validity of assessment centres, and the frequency with which they occur.

The purpose of this research is to investigate the perceived nature of social and administrative processes and events in assessment centres, focussing in particular on those processes and events which are likely to undermine the effectiveness and fairness of the centres. Because operational assessment centres involve people playing different roles, this issue was investigated by surveying the social-administrative issues in assessment centres from several perspectives: assessment centre designers, administrators, assessors, consensus meeting chairs, and candidates.

**Method**

A questionnaire was developed to collect information about (a) whether or not someone had been involved in an assessment centre as a designer, administrator, assessor, consensus meeting chair, and/or candidate; and (b) the nature of any events or processes they had experienced which they thought might undermine the quality of the assessment centre. For example, people who indicated that they had experience of being an administrator were asked the following:

- When helping to administer or run an assessment centre, have you ever observed or experienced anything which may have undermined the quality of the assessment centre as an objective, thorough, and fair way of assessing candidates?

- Such things could have occurred before when candidates were chosen to attend the centre, when they were invited to attend, at any stage during their attendance at the centre, or in any communication with them later.

- As well as any obvious things, please include anything subtle, things which might easily have gone unnoticed by others.

Please describe any such experiences or events in the box below.

- If you can think of more than one such experience or event, please start each one on a new line.

In addition, people who had been involved as candidates were also asked about events they had experienced in assessment centres which were desirable and positive.

A total of 271 people responded to the questionnaire. The mean age of the respondents was 44, with 173 (64%) male and the remaining 98 female. A total of 235 respondents (87%) reported that they had been assessed in an assessment centre, 125 (43%) had been an assessor, 39 (14%) had been a chair in a consensus meeting, 64 (24%) had been involved in assessment centre design, and 73 (27%) had worked as an administrator in an assessment centre.
## Results

The events and processes referred to by the candidates were listed and reviewed. They were then broken down into a series of categories, with each category representing a different process or event. The number of dysfunctional processes and events identified by each type of role-player, and an example of each, is shown in Table 1.

### Table 1: Reported Processes and Events by Assessment Centre Role

<table>
<thead>
<tr>
<th>Observer</th>
<th>Number of processes and events identified</th>
<th>Example of a process or event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment centre designers</td>
<td>30</td>
<td>Assessment centre staff altering elements of the assessment centre design when they are not authorised to do so</td>
</tr>
<tr>
<td>Assessment centre administrators</td>
<td>44</td>
<td>Assessors being given incorrect forms</td>
</tr>
<tr>
<td>Assessment centre assessors:</td>
<td></td>
<td>Assessor discussing their views about candidates before the assessment centre formally begins</td>
</tr>
<tr>
<td>Events and processes not concerning consensus meetings</td>
<td>59</td>
<td>Junior assessors deferring to more senior ones in wash-ups</td>
</tr>
<tr>
<td>Assessment centre assessors:</td>
<td></td>
<td>Taking time to settle candidates and listen to their feelings</td>
</tr>
<tr>
<td>Events and processes concerning</td>
<td></td>
<td>Being given the impression that there were no explicit criteria against which candidates were being assessed</td>
</tr>
<tr>
<td>consensus meetings</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Assessment centre candidates</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>events and processes perceived as</td>
<td></td>
<td></td>
</tr>
<tr>
<td>positive</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Assessment centre candidates</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>events and processes perceived as</td>
<td></td>
<td></td>
</tr>
<tr>
<td>negative</td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

## Discussion

Previous surveys of assessment centres e.g. Krause, Rossberger, Dowdeswell, Venter, & Joubert, 2011; Spychalski, Quiñones, Gaugler, & Pohley, 1997; Thornton & Krause, 2009, have used a set of mostly closed–ended questions designed to gather information about formal practices in a particular organization using assessment centres, completed by someone appointed to do so in that organization. These responses have then been aggregated to yield data about the frequency that various formal processes and structures are used across organizations (e.g. the types of exercises used, the amount of training given to assessors etc.). In contrast, the respondents in this study were not asked to report information about a particular organization, and were asked to describe dysfunctional (and in the case of assessees, also functional) events and processes they had experienced whilst playing a particular role in an assessment centre. The study is therefore distinctive in being concerned primarily with what can go wrong in the running of assessment centres, including informal events, rather than with providing information about the usage of formal structures and processes.
This study provides extensive and rich data about administrative and social events and processes in assessment centres which are perceived to be dysfunctional, and which may undermine the effectiveness and fairness of these centres.

A striking characteristic of a substantial number of the processes and events identified by the respondents is that they would be difficult to easily and reliably observe in an operational assessment centre. For example, one respondent with experience of being an assessor indicated that he had witnessed primacy and recency effects when assessors recall information about candidates. In addition to being hidden or latent, many of the processes and events identified by respondents are also informal: they are not part of the system of processes in which assessors have been trained. An example here is assessors discussing candidates informally with each other between exercises. There is very little existing literature on these latent and informal processes, one exception being a study of consensus meetings by Dewberry (2011), and this issue, though difficult to research, warrants more attention.

Switching the perspective from which assessment centres are viewed from one concerned with the psychology of measurement, to one concerned with the influence of social-administrative systems, opens the door to a new and promising strand of research on assessment centres, a strand which has significant utility to practitioners. Further research might focus on the perceived and actual frequency of dysfunctional and functional social-administrative events and processes, and the relative impact they may have on the effectiveness and fairness of assessment centres. In so doing a major challenge for researchers will be to find ways of detecting and measuring the impact of events and processes which cannot be directly and reliably observed.

References


**Paper 2: Challenges of Tight Time Scales in Maintaining Assessment Centre Standards**

Max Choi, Quest Partnership Ltd.

This paper conveys some of the challenges facing suppliers of AC technologies to clients who demand ACs quickly. Recently we have had to deal with several challenging client requests to quickly put together Assessment Centres. This paper focuses on one such client situation and the approach we used to maintain standards while working within restricted timeframes.

**The Challenges:**

**Timeframes**

The client had just had a major restructuring to a key part of its organisation and there was a need to use Assessment Centres and psychometrics to support with appointments to the new roles that needed to be filled quickly. Therefore, there was an urgent need to implement ACs immediately. But we were just one of several suppliers invited to provide a proposal for the work. The client took their time deciding who to use – possibly because they were inundated with detailed proposals they did not fully understand.

Meanwhile, the option to train up their own assessors disappeared due to a lack of time, and we had to ensure we had sufficient assessor cover if they said “Yes please”.

This meant that they would have to pay more for external assessors. But there were other implications i.e. external assessors were making their decisions for them. They were actually in favour of that! They saw the external provider running an objective process and the AC was to provide the final short-list for interview – therefore they were still making the final decisions. The only possible disadvantage was that the external assessors did not have a greater knowledge of their organisation but that was not seen as a significant disadvantage. Rather, they saw the advantage of using skilled external assessors and being able to implement the ACs quickly which met their needs.

**High Volume AC**

There were lots of applicants, many roles to fill and most candidates were applying for more than one role. Interviewing schedules were being prepared and therefore in order to meet the timeframes they needed us to run as few ACs as possible. In reality, the client needed an AC that was capable of handling high volume. Therefore, we provided a timetable that could accommodate 48 candidates in one day i.e. 24 in the morning and 24 in the afternoon. Obviously, something had to give. For example, we know that one-to-one interactive exercises can work very well but these would be too resource intensive and did not fit the scalable efficiencies required.
Ensuring that Candidates were treated as customers
When the pressure is on to deliver ACs, it is easy to lose sight of the candidate as the customer. We ensured that we always took the candidate perspective to ensure that things went well for them. It was vital to get the client focused on thinking about communications with their candidates, especially as many were internal.

There were other issues that needed flexibility and consideration towards the candidate to manage effectively e.g. dealing appropriately and respectfully with candidates’ special needs. In volume AC work this can be quite tricky but you have to plan ahead and ensure you have the resources and proactively make the effort to meet their requirements.

A lack of time for consultation and fact finding
Communications with the client when you are trying to implement an AC extremely quickly can be very demanding. Your client contacts are also very busy and often do not fully appreciate the importance of things. This was particularly the case when we needed to establish some facts and start positions rather than to make dangerous assumptions or just to proceed naively e.g. checking these new roles are clearly new, that people are not thinking they are just applying for their existing roles. Hence, having the time to understand and appreciate situations and people’s perspectives helps us manage the wider AC delivery effectively.

Job Analysis
This was challenging as there were many roles and little time to do what we would normally like to do for this stage. Pragmatically, there was a need for a generic AC that would be suitable for all the roles. Therefore, the focus was placed on understanding the challenges for all these roles within this specific area of work (about working with stakeholders, setting standards and achieving compliance) and identifying some key role requirements that were common to all the jobs and hence criteria that would be relevant for all. Ideally, it would have been useful to have more time to achieve a more thorough role analysis.

The vacancies also split into management and senior specialist roles. As the AC was going to be generic, it focused on meeting both and once the senior specialist roles were understood it was clear that they also required high level competencies e.g. in areas like influence. Therefore, the only key difference was that specialists might not have any direct reports to manage. AC criteria were developed and guided by the client’s organisational competencies. AC exercises were considered based on the criteria and the practical needs of running an efficient AC.

AC Content
The candidates’ AC experience lasted about 4 ½ hours. A bespoke Group Exercise was developed to tap into the specific issues and target the criteria effectively. There was insufficient time to design a tailored Written Exercise, so having identified the key criteria, one was sourced to fit the key requirements. However, one of the dangers of using an off-the-shelf exercise is that it does not meet your needs very well. This seemed to be the case. The supplier of the exercise was able to adapt their Off-the-Shelf exercises but again there was not enough time. After trialing the exercise on a few individuals internally, we concluded that the Candidate Brief would be effective and we would run with it as purchased. However, we identified potential problems with efficient and effective scoring.

Case Studies can take a long time to score well. But the client may not appreciate that resist paying for the extended time spent scoring. Also, accuracy of scoring against relevant criteria can be a problem. We therefore created our own scoring solution matching it to the AC criteria and working up a format which made scoring easier and more efficient i.e. ticking things off and only needing to write a few summary performance sentences.

As scoring was quite a cognitive challenge, it made sense for nominating Assessors to focus on this assessment role and provide them with additional training/briefing on this exercise. Our research has shown that this type of assessor focus together with a decent Rating Scale will make a significant difference to the quality of ratings. For Development Centres
this is less of an issue and it might not be appropriate for an Observer to have a single role as they are working with the Participants.

The AC also included a testing session where candidates completed verbal and numerical reasoning tests. These are useful assessments but we know that these could be conducted online allowing the AC time to be used for other activities. It was frustrating that given the high volume of candidates it was not possible to include other potentially useful assessments that would have required more resources. In summary for this AC, accuracy in assessments was enhanced by having skilled and experienced Assessors in defined roles i.e. assessors either observed and marked the Group Exercise or marked the Written Exercise, they just focused on one exercise throughout the day and therefore achieved greater accuracy working closely together and doing cross-checking.

Wash Up & Final Interview
A ‘cut-off’ was determined, along with a small score band for candidates just below the ‘cut-off’ where it was appropriate to have discussion to determine if they ought to go through to the next stage of final interview. The client was involved in the Wash Up. Those successful at the AC were invited to complete a personality questionnaire and the Scenarios Managerial Judgement Test, a SJT. These were used to support the final interview.

Candidate Feedback
Feedback process for candidates was well communicated and all candidates had an opportunity to receive feedback after they had been informed of the outcome. We encouraged Internal Candidates to request a short Candidate Report to support them with their on-going development.

Reflections
On reflection, the centre met the client’s needs. There were multiple exercises and criteria with multiple measures. If we could have extended the AC we would like to have measured some of the higher level one-to-one interactive and influencing skills in an appropriate exercise, as this seemed to be key to success in these roles. Instead these competences were assessed partly through the Group Exercise and indirectly through the Management SJT, with supporting evidence from the personality profile.

So given the constraints and resources, what we did, we did reasonably well. It would have been good to have fewer constraints and more resources so that we could assess a few more useful areas.

Conclusion
The paper describes the pressures and challenges for organisations to deliver speedy ACs. In such circumstances it can be challenging and frustrating for suppliers of ACs as we know we can provide a better solution only if there was more time, resources, etc., In such situations we will have to work as best as we can within the practical realities of organisational demands and to do our part in helping organisations to ensure that standards and good practice is achieved.

Gordon Ryan, College of Policing, Ciaran McGuigan, College of Policing, Charles Eyre, College of Policing

The quality of policing service received by the public depends on the quality of officers and police staff. When we need the police service, as victims of crime, we all want an efficient, effective and compassionate service. Media interest in policing has highlighted areas of concern relating to the standards of police integrity, for example undercover officers’ practices and racism in policing. There have been a number of high profile reports into policing. As a result, the public’s confidence in police and policing has been eroded. Ensuring those who deliver policing are competent and capable relies upon effective selection, learning and development and on-going management/leadership.
High volume assessment centres are used as part of the initial recruitment of police officers, special constables and police community support officers. These include work-sample simulations in addition to bespoke psychometric measures. Once recruited as an officer, there are assessment centres and bespoke psychometric tests of knowledge of law and procedure associated with policing specialisms and promotions. Multi-stage assessment centres, and situational judgement testing are used to identify top-talent for high potential schemes. Those at superintending ranks, seeking to become commanders or assistance chief constables, are required to pass a three day assessment centre before being eligible to join executive teams responsible for running police forces. Overall there are between 8,000 and 10,000 assessments every year.

The assessments used include; application processes, interviews, role acted work samples, written work samples, group exercises, briefing simulations, media simulations, bespoke situations judgement tests and multiple choice examinations. In addition, we have designed and deliver a bespoke 360 degree feedback and development tool and a Quality Assurance Management System.

Over the 20 years these services have been based on recognised UK and international standards such as AERA, APA and NCME Standards for Educational & Psychological Testing (1999). However, in November 2011 the ISO 10667 Assessment Delivery Standard - Procedures and methods to assess people in work and organizational settings was published. We explored the standard and decided to pursue it in 2012. In February 2013 we achieved the standard.

The decision to seek certification
The certification dilemma is; if your practices reflect good quality, evidence-based assessment – what value does external certification provide? As a new organisation charged with becoming the Professional Body for Policing this requires us to set professional and ethical standards within policing and for individuals’ ability to practice. We are responsible for also moving policing to become a profession that makes evidence-based decisions. The decision for us to seek ISO 10667 was influenced by the organisations remit. If setting standards for others, it would appear hypocritical to have standards within assessment that we were not prepared to subject ourselves to. In addition having our processes scrutinised by an external organisation was seen as an opportunity to learn where we could improve. The ISO 10667 was an opportunity to be compared to an agreed and internationally recognised standard.

The benefits we hoped to achieve in undertaking ISO 10667 included:

- Demonstrating to customers that they can have confidence in the quality of the work we do.
- Securing our position as the provider of the services we currently deliver.
- Learning more about the effectiveness of our practices.
- Reflecting on where we find compliance with the standard easy and where it is not so easy - and why this might be?

We were aware that in the early days of the standard it would probably not mean very much to our customers. We would need to bring it to their attention and communicate its importance rather than them expecting it of us. Given that there was no customer demand for the standard, the decision to be an early adopter rather than waiting until there was more clarity about the value of the standard and how it can be achieved was partly unintentional, . We had an opportunity within the delivery schedule of our quality assurance staff, those best placed to lead the work.

Overall, this was a business decision about the possible value that having the standard might present in future.

The process of seeking and securing a certification body
Being an early adopter of the standard brought with it some challenges. Amongst these was seeking and securing an
organisation prepared to offer services to certificate against the ISO 10667 standard. The International Organisation for Standards (ISO) produced the standard and the standard is available in the UK through the British Standards Institution (BSI). For accreditation, the United Kingdom Accreditation Service (UKAS), must adopt the standard and make it available through certification bodies. However, this is a demands led market and because the ISO 10667 was new, a UKAS do not offering accreditation for ISO 10667. Following discussions with BSI and UKAS it was established that certification – but not accredited certification – was possible if certification organisation willing to undertake the work could be found.

We found one certification organisation definitely intending to offer ISO 10667. It was one of the world’s leading and largest inspection, verification, testing and certification organisations offering services in a range of industries and on an international basis. This gave us confidence in their ability and that if we achieved certification this would have some meaning. We also discovered that other organisations were considering seeking the certification suggesting that they shared our belief in its value.

Stages and challenges in achieving ISO 10667
The ISO 10667 standard is in two parts. Part 1 is requirements for the client, it focuses on the processes and methods an organisation should employ in contracting a provider. Part 2 is requirements for service providers. These requirements are processes and methods for those commissioned to design, deliver, monitor and evaluate assessment services. As a service provider, we sought and achieved certification against Part 2 of the standard.

Achieving ISO 10667 took approximately six months. Before beginning, we ensured that all staff within the unit understood the reasons for pursuing certification and were familiar with the standard’s contents. There were a number of meetings with the certification body to clarify the interpretations of the standards and to discuss expectations about evidence relating to certain standards. This dialogue gave the opportunity to discuss how standards not applicable in our context would be managed. As both we and they had never applied this standard before there was an element of mutual learning throughout.

The first part of the certification process involved a self assessment against the standards. The range of assessment products we design and deliver meant this involved a considerable amount of work involving staff responsible for each product area. We erred on an over collation and submission of evidence. We were helped by the existence of many Standard Operating Procedures which exist because much of our work is routine, repeated and undertaken by different staff at different times. This made providing evidence and demonstrating certain standards easier but added to the volume of evidence.

Self assessments were shared with the certification body who audited the submissions. We were required to supply further requested documentation and evidence. This was followed by a series of interviews with staff and a number of our associate staff from across product areas. The audit looked at how the reality of people’s practice reflected the submitted evidence.

To prepare the self assessments and evidence we used a software application called the Quality Assurance Management System. QAMS is a our own tool which we provide to the police service to assist in undertaking self-assessment and inspection against quality assurance framework criteria – much like the criteria in ISO 10667. This helped to keep the burden and bureaucracy of the process to a minimum. More importantly it will make updating the evidence for annual surveillance reviews much easier in future.

Adhering to standards in a time of austerity
As with many organisations, we are under increasing financial pressures with about a 50% resource reduction in recent years. This has meant reconfiguring the practices we use in the design, delivery and evaluation of assessment products.
Achieving the ISO 10667 was a useful test to establish if our changes to achieve ‘more with less’ meant we had undermined standards. In undertaking future savings, we will consider whether the changes we intend could undermine compliance with the standard. If this were the case, it would prompt us to potentially reconsider. Therefore, we view the standard as a helpful anchor rather than constraining shackle.

Lessons learnt during and from the ISO 10667 process
Some of these lessons were may be unique to our context but many will be relevant to others seeking certification.

- Value of dialogue with other organisations considering seeking the standard.
- Benefits in clarifying the interpretation of standards with the certificating body.
- Being realistic about what and when you believe the business benefits will arrive.
- Value of staff understanding, engaging and being available – including time to manage the contracting and process
- The wider and more diverse the product range – the more challenging demonstrating the standard.
- Ease of providing evidence where standard operating procedures exist versus where these may not exist for good reasons
- Getting the volume of evidence right – quality versus quantity.
- Financial costs of seeking and achieving the certification against unclear future benefit and value
- Ability to demonstrate other standards (e.g. BPS Assessment Centre Standards) where these have been mapped to ISO 10667.
- Benefits and drawbacks of being an early adopter – the infrastructure for the standard is still developing.
- Value of certification against ISO 10667 versus accredited certification.
- Value of being audited by an external organisation – customer confidence.
- An anchor for future change decisions.
- Positive publicity.

Assessment Standards: Bonus or Burden?
Deciding to seek ISO 10667 was not easy. Its uncertain role in the future of assessment, the unknown difficulty with which it could be achieved were balanced against it being unclear whether this would be seen as value adding by our customers meant it was a finely balanced decision whether to pursue it or not.

If you are considering seeking ISO 10667 and your practices already reflect previous standards, literature and evidence-base then you are possible already be achieving the contents of the standard and may value having this externally recognised. For ourselves achieving the standard has meant that we are able to demonstrate to the police service that what we do on their behalf adhere to a recognised external standard. The standard also provides legitimacy to our organisation – we not only set standards for policing but are prepared to expose ourselves to external scrutiny where our products and services are subject to standards set by others.

References
BPS Design, Implementation & Evaluation of Assessment and Development Centres - Best Practice Guidelines (BPS, 157
This paper highlights approaches to achieving enhanced diversity outcomes at assessment centre stage. Specifically it sets out initiatives implemented within the Civil Service that have adopted a positive action approach. A spectrum of positive action models are described, designed according to project requirements, and successful results of these initiatives are indicated. Interventions have been described elsewhere that show the benefit of positive action with regard to assessment/development centres (e.g. Human Assets (2013) and Wilson (2013)). The potential power of such interventions to support career success and wider development is evident.

The nature of positive action
Positive action has been defined within the Equality Act 2010. The Act allows intervention to address disadvantage for a protected characteristic where participation of that group in an organisation is disproportionately low. Crucially, the action must be proportionate in terms of increasing participation, meeting different needs or overcoming disadvantage.

Models of applying positive action within assessment centres
There is a continuum of methodologies that might be used in terms of applying positive action for assessment centres, ranging from an assessment focused model to an assessment-development focused model. There are benefits to both models - or perhaps something more intermediate - and the choice of approach will be determined by contextual need. Whichever model is adopted, it would be positioned prior to an actual assessment event, ideally within a short, perhaps 3-6 months, timeframe or less.

The assessment model (figure 1) is designed above all to provide selection skills to the participants so that they have increased opportunity to successfully achieve subsequent selection for corporate/other roles. The model includes raising awareness about assessment centres and offers exposure and practice on exercises that are components of assessment centres. Feedback on individual/group performance would also be integrated, though this feedback may be relatively light touch.

Figure 1: Assessment model of positive action

The assessment-development model (figure 2) also aims to build selection skills in terms of assessment centre techniques, but also wider development of the individual through diagnosing strengths and development needs and putting in place an action plan. This would normally include significant self-assessment and observer/assessor review and feedback and may be part of a broader development cycle that feeds into mentoring and coaching or action learning. The approach aligns closely with a development centre approach, and is labelled as such by the Civil Service.
The two approaches overlap in terms of offering a participant an understanding of how an assessment centre is
designed, providing practice on exercise components and offering subsequent feedback. The assessment-development
model also extends to wider personal development. The assessment model may be sufficient and, indeed, may be all
that could be resourced/funded. However if there is a desire and capacity to make a broader difference to an
individual’s career journey the assessment-development model becomes more relevant.

Method
How do these models operate in practice?

Project 1: Assessment model – Intern Coaching Programme

The positive action model can be shown within a coaching programme for participants seeking to undertake the Civil
Service Fast Stream assessment process. Fast Stream is a high profile graduate programme that offers opportunities to
come future leaders within central government roles. The participants in this case were interns on the award winning
Fast Stream Summer Diversity Internship Programme (SDIP) for lower socio-economic and BAME students (Wilson, 2012
and 2013). Underlying the programme is the desire to shift the horizons of those from less privileged circumstances and
change their aspirations, which is integral to the government’s Social Mobility Strategy (“Opening Doors, Breaking
Barriers”, April 2011), led by the Deputy Prime Minister.

The coaching programme represents intensive support for interns that equips them with understanding and skills to
advance towards a successful application for the Fast Stream graduate selection process. The positive action addresses
each stage of the Fast Stream assessment process. In terms of the assessment centre phase, the coaching workshop
encompasses a half day format (as well as additional one-to-one activity):

Overview of assessment centre process

Group exercise practice.

Written exercise overview and response techniques.

Briefing exercise - demonstration video and discussion.

Interview - live demonstration and participant practice.

Personal development review against competencies.

Project 2: Assessment-development model - Union supported development and mentoring scheme

The Public Sector Development & Mentoring Scheme (PSDMS) arose from a pilot run in 2011-12 and brought together
partners (Civil Service, Local Government, universities, diversity networks) led by Fast Stream (referred to in project 1
above) and the Civil Service FDA union.

Within the scheme, university undergraduates from BAME and lower socio-economic backgrounds, as well as Civil
Service staff from target groups, undertook two elements: a bespoke positive action development centre and also a
mentoring programme. The overall focus was to achieve enhanced diversity in applications and success rates within graduate-level schemes.

The pilot and the PSDMS have involved over 200 candidate participants. As well as providing exposure to relevant (next level) assessment centre tools, it offers in-depth developmental feedback at each point using self and assessor review, supplemented with final reflection at the end stage of the development centre to create a development plan for the mentoring stage, shown schematically here:

Figure 3: Feedback-development model

1. Self-analysis
2. Assessor analysis
3. Feedback
4. Final reflection

Project 3: Assessment-development model - Positive Action Pathway Development Centre

This pathway specifically targeted women, ethnic minority and disabled staff and sought to equip participants with the skills and confidence not only to achieve career progression but also to realise their full potential. The initiative aimed to make available a structured development opportunity for staff in under-represented groups, comprising: 48% disabled; 39% BAME and 36% female.

The programme comprised:

An initial developmental launch event - involving participants and line managers.

A development centre - to identify individual participants’ learning needs and the appropriate cohort progression level.

Mandatory positive action learning modules.

Support from an internal coach or mentor

“On the job” learning such as project work, short term placements, job shadowing or secondments.

The development centre was formulated in a similar fashion to that described in Project 2, integrating self-review with assessor review, leading to final development planning.

Results
What value do these interventions add?

Project 1: Assessment model – Intern Coaching Programme
In both 2011 and 2012, 35-40% of coaching programme participants were successful at Fast Stream. This represents an appointment rate 15 times better than for for those who did not receive coaching. Based on this achievement, there was approval for more than a doubling of the number of coaching places for 2012-13. The Coaching Programme was ‘Highly Commended’ in the 2012 Race for Opportunity Awards.

Project 2: Assessment-development model - Union supported development and mentoring scheme
Overall success rates and feedback from participants were positive and the scheme continues to expand. Evaluation metrics (from the pilot university) indicated that 88% of those participating felt more confident about their career prospects as a result of participation and that 96% (compared to 50% before the scheme started) would now consider applying to schemes. The most recent review in February/March 2013 showed that 100% of participants felt the
initiative would ‘improve their employability’ and 85% felt that the work should be embedded in university degree programmes.

Specific successes included scheme participants successfully accessing the Fast Stream Summer Diversity Internship. In addition, in February 2013 a development centre was run for 10 socio-economically diverse internal candidates successful in advancing to the final stage of the Tax Professional Development Programme (TPDP) recruitment process. Of the nine who then attended a TPDP assessment centre, an unprecedented 100% achieved a place on the graduate entry scheme.

“The experience has been of enormous benefit to all”

Dean and Pro Vice-Chancellor Middlesex University Business School

“I learned a lot - it was very beneficial”

“I passed my assessment centre and have been offered a position. The development centre was critical.”

Tax Professional Development Programme participants

Project 3: Assessment-development model - Positive Action Pathway Development Centre
The Pathway project is still at an early stage in terms of judging success outcomes, but initial survey findings with participants and assessors are shown in table 1.

<table>
<thead>
<tr>
<th>Table 1: Project 3 Survey Results</th>
<th>Participants (N=21)</th>
<th>Assessors (N=14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How useful was the Positive Action Pathway Development Centre in helping you/delegates to identify areas of strength and areas for development?</td>
<td>91% agree useful/very useful</td>
<td>92.8% agree useful/very useful</td>
</tr>
<tr>
<td>Although this Development Centre was not an Assessment Centre, how useful do you think the exercises at the Development Centre were in helping you/delegates prepare for any future Assessment Centre you might undertake?</td>
<td>100% agree useful/very useful</td>
<td>92.8% agree useful/very useful</td>
</tr>
</tbody>
</table>

Discussion and conclusion
The interventions demonstrated how assessment centre performance can be improved with the support of positive action and lead to potential benefits regarding career progression. The assessment and assessment-development models outlined offer alternative options to supporting diversity in this arena.

References


Paper 5: Assessment Centre case study: over engineered and under delivering

Steve Whiddett, WHE-UK

The purpose of the AC programme was to “assess the readiness of existing staff” at a given grade “for promotion and to identify development needs in a fair and objective manner”. Development needs would be identified for all AC participants and communicated through one-to-one feedback along with a pass or fail promotion decision. A process was put in place to pre-screen candidate participants with the intention of minimising the number of participants failing the AC.

Validity was considered in the design. Assessment criteria were eight competencies from the target job grade. Eight assessment exercises were designed using the target job competencies plus job activity and job context information. Reliability and quality assurance was addressed through a high degree of administrative control over the venue, the materials and the activities of those directly involved in the assessments, i.e. assessors, participants and actors. Only individuals trained and experienced in their AC roles were employed for the programme. All rating and decision procedures were agreed in advance including a weighting system within the pass/fail decision criteria.

This design had received a high degree of thought and at this level, would still tick the high level categories of the new AC standards. So what boxes would not have been ticked?

Even the best processes can usually be enhanced in some way and it would be unfair to pick apart every possible aspect of this AC programme. This next section highlights a few important issues that became apparent during implementation that could and should have been avoided – at the scoping and design stages.

So what boxes would not have been ticked?

I cannot establish whether certain assumptions were made and so instead I present and respond to some of the questions that the new standards could have helped resolve.

Was the proposed AC design the most appropriate way in which to “assess the readiness of existing staff” at a given grade “for promotion and to identify development needs in a fair and objective manner”? There are two purposes here and each may have been better achieved by meeting each need separately.

At one point 87 out of 127 participants failed the AC with a significant negative impact on their motivation and sense of well being. A development centre focusing only on assessment of development needs is unlikely to have been demotivating to so many participants and would not have required investment in the pre-screening process which did not appear to be effective. A development centre would have been much less costly as it would have required significantly less resources. Each AC was effectively two ACs running in parallel over three days with 6 participants per stream and 6 assessors per stream plus two centre managers and five admin staff.

Was the breadth of assessment the AC would provide required for both development and for the pass/fail decision? Eight competencies were assessed in the AC for development reporting and for pass/fail decision making. The pass/fail decision rule stated that to be awarded a pass a score of 4 or higher on the ‘problem solving’ competency was essential and scores of 4 or higher in four out of five other named competencies were also required. So, out of eight competency scores, three would not count toward the pass/fail decision and two competencies would not be considered in the decision. A development centre and separate assessment for promotion process could have provided more cost effective solutions to the two purposes with less problematic consequences.

Were the assessment criteria fit for purpose? Analysing assessment data available for 116 AC participants, mean scores for pass and fail participants differed by >1 standard deviation on only 13 of the 81 behavioural indicators assessed. Perhaps it is not surprising that 5 of these indicators were from the 9 problem solving competency indicators. A detailed investigation showed that the competency indicators were a mix of task statements, behaviour statements and statements of abilities/skills. Many indicators across the 8 competencies were heavily dependent on two sets of skills –
problem solving and people skills. The 13 behavioural indicators mentioned above relate to problem solving and people skills. A review and validation of the assessment criteria should have been agreed at the scoping stage.

How would validity be achieved and assessed? Validity was tackled within the design but focused almost entirely on the content of exercises. The validity of the ratings system to the target job grade was not assessed. The job context was represented within the simulation based assessment exercises but not in the assessment context. For example, participants were escorted to and from each assessment exercise. Participants would be taken into an assessment room and introduced to those persons present including the assessor before the exercise commenced. While exercise content reflected job activities the treatment of participants as ‘subjects’ in a regime in which they had little control did not reflect the level of autonomy of the role they were being assessed for. Content validity was not extended to the assessment setting and the impact of the setting on validity had not been accounted for. An AC or DC could have allowed for assessments to have taken place on job simulations within a simulated work environment based on the target job grade.

How would the assessment of appropriateness and choice of assessment exercises be made? Eight assessment exercises over two days does not sound too daunting and the basic principle of assessing all competencies at least twice was followed. However, more than three competencies were assessed per exercise and interdependent competencies were included within some exercises. Another issue was the time allocated to gathering evidence as some exercises were attempting to capture evidence for too many competencies/indicators, e.g. four competencies in a seven minute interactive exercise. Exercises do not appear to have been adequately trialled to establish realistic timings and scoring guidelines.

How do we ensure the centre does not have a negative impact on participants and other stakeholders? It appears that impact on participants was given some consideration albeit not as effectively dealt with as may have been hoped. The remaining stakeholders include all admin staff, the centre managers, the assessors and the managers of fail and current and future managers of pass participants. It was not possible to ascertain what impact had been considered and addressed for managers. The regime of the AC appears only to have considered the potential impact that assessors may have on the process rather than the impact of the process on the assessors. In an attempt to control assessors’ use of time and the quality of their work, the AC timetable and QA processes were counterproductive. Assessors and admin team members were placed under heavy cognitive loads with insufficient time for breaks, sometimes working up to 16 hours a day. Quality assurance added to the load by requiring some work to be redone, often with no significant change to evidence or ratings. Assessors were frequently reminded of the need to manage their time while timetabling was not reviewed. A full pilot of the AC should have determined realistic timeframes to complete tasks for all stakeholders. The physical and psychological impact of the AC implementation should have been accounted for in the design and refined after piloting.

**Conclusion** This AC design and delivery considered many of the aspects of ACs that should be considered to achieve a high standard but they were not considered in sufficient detail to realise that standard. The scope and purpose appeared to have been well considered until they were tested through implementation. Implementation is far too late to try to improve things. Points that should have been made explicit and explored in some detail at the scoping and planning stage appear to have been assumed.

Working in partnership to meet a business need requires openness; to challenge and explore the views of all parties involved. This can be challenging when one party is a potential client who can choose to find and work with another partner. It will be much easier to make challenges and achieve more effective outcomes when an independent set of standards can be used to guide the agenda.
Individual psychological assessments: a predictive validity study

P.T. Weldon, Civil Service Resourcing, C. Fletcher, Goldsmiths University of London/Personnel Assessment Ltd, R. MacIver, Saville Consulting Ltd

One of the most widely used occupational psychology services is the Individual Psychological Assessment (IPA). This is a process whereby a psychologist uses a battery of psychometric measures and/or exercises, along with an in-depth interview, to form an assessment of an individual, usually integrated in a written report. Typically, the findings of an IPA are fed into the final selection interview and decision making as one piece of evidence rather than as a deciding factor. IPAs are also widely used for development purposes, to provide the person assessed with a profile of strengths and development needs. Since they are quite lengthy and thus costly, IPAs tend to be used only for assessing middle and senior level staff. Silzer & Jeanneret (2011) found that IPAs are routinely offered by consulting firms in the USA and that the number of psychologists doing them is growing substantially; our impression is that the same is true in the UK.

Alarmingly, given this wide use by an evidence-based profession, the research support for IPAs is far from reassuring, and they have been subject to considerable criticism both on grounds of reliability and validity (Ryan & Sackett, 1998; Highhouse, 2002). Perhaps the greatest criticism is that there is so little evidence in the first place. The reason for this is that there are various practical problems in carrying out research on IPAs. They are, as stated, generally used for individual development purposes or for assessment in relation to a single high level position - in the case of the latter, perhaps 3 to 5 shortlisted candidates may be assessed. Consulting firms are rarely asked to conduct validation, and only the largest organisations will recruit sufficient numbers of senior managers to make such validation feasible. Much of senior recruitment is also wrapped up in layers of secrecy that prohibit evaluation being made public. Thus, in most instances the numbers we would need to do validation exercises are simply not there. Additionally, the question of what criterion of success might be used is far from straightforward - senior level jobs might have different measures of effectiveness. Finally, there is little consistency between psychologists in terms of the measures they use or the approach they take to assessment.

Thus, it is not surprising that few validation studies exist. Those that do have been recently subject to a meta-analysis (Morris, Kwaske & Daisley, 2011; Silzer & Jeanneret, 2011). This found a mean corrected validity of IPAs in predicting job performance ratings of .26; where the criterion was changes in job level or salary, this figure dropped to .17. However, the 18 studies included in this meta-analysis were very diverse in nature and in some cases stretched the conventional definition of an IPA somewhat (for example, in some there was no interview, in others more than one assessor was involved, and so on), and where those assessed were classed as managers they were - rather surprisingly - nearly all first line supervisors rather than more senior candidates. Overall, these studies provided little evidence to assess the validity of IPAs where an individual psychologist uses an interview and tests to assess senior management staff. The predictive validity study reported in this paper sought to address precisely that situation.

Background and Method

The candidate sample consisted of 115 middle and senior management level civil servants working in, or seeking appointment in, a UK Central Government Department, of whom 66 were male and 49 were female. They were all assessed either for promotion to a more senior post or for career development purposes, in connection with which there were interviewed by one or other of a pool of eleven occupational psychologists and completed psychometric measures of personality (NEO, HDS) and cognitive ability (Professional Aptitudes Verbal and Numerical). The purpose of assessment is two-fold: to assess suitability for a specific role, and to assess general potential for more senior roles. Typically, the assessment session lasted 3.5 hours - some measures being done online at a different time. All the assessors were psychologists highly experienced in conducting IPAs, and working to a common assessment procedure,
All candidates subsequently (6 - 12 months later) went through a multisource, multirater (MSMR) feedback process using the Saville Wave Performance 360. Feedback ratings came from peers, self, line manager, team/direct reports and a combined 'All Rater' group. The output from the 360 was used as the criterion measure.

The aim of the study, then, was to examine the extent to which IPA ratings predicted 360 feedback ratings. The original IPA reports were structured around four domain headings -

- Relating and Influencing
- Leadership
- Motivation and Resilience
- Managing Change and Complexity

However, the reports were written in narrative style and did not contain any numerical ratings. To facilitate the analysis, psychologist assessors read through the IPA candidate reports they had written and, for each IPA report domain, for every candidate, gave each one a rating on a five point scale -

- Very strong in this area; all evidence offered is firmly positive
- Strong in this area; mostly positive evidence, only limited concerns raised
- Satisfactory; mixed evidence, with strengths largely outweighing concerns
- Generally Sound; mixed evidence, with concerns and strengths equally balanced
- Less Effective; concerns tend to outweigh strengths

In addition, they made an overall rating of the candidate on the basis of the report, using the same scale. The Saville Performance 360 can yield a global measure, "Demonstrating Potential", which combines ratings from all sources. Given the avowed purpose of the assessments, this measure was used as the principal criterion and correlated against the assessor ratings.

**Results**

Table 1 shows the corrected (for unreliability in the criterion) and uncorrected correlations between the IPA ratings on each of the four domains assessed and the composite Demonstrating Potential score derived from the Performance 360.

**Table 1: Correlations between IPA domains and 360 Criterion (N=115)**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Demonstrates Potential (360)</th>
<th>Corrected r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relating and Influencing</td>
<td>.325**</td>
<td>.46</td>
</tr>
<tr>
<td>Leadership</td>
<td>.273**</td>
<td>.39</td>
</tr>
<tr>
<td>Motivation and resilience</td>
<td>.348**</td>
<td>.50</td>
</tr>
<tr>
<td>Manages change and complexity</td>
<td>.077</td>
<td></td>
</tr>
<tr>
<td>Average of IPA dimension</td>
<td>.334**</td>
<td></td>
</tr>
</tbody>
</table>
correlations

* p<.05, ** p<.01.

For three of the four domains assessed in the IPA process, significant correlations are achieved with the criterion, even before correction for unreliability. The data were also analysed at the more detailed level of the individual competencies covered in the 360 questionnaire, providing support for the construct validity of assessor ratings (table 2).

**Table 2: Correlations between IPA ratings and 360 ratings on the Wave Performance 360 12 sections**

<table>
<thead>
<tr>
<th>IPA Wave 12 section ratings</th>
<th>Performance 360 12 Section ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluating problems</td>
<td>.195*</td>
</tr>
<tr>
<td>Investigating issues</td>
<td>n.s.</td>
</tr>
<tr>
<td>Creating innovation</td>
<td>.307**</td>
</tr>
<tr>
<td>Building relationships</td>
<td>.382**</td>
</tr>
<tr>
<td>Communicating information</td>
<td>n.s.</td>
</tr>
<tr>
<td>Providing leadership</td>
<td>.212*</td>
</tr>
<tr>
<td>Showing resilience</td>
<td>.243**</td>
</tr>
<tr>
<td>Adjusting to change</td>
<td>n.s.</td>
</tr>
<tr>
<td>Giving support</td>
<td>n.s.</td>
</tr>
<tr>
<td>Processing details</td>
<td>n.s.</td>
</tr>
<tr>
<td>Structuring tasks</td>
<td>.197*</td>
</tr>
<tr>
<td>Driving success</td>
<td>.292**</td>
</tr>
</tbody>
</table>

Notes: Pearson’s correlations (uncorrected), two-tailed significance. N=115.

* p<.05, ** p<.01.

Space limitations preclude presenting the analysis in full here, but it shows that assessor ratings predicted a variety of different 360 degree feedback givers’ ratings of job performance, in anticipated ways - for the self, line managers, peers and direct reports. Because self ratings were included in the 360 feedback process, it was important to establish that these did not carry too much weight in the findings ie, that assessors judgments were not so strongly associated with
subsequent self ratings as to suggest that the IPA was unduly influenced by candidates' self views. The analysis discounted this concern.

The other question to be addressed was the extent to which the psychometric data alone predicted the criterion. The Verbal test correlated .30 (p<.01) and .23 (p<.05) with 360 ratings on 'Evaluating Problems' and 'Creating Innovation' respectively, and the Numerical test correlated .23 and .20 (both p<.05) with the same two dimensions - which were the 360 dimensions more relevant to cognitive factors. The most important issue for the analysis here, however, was whether assessor judgments added incremental validity over what would be achieved by test data alone. Hierarchical multiple regression was used to assess the level of prediction against the criterion, with all personality (Big Five) and ability psychometric scores (R=.34), followed by assessors' ratings being entered (R=.46); results indicate that assessors do indeed add incremental validity over just psychometric data alone (R2 Change .09, p < .05).

**Discussion & Conclusion**

This study was carried out to investigate the predictive validity of IPAs against a criterion of 360 degree feedback ratings made subsequently on the IPA candidates. The analysis shows that assessor ratings did correlate with a variety of job performance criteria, including organisational competencies, at levels which would normally be considered very satisfactory and certainly substantially above the figures quoted by Morris et al (2011) in their meta-analysis. Given the number of steps involved in arriving at IPA ratings and the other possible sources of error variance that could reduce the chances of obtaining significant relationships, this is particularly impressive. Moreover, the results further demonstrated that the input of the assessors added significant incremental validity over the psychometric test data on its own (Silzer & Jeanneret, 2011).

The one major IPA report heading that did not show any correlation with the main 360 criterion - 'Manages Change and Complexity' - perhaps suffered from being rather wider in its focus than the other report headings, and hence less easy to capture in a single rating. Whilst the pattern of correlations between IPA ratings and individual 360 competency dimensions was less consistent, it has to be noted that (a) the content of some of these competencies was not covered in the IPA anyway, and (b) this analysis involved making ratings on the basis of the IPA report content, which potentially added more error variance.

One of the problems that have beset attempts to validate IPAs is the difficulty of finding a suitable criterion, especially with senior level appointments. Salary progress and promotions might be considered, but they are impacted by too many other, non-performance related influences, in addition to there being possible ceiling effects at such high levels. However, this study demonstrates that 360 degree feedback ratings offer a very suitable criterion, since they represent a range of perspectives on an individual's performance and bear heavily on the interpersonal competencies which typically form the focus of IPAs.

In summary, the findings obtained here provide some much needed evidence to support one of occupational psychology's most frequently used approaches to high level assessment.

**References**


Jeanneret, R., & Silzer, R (Eds) Individual Psychological Assessment: Predicting Behavior in Organizational Settings. Jossey-Bass: San Francisco
"Big data" offers all the attendant advantages and disadvantages of large scale descriptive research. For example, it is useful for reflecting current organisational realities and can be conducted by non-psychologists with an adequate analytical background. However, because big data analysis is correlational rather than causal, it cannot readily create the kinds of new organisational realities available to occupational psychologists via theory-based experimental and explanatory research. Through a series of practical case studies, this session will demonstrate how big data and theoretical psychology can be harmonised to break through organisational silos to deliver improved innovation, sales force effectiveness, and talent management in large organisations.

Implementing a Values Based Interview approach within the NHS: A single organisation case study.

The UK National Health Service has recently faced calls for the need for a culture shift with a commitment to common values, based on the NHS Constitution. A core driver to this has been the recommendation that recruitment should be enhanced to integrate these shared values (Francis Report, 2013). Such approaches can be viewed as a move away from a common focus of performance outcome based competency based selection. The paper is a practitioner case study that provides an overview of design and implementation in Northumbria Healthcare Foundation Trust (NHCFT).

Background

The 2013 Francis report examined the concerns of care in Mid Staff NHS Trust. The report recommendations provide targets for the whole of the NHS. An emphasis throughout was a return to core NHS values and being patient centred. The relationship between values and attitudes of staff and its impact on the quality of patient care and patient experience and this is well established (West and Dawson, 2011). 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 report 2009). Within the NHS the annual staff survey has indicated although high can be improved; 85% of staff feel satisfied with the quality of work and patient care they deliver; 89% of staff feel their role makes a difference for patients (NHS Staff Survey, 2012).
Several values are expressed in the NHS constitution “Patients, public and staff have helped develop this expression of values that inspire passion in the NHS and should guide it in the 21st century. Individual organisations will develop and refresh their own values, tailored to their local needs. The NHS values provide common ground for co-operation to achieve shared aspirations” - Respect and dignity; Commitment to quality of care; Improving lives; Working together for patients; Compassion; Everyone counts.

A number of organisations have already begun to implement values based approaches both within the NHS and outside (e.g. NSPCC). Approaches have focused mainly on the use of values based interviews although there are drivers to develop other selection methods such as Situational Judgement Tests. Due to the infancy of this area there have been few comprehensive evaluations completed. Most organisations adopting this approach have reported high face validity from recruiters and candidates.

**Aims and Objectives**

The aims of the current paper are:

- To introduce a values based focus in selection
- To provide a case study on the development of new approach to an organisation wide selection process.
- To provide insight into the challenges of implementation and lessons learned

**The intervention**

NHCFT is a large NHS Trust in the northeast of England employing over 8,500 staff. The first phase of the project involved developing a set of values for across the organisation through a series of engagement events and employee consultation through eight focus groups drawn from across the organisation. The values adopted by the Trust were: Patients First; Safe and high quality care, Responsibility and Accountability, Everyone’s contribution counts, and Respect.

The second phase of the project involved the development of a values based interview method through a series of eight focus groups with staff drawn from across the organisation. Key values based competencies, alongside underpinning aligned and non-aligned behaviours were established. The developed interview approach was then developed further through a series of pilot interviews with different staff groups. All recruitment materials, processes and training were reviewed and revised to accommodate the new approach.

A full organisation wide roll-out plan is currently being implemented. Broader implementation of the values based approach has included the embedding of values in existing assessment centres for medical consultants and management posts, screening interviews for trainee management applications, and use of a situational judgement test for healthcare assistants. Strategically these values have also been incorporated into the appraisal process.

**Discussion**

The current implementation of the project remains on schedule. The process of embedding the values requires on-going attention and monitoring particular as implementation within each different staff group presents new insights and challenges. The outcome of instilling the values organisational wide on patient care and key performance indicators remains a core goal. The challenge of implementation and possibilities of on-going evaluation and expansion are discussed further.

**Practice points**

The introduction of a values based approach at an organisational wide level presents significant design and implementation challenges. For example, how do values integrate with technical competencies; what happens when an internal candidate does not meet the criteria?
Originality/Value
The paper links well with the conference theme ‘Organisation’. The study describes a change in selection practice by one NHS Trust but is indicative of a change across one of the UK’s largest employers. It may also reflect an emerging interest in values based selection solutions and a move away from existing approaches. The paper itself is grounded in a practitioner case study perspective, however reflects one of the future directions for selection research.

The novelty of this study is that an innovating values based approach will be outlined to delegates that may be more used to performance based approaches from the past. For the audience, the most stimulating element will be gaining an insight into a novel selection area and understanding the challenges of implementing this at a large scale. Some sample questions with behaviours will be made available for attendees to the session.

The paper offers insight not just to an emerging direction in employee selection but also a pragmatic description of the implementation of a significant project.

T39
The Psychology of Reputation & Continuing Professional Development: Co-Creation to Grow a Distinctive Profession
Dr Rachel Avery, University of Surrey, Dr Joanna Fitzgerald, University of Aston, Parvin Begum, Lloyd's of London, DOP Learning a Living (LAL) Committee
Theme Profession

- Do you think the Occupational Psychology profession could be working smarter at being distinctive?

- Are you interested in finding out more, via a participative workshop, about ‘whole-scale’ organisational change methods?

- Do you want to gain an understanding of the research evidence behind reputation building?

- Would you like to have input into the developments of the DOP and the role of Continuing Professional Development (CPD) in the Occupational Psychology profession?

This will be a working session lead by members of the Learning a Living committee who will combine their expertise in marketing, continuing professional development, large-scale organisation development interventions and academic evidence review. There will be three stages to this session. We will provide a table exercise around building the reputation of the Occupational Psychology profession, as on-going work that all of us contribute to, to generate alignment. One of the key concepts in a ‘whole-scale’ event is that of ‘build’ i.e., groups contribute to each other’s work, rather than critiquing. This involves a group working on a document on one table for one session and then moving to the next table to do the second exercise, building on what a different group initially produced.

There will be three ‘provocations’ – the introduction of knowledge and expertise, followed by a guided set of groups activities which will lead to high quality data output for the LAL committee and those attending to implement:

1. **Provocation 1**: A critical review of the psychology of reputation building (and brand development) at profession and individual level, the impact of the current social network and social media context and the ‘competitor landscape’. BPS and DOP strategy development documents will also be reviewed. The table exercise will require the open generation of ideas and thoughts linked to the intent to build a distinctive reputation for the DOP and its members.
2. **Provocation 2:** A critical review of approaches to co-creation for organisational change through ‘whole-scale’ group work and an explanation of the way this session has been designed using these principles (relative to other methods). We will cover its strengths and weaknesses as a technique for organisational change and in particular for working with professional networks. DOP data relating to member demographics will be reflected upon and we will review how those attending either represent the Occupational Psychology profession or not.

3. **Provocation 3:** The presentation of the results from a review of individual approaches to CPD and the existing behaviours and constraints will be presented. Specific consideration will be given to where our profession sits in relation to this type of regulation. Those participating will have direct input into the developments of the DOP based upon workshop content/discussion and gain an understanding of current state of play in CPD.

Those participating will work in table groups of up to 8 people and will need to move around the room as the session develops. LaL committee members present will be happy to provide division CPD guidance and advice on current CPD opportunities.

**T40: Short Paper**

**Using mediation to tackle workplace bullying: experiences from employees and mediators**

Neill J. Thompson, Northumbria University, Madeline Carter, Durham University

**Theme** Organisation

Workplace bullying presents multi-level and complex challenges to organisations (Bloom, 2012). A solution that has been adopted in the UK is to offer mediation to employees who raise a complaint of bullying, allowing the target and the alleged perpetrator to resolve any disagreements before they further escalate. Mediation, despite being widely adopted, remains under-examined and concerns have been raised in relation to it’s appropriateness for workplace bullying. This qualitative study aimed to examine efficacy and appropriateness of mediation.

**Introduction/Background**

Workplace bullying is a significant and persistent problem in many organisations healthcare organisations (Carter et al, 2013; Fevre et al, 2008; Hoel and Cooper; Rayner, 1999). For individuals, being exposed to bullying can have serious implications for mental and physical health including depression, helplessness, anxiety, and despair (Adams, 1992); suicide ideation (Einarsen, 2011a); psychosomatic and musculo-skeletal complaints (Einarsen et al, 1994) and risk of cardiovascular disease (Leymann, 1996). Despite these multi-level concerns there remains a lack of an evidence base for workplace bullying interventions in general (Illing et al, 2013).

Mediation has been widely used in organisations as a means of resolving conflict and bullying. The Advisory, Conciliation, and Arbitration Service (ACAS) website defines mediation as “a completely voluntary and confidential form of alternative dispute resolution. It involves an independent, impartial person helping two or more individuals or groups reach a solution that’s acceptable to everyone. The mediator can talk to both sides separately or together. Mediators do not make judgments or determine outcomes - they ask questions that help to uncover underlying problems, assist the parties to understand the issues and help them to clarify the options for resolving their difference or dispute.”

The use of mediation has increased in the UK in the last five years as a means of conflict resolution, or an Alternative Dispute Resolution (ADR). The Gibbons Review, Employment Act 2008 and revised ACAS Code of Practice and Disciplinary and Grievance Procedures (ACAS, 2009) all promote the use of early dispute resolution methods.

Practitioners and academics recommend mediation (Resch & Schubinski, 1996; Podro & Suff, 2010) Despite favourable practitioner support for the use of mediation in workplace bullying occurrences critiques have questioned the appropriateness and efficacy of adopting it as an approach (Vartia and Leka, 2011; Keashley and Nowell,
2003). Saam (2010) criticises the use of mediation for bullying as previous bullying behaviours are not punished and the harm done to the target is not addressed. Ferris (2009) raised concerns where inexperienced mediators may be unfamiliar to bullying and that power dynamics between parties might favour the victim. A further concern is that targets of bullying may be psychologically fragile and may not be sufficiently resilient to participate.

Aims and Objectives
The aims of the current paper were:

- To critically consider the use of mediation as an intervention for workplace bullying
- To examine the appropriateness of mediation in workplace bullying cases
- To identify areas of practice improvement

Method
Semi-structured interviews were conducted with employees who had experienced mediation and experienced mediators. Employees and mediators were recruited from across a number of organisations. All employees who had been through mediation had also had time to review whether agreements had been maintained in the longer term. The interviews lasted between 20-30 minutes in duration and were coded anonymously. Thematic Analysis (Braun and Clarke, 2006) was used for analysis, with both researchers independently confirming the thematic framework.

Findings
Results will be presented on the overall experiences of mediation, perspectives of appropriateness and efficacy. Recommendations for improvement will also be highlighted.

Early analysis of the interview data has identified several key themes relating to efficacy of agreements in the long-term. A number of examples of employee experiences (positive and negative) will be presented.

Conclusions
Due to the damaging impact that bullying can have in workplaces a key activity for organisations is to develop effective intervention strategies. Therefore, establishing evidence bases for interventions that can be developed to tackle the problem is important.

Originality/Value
Workplace mediation is an intervention that is widely adopted by organisations across the UK to address disputes and conflict that can at times escalate to bullying. Our understanding of this practice remains limited. This study is original as it critically examines the practitioner and user experiences in order to offer future research directions and practitioner points. The use of a qualitative approach in the study will also demonstrate the benefits of using this form of investigation for evaluation of interventions. Workplace mediation is a significantly growing area in the UK, and although is an area traditionally that has had minimal involvement from occupational psychology; its future development offers great potential as a future direction of work for our profession.

Ethics
Ethical approval provided by Northumbria University, Psychology Department, School of Life Sciences. This followed adherence to BPS guidelines and included anonymity throughout, providing verbal and written participant information, attaining informed consent, providing debrief and re-iterating the right to withdraw.

References
Coaching as a vehicle for greater creativity and innovation?

Céline Rojon, University of Edinburgh Business School, Almuth McDowall, University of Surrey

Overview and background

Creativity and innovation are crucial to organisational success and hence intrinsic to the UK government’s strategy (Department for Business, Innovation & Skills (BIS), 2011). A variety of different techniques and workshops exist to facilitate both creativity, defined here as the generation of ideas (Axtell, Holman, Unsworth, Wall, Waterson & Harrington, 2000), as well as innovation, understood as implementation of ideas (ibid.). However, many well-known techniques have a questionable evidence base, an example being ‘brain storming’, a popular approach to stimulating creativity and innovation, research indicating that group dynamics can stifle individual ideas (e.g. King & Anderson, 1995). Hence, there is a rationale for working with individuals on a one-to-one basis, or in combination with one-to-one/group approaches, to support individuals’ idea generation as part of a coaching paradigm, using appropriate
facilitation techniques. Yet curiously, there is little research on creativity, innovation and coaching per se. This is somewhat surprising, given a) the importance of the generation and implementation of ideas to the knowledge economy that we work in, as well as b) the omnipresence and growth of coaching in the workplace and elsewhere (e.g. Passmore, 2012). Thus, in our present study, using a quasi-experimental design, we examine the effects of a newly developed coaching intervention received by an intervention group and comparing participants’ levels of creativity and innovation pre and post intervention to those of a control group, which is not exposed to the intervention. We expect the coaching to have a positive impact on participants’ generation (i.e. creativity) and implementation of ideas (i.e. innovation), as well as their creative self-efficacy. The study is currently underway; findings will be made available at the time of the conference.

Current study
Research question
To what extent does coaching facilitate creativity and innovation compared to a control group that does not receive the intervention?

More specifically, we expect the following:

a) Participants in the intervention group (i.e. who receive the coaching intervention) will generate more ideas and score higher on measures assessing creativity, innovation and domain-specific self-efficacy than those in the control group (i.e. who is not exposed to the coaching intervention).
b) There will be a significant difference in means for both the creativity/innovation/self-efficacy measures and idea generation between the baseline assessment and follow up assessments.

Method
Participants
Participants recruited for this study are full-time or part-time MSc or MBA students from two UK universities. The inclusion criterion is that students have some level of professional work experience (at least six months) to facilitate understanding of a case study presented to participants during the quasi experiment (see below for further information regarding this case study). Following calculations to determine statistical power, 27 participants are being recruited per group (i.e. intervention/control) (i.e. $N_{total} = 54$).

Design
We are implementing a quasi-experimental, 2x2 mixed factorial design as follows (see also Table 1):

- Independent variable 1: Intervention/experimental group and control group (between-groups comparison)
- Independent variable 2: Pre-test/baseline measures of creativity (just before undertaking coaching intervention; subjective measures only) and post-test/follow up assessments (different time lags afterwards: immediately afterwards (objective and subjective measures) and 2 weeks/4 weeks afterwards (subjective measures only)) (within-groups comparison)
- Dependent variable: creativity/innovation scores (objective idea generation index; results from subjective measures)

Table 1
Study design

<table>
<thead>
<tr>
<th>Between-groups comparison</th>
<th>Within-groups comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention group pre-test/baseline</td>
<td>Control group pre-test/baseline</td>
</tr>
<tr>
<td>Intervention group post-test/follow up</td>
<td>Control group post-test/follow up</td>
</tr>
</tbody>
</table>
Between-groups comparison

As explained, the design is mixed, measuring changes within each group across baseline and follow up, as well as measuring differences between the intervention/experimental and control groups. In order to avoid evaluation apprehension (Diehl & Stroebe, 1987), ideas generated are not evaluated by the study facilitator, the instructions stressing that ‘anything goes’.

Procedure

Having gathered the respective programme directors’ consent to do thus, participants across the two UK universities involved in this research are recruited through email lists, a prize draw being offered to attract individuals. Participants are assigned to conditions using a random number generator. The overall approach to this research is shown in Figure 1.

Figure 1. Study procedure.

The (subjective) measures, which are validated questionnaires on creativity, innovation (Axtell, Holman, Unsworth, Wall, Waterson & Harrington, 2000) and creative self-efficacy (Carmeli & Schaubroeck, 2007), require that participants rate themselves on a variety of aspects (subjective measures). Moreover, an objective index of creativity will be used, namely the actual generation of ideas.

Intervention/experimental group

The basic procedure is the same as in the control group, which is outlined below, except, of course, that the experimental group is being exposed to a specific coaching intervention that we have developed. As such, we are using a group-based coaching approach for the experimental condition, drawing on the principles of Gestalt coaching. Derived from techniques long established in clinical and counselling contexts, Gestalt psychology purports an experiential approach, where clients are encouraged, through questioning and facilitation, to work on the ‘here and now’, with a clear focus on the present (Whybrow & Allan, 2007). We have combined this with principles from existential coaching to ensure a non-normative stance, where the focus is on ‘describe, don’t explain’ (Spinelli, 2010). The protocol involves a warm-up exercise, a visualisation exercise with a strengths-based focus in pairs, and then working through a written case study provided by the facilitator. In this case study, which has been developed to closely reflect issues that could potentially arise in a real work context, an organisation is experiencing financial problems, amongst others. In pairs, participants are then requested to think of as many ideas as possible on how to address the organisation’s problems, their idea generation being interpreted as a ‘hard’, objective index of creativity.

Control group

Upon having completed the subjective, self-report measures of creativity, innovation and creative self-efficacy at baseline, the control group receives a briefing from a facilitator, and is then asked to work through a case study as aforementioned (section ‘intervention/experimental group’), recording ideas on how to address the organisation’s issues in pairs. They are then asked to complete the self-report measures again, as well as a demographic background questionnaire. Finally, they are also reminded of the follow up (online) questionnaires being emailed to them in several weeks’ time.
Analysis
We will conduct appropriate group wise comparisons or analysis of variance (ANOVAs) depending on the normality of the data generated. If necessary, we can partial out any creativity-related work experience as a covariate, demographic data being gathered to control for this, if necessary.

As aforementioned, results of the study will be available for presentation and discussion at the time of the conference.

Selected references

T42: Lifetime Achievement Award
Please see the awards supplement at the back of your programme.

T43: Short Paper
What Maketh a Manager? Differences in culture and personality across four countries
John Hackston, OPP Ltd, Gabrielle Walker, OPP Ltd, Elizabeth Kendall, OPP Ltd
Theme Organisation

Introduction
We work in a multinational world; participation in cross-cultural teams is common and cultural differences often impact on workplace interactions (Brodbeck et al, 2000; Taras et al, 2010). What is valued in and expected from managers varies across cultures (House et al, 2004), and so different factors will be associated with promotion across countries. This research explores the differences and similarities between countries in terms of how culture and personality relate to job level; this can help us to support organisations in the development of cross-cultural teams and working relationships.

Previous research has shown that culture varies across countries. Hofstede & Hofstede (2004), defining culture as "The way we do things round here" and "a learned pattern of thinking, feeling and acting", have shown that while many differences between countries are at a deep, values-related level, differences among organisations are typically at the level of practices (Hofstede, 1993).

Many researchers have developed culture models, notably Hofstede (1980) and Trompenaars (Trompenaars & Hampden-Turner,1998). The GLOBE model (House et al 2004) builds on Hofstede, Schwartz (1994) and Inglehart (1997) to show how managers from 62 different countries differ across 9 dimensions of culture. The Cultural Orientations Framework (Rosinski, 2003) takes aspects of Hofstede and Trompenaar as well as Kluckhohn & Strodtbeck (1961), Hall (1990) and others to derive a set of cultural orientations - an inclination to think, feel or act in culturally determined ways.
"Leadership" differs across cultures. GLOBE found that leader effectiveness is embedded in the societal and organizational norms, values, and beliefs of those being led. Brodbeck et al (2000) suggest that leadership differs as a function of cultural differences across European countries, finding five clusters (Anglo, Nordic, Germanic, Latin and Near East European) which differed in leadership prototypes and cultural values. Many studies have examined the relationship between personality and leadership (e.g. Judge et al, 2002), personality and culture (e.g. Heine and Buchtel, 2009) and how personality and culture interact in the workplace (e.g. Taras et al, 2010). This study investigates how culture (measured by cultural orientations) and personality (measured by psychological type) interact in different ways with job level across four countries - Australia, India, the UK and the USA.

Methodology

Data was collected online between April and May 2013, from participants who already knew their personality type. A subset resident in Australia, India, the UK or US was used (n=710). Participants were predominantly working in coaching, consulting, education, hr, or learning and development. The sample was 69% Female and 31% Male, with a mean age of 44 years and a range of seniority from "employee" to "executive level/owner".

Cultural orientation was measured using the Cultural Orientations Framework (Rosinski, 2003); this measures both the visible aspects (behaviours, language, artefacts) and invisible manifestations (norms, values, basic assumptions or beliefs) of culture. The framework includes 17 dimensions, grouped into 7 categories. Although used in coaching, little empirical research has previously used the framework.

Participants had all previously completed the Myers-Briggs Type Indicator® questionnaire (Myers et al, 1998), and had feedback to help them decide on their true or "best fit" personality type, as measured by four dimensions, Extraversion/Introversion, Sensing/iNtuition, Thinking/Feeling Judging/Perceiving.

Additional survey items included gender, age, occupation, employment status, and job level.

Analyses

It was hypothesised that:

1. Some cultural orientations would show a consistent relationship with level of seniority across countries. Others would be country-specific. Orientation scores were correlated with seniority, and coefficients transformed into Fisher z scores.
2. Those with an iNtuitive preference, focussed on the big picture, were more likely to be at senior levels across all countries. Independent t-tests were used to look for significant differences in seniority between E and I, S and N, T and F and J and P.
3. Personality and cultural orientation would both relate to seniority, but personality would have the biggest effect. A univariate analysis of variance was used to assess which had the greatest effect on levels of seniority across all countries and in individual countries.

Results

Correlation coefficients and Fisher-z scores by country

<table>
<thead>
<tr>
<th>Orientations</th>
<th>Correlations</th>
<th>Fisher Z</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Australia</td>
<td>India</td>
</tr>
<tr>
<td>Sense of Power and Responsibility</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>Control/Harmony/Humility</td>
<td>-0.12</td>
<td>0.02</td>
</tr>
<tr>
<td>Time Management Approaches</td>
<td>-0.20</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>Monochronic/Polychronic</td>
<td>Past/Present/Future</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------</td>
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<tr>
<td></td>
<td>0.10</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>0.20</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>-0.10</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>-0.23</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Commonalities across countries:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Past/Present Future:</td>
<td></td>
<td></td>
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<tr>
<td>more senior individuals were oriented towards promoting a far-reaching vision, and preferring long-term benefits</td>
<td></td>
<td></td>
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<tr>
<td>- Stability/Change:</td>
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<tr>
<td>more senior roles preferred a dynamic, fluid environment, especially in Australia and the UK</td>
<td></td>
<td></td>
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<tr>
<td>- Analytical/Systematic:</td>
<td></td>
<td></td>
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<tr>
<td>more senior roles prefer to explore connections and focus on the big picture.</td>
<td></td>
<td></td>
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<tr>
<td><strong>Differences across countries:</strong></td>
<td></td>
<td></td>
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<tr>
<td>- Scarce/Plentiful:</td>
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<td></td>
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<tr>
<td>in Australia and the UK, senior managers see time as a more scarce resource, whereas in India those in more junior roles have this orientation</td>
<td></td>
<td></td>
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<tr>
<td>- Monochronic/Polychronic:</td>
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<tr>
<td>in the US in particular, more senior managers are more orientated towards concentrating on multiple activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Individualistic/Collectivistic:</td>
<td></td>
<td></td>
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<tr>
<td>in Australia, senior managers are orientated towards satisfying their own individual needs before those of the group.</td>
<td></td>
<td></td>
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<tr>
<td><strong>Type differences; independent-sample t-tests</strong></td>
<td></td>
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<tr>
<td>In the US individuals with a preference for Extraversion were in higher level roles (t= 3.304, p= .001).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individuals with a preference for iNtuition were in higher level roles in all cultures:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (t= -2.971, p= .004)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India (t= -3.566, p=.000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK (t= -4.308, p=.000)</td>
<td></td>
<td></td>
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<tr>
<td>US (t= -3.012, p=.003).</td>
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</table>
No significant results were found on Thinking-Feeling.
In India individuals with a preference for Perceiving were found in higher level roles (t= -2.263, p=.025).
Univariate analysis of variance
Combining all countries, those in more senior roles were more orientated towards Control (F= 5.689, p=.001),
Polychronic (F= 2.944, p=.020), Future (F= 2.998, p=.018), and Change (F= 3.788, p=.038) and were more likely to have
a preference for iNtuition (F= 7.933, p=.005).
The proportion with a preference for iNtuition increased significantly with level of seniority in Australia (F= 5.209, p=.028)
and India (F= 8.865, p=.004).
In the UK the proportion with a preference for Thinking (F= 5.384, p=.016) and Control (F= 4.147, p=.017) increased
with level of seniority.
In the US cultural orientation preferences for Control (F= 3.127, p=.027), Polychronic (F= 3.263, p=.013), Equality (F=
2.545, p=.041), Sharing (F= 2.548, p=.041), High Context (F= 4.450, p=.002), Direct (F= 5.120, p=.001) and also
Thinking (F= 4.241, p=.041) increased significantly with level of seniority.
No interaction effects were found between personality and cultural orientation.

Discussion
The results demonstrate that while there are similarities between managers of different cultures, there are differences
too; this can be extremely useful in helping practitioners working internationally. For example, a UK manager working in
India may be taken aback by a greater liking for stability, and a view of time as a plentiful resource, even in more senior
managers; conversely an Indian manager may see a scarcity of time as something that it is the role of more junior staff
to worry about. Working across cultures is hard; every culture is different. However, appreciating these differences can
help practitioners use them to their advantage. It may be that an understanding of personality type can be a bridge
between cultures; those of the same type from different cultures may have more fellow feeling that people of the same
type in the same culture.
Previous research showing more people with an iNtuitive preference in senior roles was supported. However the
hypothesis that personality would show a greater effect than cultural orientation on seniority was not supported. It may
be that some of the cultural dimensions are in effect personality scales.
In the presentation, we will discuss the results in detail, and explore techniques for working with people from different
cultures. In a globalised world, this is important for investment in the future of both individuals and organisations. The
project is ongoing, and we will present updated findings. We will make electronic copies of slides available.

References:
Prototypes Across 22 European Countries. Journal of Occupational and Organizational Psychology. 73, 1-29.
60, 369-394
Sage, 1980
Hill
Investing in the future of young people: How can Occupational Psychology help young people become more employable and stay at school?

Ali Shalfrooshan, a&dc, Dan Hughes, a&dc, Louise Brown, ThinkForward (part of Tomorrow’s People)

Theme Communities

Arguably youth unemployment is now one of the greatest challenges facing the country. A report by the ACEVO Commission on Youth Unemployment highlighted that 1.4 million young people are currently not in education, employment or training (commonly known as “NEETs”). This is the equivalent of 1 in 5 young people. The human misery of youth unemployment is also coupled with a financial cost. At its current rate, in 2012 youth unemployment will cost the exchequer £4.8 billion and cost the economy £10.7 billion in lost output.

ThinkForward is a charity that works directly with young people between the ages of 14 to 18 in the Shoreditch area of London’s East-End. It has taken a proactive approach to the issue, providing schools with highly trained coaches who work directly with young people as they progress through to their GCSEs and post-16 choices. The school identifies the young people who are most at risk of dropping out of education and employment to work with the coach. The coaches will then develop relationships with these individuals and provide focused support to help make them more employable and have a successful transition into adulthood.

ThinkForward recognised that Occupational Psychology could potentially assist with achieving the charity’s goals. This was supported by a growing body of evidence demonstrating that some disciplines within ‘positive psychology’ can contribute to adolescent well-being and educational performance (Brunwasser, Gillham & Kim, 2009). There has also been a general shift in focus from children’s deficits/pathology to a more affirming and strength-building approach (Roberts, Walton & Bogg, 2005). It is believed that by helping a young person to understand their strengths and areas for development, they will be better able to thrive during challenging times, be more employable and capable of achieving their aspirations.

The Challenge

From their work with young people, the coaches had recognised that there were some core attitudes and skills that help young people become more employable and likely to achieve their potential. However, these attitudes, despite being well understood, were not easily explicitly communicated or actively measured. With this in mind, the charity acknowledged the need to carry out the following in order to enhance their approach:

- Identify and define the core attitudes, psychological constructs and soft outcomes the coaching process is trying to enhance in young people
- Design a coaching tool to help surface and target these outcomes and psychological constructs
- Design some tools to help evaluate the effectiveness of the coaching programme
The solution

In order to specifically achieve these objectives, ThinkForward appointed a business psychology consultancy to design and assist in the roll-out of this new approach. As a consequence ‘The ThinkForward Questionnaire’ was designed to help coach young people fulfil their potential and provide a tool to measure the ‘distance travelled’ by the young person.

In order to deliver this, the following two broad stages were implemented:

Stage 1: Construct Identification
This is arguably the most important stage and its aim was to establish a comprehensive list of dimensions underpinning employability that were evidence based, discrete, intuitive and could be developed through training or coaching interventions.

The research incorporated investigating psychological models, employability skills frameworks, and constructs assessed in a number of different psychometric measures that are currently available. From these sources 139 different employability and psychological constructs were identified including Learning Agility (DeMeuse, Dai & Hallenback, 2010), Emotional Intelligence (Goleman, 1998), GRIT (Duckworth, Peterson, Mathews & Kelly, 2007), Learned Optimism (Seligman, 2001) and Goal Setting (Locke & Latham, 1984). In addition through workshops with 11 subject matter experts (specialist coaches who provide personalised support to young people identified as being at a risk of becoming a NEET) a set of 36 additional constructs were identified. Therefore a total of 175 discrete constructs were identified.

A mapping exercise was carried out with two business psychologists and a total of 14 subject matter experts. After reviewing these skills, attitudes and behaviours two common themes were identified; the psychological constructs related to an individual’s attitude (mindset) and skills that are related to an individual’s employability (employability skills).

Mindset: An individual’s mindset is a mental attitude that determines how they interpret and respond to situations. The way a person thinks can have a huge impact on their happiness and ability to achieve what they want in life. People who are successful tend to have a pattern of thinking and attitudes that help them to be the success that they are. They have a mindset that helps them constantly grow, develop and improve. Based on the mapping exercise a set of eight mindset components were identified.

Employability Skills: Employability is a person’s capability for gaining and maintaining employment. Different jobs might need different skills, knowledge and abilities. However, there are certain core skills that will help a young person in any job. These have been identified as ‘employability skills’. Essentially employability skills are skills almost everyone needs to do almost any job. Based on the mapping exercise a set of six employability skills were identified.

Stage 2: Design of a reliable tool

Items for the initial trial version of the questionnaire were written for each of the constructs identified. In order to pick the best items, between 10 to 16 items were developed for each construct with a view to bringing it down to 5 to 6 items per scale for the final questionnaire, depending on reliability levels. Items were written drawing upon the supporting literature underpinning the construct and related scales.

Items were trialled alongside a number of research scales and related constructs, to assess how the items performed and to provide evidence of construct validity. The following areas were also measured as part of the trial:

- Prosocial behaviour
- Positive attitudes to school
- Positive attitudes to learning
- Attitudes towards staying at school
- Conduct Problems
- Hyperactivity
- Peer problems
- Truancy
Full sets of responses for all items and scales were received from 192 respondents. On the basis of these criteria the final set of items were selected and an initial norm group created. The alpha coefficients for all of the scales exceeded 0.7, the benchmark level for adequate internal consistency for psychometric tests according to the European Federation of Psychologist Association (EFPA) Guidelines. The median alpha across the scales is .82. A construct validity study was undertaken to examine the relationship between the mindset components and the scales measured by the Strengths and Difficulties Questionnaire (SDQ). The results are shown in Table 1 below:

Significant correlations were found between all eight of the mindset components and the SDQ scales. The study suggests that individuals with higher levels of these mindset components will be less likely to demonstrate conduct problems, emotional symptoms, hyperactivity and have problems with peers. In addition there is strong relationship with all of the scales and prosocial behaviour.

In addition during the trialling of the questionnaire, data was also collected on a set of questions designed to assess positive attitudes to school, learning and teachers. This study demonstrated that there were significant correlations between the mindset components and employability skills with positive attitudes to school, teachers and learning.

Outcomes

A phased roll-out of the process has been undertaken, with a pilot study being carried out with 277 young people across 12 secondary schools in March 2013. Based on the pilot sample of 277 participants; all of the ‘mindset’ and ‘employability skills’ scales showed significant correlations with self-reported happiness and satisfaction. Some of the scales demonstrated a significant negative correlation with sleep problems. The results are shown in Table 1 below:

The validation and evaluation of the process are still ongoing but initial evaluation has identified:

• More focused interventions have been put in place due to the common framework being used
• Positive feedback from coaches about the increased quality of information they have when coaching the young person
• Improved communication between coaches and young people, with mindset and employability skills becoming integrated into the coaching process

The intention is to roll-out the programme to a larger sample of young people in September 2013 as part of a four year project. Therefore a longitudinal study on the ThinkForward programme will be undertaken. This will investigate the impact of the programme on the young people involved and their level of employability. The purpose is to carry out a predictive validity study on a larger sample once sufficient objective data is collected.

Interactive components

• Attendees will be given the opportunity to discuss in pairs what they believe is the definition of employability
• Attendees will be asked to discuss and identify the core attitudes that would help a young person be more employable
• Attendees will be asked what sort of strategies or interventions can be used to make young people more employable

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Prosocial Scale</th>
<th>Conduct Problem Scale</th>
<th>Emotional Symptoms Scale</th>
<th>Hyperactivity</th>
<th>Peer Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Belief</td>
<td>.334**</td>
<td>-.362**</td>
<td>-.575**</td>
<td>-.442**</td>
<td>-.343**</td>
</tr>
<tr>
<td>Positive Thinking</td>
<td>.476**</td>
<td>-.446**</td>
<td>-.464**</td>
<td>-.438**</td>
<td>-.403**</td>
</tr>
<tr>
<td>Aspiration</td>
<td>.452**</td>
<td>-.263**</td>
<td>-.203**</td>
<td>-.409**</td>
<td>-.184*</td>
</tr>
<tr>
<td></td>
<td>Happiness</td>
<td>Sleep problems</td>
<td>Satisfaction</td>
<td></td>
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<tr>
<td>Self Belief</td>
<td>.313**</td>
<td>-.294**</td>
<td>.469**</td>
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<td></td>
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<tr>
<td>Positive Thinking</td>
<td>.359**</td>
<td>-.235**</td>
<td>.567**</td>
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<tr>
<td>Aspiration</td>
<td>.396**</td>
<td>-.105</td>
<td>.342**</td>
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<tr>
<td>Determination</td>
<td>.527**</td>
<td>0.06</td>
<td>.232**</td>
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<tr>
<td>Flexibility</td>
<td>.403**</td>
<td>-.039</td>
<td>.277**</td>
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<td>Appetite for Learning</td>
<td>.506**</td>
<td>-.015</td>
<td>.218**</td>
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<tr>
<td>Understanding Emotions</td>
<td>.420**</td>
<td>0.076</td>
<td>.154*</td>
<td></td>
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<tr>
<td>Managing Emotions</td>
<td>.486**</td>
<td>-.227**</td>
<td>.369**</td>
<td></td>
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<tr>
<td>People Skills</td>
<td>.313**</td>
<td>-.11</td>
<td>.292**</td>
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<tr>
<td>Teamwork</td>
<td>.370**</td>
<td>-.038</td>
<td>.173**</td>
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<tr>
<td>Effective Communication</td>
<td>.170**</td>
<td>-.054</td>
<td>.210**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding Solutions</td>
<td>.403**</td>
<td>-.136*</td>
<td>.303**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning and Organising</td>
<td>.651**</td>
<td>-.129*</td>
<td>.278**</td>
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<tr>
<td>Building a Positive Network</td>
<td>.469**</td>
<td>-.127*</td>
<td>.260**</td>
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</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

References

Clive Fletcher & Almuth McDowall, DOP 8 Areas Review Project Board Co-Chairs
Theme Profession
There is no doubt that the 8 areas served us well over the years, providing a structure to the MSc (Level 1) curriculum and ensuring breadth of knowledge at entry level for aspiring Occupational Psychologists. Nevertheless, calls for the curriculum to change and be brought up-to-date have been voiced at regular intervals. An extensive report by an expert panel delivered to the Division in 2011 emphasized the need for change, now or never, so this is what a dedicated project board set out to do. This session will introduce and launch the new curriculum by explaining the consultative and iterative process taken, the rationale for the new and broader topic areas and also the new emphasis on practical as well as research skills. There will also be plenty of opportunity to ask any questions. For further information on the background for the project, please visit http://bit.ly/dop-8-areas.

T47: Standard paper
Dealing with email at work: Bad habits and strategies
Dr Emma Russell, Kingston Business School
Theme Individual

The explosion of new technology communications – email in particular - in the workplace, within the last ten to twenty years, has literally been phenomenal. It has changed the way that we organise and deal with our work, and altered our approach to communication entirely (Kraut and Attewell, 1997). Developments in email technology have progressed at a far greater pace than psychological science can observe. As such, end-users have been foundering – adopting techniques and strategies that quickly become obsolete as the rapidity of technology change outsmarts individual adjustments to it (McFarlane and Latorella, 2002). Failure to adapt plans for dealing with email communications can result in them becoming pathological – habitual or generalised strategies (Frese, Stewart and Hannover 1987) - that result in inefficient outcomes. For example, people may engage in ‘absent-presence’ whereby they may be physically present in a social context, but mentally absent through smartphone engagement (Orlikowski, 2006). Others may over-delete, insistent that their inbox remain free, even if this means important information is frequently lost or removed (Gwizdka, 2004).

Despite these potential problems, email communication technologies are here to stay, and in certain groups have been found to enhance well-being and provide other social benefits (Russell, Millward Purvis and Banks, 2007; Cotten, 2008). As such, this research is concerned with investing in the future by better understanding the relative efficiency of different strategies for dealing with email at work, in particular with reference to well-being and personality style. This research is novel and innovative in that it adopts a relatively under-utilised theory of work psychology - Action Regulation Theory (ART: Frese and Zapf, 1994; Hacker, 1994) – alongside Affective Events Theory (AET: Weiss and Cropanzano, 1996) as its central organising frameworks. ART is an applied theory of work, and its purpose in conception is to assist work designers in making the workplace, and its associated tasks, as efficient as possible (Frese and Zapf, 1994). However, ART does not coherently address the issue of personality as impacting on strategy choice, despite attempts to convey the importance of this study focus (Frese and Zapf, 1994; Hacker, 1994; Miller, Galanter and Pribram, 1960; Schönpfugl, 1992). Nor does ART address the concept of well-being as a consideration in people’s strategic activity. These seem to be vital omissions, for although a strategy may seem ‘pathological’ in terms of efficiency at getting a work task done (e.g. constant checking of email), it may have other benefits in terms of well-being (e.g. reducing boredom – see Russell et al., 2007). Addressing well-being and affect as both precursors to action, and consequences of responses to work events, are the central foci in AET. AET considers how exogenous features of the workplace (such as email events) and endogenous features of the person (such as well-being and personality) interact to create and determine affect experiences.

Although a two-phase research programme (funded by the Richard Benjamin Trust), only phase one results are presently available and will be presented at conference. In phase one (interview research), a taxonomy of strategies/habits for dealing with email communications was established, along with reasons for their implementation.
During the presentation, delegates will be asked to consider which strategies they use to handle their email, and a short quiz into addictive bad habits will be conducted. Delegates will be encouraged to reflect on their own emailing behaviours and how they impact on their work efficiency, well-being and on others. Delegates will also be invited to contribute suggestions as to how email management can be improved. Email strategies are often very personal; placing strategic behaviour into the public domain may aid delegates (and the wider public) who wish to compare and improve their email adaptation.

By focusing on the future of the individual – from the perspective of attending to employee well-being and individual differences in strategy choice – this research aims to provide organisations with advice and policy that can be tailored to the specific requirements of its individuals, to help them to improve their management of email communication technology at work.

Method
In phase one, 28 semi-structured interviews were conducted with individuals across a range of job levels and job types. 16 participants were female, 12 were male. Participants were asked about the strategies and ‘bad habits’ that they use, used, or had observed others’ using at work, in receiving, sending and managing email communications. Reasons for using these strategies or habits were explored. This phase was designed to help establish a ‘taxonomy of strategies’ for dealing with email communications, and to understand (through reason coding) which strategies and ‘habits’ might be considered maladaptive or pathological.

Participants were obtained through opportunity sampling methods – utilising the author’s network of contacts. Only those who use email for work purposes on both desktop and mobile communication devices (e.g. smartphone) were interviewed. All participants received a £10 gratuity for their participation. Interviews lasted from 1-2 hours and were held in the interviewees’ workplaces or homes. Interviews were coded using content analysis (Bryman, 2001).

Results
88 strategies were reported by the participants, across 10 categories, such as “Strategies for crafting email”, “Dealing with email outside of office hours”, “Normal methods for receiving email”. 8 different reason codes were given in total, as to why people use the strategies reported. These were given as:
- To improve work efficiency
- To improve well-being
- To feel in control
- Out of a concern for others
- To be true to one’s ‘self’ or personal style
- For ease/practicality
- Out of habit/automatic
- It is company/industry policy

Participants also reported a wide range of negative implications for the strategies, along with 7 different categories of addictive, potentially ‘pathological’ behaviours and bad habits (primarily concerned with compulsive behaviours and anxieties – e.g. “I feel compelled to constantly check my email”, “I feel anxious about deleting an email”). These results are still being analysed, and a full set of frequencies will be presented during conference.

Discussion
The multitude of strategies reported reveal the wide-ranging, often idiosyncratic, actions that people have developed to deal with email at work. The four most commonly reported reason codes for using a strategy (the first four listed
above) also indicate that whilst ART rightly identifies a desire to improve work efficiency as a key motivation in the development and implementation of people’s plans at work, AET is an additionally useful theory for explaining why people also work towards achieving well-being goals, and how endogenous personality factors may explain reasons such as a need to feel in control (potentially related to conscientiousness) and a need to show concern for others (potentially related to agreeableness). These elements will be further explored in phase two, and it will also be of interest to note whether multiple strategy reasons exist concurrently as justifications for pursuing single strategies.

Implications

It is intended that this research will alert individuals and organisations to the strategies that people are currently using to deal with their new communication technologies that may in fact be maladaptive (have a negative impact on well-being and/or job efficiency) and may require them to alter their approach. It may also highlight whether certain personality characteristics are more prone to adopting pathological strategies. If this is the case, the research has implications for the selection of these traits into jobs that require high-level usage of email or smartphone.

Following on from this ‘seed’ research a third phase will be prepared, concentrating on affecting behavioural change. Health and Social Psychology research has recently focused on how to increase people’s intentions to change maladaptive health behaviours. However, this work has yet to encroach upon the domain of maladaptive occupational behaviours, and nor has it progressed to seeing behavioural change consistently enacted beyond stated intentions. Finding methods for reducing pathological email and smartphone activity at work will (it is hoped) benefit the individual worker, their organisation, their families, and therefore, society as a whole.

References


Changing Organisational Culture in the Residential Care Home Sector

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Theme Organisation

Background:
The quality of patient care in the healthcare sector has been a topic of fierce debate and public interest for many years, with several high profile government-led enquiries revealing shocking examples of the actions of individuals working within this sector, including the cases of Winterbourne View care home and more recently the Francis report into failures at Mid Staffordshire NHS Foundation Trust. To date, this is an area where Occupational Psychology has had a limited impact and yet the issues underpinning these failings are directly related to topics such as organisational culture and employee engagement. This paper reports on a major study to evaluate and re-design organisational culture within one of the largest provider of residential care homes in the UK, with over 30,000 staff caring for more than 20,000 residents (referred to as ‘XXXX’ throughout this submission). This research should be considered within the wider context of the political and social factors affecting the healthcare sector, including an aging population, major financial and resource pressures and a recognition that the sector needs to identify ways to respond to such changes in order to prepare for future challenges.

Research Aims:
The initial aim of this research was to help the organisation to identify ways to address the problem of significant levels of staff turnover. Drawing on the body of research evidence which suggests that motivated, engaged staff perform better and are more likely to remain in role for longer (e.g. BlessingWhite, 2008; Harter et al., 2002;) this study focused not only on recruitment and selection processes, but the entire talent management cycle. As such, the findings from this study provide a broad insight into the range of factors which affect staff motivation and morale and ultimately patient care and safety.

Methodology
Phase 1: A range of documentation (including: competency frameworks, job descriptions, recruitment data, staff surveys) was reviewed to provide insight into the following:

- The organisation’s approach to recruitment and selection across the key roles and the guidance available to support this activity
- The organisation’s approach to training and development for the key roles and the guidance available to support this activity
- Priority issues facing the homes to be targeted during phases 1 and 2

Phase 2: Interviews (n=35) took place with Home Managers, Regional Managers, Operational Managers and Senior Board Members to explore perceptions of factors influencing turnover. Individuals invited to take part in the telephone interviews were put forward by the organisation; attention was paid to ensuring a representative split across regions and with regards to the performance rating assigned to each home.

A semi-structured approach to the interviews was taken, with questions asked broadly around the following areas:

- Interviewee’s background and information about their role/home
- Perceptions of recruitment processes including current approaches and challenges experienced
- Perceptions of staff turnover and ideas for what may impact this
- Perceptions of training and development opportunities including current approaches and challenges experienced

Time was given within each interview to allow the interviewee to raise any other issues that they wanted to discuss in relation to the above points. Interviewees were reassured of the confidential nature of all discussions. Notes were taken...
and semi-transcribed to allow for content analysis of the key emergent themes. Pertinent quotes were recorded verbatim to be used to illustrate key points.

**Phase 3:** Site visits (n=5) took place to observe first-hand the challenges described during Phases 1 & 2 and to further explore perceptions of factors influencing turnover with Nursing and Care Staff. The five homes were selected in order to ensure a representative split across regions and size of care home. The perspectives of the Home Managers, as revealed during the telephone interviews, were also considered in respect to selecting site visit homes in an attempt to ensure that the visits were most likely to represent a broad range of opinions and challenges.

Site visits lasted for approximately half a day and included the following:

- A brief tour of the home (or if this was not practical the workings of the home were observed throughout the course of the visit).
- A discussion with the Home Manager to further discuss points raised during the telephone interview and to give the Home Manager an opportunity to illustrate any of their issues through practical demonstration or by showing examples of hard-copy material.
- Conversations with Care Assistants and Nursing staff to discuss their role, their perceptions of XXXX and their challenges.

Time was allowed within each discussion to give the participants the opportunity to raise other issues. All participants were reassured of the confidential nature of all discussions. Notes were taken and semi-transcribed to allow for content analysis of the key emergent themes. Pertinent quotes were recorded verbatim to be used to illustrate key points.

Outputs from each of the three phases were analysed qualitatively to identify the key themes which were structured under seven headings (see below). To ensure robustness, the data were reviewed by three independent researchers before the seven categories and labels were agreed upon.

**Findings**

The key findings from the research were categorised under seven headings (Recruitment Practices and Selection Tools; Attracting Good Quality Staff; Opportunities for Learning and Development; Leadership; Organisational Culture; Pay and Recognition; and, Employee Engagement and Motivation) under which more detailed sub-categories were identified. For each key area, specific recommendations were made as to possible ways of addressing or responding to the issues identified, these were mapped against a three-year plan for implementation which detailed how the recommendations could be grouped into three key workstreams each including a set of specific deliverables alongside outcomes of both clinical excellence and commercial leadership. Our presentation will discuss each of these workstreams drawing upon illustrative quotes from those involved in the study and reflecting on each stage of their development as well as broad lessons which can be learned for Occupational Psychology as a whole.

**Conclusions and Reference to Conference Strand**

This initial study set out to explore the factors impacting on staff turnover during which far broader organisational change issues emerged. The interconnected nature of these issues has implications for addressing future organisational change and development in this context. It highlights the need to take a multi-pronged approach which shows an appreciation for the wider political context within which the healthcare sector is operating as well as providing a case study for how Occupational Psychology can contribute to this field.

**References**

The UK National Health Service is presently in a state of flux. The national economic downturn and change in government are two drivers responsible for instability and planned changes in organisational structures, funding and commissioning. The coalition government plan to cut at the tier of middle management in a proposed bid to improve efficiency. However, very little is known about the work and contributions of managers within the context of quality in healthcare and middle managers in particular are the least researched organisational tier (Flin & Yule 2004; Marshall & Ovretveit 2011). A better understanding of what managers actually do for quality of care and patient safety and what powers they hold can in turn illuminate their actual and potential contributions towards maintaining and improving care and help consider the impact of the policy plans to come into effect in the imminent future. This study identifies mid-managerial activities and their contextual factors with theoretical constructs.

Research questions: (i) How and how much do middle managers attend to quality and patient safety? (ii) What is the potential of middle managers to influence quality and safety? (i.e. what powers do they hold) and (iii) how do clinical staff ratings compare with managers' ratings on how much and how they attend to quality and safety and their potential to influence it?

Methods
A survey exploring managerial quality and safety-related activities, attitudes, learning and power was completed by 100 middle managers from 10 UK acute care Trusts and by 60 clinical staff from the top responding Trust. Theoretical constructs of managerial power and work roles were used within the survey measure taken from Mintzberg’s (1973) 10 managerial roles and French & Raven’s (1959) 5 power bases. Validated scales from ARQH’s Hospital Survey on Patient Safety Culture (HSOPSC) and Sexton’s Safety Attitudes Questionnaire (SAQ) were used for the safety attitudes/actions section. The survey measure thus comprised of the following sections (including 3 items per construct): Section A: Demographics; Section B: Time, attitudes/actions & research in quality and safety (QS); Section C: Work roles in QS; and Section D: Influence style in QS.

Findings
Responses showed many quality/safety activities regularly undertaken by managers; the most commonly reported actions were taking corrective action to manage adverse situations/operational breakdowns, encouraging teamwork on quality and safety improvement, monitoring quality and safety targets, and assigning staff to address capacity issues that may compromise quality or safety. Yet the responses also revealed that they sometimes prioritise finance over patient safety (35% self reports/84% staff reports), have low reinforcing powers, little formal learning, and spend little time on quality and safety (36% currently less than a Â¼ of their time at work). Collectively, the staff were undecided as to whether their manager’s actions always showed that patient safety is a top priority (29% neither agree nor disagree, 22% disagreed). Furthermore, many did not feel that their managers were respected or held a positive attitude that makes others more likely to listen to them. Nonparametric comparisons showed that staff rated their managers’ safety
(attitudes/actions) score significantly lower (mean rank=33.32) than reported by the managers (mean rank=66.12), U=221.500, P<.001. They also rated significantly less referent (charismatic) power (mean rank=40.14) than the managers reported (mean rank=54.55), U=598.500, P<.01. Nevertheless, referent power was one of the two predictors (along with the leader role) that explained 70% of the variance of safety attitudes/actions scores within a step-wise multiple regression, R²=.713 Adjusted R²=.694, F(2)=38.45, P<0.001.

Conclusion
This study indicates that managers can and do contribute to quality care, but may not be provided with sufficient resources and powers to do so. There is a low percentage of time spent on quality of care and patient safety, little formal learning and low reinforcing powers. The most common activities indicate more frequent reactive and fraught work on quality and safety. This paper draws implications for the planned cuts at the middle management tier and suggests how managers can improve their organisation’s quality of care and safety for their patients.

T51: Short Paper
The Influence of Leadership and Entrepreneur Status on Follower Creativity
Dawn L. Eubanks University of Warwick – Warwick Business School, Tamara L. Friedrich, University of Warwick – Warwick Business School
Theme Individual

Entrepreneurs are clearly creative in the development of their new venture. However, as they enter into a leadership role does the fact that they are serving as a role model of creative thinking result in greater employee creativity or does their strong vision stifle the creativity of their followers? Their leadership style may moderate this relationship. Our goal is to evaluate the relationship between entrepreneurship, leadership styles, and follower creativity. In this study we will test both the difference that autocratic, participative, or free reign styles have on follower creativity along with whether the leader is a founding entrepreneur with a clear vision, or a newly hired leader that is following an established vision. In addition, we will evaluate any interactions between leadership style and entrepreneur status. This presentation will contribute to the main conference theme of Investing In The Future of the Organization by providing insight into how small businesses may better facilitate creativity and innovation, and Individual, by providing insight into how to promote the creative development of followers, and the development of leaders’ capacity to manage innovation.

Creativity and innovation are important for many reasons. First, new ventures must present a unique contribution to the market in order to thrive. It is through these new ventures that the market continues to flourish. Next, existing companies must maintain their competitive edge. In order to do this, companies need to remain relevant and consider new technologies and emerging problems/needs around them. Because of this, senior executives consistently identify innovation as a key to remaining competitive and creating new jobs (GE Global Innovation Barometer, 2011; Waight, 2005). While innovation may be easier to promote in larger organizations, entrepreneurs may face a challenge in promoting creativity in organizations where they have established their own, clear vision.

Leaders play a critical role in promoting creativity within organizations by setting clear performance expectations, role modelling creative performance, and establishing an innovation-focused vision and creative climate. Creative workers perform best when supported within a creative climate, which includes autonomy, recognition for contributions, adequate resources, risk tolerance, challenge, and intellectual stimulation (Friedrich, Stenmark, & Mumford, 2011; Mumford & Hunter, 2005).

Founding entrepreneurs, as the creators of new ventures, can be considered role models of creativity and innovation. However, common characteristics of entrepreneurs may inhibit the emergence of subordinate creativity. This can
happen because of the strength of their creative vision and attachment to it or their personal need for achievement and need for control (Bessant & Tidd, 2011; Chen, 2007). However, the entrepreneurial leader’s leadership style may mitigate these effects.

There are many ways to categorize leadership styles and behaviours such as Directive vs. Supportive; Person-focused vs. Task-focused; Transformational vs. Transactional; or Autocratic, Participative, Free Reign. For this study, we have chosen to look at Autocratic, Participative, and Free Reign styles to incorporate a broad range of leader actions. Extant research suggests differences in follower creativity for leadership style in non-entrepreneurial contexts. For example, leader control (autocratic) generally harms creativity, encouraging voice and involvement (participative) promotes creativity, and giving trust and autonomy (Free Reign) promotes creativity (Amabile, 1998; Friedrich, Stenmark, & Mumford, 2011; Yukl, 2009). Considering previous research, we have the following three hypotheses:

H1: Followers will exhibit higher levels of creativity (quality, originality and elegance) under new leaders compared with entrepreneurial leaders.

H2: Followers will exhibit higher levels of creativity (quality, originality, elegance) under free-reign leaders compared with autocratic leaders.

H3: Followers will exhibit the highest level of creativity (quality, originality, elegance) under free-reign new leaders compared with other leadership combinations.

Method
This study included 129 participants recruited from a University in the United Kingdom. Participants were enrolled in an undergraduate or masters program at the University. The study was a 2 (entrepreneurial leader or newly appointed outside leader) x 3 (autocratic, participative, or free-reign) factorial design. After reading a scenario about a fictitious cookie company, participants were asked to generate an idea for a new healthy cookie for a new product line. They were asked to complete three phases in 35 minutes: 1) generate all the ideas you can think of for solving the problem, 2) write out your evaluation of your ideas and choose your best idea, giving the reasons why, and 3) write out the plan for implementing your final idea. These three phases cover the broad phases typically associated with organizational innovation – idea generation, idea evaluation, and idea implementation.

Next, three coders familiar with social sciences attended rater training and coded the open-ended responses. They coded the open-ended responses for quality, originality and elegance for the responses to each of the three phases. Inter-rater reliabilities reached an acceptable level at $\alpha = .84$ across ratings.

Results
Significant covariates across analyses were English as a first language $p<.01$ and Fluency $p<.01$. Fluency constituted scores on an additional task where individuals were asked to generate as many uses as they could think of for a brick or pencil. The fluency score was the number of items generated for this task and is an indication of the individual’s generative skills.

In Phase 1 (generation of ideas), we found a main effect for leader style $F(4, 117)=2.86, p<.05$. Leader style reached levels of significance for Quality $F(2, 119)=3.23, p<.05$ and Elegance $F(2, 119)=3.79, p<.05$ in Phase 1. Univariate tests indicate the predicted pattern: Free Reign had the highest means (Quality $M=2.78$, Originality $M=2.43$, and Elegance $M=2.59$), Participative the next highest means (Quality $M=2.48$, Originality $M=2.23$, and Elegance $M=2.33$) and Authoritarian had the lowest means (Quality $M=2.37$, Originality $M=2.14$, and Elegance $M=2.16$). There were no significant interactions for Phase 1. Leadership style may have had an impact in the generative phase rather than other phases because the three styles - authoritarian, participative, and free reign – vary in their degree of autonomy and participation granted to the follower. Existing research supports this finding that conditions with more perceived
autonomy (Free Reign and Participative) will result in more follower creativity (Amabile, 1998; Mumford & Hunter, 2005).

In Phase 2 (evaluation of ideas), we found no main effects or interactions. Perhaps leader type and style had no effect because this process is more removed and the leader is less salient in your objective evaluations of ideas.

In Phase 3 (implementation plan), we found a main effect for leader type (entrepreneurship or new leader) $F(3, 117)=3.52, p<.05$ but not for leadership style or the interaction. There were no significant univariate tests, which indicates a true multivariate relationship. The trend of the means, however, indicates that a founding entrepreneur was better than the new leader for quality, $M=2.58$ versus $M=2.41$, and originality, $M=2.18$ versus $M=2.16$, but the new leader was better than the founding entrepreneur for elegance, $M=2.24$ versus $M=2.20$. Leadership type may have an impact on this phase because the implementation plan requires that the follower consider the leader's overall vision for the organization as they prepare their plan. This vision is particularly salient if the leader is a founding entrepreneur with a clear vision.

These results allow us to draw the following conclusions. Hypothesis 1: Followers will exhibit higher levels of creativity (quality, originality and elegance) under new leaders compared with entrepreneurial leaders was not supported. In fact, higher levels of creativity (quality and elegance) were found under entrepreneurial leaders. Hypothesis 2: Followers will exhibit higher levels of creativity (quality, originality, elegance) under free-reign leaders compared with autocratic leaders was supported with the highest levels of creativity under free-reign leaders and the lowest levels occurring under autocratic leaders. Hypothesis 3: Followers will exhibit the highest level of creativity (quality, originality, elegance) under free-reign new leaders compared with other leadership combinations was not supported. There was no significant interaction found. The meaning of these conclusions is discussed below.

**Discussion**

Before turning to the broader contributions of this effort, we should acknowledge some limitations with the study. Mainly, our study is limited in the generalizability of a controlled experiment. While the use of a controlled experiment can pose problems of generalizability, in this instance it was acceptable because of the difficulty of conducting a similar field study. Using a student sample also can pose a problem, but this weakness was mitigated by asking students to solve a problem in a familiar domain where they have some degree of expertise as a consumer.

As discussed earlier, leadership style may be more important during the generation of ideas because perceived autonomy has more of an impact during this stage (freedom to generate novel ways to do things) than whether the leader has a specific vision that the ideas need to fit into. Leader type appears to be important during the implementation phase with higher quality and more elegant solutions resulting when an entrepreneurial leader is in place and followers consider the vision of the leader.

This study is the first to explore the relationship between leadership styles and follower creativity in the context of entrepreneurship, thus expanding our understanding of entrepreneurs as a unique form of leading for innovation. Free-reign findings provide additional support for research that promotes the need for autonomy. Recommendations on improving innovation may vary depending on the type of leader and their entrepreneurial role.

Our findings have implications for understanding the difference between founding entrepreneurial leaders and newly hired leaders. This can allow for greater insight into entrepreneurial ventures and the nature of these “creative environments”. Electronic copies of slides will be available upon request.

**References**


**T52: Meet the “OP Matters” Editor**

Robert Goate, Business Psychologist

Theme *Profession*

Come to meet Robert Goate, the editor of the DOP’s quarterly journal, OP Matters. Find out how to write an engaging and informative piece of interest for the DOP’s 6,000 members. OP Matters is a fantastic platform to build your personal profile, and raise awareness of your company and its successes.

**T53: Standard Paper**

**The impact of tablet based training on customer care**

*Richard Hunter* CPsychol, Criterion Partnership , *Alan Redman* CPsychol AFBPsS Criterion Partnership

Theme *Organisation*

Overview of proposed 40 minute session

1 minute: The key question
How can high impact training in customer care be provided without staff needing to leave their place of work?

4 minutes: The psychology of customer care
A brief overview of the published research which supports the following arguments:

- Empathy with customers is a key factor affecting the attitudes and behaviours which underpin customer care
- Developing greater empathy with customers may result in improved standards of customer care
- Of the methods available for the measurement of customer care, mystery shopper evaluations provide the most compelling evaluations

8 minutes: A training experience (Interactive)

1. Delegates are introduced to a set of mystery shopper criteria used to evaluate the customer care provided by staff within community pharmacies.
2. Delegates observe two live professional actors, one in the role of a customer within a community pharmacy and one in the role of a staff member. While they observe, delegates use the mystery shopper criteria to evaluate the customer care provided by the staff member.

3. Following this, delegates are invited to consider:
   - how this training experience has invited empathy with the customer
   - how this training experience has enabled assimilation of customer standards (i.e. the mystery shopper criteria)
   - how the costs of live professional actors would make this training experience difficult to replicate within the workplace
   - how state-of-the-art technology has been used to bring this training experience into the workplace

2 minutes: Bringing this training into the workplace

A summary of methodology, including:

The sample: staff members within 500 community pharmacies

Measurement: mystery shopper visits before and after implementation of training, including an experimental group (who received training) and a control group (who did not receive training)

Hypothesis: expected uplifts in mystery shopper evaluations following implementation of training

15 minutes: Demonstration of the tablet-based training app (Interactive)

The customer care tablet-based training app is demonstrated using a series of short videos which show:

- How the training app introduces the training experience
- How the training app provides an opportunity for practice and familiarisation with touch screen technology
- How the training app shows two actors on video, one in the role of a customer within a community pharmacy and one in the role of a staff member. (Note These are the same two actors who appeared live within this DOP paper: see "A training experience" above.)
- How the training app invites empathy with customers
- How the training app enables assimilation of customer standards (i.e. the mystery shopper criteria)
- How staff members are evaluated as they complete the training
- How the training app illustrates exemplary customer care

Video 1: Introduction and mystery shopping questions...
https://www.youtube.com/watch?v=qEUXR_jSRGY

Video 2: How to be a mystery shopper...
https://www.youtube.com/watch?v=nQkouNTdJQE

Video 3: Imagine you are the customer...
The effectiveness of the tablet-based training app was evaluated using mystery shopper scores collected before and after the implementation of training. Results are reported for both the experimental group (who received training) and the control group (who did not receive training).

5 minutes: Discussion (Interactive)

Delegates are invited to join a discussion which may include:

- Experiential learning techniques which invite empathy with customers
- Further opportunities to use tablet-based training for learning and development
- The economics of tablet-based training
- Scientific methods used within this study
- Future research opportunities

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

Empathy with customers is a key factor affecting the attitudes and behaviours which underpin customer care


Developing greater empathy with customers may result in improved standards of customer care


Of the methods available for the measurement of customer care, mystery shopper evaluations provide the most compelling evaluations


2. How do you see your proposal linking with the main conference theme of Investing In The Future, and what makes it apt for the particular strand you have chosen?

This session is a case study in the application of occupational psychology using cutting edge technologies. The session shows how a touch-screen tablet-based training intervention was used to mediate highly interactive, video-based learning using professional actors to simulate everyday working encounters.

Organisation is explored by showing how investment in this tablet based training app has resulted in measurable improvements to customer care without staff needing to leave their place of work. The economics of this return-on-investment are discussed.

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

Experiential learning using professional actors is a high impact learning method. However, the delivery costs associated with this approach have made it difficult to justify for many customer-facing roles. The innovative use of new technology (and the relatively low costs of this technology) now make it possible to accrue the benefits of experiential learning with very low recurrent costs.

However, the application of technology is not enough on its own. Effective learning interventions require psychological insight whatever delivery platform is used.

4. Which aspects of your session do you think conference delegates and potentially the wider public will find most informative and stimulating about your session?

Conference delegates and the wider public will be fascinated to see technologies (familiar from tablet and smart phone apps) being used to change behaviours in the workplace.
5. If any, what materials do you intend to make available to attendees and in what format (e.g. printed hand-outs, electronic copies of slides)?

Printed hand-outs and electronic summaries will be provided.

**T54: QOccPsych (Stage 2) Supervising for the Qualification in Occupational Psychology**

Karen Moore, Rosemary Schaeffer & David Carew, QOccPsych Qualification Board

Theme **Profession**

The Society’s Qualification in Occupational Psychology (Stage 2) is a professional qualification and training route for new entrants to the profession. The very flexible nature of the supervised practice element of the Qualification means that the role of the supervisor is crucial in supporting and guiding candidates as they prepare their portfolios for assessment.

Individual candidate cases cannot be discussed in this forum – individual support sessions will be available throughout the conference at the Qualification’s stand, however, if you are an existing supervisor and want some guidance on, or have any general questions about, supporting candidates through the enrolment process, preparing their entries and completing the Annual Progress Review, we will cover these in this session.

Current ratios of supervisors to students are very good, but the geographical spread of supervisors does not match the spread of candidates, so if you are not currently a supervisor, but are keen to get involved in helping individuals through this crucial stage in their professional development, this is also the session for you.

**T55: Discussion**

**Promoting board effectiveness - the application of psychological evidence for boards**

Rosalind Searle, Co-director of the Centre for Trust and Ethical Behaviour (CETEB), Coventry Business School, Coventry University and Co-convenor DOP Board Effectiveness working group.

Theme **Organisation**

This panel discussion considers the role and application of psychological principles and research in enhancing and promoting more effective performance, and better governance for those at the top of organisation. The panel will reflect and examine whether and how the inclusion of psychology evidence-based practice can make boards more effective for the individuals at the top, the people they employ and the communities in which they reside. Discussion will also consider how psychologists can become more influential in this arena.

The DOP's Board Effectiveness Working Group aims to promote greater understanding and awareness of the psychological evidence as it applies to the board of organisation. This panel submission contributes to this topic through each of the conference’s submission strands. Therefore this submission is design to:

1. Offer an opportunity to consider and reflect on the current evidence-based practice with a panel including four of the DOP 2014’s keynote speakers, with regard to the more effective selection, performance and governance of boards, and to discerning gaps within the current research (Research)

2. Raise awareness and knowledge about one of the DOP’s more recent working groups which focuses on Board Effectiveness, with a view to expanding its membership and interest in this topic (Theme Profession)
3. Promote psychologically informed discussion of key topics concerning executive boards including: leadership, coaching, development and training, reward and recognition, and individual performance concerning those at the very top of our organisations (Individual)

4. Examine more critically psychological dimensions pertaining to: team dynamics and team building; conflict resolution for executive boards; management of change to promote more ethical conduct and behaviour by those at the top of organisations; the role of boards in creating and cascading more ethical organisational cultures and performance; the attraction, development and retention of talent for the top; the better management and discernment of risk by board members (Organisation)

5. Reflect on three central topic concerning community level impact: Demographic diversity in the UK and therefore the need to develop and sustain more diversity and inclusion right at the top of organisations; how to better inform and influence public policy about psychological evidence in this domain, such as through working with organisations such as the Financial Reporting Council’s (FRC) who is the independent UK’s regulator responsible for promoting high quality corporate governance and reporting. The FRC’s (2012) code of Corporate Governance Code includes five main principles, which psychology can directly inform. These areas include: Leadership, Effectiveness, Accountability, Remuneration and Relations with Shareholders. (Communities)

Panel chair
Hazel Stevenson, Director People Transform Limited and Co-convenor DOP Board Effectiveness working group

Panel to include:

DOP keynotes
Prof. Alice Eagly, Northwestern University, USA, Prof. Keith Grint, Warwick Business School, Prof. Alex Haslam, University of Queensland, Australia, Prof. Jo Silvester, City University, UK

Additional experts
Prof. Andrew Kakabadse, Cranfield University, a board member

Panel design
This session will comprise of an introduction by Rosalind Searle and Hazel Stevenson (co-convenors of the DOP Board effectiveness working group) about the group and this panel - 5 minutes.

This will be followed by a brief input (5 minutes) from each speaker to the question - what key psychological insights do you think would enhance the effectiveness of boards? - 25 minutes.

A 25 minute question and answer session with questions from the floor will follow. In addition the chair will be able to prompt discussion in terms of the 5 previously identified themes to ensure the session progresses into key agendas for conference delegates to consider around the 'investing in the future' conference theme.

5 minutes summing up of the discussion, identifying the key current role for psychology and its potential future impact in the 'executive suite' will close the session.

T56: Discussion
Investing in the future of Assessment and Development Centres
Helen Baron, Independent Practitioner, Dave Bartram, SHL Group Ltd, Max Choi, Quest Partnership Ltd, Charlie Eyre, College of Policing, Patricia Lindley, Independent Practitioner, Nigel Povah, Assessment & Development Consultants
The DOP Science and Practice project to develop a new good practice standard for assessment and development centres (centres). The aim of the project is to update earlier work on the BPS Guidelines for centres and to develop a document that provides a detailed standard consistent with ISO 10667. ISO 10667 provides a general standard for good practice in the delivery of occupational assessment. It does not specifically address quality criteria for centre provision. The work we are doing addresses the issue of centre design, development and delivery as well as more general provider-client relationship issues in the provision of assessment services.

The standard has been developed with input from a working group of practitioners with a subgroup acting as a drafting committee. The standard has now reached a stage where it is ready for wider discussion and consultation.

This session will describe the reasons for developing this standard, outline the process that has been followed and highlight the issues that have been raised. It will provide opportunity for the audience to discuss these issues with the panel and to raise other issues as necessary.

Possible future applications of the standard will be described. In addition to provide good practice guidance, the standard could be used as the basis for quality audits of service provider organizations, assessor competence certification, qualifications in centre design and so on. Feedback will be sought on what the future priorities should be.

The session will be in the format of a panel discussion with the drafting committee providing the members of the panel. A standard theatre style layout with the panel at the front is required.

The first half of the 60 minute session will be a briefing from the panel regarding different aspects of the development of standards. The panel will highlight issues that have arisen during the preparation of the draft standards. These will be issues in centre design and implementation that have proved controversial in the development of the standards. The remainder of the session will be a facilitated discussion between the audience and the panel focusing on these issues to try to reach a consensus view. The standards are still under development and therefore a detailed list of issues is not yet possible but areas where there are current discussions include how information external to the centre (e.g. performance appraisals of incumbents) should be handled, whether a wash-up session should be allowed to override assessment evidence and what is the maximum number of participants an assessor can be expected to accurately observe.

The main discussants will be those who have been on the drafting committee. They include leading practitioners in AC/DC design and delivery and experts in the design and production of guidelines and standards.

T57: Workshop
Communicating the value of assessment data to key decision makers
Eugene Burke, Tom Gibbs, Emily Hill and Sara Asady, CEB-SHL

Ultimately the value of assessment is judged by key decision makers in terms of the impact testing has on the issues that keep them awake at night. In today’s tough and volatile environment, the C-suite and no less than the CEO want answers to questions such as:

• How effective are our talent attraction strategies compared to the industry sectors and geographies we operate in?
• Where are our best sources of talent geographically?
Why are our projects not being delivered to time, cost and quality?

Why are our marketing programmes failing?

These are all questions about people and flag an opportunity to realise the broader strategic value of test data. Yet a clear challenge to the industry is how to communicate value to those who are looking for answers to their key strategic issues but do not have a strong background in testing and assessment.

**Talent Analytics: A new opportunity for occupational psychology.** In previous conferences, we have shown the critical role that occupational psychology has in talent management through evidence-based frameworks for defining and measuring the potential of people (Burke, Vaughan, Martin, Cox and Bidder, 2011; Burke and Martin, 2012). In this workshop, we explore the value of this role further by showing how those frameworks and measurement tools deployed through talent analytics have helped senior executives articulate their people issues, understand their talent management challenges and identify their options for action.

We live, according to McKinsey and others (Brown, Chui and Manyika, 2011), in an era of big data with those in marketing, production and customer services using large databases to seek out patterns and relationships that enable better products and services to be delivered more efficiently and effectively at the optimal moment to engage customers. Not surprisingly, the availability of big data is also raising the value of predictive analytics as organisations look to reduce the risks of business decisions and to maximise value of innovations and new opportunities by exploiting data more effectively and systematically (Davenport, Harris and Morison, 2010). It is hardly surprising that these trends – big data and analytics – have now embraced people issues in the form of HR Analytics (Gardner, McGranahan and Wolf, 2011) or Talent Analytics (Burke, 2011 & 2012). This is the focus of the workshop – a practical and case story led introduction to the power of analytics driven by data on potential coupled with models of performance drawn from occupational psychology.

The move to aggregated views of data on potential should not be a surprise to occupational psychologists given recent academic papers. Examples include the relationship between aggregated measures of human capital (including measures of cognitive ability and personality) and the financial performance of firms (Crook, Todd, Combs, Woehr and Ketchen, 2011), and, more recently, the relationship between Big 5 profiles of countries and economic innovation indices for those countries (Steel, Rinne and Fairweather, 2012).

What is new is a growing interest in how aggregated measures of potential are being incorporated into analytics models, and that this is providing new opportunities for the value of that data to be realised by senior executives and line managers. We will be sharing two client case studies to help demonstrate this.

The first case study looks at a leading consumer brand’s marketing function. Why is this highly creative function having trouble turning ideas into tangible products that deliver value? The second case study addresses issues faced by the CEO of a global telecoms company. Specifically, why are capital projects not running to schedule, cost and quality? These case studies will highlight how aggregate level data on people’s potential offers a significant opportunity for occupational psychology and occupational psychologists to engage effectively with C-suite executives.

**A model for Talent Analytics.** Effective talent analytics requires at least four elements: questions that can be tested as hypotheses; data that provide breadth across a landscape of interest (e.g. by industry, geography, business function and role); models that link the data to the performance issues in question; displays through which the results of analytics can be tied back to the questions to provide actionable insights. The model for talent analytics shared in this session works to bring all four of these elements together in a way that facilitates ease of communication with business leaders and managers.
The database sitting at the core of the model draws on 5 million in vivo assessments for managerial and professional roles from individual contributor through to executive level positions across 80 countries, 40 industry sectors and 31 business functions. This database has been organised so that an organisation’s employees can be compared by sector, geography, business function and job level with employees of other organisations without breaching the confidentiality of those other organisations.

The data have also been organised to be clearly linked to performance and the framework for this is the Universal Competency Framework (UCF) as described by Bartram (2005) and Burke (2008). This framework is based on extensive validation work establishing links between measures of potential (cognitive ability, personality and motivation) and performance as measured against specific behavioural competencies. For each of the client case studies, we have created competency profiles for the groups of employees the C-Suite had questions about. Those competency profiles can then be compared to the competency profile for employees at similar levels across the industry sector or the company’s competitors globally.

The final element of the SHL Talent Analytics™ model is the displays through which the results of analytics are summarised. These will be explored in the course of the session and are omitted from this abstract for the sake of space and ease of formatting. In essence, they provide a simple way to see immediately how the potential of an organisation’s people compares to the chosen benchmark populations.

How do these two pictures appear to the C-Suite? Using our Talent Analytics displays, we were able to identify the clear gaps on critical competencies, thus giving an insight into why the companies were facing the talent issues mentioned earlier.

Communicating the value of occupational psychology’s role in talent management. Debates and discussions at DOP conferences often highlight the challenge of communicating the value of occupational psychology research and services to lay clients. This is one of the strongest opportunities offered by couching the intelligence that occupational psychology models and data offer within an analytics framework.

Demonstrating the talent gaps that exist provides the C-Suite with a clear view of their people and helps to answer the questions posed by the client: why is the consumer brand’s marketing team not translating ideas into tangible products that deliver value and why does the telecoms client have critical projects running behind time, running over cost and missing quality targets?

So, now the client can address other questions such as are they attracting the best people and, if they can attract world class people, why aren’t they attracting and acquiring more? Are their best people assigned to the most challenging projects and are the right people in the right teams, to ensure learning and to deliver the most value? This allows the key decision makers to have a specific and tangible conversation with colleagues about how they can refine their attraction strategies and improve the deployment of their people and workforce optimisation.

The structure and format of the workshop. This session addresses the challenge of communicating the value of test data to those who do not have a background in testing and assessment, by sharing learning from two recent engagements in the US, Europe, Africa and Asia.

The session is organized into four parts:

- An introduction to the data, the models and the displays and how these are used to provide insight to business issues
- Two practical case studies that show how the tools and models were deployed with opportunities for participants to ask questions and to comment on the materials shared.
A third section which explore how data from occupational psychology can be combined with data from economics and social demography to explore global and local talent trends. The example shared will be a model of employability for graduates. Setting this model within an economic context will be used to articulate the choices shown by the data in terms of strategies for talent acquisition, and which strategies offer a more sustainable pay off for organisations.

A question and answer session to facilitate audience dialogue and draw out thoughts on how to communicate the value of assessment data to senior stakeholders in organisations

Who should attend?
This session will care for up to 40 participants and requires no more than an orientation to data and simple data displays, and an open mind to the possibilities for test data to address strategic questions in ways that stakeholders from the line to the C-suite will understand.

Objectives:

- To share a practical and tested model for benchmarking and provide insight to organisational issues using test and assessment data

- To provide practical examples of how the model has been applied successfully with non-testing executives

- To share the broader strategic value of test and assessment data

References:


Burke, E. (2012). *SHL Talent Analytics™: Answering the critical questions about the potential of your people and the effectiveness of your talent management processes.* SHL Group Ltd.


Towards Greater Understanding of Ethnic Bias in Ability Testing for Selection

Danny Hinton, Aston Business School

Theme Communities

Background (Q1: Main research, theories and models underlying the research)

Meta-analytic research into selection methods has consistently shown that ability tests are the single best predictor of future job performance available (Robertson & Smith, 2001). However, bias research has consistently shown that these tests have an ethnic bias towards white people, with certain minorities scoring less well on the same tests (Cooper & Robertson, 1995).

There is no real consensus as to why ethnic bias occurs in ability testing. In the case of group differences in test scores between US Blacks and US Whites, the literature is divided between hereditarian models (e.g. Rushton & Jensen, 2005) and culture-only models (e.g. Dickens & Flynn, 2006). Hereditarian models argue that any observed group differences are not dependent on socio-economic factors and instead are accountable exclusively by genetic differences. Rushton & Jensen (2005) maintain that, because group differences between Blacks and Whites on cognitive ability measures have not reduced significantly over recent years and because genetic factors such as mean brain mass and cranial volume parallel IQ so closely, environmental explanations of racial differences are inadequate.

Conversely, culture-only models say that social inequalities account for these differences in the main. Dickens & Flynn (2006) argue that it is a myth that Black-White differences in ability have remained constant over time and that US Blacks have closed the gap between themselves and US Whites in recent years. These observations lend support to the theory that Black-White test score differences cannot be purely genetic in origin and may be linked to socio-environmental factors such as the increased access to education and occupational status of Blacks in recent years.

Many modern approaches to ethnic bias investigation use methods based on Item Response Theory to identify differential item functioning (DIF) and differential test functioning (DTF). The current generation of researchers in to ethnic DIF have begun to use modern statistical techniques to identify the variables responsible for ethnic bias (e.g. Zumbo & Gelin, 2005) though, in a review of the DIF literature, Ferne & Rupp (2007) argue that little progress has been made. This could be due to an observation made by Hunter & Schmidt (2000) that many DIF studies suffer from serious methodological problems that confound their results.

The Present Research

The present research proposes a new, socio-environmental contextual model of between-group test score difference based on Ibarra’s (2001) Multicontext Model. Ibarra’s model attempted to explain gender DIF in US university aptitude tests by hypothesising that DIF was the result of conflict between the cultural context represented in an item and the cultural expectations of the test-taker. The present study’s model expands Ibarra’s model to argue that differences in responding behaviour are the product of differences between the context in which the test items were designed and the context in which the test-taker developed the skills relevant for the test. The model further argues that socio-environmental factors such as socio-economic status not only have a direct effect on cognitive ability but also are the direct antecedents of these contextual differences.

The model states that socio-environmental factors cause differences in ability. If the context that the test was designed in does not differ substantially from the context in which the test-taker developed the relevant skills for the test, differences in item responding behaviour are the result of true differences in ability. However, if the context under
which the test was designed differs from that in which the test-taker developed the necessary skills for the test, these contextual differences moderate the relationship between cognitive ability and responding behaviour. Given that the majority of tests were designed under the assumption that normal intellectual development occurs in a normal environment, but more often than not “normal” development and environment is defined in terms of what is normal for white, middle-class Western males (Arnold et al, 2005), ethnic bias in ability testing is the result of these contextual differences between test designer and taker.

Research Questions

• What demographic and socio-environmental variables are principally responsible for moderating the relationship between ability and responding behaviour?

• To what extent can contextual variables (as defined by Ibarra’s Model) explain the differences in test performance of different ethnic groups?

• Does the nature of these effects differ across tests designed to measure different facets of ability?

• Having answered the above questions, what implications do these finding have for public policy on dealing with ethnic bias in selection processes?

Method

Study 1
The first study was a broad attempt to answer the first research question at a cross-cultural level using existing secondary data. A large dataset was obtained from Pearson Talent Lens. The dataset contained item- and test-level scores on the Raven’s SPM as well as demographic and socio-environmental variables such as age, gender, ethnicity, level of education and occupation. The results of Study 1 proved interesting yet inconclusive, necessitating the use of a sophisticated sampling frame and collection of more specific demographic and socio-environmental data for Study 2.

Study 2
Approximately 200 members of the UK population of working age were recruited for this study. The sample of participants was stratified to be ethnically representative of the UK population. Participants were recruited from both the working population and the unemployed, bypassing the problem of range restriction often present in selection research.

Participants were tested on Team Focus’ Profiling for Success ability test range, a UK-based battery that assess three facets of intelligence (verbal, numerical and abstract reasoning) and on Raven’s SPM, a US-based measure of g. Additionally, participants were tested on Team Focus’ MAT, a measure of Working Memory Capacity. Prior to testing, demographic data was collected for each participant using a questionnaire. Data collected included participant age, socio-economic status (SES), familial SES, ethnic background, country of birth and development, gender, employment status (i.e. employed/unemployed), familiarity with ability tests and familiarity with IT.

Analyses
Data from both studies was analysed using mixture latent variable modelling (Muthén & Muthén, cited by Zumbo, 2007). For each test, all items were entered in to a mixture model in Mplus. Comparison groups were not defined ahead of analysis. Instead, the software used latent class and mixture modelling methods to define the groups for which there existed the greatest degree of DTF for each test.

In contrast to traditional DTF approaches, in Study 2 the MAT was used to match participants, allowing inferences to be made about detected DTF that were not confounded by differences in true ability.
For both studies, binary logistic regression was then run using the collected demographic variables as predictors of group membership as the dependent variable. This allowed for the identification of the most salient variables that predict a test-taker’s behaviour when responding to items designed to examine different facets of cognitive ability.

Discussion

Q2&Q4: Link to Conference Theme & Most Informative Aspects for Conference Delegates & Wider Audiences

Though the full data collection and analyses are still to be finished (estimated completion: November 2013), preliminary analyses indicate that ethnic group predicts differences in responding behaviour far less well than SES does. Furthermore, familial SES is a meaningful predictor of responding behaviour over and above individual SES. The implications of these findings in terms of investing for the future of communities are that they provide greater understanding of the nature of ethnic bias by examining it in terms of real (and often long-term) barriers to employment.

Academics will benefit from this new research as the model provides a framework that will guide future research. Practitioners will benefit from the research as it will provide them with practical guidelines for how ethnic bias should be addressed in selection and test development. Finally, the findings could be used to inform evidence-based policy on the fairest way to use ability tests in selection

Q3: Novel/Innovative Aspects

The present research is novel for a number of reasons. Firstly, the vast majority of research in this area has been conducted using US samples with very little data obtained from the outside the US (Woods, 2008). Secondly, research into ethnic bias tends to focus on differences between Whites and Non-Whites. The present research focuses on differences between specific ethnic groups. Additionally, most studies of ethnic bias draw on data that is quite old. The present study uses data from 2012–2013, reflecting the nature of ethnic bias on the modern workforce. Finally, the vast majority of studies in the past have used techniques and samples that are inadequate for investigating DTF properly. Studies in this area have tended to use techniques that estimate true ability to match participants. The present study’s use of the MAT to match participants accurately by their level of ability ensures that any DTF effects observed are an accurate depiction of the nature of differential response behaviour. Furthermore, the sample uses data from both working and unemployed participants, giving further insight in to the factors that cause barriers to employment for minority groups.

Q5: Materials

Hardcopies of the presentation slides will be available to attendees. Additionally, PDF copies of the slides will be made available through electronic media.

Q6: Interactivity

As well as the usual opportunity for questions at the end, approximately 15 minutes of the presentation will be dedicated to straw polls and discussion of the impact on practice of the findings.

References


**T59: Standard Paper**

**Jung and Swiss cheese**

Ken Rawling, Rawling Associates

Theme **Individual**

This presentation will ask a specific question and try to answer it with a general idea. The specific question is: Why does C G Jung's theory of psychological types - the basis of most psychological type indicators - appear to be so widely misunderstood and misconstrued? The general idea is a new psychological concept relating to perception, which will be put forward as a possible explanation for the confusion that seems to surround Jung's theory, and much else besides.

**Introduction**

This presentation will ask a specific question and try to answer it with a general idea. The specific question is: Why does C G Jung's theory of psychological types (Jung, 1923/1971) seem to be so widely misrepresented and misconstrued?

This is not an idle question. A derivative of Jung's theory is in widespread use in the UK and many other countries and it is no exaggeration to say that it affects people's lives (and livelihoods). Decisions about occupational choice, career and personal development, personal relationships, group dynamics, etc, are frequently influenced by descriptions of two pairs of contrasting thinking and decision-making styles that were not specifically identified by Jung, and are arguably much less useful and relevant than the four pairs of contrasting styles that he did identify.

**Psychological types**

Jung's theory is extremely simple, and there is plenty of evidence to support it. It can be accurately summarised in five sentences:

- Jung identified four mental processes - sensation, intuition, thinking and feeling - each of which can be either extraverted (externally focused) or introverted (internally focused)
- Sensation and intuition are two different ways of perceiving (taking in and processing information); thinking and feeling are two different ways of judging (making rational judgments and decisions).

- He called the four processes functions and the two opposite ways of focusing each of the four processes attitudes.

- He never (except in his list of definitions) described the four functions per se, only in their extraverted or introverted attitudes, e.g., extraverted sensation, introverted sensation, extraverted intuition, introverted intuition, and so on. Jung's functions always had attitude! In other words, they were always oriented towards the external world or the internal world.

- A further important element of Jung's theory was his observation that individuals tend to use and rely on one of the eight oriented functions to a much greater extent than any of the others. He called this preferred function the dominant function.

Nowadays the functions and attitudes are frequently identified by letters, as follows:

Extraverted E  Introverted I  Sensing S  Intuition N  Thinking T  Feeling F

so extraverted sensing is ES (or Se), introverted sensing is IS (or Si), extraverted intuition is EN (or Ne), and so on.

Jung's eight psychological types are simply the eight types of people who have each of the oriented functions as their dominant function:

ES  IS  EN  IN  ET  IT  EF  IF

In Jung's theory people who are clear examples of these eight types invest most of their energy in their dominant function and neglect all the other attitude+function combinations. However, Jung (and those who adopted his ideas) recognised that these types seldom occur in their pure form in real life. Most people have some interest in their three non-dominant functions, and an order of preference for them. They have a secondary function which supports and complements their dominant function, a third preference function, and a fourth preference function which is the opposite perceiving/judging function to the one that is dominant (e.g., if a person's dominant function is sensing, a perceiving function, their fourth preference will always be the other perceiving function, intuition). Nowadays the three non-dominant functions are referred to as the auxiliary, tertiary and inferior function, respectively.

It is surprising therefore that - with one known exception - none of the type indicators that claim to be based on Jung's theory appear to have followed his classification scheme. Instead of trying to identify the eight attitude+function types which he described in such detail the Gray-Wheelwright-Winer Type Indicator Test, the Myers-Briggs Type Indicator®, the Jung Type Indicator, the Jung Typology Test, the Prelude Character Analysis, etc, all sever the extraversion and introversion attitudes from the functions that they are associated with in Jung's model, and then go on to represent the function preferences as a contrast between Sensing (Sensation) and Intuition, and Thinking and Feeling. In other words, instead of trying to establish people's preferences for the attitude+function combinations that Jung described:

they identify people's preferred perceiving function and preferred judging function regardless of attitude:

S  (unspecified mixture of)
N  (unspecified mixture of)
T  (unspecified mixture of)
F  (unspecified mixture of)
These indicators all produce a 4-letter type code to indicate a person’s ‘overall’ preference for Extraversion (E) or Introversion (I), followed by their preferences for Sensing (S) or Intuition (N) and Thinking (T) or Feeling (F), and a fourth letter to indicate their preference for Judging (J) or Perceiving (P). The Judging/Perceiving letter is supposed to enable the user to identify the orientation of the four functions, but this is a very questionable way of establishing orientation, as Garden (1994) and others have pointed out. As far as the author is aware the only commercially available type indicator that is designed to indicate the oriented functions directly is the Singer Loomis Type Development Inventory. The rationale for the original version of this inventory is explained in Loomis & Singer, 1980.

What about the others?

There is a second issue with all the popular type indicators, and that is the way that they treat the three non-dominant functions. Jung implied that the three non-dominant functions are all in the opposite orientation to the dominant function in terms of the extraverted/introverted attitude. Eg if a person’s dominant function is extraverted sensing, their intuition, thinking and feeling will all be introverted. This rigid formulation (with one slight modification) is still followed today but there is no evidence to support it. The presenter’s own research - with a type indicator currently under development that attempts to measure people’s preferences for the eight oriented functions - suggests that all sixteen possible combinations occur in practice (see pie-chart below). Technical information about this questionnaire and further research results will be provided on a handout at the presentation.

Percentage of respondents who express a preference for each of the 16 possible ways in which the four functions can be oriented (N=430 UK adults)

As a brief literature survey (including websites) would quickly demonstrate, most of the debate about type characteristics focuses on the distinction between ‘disoriented’ sensing and disoriented intuition, and disoriented thinking and disoriented feeling. At meetings and social gatherings where type characteristics are the topic of conversation, trying to steer the conversation away from the S/N, T/F distinctions and towards ES/IS, EN/IN, ET/IT and EF/IF is a bit like trying to roll a ball up a hill. The conversation almost always gravitates back to S/N and T/F and the
richness of Jung's insights is lost in facile discussions about 'Sensing types' and 'Intuitives' and 'Thinking types' and 'Feeling types'.

Orientation is acknowledged by most of the type indicators that produce a 4-letter type code, albeit as a secondary consideration, and there is even a booklet in the MBTI® Introduction to Type series called 'Introduction to Type and the 8 Jungian Functions' (Hartzler et al, 2005), but the message doesn't seem to be getting through.

If we are Individual, shouldn't we be concerned about providing the individual with precise information? Jung's distinctions might be nearly 100 years old but, suitably updated, they are invaluable in helping people with their career and personal development. When 90 per cent of operational managers in a public transport undertaking are extraverted thinking types and only 7 per cent are introverted thinking types (chi-square = 71.02, p < .001, N=265) (author's report) is there really any point in calling them all 'Thinking types', and is it even ethical to do so? Consistent with Jung's theory, extraverted thinking types will tend to predominate in an occupational area that, almost by definition, requires the application of logical thinking to ongoing problems and situations in order to organise and control them; this kind of activity is anathema to most introverted thinking types, who prefer to focus their thinking internally and analyse specific problems in depth in their own minds in the search for correct/optimal solutions. Both types would benefit from feedback that acknowledges and takes account of these differences.

And if only 30 per cent of people fit the assumptions of type theory about the non-dominant functions doesn't our failure to recognise the preferences of the remaining 70 per cent amount to a form of unfair discrimination?

This session will therefore urge all those who use type theory in their work with individuals (and organisations) to:

- remember that functions always have attitude
- recognise that the orientation of the dominant function does not constrain the orientation of the other three functions in order to provide their clients with more helpful, meaningful, relevant, precise and accurate advice.

The general idea is a completely new psychological concept which will be kept secret until this presentation. The 2014 DOP Conference will therefore have the honour of introducing it for the first time! The concept concerns an aspect of perception, and will be put forward as a possible explanation for the confusion that seems to surround Jung's theory, and much else besides. This part of the presentation will definitely be of interest to occupational psychologists who are not specialists in the topic area, and people in general.

In order to gauge reaction to this new concept and put it to the test the audience will be invited to complete a short 5-minute questionnaire (NB not a type indicator) after the first half of the presentation, and the results will then be displayed and discussed for a further 10-15 minutes. And the reference to Swiss cheese? That will be explained during the presentation as well.

References and sources of information


Gray-Wheelwright-Winer 4-letter Type Indicator Test - www.winerfoundation.org

HARTZLER M T, McALPINE R W and HAAS L (2005) Introduction to Type and the 8 Jungian Functions (Mountain View CA: CPP Inc).

**T60: Workshop**

**Assessing the Impact of Group Interventions on Organisational Change.**

*Wyn Owen, Debbie Stevens-Gill, University of Wolverhampton*

**Theme** Organisation

**Abstract**

**Theoretical Stance**

The speed, magnitude and impact of organisational change is greater than ever and affects all sectors and sizes of organisations. It is increasingly important for organisations to seek out, adopt, embrace and instigate change. However it is important to note that seven out of ten change interventions fail (Burnes, 2004).

Action learning is a continuous process of learning and reflection, tackling important issues supported by colleagues with the intention of getting things done. The basic principles of Action Learning generally involves a small group of people (known as an Action Learning Set) working together for a concentrated period of time. Set members should be must be willing to consider change positively and must commit to making the set alive and vibrant (McGill and Beaty, 2001). In the words of Action Learning’s founding father Reg Revans, when undertaken to its full potential Action Learning is “Deceptively simple – Surprisingly powerful!” (Revans, 1982)

Agrisgôp is a Management Development programme for farming businesses in Wales which was first established in 2003 in order to develop management capabilities and consequently result in more viable and sustainable businesses. The primary process utilised with Agrisgôp is Action Learning as introduced by Ashridge Consulting in 2003 (Pearce and Williams, 2010). The current programme began in September 2011 and is due to run until December 2013. 72 Agrisgôp groups have been recruited since September 2011 and potentially 700 beneficiaries will have completed the programme by early 2014.

Although the benefits of being in an Agrisgôp group are anecdotally substantial and often life changing, the outcomes are extremely difficult to measure or quantify because individuals may not realise or acknowledge the attitude change, the process may develop pre-existing ideas which would not however have come to fruition without Agrisgôp and outcomes are typically softer and qualitative. Therefore, all beneficiaries on the current programme have been invited to complete a mixed measures questionnaire pre, mid and post group and a considerable volume of rich longitudinal qualitative and qualitative data has already been collected.
The quantitative questions relate to factors such as resistance to change, confidence in unfamiliar circumstances, communication skills and ability to evaluate new information. The questionnaire was developed by the submitter who drew upon the principles utilised to measure similar and related psychological constructs namely Bandura’s Self Efficacy scales (Bandura, 2006), Spector’s Locus of Control scale (Spector, 1988) and Oreg’s resistance to change scale (Oreg, 2003). Qualitative questions are also included to draw out participants’ viewpoints on expectations, developments and outcomes from the group. The use of qualitative measures in organisational psychology continues to increase as does the viewpoint that mixed measures results in a synergy that gives a greater insight and understanding than either quantitative or qualitative research can provide alone (Creswell, 2009).

Investing in the Future
In relation to the main conference theme of Investing in the Future it is considered that the absence of information relating to the true impact of programmes such as Agrisgôp and more specifically Action Learning interventions is an area that certainly needs researching so that they can be delivered and evaluated more effectively in the future. Whilst the support for Agrisgôp has been consistent over the past decade, the cost is considerable and increasingly funders require concrete evidence of the financial and social impact of any initiative they fund. A recognised tool that enabled organisations to measure and quantify the impact of such initiatives would considerably strengthen and validate proposals made to prospective funders. More importantly, the possibility of establishing the first steps towards a measure that can quantify the benefits would surely constitute an investment that would benefit organisations involved in change in the future.

Novel and Innovative aspects
The novel and innovative aspects of the ideas presented include the use of organisational psychology principles in the Action Learning arena and with groups of Welsh farmers. However, as previously stated, the potential development of a longitudinal mixed measures tool to assess the impact of coaching/facilitative type interventions is certainly considered to be innovative. It is important to note that the submitter is not claiming to have achieved this, but to be conducting research which may yield data which would start to inform the development of such a measure. It is also hoped that the proposed Action Learning format of the workshop would enable, encourage and instigate fruitful discussions and input from the participants which could inform the development and reporting of the research.

Aspects which delegates would find informative and stimulating
The novel and innovative aspects of the ideas presented as outlined above would hopefully be the main attraction of this workshop to delegates. However the particularly interactive and participative nature of the workshop should result in participants leaving the session feeling inspired and invigorated in relation to enabling positive change through innovative methods. Furthermore, this is an opportunity for students to hear from a fellow student about the practical application of organisational psychological theories in the workplace and a research project which aims to bring together those theories and Action Learning principles, with the aim of gaining an understanding of how this type of change interventions could be evaluated.

References


T61: Short Paper

Developing a framework for spotting talent within the Police Service

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Theme Organisation

Link to Conference Themes
The focus of this work was to support organisations within the policing sector with talent spotting, or more specifically assisting those in supervisory or middle management positions in identifying staff who demonstrate high potential. These managers have traditionally not seen this as a key part of their role and so by facilitating developments in this area this work is helping these organisations to apply more effective talent management processes. This would seem to fit under the conference strand of 'Organisation'.

Rationale for Submission
The work described above and outlined in more detail below was a new piece of research within the Police Service designed to deliver benefits across policing organisations. Whilst the techniques used were not new by any means; the context and the focus of the research was novel. For example, there is a strong hierarchy within police forces which officers must move through sequentially in order to progress. This scheme aims to identify officers who have the potential to operate at a much higher level within this structure which in many ways contradicts this approach. This approach also provides a different perspective from the traditional approach to the development of a competency framework by trying to define what differentiates those who have high potential over what represents the majority. The outcomes of the research may also be of benefit for other industries who are looking at similar challenges and will further the body of work in the field of talent management. It is hoped that this short paper will provide practitioners with an opportunity to consider the approach that was taken and what they might do in a similar situation, and for those working in talent management across different sectors the opportunity to consider whether similar research would potentially be of benefit to their organisations.

Outline of paper
'Reason for the work'

There is a national development scheme for officers who display leadership potential which seeks to facilitate them to reach senior levels of the Police Service. Officers who are successfully placed on the scheme will undertake a five year programme of professional and academic development.

Each of the individual 43 police forces is initially responsible for identifying officers who in their view demonstrate 'high potential'. These supported candidates then undertake a national Selection Process to select those who are eligible to join the scheme.

One of the key questions that have been fed back from representatives within each force has been 'how do we best identify those candidates with high potential'. Existing guidance that was provided to forces was based on a series of
fairly generic questions aimed at helping to recognise whether someone had 'high potential'. It was recognised that some supervisors and middle managers, in line with existing research (Bourne & Beaumont, 2010), were struggling to differentiate between those officers who were 'high potential' and those who were 'high performers'. In this research the difference was made between those who were able to exceed the expectations of them in their current role (High Performers) with those who had the motivation and ability to perform effectively at a higher level even if they are not currently outperforming peers in their current role (High Potential). Selecting the wrong candidates to put forward for such a scheme has obvious impacts in terms of affects on self esteem and confidence of the individual as well as cost implications.

'The methodology applied'

Data Gathering

Developing a framework which described what high potential looked like within the Police Service was essentially a form of job analysis. Therefore the job analysis method of Repertory Grid interviews (Kelly, 1955; Jankowicz, 2003) was used to obtain perceptions of what characteristics those officers with 'high potential' demonstrated from senior mangers within the Police Service (Chief Superintendents and Superintendents). Specifically, the officers asked to compare and contrast three officers which they considered to be 'effective performers', and three which they perceived to demonstrate 'high potential' in order to help identify constructs which differentiated the two groups in order to address the issue outlined above.

The participants were recruited from a database of 107 senior managers that have volunteered to assist in research projects. Of the 40 who volunteered 15 were selected through a stratified sampling methodology based on sex, ethnicity, and the type of force (size, rural/urban) they worked within. Nine officers were then actually interviewed as part of the research project.

Using the Repertory Grid approach, participants were asked to explain why individuals with the two groups (effective performers and those with high potential) differentiated in the ways in which they display 'high potential'. Laddering was used to elicit constructs from the behaviours identified and care was taken not to lead to interviewee in any way. Data was gathered on what the positive aspect of the construct looked like as well as the negative aspect and then the participant was asked to give the construct a title which summarised the main behaviours identified within it.

Analysis

The analysis involved taking the individual descriptors which participants had used to describe the constructs during the repertory grid interviews and working through each one individually divide them into two groups based on their degree of similarity. This was effectively a form of linguistic analysis (Tan & Hunter, 2002) which focused on classifying common constructs. Each group of constructs was given a label and this process was repeated until it was agreed that each group of descriptors represented a common theme.

Specific descriptors were selected within each new construct to help define what each of these represented and these were lifted directly from the data, meaning almost all of the wording used to describe each construct was that used in the interviews. The group labels and behavioural descriptors were used to develop the first draft of the framework which included 10 constructs.

Validation

Following the development of an initial framework work was then undertaken to validate the framework using two keys elements; the first involved seeking input from a wider range of senior managers across the Police Service, and the second involved mapping the framework against similar tools currently available.
A survey was used to gather the views of a further 45 senior managers with the Police Service. This covered how useful they felt the framework would be in supporting managers within forces in identifying those people who demonstrate high potential and how well they felt each of the ten main constructs in the framework enabled them to differentiate between people they saw as having high potential and those who they saw as effective performers. Analysis of both the quantitative and qualitative data gathered through the survey was used to review and update the framework. In particular, two constructs were seen as being less effective in this aspect by the respondents.

The framework was also mapped against a recent Hay Group report on 'potential' and the Department for Work and Pensions (DWP) 'indicators of high potential' framework which underpins their internal development programme. This highlighted areas of similarity and difference which were qualitatively evaluated alongside the specific requirements for the environment these different frameworks were designed for.

On the back of this validation work, changes were made to the framework with constructs removed or changed and different titles applied in some cases. The majority of behaviours within the ten constructs were retained but in some instances combined in different ways to ensure these reflected the meaning of the construct title.

'The framework developed'

The final framework was approved by the governing body for the national scheme. A copy of this would be provided to delegates with an opportunity to share thoughts and observations.

'Challenges experienced'

Some specific challenges that have been experienced since the framework was launched earlier in the year have surrounded user's interpretations of how the framework should be used and what it shows.

For example, some users have assumed that officers would be expected to demonstrate evidence against all of the constructs within the framework which would be unrealistic to expect. This was never the intention of the research but showed that users may have interpreted it this way. Users have also looked to use the framework as a replacement for the existing national competency framework which underpins national selection and development processes which again was not the intention of the framework. As a result further guidance was developed to support officers in using the framework correctly.

'How it has been used'

In support of the aims of undertaking this research, the framework was initially represented in the scheme selection materials at the application stage to prompt individuals, their line managers and their forces to consider if the individual meets the criteria that the framework describes. It has also been made more widely available for police forces to use in other contexts they consider appropriate (e.g. internal talent management schemes) and to act as a reminder to all managers about their responsibilities for identifying and developing talent.

A further suggestion has been that it is incorporated into some of the national leadership programmes within policing to help give supervisors and middle managers greater confidence in what they can contribute to recognising talent and reinforce their managerial responsibility for talent management. This approach has yet to be adopted along with other potential avenues for its application, such as a pre-application tool for a future external graduate selection process to assist interested applicants in determining whether they have the relevant characteristics to consider applying to join the police in this capacity.

T62 Short Paper

The Psychological Impact of Agency Worker Utilisation

Simon Toms, University of Gloucestershire, David Biggs, University of Gloucestershire

Theme Research
Introduction
In early 2009, reports emerged over the loss of employment for a substantial number of workers from BMW’s Mini Cowley plant in Oxford. Eight hundred and fifty agency workers were told an hour before the end of their shift that they had been laid off with immediate effect. The lack of protection inherent in the employment arrangements of these staff was cited as a key contributor to this occurrence, yet opponents cite job insecurity as just one of several problems faced by those employed as agency workers. For some, temporary agency work provides individuals with fast access to flexible and wide-ranging types of employment that demands fewer obligations and reduced responsibility to the employer. For critics, it represents an inferior and poorly-protected form of work that encompasses low pay (Druker & Stanworth, 2004), poor treatment (Hall, 2006), and little chance for development (Wiens-Tuers & Hill, 2002). The triangular nature of the employment contract is a key characteristic of this worker group, and is illustrated in figure 1 below.

As a result of their triangular contract, the employment status of agency workers can be rather complex and often not clear (McMullen, 2008; Storrie, 2002), as it can become uncertain whether the individual is a member of the third party employer or the employment agency that supplied them (Forde & Slater, 2005; Williams, 2004). In UK employment law, there is an important distinction between ‘employees’ and ‘workers’, and the classification of many agency staff as ‘workers’ means they are excluded from the entitlement to important employment rights, like unfair dismissal and redundancy protection, which are only available to ‘employees’ (TUC, 2007). Recent legislative change has attempted to address this disparity. The Agency Workers Directive (or Agency Workers Regulations) came into force as UK employment law in October 2011, and seeks to provide these workers with equal treatment in relation to the pay and employment rights of comparable permanent workers after completion of a twelve-week qualifying period in a given assignment. The number of potentially affected individuals is significant. The Labour Force Survey (LFS) divides workers into permanent and temporary, and agency workers represent a subgroup of the latter. The LFS indicates that 0.94% of the UK’s total workforce (LFS, 2009) can be placed in this category, although the relatively short-term nature of agency work ensures that estimates are often varied. Despite their unique contractual arrangement, their position on the periphery of the workforce means that the issues facing agency workers are often shared by temporary workers in general.
The roles of employees on the periphery of the workforce are often dependent upon levels of demand and economic fluctuation, and the global financial difficulties over recent years have only increased the insecurity of these positions. Research in the Netherlands found that: “In economic downturns, people with a temporary contract can be laid off without having to be paid premiums to laid off personnel and without the risk of strikes or other types of protests.” (de Gilder, 2003; p. 589). De Gilder (2003) went on to claim that: “In times of economic recovery, organisations that are uncertain about the strength of the recovery may hesitate to employ people on a permanent basis, whereas others can adapt to the situation by hiring temporary employees until it is clear that expansion is permanent.” (de Gilder, 2003; p. 589). Research by Felstead and Gallie (2004) argued that the continued growth of non-standard working arrangements throughout the developed world suggested that organisations may be segmenting their workforces along these lines in order to use non-standard workers as a buffer to protect the privileges enjoyed by those in the 'core' of the organisation. Such employment practices may well protect organisations in times of economic uncertainty, but this protection comes at the expense of the job security afforded to temporary staff, a situation that other research has also highlighted (e.g. de Gilder, 2003; Golden & Appelbaum, 1992).

Motive
When faced with uncertain economic conditions, temporary employment agencies can provide an avenue of staffing support with limited obligation. Engaging these services can help companies to increase their flexibility and protect their permanent staff, but the benefits of flexibility can also extend to the individual agency workers. Research into the motives possessed by individuals employed as agency workers has cited the desire for flexible working arrangements as a strong attraction. Druker and Stanworth's (2004) sample of forty-two agency workers presented a variety of different reasons for engaging the services of a temporary employment agency. Among the sample were first-time jobbers who enjoyed the flexibility, people who were planning, engaged in, or who had recently returned from long-haul travel, and people who were seeking, or had just been offered, permanent employment. The sample also contained participants who had changed their employment situation due to impending marriage, citing a desire for the extra security that an extra source of income would provide. Several other individuals were experiencing career transitions, and viewed 'temping' as a method of repositioning themselves in the labour market, whilst others had been made redundant or had taken early retirement. Despite voicing a preference for permanent employment, the redundancy sufferers in the sample also spoke well of the opportunities offered by agency work. Several other participants, including students and recent graduates waiting to see what the market has to offer, voluntarily rejected the pursuit of permanent employment, instead voicing a preference for the opportunity agency employment provided.

Psychological Contract
When applied to a standard employment relationship, the theory of the psychological contract concerns the subjective beliefs that an employee associates with the exchange agreement they make with their employer. Rousseau (2001) highlighted one of the major features of the concept as the individual's belief that an agreement is mutual, as a common understanding exists that binds the parties involved to a particular course of action. Transferring findings from permanent worker samples proves problematic, as reductions in job security are less likely to contradict the psychological contracts dominant among individuals employed on a temporary basis (De Cuyper & De Witte, 2006; Maunu, Kinnunen, Mäkikangas, & Näätä, 2005). However, further research has addressed this concern by classifying types of psychological contract into relational and transactional, in order to better represent the expectations held by individuals towards their employers.

Resulting research into temporary worker samples has claimed that the psychological contracts of permanent staff may include more relational entitlements when compared with the psychological contracts of temporary staff (De Cuyper & De Witte, 2006; Millward & Brewerton, 1999). De Cuyper and De Witte (2006) cite shorter tenures as a key factor for the prominence of transactional tendencies. Whilst Millward and Brewerton (1999) claimed that these tendencies did not prohibit relational aspirations forming within the temporary staff. Research by Guest (2004) concluded that
temporary workers displayed a preference for easy-to-monitor psychological contracts that were narrower and more transactional than relational contracts.

When focussing upon agency workers, the triangular nature of the contract has been a source of complication. After applying the concept of the psychological contract to the three parties involved in the employment of agency workers, Claes (2005) concluded that temporary employment agency and the third party employer perceived their promises made and kept to be more favourable than the individual agency workers did. Comparisons can be drawn with the findings of Druker and Stanworth (2004), as they also suggested the existence of a discrepancy between the high expectations of third party employers and the limited rewards they offer individual agency workers.

Job Satisfaction

After completing a study into a diverse group of Australian agency workers, Hall (2006) concluded that participants reported lower levels of satisfaction with skill utilisation, pay, autonomy, empowerment, the work itself, and the job overall. In contrast with industry claims, Hall (2006) also found that the surveyed agency workers were no more satisfied than their permanent counterparts in regard to the degree of flexibility they possessed with their working hours, and their balance of work and non-work commitments. Hall (2006) concluded that the workers studied did, on average, exhibit the characteristics of marginal, peripheral workers. Biggs (2003) also discovered that agency workers had significantly lower levels of job satisfaction when compared with permanent staff when their influence was taken into account.

Several studies have linked the difficulties experienced by agency workers with feelings of dissatisfaction, but understanding whether these individuals desire their non-permanent status has proven significant. After distinguishing between voluntary and involuntary temporary help employees, Krausz et al (1995) found that the higher levels of job satisfaction reported by the former group stemmed from intrinsic aspects, such as flexibility of work arrangements, social variety, and growth opportunities. Consequently, Krausz et al (1995) conclude that an individual’s control over whether they worked in a non-standard employment setting greatly affected their attitude to the job. Research by Feather and Rauter (2004) found no significant differences in job satisfaction between permanent and ‘involuntary’ contingency teachers, but argued that these perceptions may have been positively influenced due to possessing positions in their desired career path.

Job Security

When assessing the levels of job security perceived by agency workers, the lack of contractual protection outlined above could be identified as a strong negative influence. Findings from qualitative interviews performed by Druker and Stanworth (2004) included a number of reported experiences of participants being brutally axed by the third party employer. Forde and Slater (2006) reported similar findings during their study into UK agency employment, as their agency worker participants exhibited higher levels of anxiety about their positions. Agency workers in Hall’s (2006) sample reported significantly higher levels of job insecurity in comparison to their permanent worker counterparts. For such workers, the flow of future assignments can also be a source of insecurity. Rogers (2000) found that many US agency workers interviewed demonstrated feelings of insecurity about the unpredictable flow of temporary assignments.

Despite these findings, difficulties arise when attempting to assess the security of individuals engaged in temporary employment. Anticipation of unemployment, created by the threat of job loss, is the core element of an objective conceptualisation in permanent worker research, yet temporary employment is typically limited in duration by its very definition, and could be viewed as an indicator of job insecurity as a result (De Witte & Näswall, 2003). Differences between permanent and non-permanent staff may also extend to the implications of insecurity. Studies from several researchers concluded that high job insecurity was associated with raised job induced tension for permanent workers, but not temporary participants (Bernhard-Oettel, Sverke, & De Witte, 2005; De Cuyper & De Witte, 2006; De Witte and
De Cuyper and De Witte (2007) perceived findings like these in the context of the psychological contract, arguing that high levels of job insecurity were considered a breach of the relational elements that were more likely to be inherent in the understanding possessed by permanent workers. Such research highlights the influence that motives, expectations, and intentions can have upon how agency workers view their employment arrangements.

**Organisational Commitment**

Organisational commitment is one of the most studied variables in both the practitioner and academic literature (Gallagher & Parks, 2001), yet translating findings into the context of temporary employment can prove problematic. Varying individual motives, shorter tenures, the ‘duel’ employer situation, and the increased emphasis that agency workers may place upon transactional rewards in the psychological contract may influence the validity that traditional measures of commitment possess. A study by Von Hippel, Mangum, Greenberger, Heneman, and Skoglind (1997) reported that individuals hoping to gain a permanent job displayed greater commitment towards the third party employer, yet no systematic change was demonstrated in their commitment to the temporary employment agency. Research into the motives of agency staff by Connelly et al (2007) also accounted for the dual employer relationship, indicating suggesting that individuals who pursued temporary employment voluntarily were more likely to formulate feelings of affective commitment towards their agency.

Other research has drawn comparisons between the levels of commitment exhibited by permanent and non-permanent staff. One such study was completed by De Gilder (2003), who assessed the feelings of commitment and trust that contingent and core permanent Dutch hotel workers exhibited towards their employing organisation. Findings indicated that levels of commitment and trust were significantly lower in the contingent worker sample. Biggs and Swailes’ (2006) study into UK-based agency workers reported similar findings, as participants exhibited significantly lower levels of organisational commitment in comparison to permanent workers. Research by Forde and Slater (2006) concluded that their sample of British agency workers possessed little loyalty to, or pride in, the company they were working for, and were less likely to report a strong desire to stay with that organisation. Like other psychological variables, research into the organisational commitment of agency workers has forwarded contrasting findings, with one possible explanation being the future intentions of the individual. After reporting no significant difference between the levels of organisational commitment reported by the agency and permanent worker sample, McClurg (1999) argued that many of the agency workers were using the temporary help service experience to achieve permanent employment.

**Research Design**

**Sample**

Initial categorisation of participants placed individuals into two groups. The first of these groups consisted of agency workers and totalled twelve, and the second group represented other interested parties and encompassed thirteen participants from temporary employment agencies and third party employers. In order to obtain participants for both major groups, I relied upon a mixture of two main sampling techniques, which Clark-Carter (2004) categorised as ‘purposive’ and ‘snowball’ sampling. Purposive sampling occurs when the researcher wishes to study a clearly defined sample, and was utilised during my efforts to secure participants who represented several different perspectives within the agency employment industry, including agency workers, recruitment consultants, and representatives of the third party employers. Snowball sampling was used far less frequently, and occurred when initial contacts identified further participants who would be interested in taking part in my research. By interviewing individuals possessing varying perspectives of the agency employment industry, I felt I gained a more rounded view on the implications of agency worker utilisation in the present-day UK labour market.

**Design**

The current study incorporates four main stages, which include preliminary research, ethnography, main interviews, and a follow-up stage. Figure 2 below presents each stage of the research, and is followed by summaries of each.
Preliminary Research Stage

The preliminary research stage consisted of a study which explored the psychological effects of agency working and the potential impact that a company’s utilisation of agency workers may have upon its permanent workforce. Ninety-six participants were placed into three categories: agency workers, permanent workers that worked with agency workers, and permanent workers that did not work with agency workers. A quantitative research method was used to assess a number of psychological variables. Findings indicated that agency workers and permanent workers who worked with them recorded lower levels of job security when compared with the responses of the third sample group, although reports of organisational commitment did not differ significantly between the three participant sample groups.

Ethnographic Stage

Whilst the majority of data would be collected during the main interview stage, first-hand experience was also identified as a valuable insight into the agency employment industry. In order to obtain this data, I decided to seek employment as an agency worker, incorporating resulting experiences into the study. Over the course of the thesis, I experienced employment in several assignments that varied considerably in their content, shift patterns, location, and working practices. During these assignments, I kept in-depth written notes in diary form that described perceptions, opinions, and incidents encountered.

Main Interviews

Before beginning the interview process with participants, specific question scripts were created for each of the sample groups. The composition of the question script was informed by survey-based questions from five previous psychological studies (i.e. Biggs & Swailes, 2006; Cook & Wall, 1980; Eisenberger Huntington, Hutchinson, & Sowa, 1986; Hackman & Oldham, 1975; Oldham, Kulik, Stepina, & Ambrose, 1986). Further interview prompts were also used to collect data on participants’ basic demographic information, motivation over their employment, and reaction to recent legislative development. Interview length was typically between 30-60 minutes, and responses were recorded, transcribed, thematically coded, and analysed using Interpretative Phenomenological Analysis.

Follow-up Interviews

Follow-up interviews with agency workers from the sample took place three to six months later, enabling the participant to conclude some of the developments that were ongoing during the initial discussion. The short-term nature of assignments ensured that beneficial information was able to be gathered during this stage. These interviews provided a longitudinal dimension to a predominantly cross-sectional study.

Findings
Motive
Assessing the psychological consequences of agency working is a key objective of the research, yet the findings of the current study suggest that the motives which lead individuals and organisations to seek the services of temporary employment agencies can play a significant role in the resulting perceptions. During the current study’s investigations, the sheer variety of agency worker motives was a clear and recurring theme throughout. This variety has been reported in previous literature (e.g. CIETT, 2000; Druker & Stanworth, 2004), and understanding the motives of agency workers has become a challenging and complex process as a result. An example of the variety can be seen in an excerpt from my ethnographic field notes:

In the relatively small pool of people I met, underlying reasons for taking an agency role varied greatly. In one assignment alone, I encountered individuals possessing many wide-ranging motives. One had a long-term and well paid career as an airline pilot lined up in a matter of weeks, whilst another had left their employment after thirty-six years, with the desire to experience a variety of employment situations before resettling into another permanent role. Two students were there just to earn extra money to allow them to travel – one to travel the world before returning home to Australia, and the other looking to move to America in order to marry her boyfriend. Several individuals had recently migrated, and possessed varying higher education degrees, despite the relative simplicity of the role. One agency worker needed short-term work whilst recuperating from an injury that occurred during army officer training at Sandhurst, whilst another had simply failed to locate a suitable permanent role, and perceived agency employment as her best chance of achieving a permanent transition (Researcher’s diary).

Despite experiencing an identical role provided by the same employment agency, the assortment of motives which led this small number of agency workers to the same assignment varied greatly. This variation demonstrates that temporary employment agencies can provide opportunities to individuals experiencing a range of circumstances, and is especially suited to short-term gaps in unemployment. James possessed a similar point of view during his agency role:

The agency work was a stopgap whilst I looked for something more permanent. This came up and it was going to pay me money straight away, so it was a stopgap before I could get something more permanent and do better.

Like many participants, James was keen to stress the immediate benefits of the flexible working arrangements supplied by the agency, most notably the quick access to funds. The significance that participants placed upon obtaining fast access to paid work also coincides with research into the psychological contract, as emphasis upon transactional benefits like monetary exchange and reward is more likely to occur in short-term contracts (De Cuyper & De Witte, 2006). The perception that agency work represented an inferior form of employment to permanent work was also voiced by James, and this view was shared by the vast majority of participants. When comparing his agency role with permanent employment, Baz emphasised job security as his greatest concern:

I like the job I’m doing, but like I said, there’s no security there. They could say that, when it came to the end of January, that could have been it, whereas if you were in an equivalent but same job, the security is there.

For agency workers like Baz, the uncertainty that exists during and between assignments represents a form of employment limbo that was a constant source of anxiety. Permanent roles were frequently associated with reliability and peace of mind, and regarded as far more preferable to agency work when long-term and unbroken employment was desired. The findings above demonstrate the complexity of individual motives, and highlight the importance of understanding them as precursors to the ensuing employment, and the psychological perceptions that result.

Job Satisfaction
Reported levels of job satisfaction varied throughout the sample of agency workers. This degree of variation became the subject for Nick P, who was asked to assess the levels of agency worker satisfaction that he observed as a recruitment consultant:

It’s about sixty-forty. Sixty are really satisfied, [but] because they are not their ideal roles they’re not one hundred percent satisfied... If you probably really got down to the nitty gritty with them, it would probably be, yes they are satisfied, but they feel they could always be something better. The pay could be better, the management could be better, there could be more incentives.

By drawing a comparison with the permanent labour force, Nick suggested that the varying levels of satisfaction agency workers experienced were similar to those of permanent workers. However, Nick also argued that agency employment often represented a second choice to permanent work, and that this was reflected in the varying levels of satisfaction that he witnessed in his role. The motives and future employment prospects possessed by individuals prior to the commencement of their assignment can prove significant to the levels of satisfaction they attribute to their roles. When asked whether he was happy in his agency working role, Dan N replied:

I actually am happy, even though it is a bit repetitive we can listen to music, we can pace ourselves, it’s not too rigidly enforced. I wouldn’t want to do it for a living full time.

Dan’s agency assignment was scheduled to last for approximately two months, and despite the mundane nature of the tasks, the presence of an end date limited the effect that the assignment’s negative elements had upon Dan’s job satisfaction. If Dan had possessed an equivalent permanent role, his feelings of job satisfaction may have been far more negative, as he would have found himself in an undesirable role over a long-term period of time.

Shorter tenures may limit the impact of poor satisfaction and could prove ideal for individuals keen to gain job experience in a variety of roles, but findings also indicated several negative outcomes. Participants described instances in which agency workers were perceived by permanent staff to be uncommitted to the organisation. During our interview, Barry reported the initial permanent worker reaction to his recruitment, and described how this changed over time:

To start with, it wasn’t great, because a lot of the full-time people who were permanent didn’t really want to get to know you, because they thought you were a temp, so you wouldn’t be there that long so they weren’t going to bother... But now I’ve got to know everyone a bit better, I don’t mind the job ... I think they do consider me a member of the team even though I’m only a temp. I mean some people didn’t even realise I was a temp until recently.

The surprise exhibited by permanent members of Barry’s organisation upon finding out he was an agency worker resulted from the reduced tenure they had frequently witnessed during their company’s utilisation of agency staff. The greater integration into the workforce that accompanied Barry’s increased tenure was central in the formulation of satisfaction he felt in the job. However, this also demonstrates the difficulty that many agency workers can initially encounter in their assignments. Low pay and reduced freedom also characterised many of the employment experiences of the sample’s agency workers, whilst poor treatment was also an issue. Jamie reported similar problems after comparing two previous agency working assignments:

When I look at it now, I really wasn’t treated well. The pay was absolutely horrendous. I think you learn from that, so it definitely helped me choose the right agency to go to later on when I did progress onto the airport, and then into full-time employment. It’s definitely more steady, and you know you’re going to be there one day and you could be gone the next.
For Jamie, the uncertainty inherent in his agency roles significantly damaged his job satisfaction that was only addressed when he transitioned to permanent employment. The belief that agency work represented a less desirable long-term career path was frequently voiced by participants, and has been highlighted in previous research (e.g. Hesselink & Vuuren, 1999; Rogers, 2000). A lack of continuity between assignments was a source of anxiety, and ensured that a preference was typically voiced for the security resulting from long-term assignments and permanent employment. As a permanent worker, Sam understood the fears that his agency worker colleagues were experiencing at the time of our interview:

They’re not actually sure if they’re being taken on or not... I guess they’re unsure, so that makes them a bit worried about what they’re going to do if they don’t get a contract. I suppose that’s down to their satisfaction. If they know they’ve got a job in the next couple of weeks then they’ll be happier.

Sam had begun his time at the organisation as an agency worker, and was empathic towards the uncertain futures of his agency worker colleagues. Agency worker utilisation regularly represented the initial stages of the company’s permanent recruitment process, yet the financial difficulties occurring at the time of the interview reduced the likelihood of these transitions taking place. Consequently, the agency workers were kept in a form of employment limbo, and Sam identified this as an antecedent to negative feelings of job satisfaction. In his role as a recruitment consultant, Jason described the importance of guaranteed employment in relation to the happiness of individuals:

Agency workers are satisfied if it’s ongoing work... I can’t guarantee them work. I phone them up one day [and say] “there’s work for one day this week, nothing for the next couple of weeks”. They always want ongoing work... When I can’t guarantee them work, they’re never going to be always happy, so it’s fifty-fifty to be honest.

The difficulty Jason experienced in placing agency workers into long-term and on-going assignments resulted in a great deal of variation in job satisfaction. Longer-term assignments may be relatively unstable when compared with permanent contracts, yet Jason reported the difficulty in securing these very assignments in the first place. The sporadic provision of short-term work translates into a varied experience of employment with an unpredictable wage, and will be viewed by many agency workers as highly strenuous, uncertain, and unrewarding.

Job Security

As highlighted in the introduction, the levels of security inherent within agency worker contracts are low when compared to permanent contracts. Penalties for immediately and prematurely ending an assignment are typically absent, making them an attractive prospect to employers attempting to remain flexible. During an assignment, Rejani’s employer encountered a sudden and unexpected drop in available work, which led them to send her home for the day without pay. Interviewed soon afterwards, Rejani argued that such treatment should not occur:

When they say temporary work, they should be sure that’s it’s for like a week or two weeks. It should not be that they could terminate it at any time. Even if it’s a temporary job it should have a timeframe saying that “we will hire you for one month and we will pay you for one month.”

The measures Rejani described above are typically absent from an agency worker’s contract of employment. Increasing organisational flexibility is an important motive behind the utilisation of agency workers. By increasing agency worker security, the temporary employment agency would forfeit the client company’s flexibility, risking the loss of their custom. Yomi described how his role as an agency worker has had wider ramifications upon his life:

Now, with the flexibility comes the lack of compensation... It’s a little bit disappointing. It’s just that, with that comes the inability to plan, medium to long-term. Because of the uncertainty that comes with it.
Yomi voiced frustration over the difficulty stemming from his role as an agency worker. The provision of flexible working opportunities for individuals is frequently voiced as a positive characteristic of agency working by the industry, yet Yomi’s experiences suggest that these levels of flexibility are not always present. An inability to plan is a recurring experience for agency workers who remain uncertain about their future, as a desire to remain available for further employment is a key concern for many agency workers. Henson (1996) reported similar examples, as participants felt it necessary to avoid situations that would make them temporarily unavailable to their agencies and risk sacrificing their access to future assignments. In the excerpt above, Yomi argued that a perceived trade-off between flexibility and job security took place. As Yomi’s manager, Cynthia was asked whether she thought this trade was fair:

No, it’s probably not a fair trade, but in some cases it’s the only choice they have... Some people come in with the thought that “I’m not important, so I like that fact that I can walk out of here” and, that’s happened, quite a bit. It depends upon the calibre of the person being sent in your direction.

Shorter tenures and their limited experience of the organisation will often serve to restrict the number of responsibilities that agency workers possess, and may prevent the individual from embedding into the company. The agency working contract incorporates little obligation from the individual, enabling immediate withdrawal from the assignment without penalty. In her experience, Cynthia suggested that this degree of flexibility does exist, but is outweighed by the reduction in job security. In his role as a recruitment consultant, Jason argued the information provided to the individual agency worker makes it clear that their position remains precarious throughout their assignments:

You live and die by the sword. You know you are going to an agency and you know you are going to be a temp, so you shouldn’t think that you’ve got guaranteed security in your job, because at the end of the day you are just a temp. As soon as we go through the rules and regulations of what you’re signing up to, you know that this contract could finish any day, rather than “oh at least I’ve got a guaranteed six month contract”. You haven’t.

For Jason, agency work undoubtedly represented a precarious and uncertain employment experience for the individual, and making this clear to his agency workers from the outset was important. Whilst agencies may find it difficult to control some of the less desirable characteristics of the employment opportunities they offer, they do possess a responsibility for fully informing the worker of this situation. When the agency workers in the sample were fully informed by their agencies on the risks associated with their assignment, the negative aspects of their ensuing experiences were often reported in a far more favourable manner. This may contrast with permanent workers, for whom a loss of employment will typically represent a highly problematic development in their careers. During his agency working assignment, Ivan understood the greater risk inherent within his role:

I’d be the first to go, obviously because I don’t have any employment rights. I would say in general that agency workers will only be in a role for the short term so they’d obviously be the first to go if the work subsides. That said, the agency might find you more work, and in a permanent role you might be made redundant in any case.

As with other agency workers of the sample, Ivan expected to be the first recipient of redundancy if his third party employer encountered financial difficulties. He based this belief upon his rights as an employee, which he considered to be significantly lower than his permanent counterparts. However, the redundancy he had experienced as a permanent worker had served to increase his awareness of the threat. He felt his temporary employment agency would provide an alternative assignment as soon as possible, and that this represented a support network that permanent counterparts suffering the same fate would lack. For several of the study’s agency worker participants, the presence of their agency instilled a sense of employment security that would be lacking from a more traditional employee/employer arrangement.

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Organisational Commitment

The vast majority of research into organisational commitment has focussed upon participants who have been employed by a single company. As figure one illustrates, agency workers interact with two sets of organisation: the third party employer (TPE), and the temporary employment agency (TEA). In order to better understand the perceptions of organisational commitment experienced, findings will be divided in order to account for this arrangement.

Third Party Employer

Building relationships with co-workers and management staff will often instil feelings of commitment towards the organisation within the individual, but participants frequently cited minimal tenures, sporadic assignment distributions, and irregular shift patterns as barriers to integrating with pre-existing staff. These difficulties were only exacerbated when individuals were employed on a part-time basis to plug gaps, or if the assignments placed these workers into larger companies, thereby further reducing the familiarity that individuals have with the staff or work environment. The familiarity inherent in longer term and consistent assignments may also prove beneficial, as Dan N reported when asked whether he felt committed towards his organisation:

I do here, yeah. I've been here for over a year with [TPE] off and on, so you do you feel a commitment to do the job properly. You sort of get to know a few people in the organisation too.

As the experience of Dan demonstrates, improved integration and increased tenure can also prove highly beneficial for agency workers. The existence of these aspects can help to form increased commitment that the agency workers of the sample experience towards their employer and its workers. However, agency worker assignments are far more likely to exclude these benefits, and a detrimental impact on commitment may result. The opinion that agency workers lacked commitment towards the organisation was expressed frequently by the permanent workers of the sample. This belief soon became apparent during one of my agency assignments, which contained repetitive and physically demanding tasks:

At the end of my shift, the amount of remaining work led the manager to ask workers to stay late and help. The agency staff working with me left at the allotted time despite this request, as they were not obligated to work beyond the hours agreed with the agency. I decided to stay a little longer to help finish the job I had begun, causing one of the departing agency workers to remark that I was ‘mad’. My decision was met with considerable surprise and confusion from the permanent members of staff, who by then knew I was agency worker (Researcher’s diary).

The reaction towards my behaviour suggested that the permanent workers were surprised by my decision to stay on, as this differed from the typical actions of agency staff. Unlike my permanent colleagues, the tenure of my agency contract prevented me from claiming overtime on the extra work. I wanted to finish the job I had started, but the permanent workers were clearly unaccustomed to witnessing this level of commitment in their agency counterparts. My actions may well have contradicted a stereotype that Henson (1996) also referred to, when claiming that permanent staff considered their agency colleagues as less committed, less qualified, and less principled workers. A negative perception of agency staff was also reported by other permanent participants who had worked alongside these workers. When asked whether he felt the agency staff that his company utilised demonstrated similar levels of commitment when compared with permanent staff like him, Ben replied:

I’m not sure to be honest. I guess not as much with agency staff. Easy come easy go.

The doubt voiced by Ben represents the permanent worker perspective resulting from infrequent and sporadic agency worker utilisation in the silver service industry. In his role with his company, Ben had witnessed large numbers of agency staff enter their company for short periods of time, often to set up, run, or disassemble the large service events held by the company. The workforce of agency workers frequently changed in personnel, and these staff typically worked
shorter shifts that rarely merged with those of Ben and his permanent co-workers. The working opportunities provided by the third party employer may prevent the development of the agency worker’s organisational commitment, yet the individual’s intentions may also prove influential. When asked what motivated his pursuit of agency employment, Mike replied:

At the time I would have looked for whatever better jobs were going... companies offering better salary or better hourly wage... I was really just chasing money. I didn’t really care what job I was doing, I just needed to earn a day’s worth of work almost every day so I could pay my way. So, yeah, money was the only real incentive for me.

In contrast to many permanent workers, the desire to establish a strong relationship with the employer was not considered by Mike to be a priority. By highlighting money as the only real incentive for his actions, Mike moved from one assignment to the next, rarely staying for more than a few days. The absence of responsibilities resulting from shorter tenures led Mike to report increased freedom in his agency status, yet these feelings were often offset by reduced levels of commitment towards his client companies.

**Temporary Employment Agency**

For many of the participants, commitment towards the employment agency often varied. A key characteristic which can negatively influence perceptions of commitment was highlighted during a discussion with Dan G during his time as an agency worker:

I had barely any interaction with the agency, other than sending hours to them at the end of the week.

The lack of contact Dan G described above was typical of many of the relationships concerning agencies and their agency workers. Once placed into an assignment, communication between the individual and their agency was minimal. During the interviews, proximity and regular contact often emerged as integral to the formulation of commitment. Tom made this point when asked which organisation he felt more committed to:

I’d say more to [TPE] because they’re the people I’m doing the task for. I do see [TEA] as a middle-man still... In terms of doing the job, total commitment to [TPE]. Much more so than to [TEA].

For Tom, the temporary employment agency represented a middle-man that had profited from finding him work, and this perception prevented him from formulating any strong feelings of commitment towards them. Agencies are responsible for placing their workers into assignments, yet once this has taken place, any further contact is often limited to the individual’s submission of timesheets, and little else. This is a recurring characteristic in agency employment that can often undermine the relationship between the agency and the worker.

The possession of low expectations may be common for agency workers, but when experiencing actions perceived to be above and beyond these expectations, individuals can respond in a grateful manner. It is fairly common for agency workers to experience different employment agencies in their search for work, and this can often lead to a variety of experiences. Individuals may well face poor treatment from some agencies, yet these difficult encounters may lead to increased feelings of commitment from agency workers when they interact with more caring and approachable agencies. A sense of loyalty towards the agency became apparent when Robert was asked whether an increased offer in pay from another temporary employment agency would cause him to move:

Personally, I would probably be loyal to the people that have seen me right. Basically, I would probably say I’d stay, disregarding that if it’s for double or five times. But yeah I would be loyal I think.

The concept of loyalty occurred throughout the interviews with participants, yet for many agency workers, the decision to sign up with more than one agency occurred frequently.
Conclusions
The review of previous literature established that research typically focussed upon the experiences of individual agency workers, and the current research attempted to add to this literature by incorporating representatives of third party employers and recruitment consultants who frequently interacted with agency workers on a daily basis. Encompassing multiple perspectives in this manner is perhaps the most prominent way that the current research has increased understanding of the agency employment industry, and this has created a context in which to consider the impact that agency working can have upon individuals. The inclusion of multiple perspectives was facilitated by the qualitative approach inherent in the study’s research method, and this was noted as a key strength. Studies into the motives individuals possess when approaching agency work have frequently displayed this variety, and the current thesis was no exception. These findings suggest that the incentives temporary employment agencies can offer allow them to cater to individuals from a wide range of circumstances. The qualitative approaches applied when gathering my findings were better suited to account for these variations, and ultimately, to improve the understanding in the area.

Findings strongly supported the claim that the pre-assignment motives possessed by individuals had a significant impact upon how they view their resulting experiences, most notably in relation to job satisfaction and job security. Whilst the vast majority of participants viewed permanent roles as superior, individuals who desired and obtained paid work that was short-term, temporary, and non-committal often viewed reductions in employment security and job satisfaction as a fair trade. Feelings of dissatisfaction and insecurity were frequently voiced by participants, but the belief that agency working represented a short-term and flexible form of employment typically limited the negative consequences of these variables. In contrast, individuals pursuing longer tenures, training opportunities, and permanent transitions gained little from the flexibility inherent in agency working, instead finding this form of employment frustrating, problematic, and undesirable. Findings also indicated the significant influence of tenure. Agency workers employed in longer-term assignments reported greater integration into the organisation, resulting in increased commitment towards the third party employer, and improved relationships with permanent staff.

Ensuring that the motives which lead individuals into agency work matched the expectations of the role was regarded as central to the jobs of recruitment consultants, yet agency workers often voiced disappointment over their assignments. By providing individuals with clear and transparent presentation of the assignment, recruitment consultants will be better placed to fulfil the motives of the individual, resulting in a happier and better-informed temporary workforce.

References


T63: Short Paper

Work-life balance, recovery strategies, and well-being in fire service personnel
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Theme Individual

It has been argued that fire service personnel, especially operational staff, are particularly likely to experience work-life conflict due to characteristics of the job such as long work hours, rotating shifts, and traumatic incidents, and this may affect their well-being (Brough, 2005). Nonetheless, little is known about work-life balance and its consequences in this sector.

Work-life balance research is often based on role conflict theory (Greenhaus & Beutell, 1985), which suggests that incompatibilities arising from engaging in multiple roles (e.g. work and family) make it difficult to carry out roles effectively. Research findings indicate, however, that conflict is not inevitable and the occupancy of multiple roles can be enriching with positive implications for the employee and their work and non-work roles (Carlson, Kacmar, Holliday Wayne & Grzywacz, 2006). As yet, relatively little research has focused on both enhancement and conflict when investigating the work-non work interface.

The impact of work-life conflict and enrichment has been investigated bi-directionally (i.e. from work to home and from home to work). Bi-directional conflict has been related to a range of negative outcomes such as psychological strain (Kinnunen, Feldt, Geurts, & Pulkkinen, 2006), poor sleep quality (Williams, Franche, Ibrahim, Mustard, & Layton, 2006), and reduced healthy eating and exercise (Allen & Armstrong, 2006). Conversely, bi-directional enrichment has been linked to positive outcomes such as psychological well-being (Carlson et al., 2006). It could be argued, however, that the extent and outcomes of work-life conflict and enrichment may depend on the extent to which opportunities for recovery are available and people are able to switch-off and unwind from work.

The effort-recovery model (Meijman & Mulder, 1998) suggests that effort expended at work may lead to strain outcomes, and insufficient opportunities for recovery (i.e. unwinding after effort expenditure) may lead to chronic health problems (Kivimaki, Leino-Arjas, Kaila-Kangas, Luukkonen, Vahtera, et al. 2006). Thus, when work-life conflict is experienced, sufficient recovery opportunities may buffer the negative affects. For example, Moreno-Jimenez, Mayo, Sanz-Vergel, Geurts, Rodriguez-Munoz & Garrosa (2009) found that the recovery strategy of detachment moderated the relationship between work-family conflict and psychological strain, and between family-work conflict and life satisfaction. Affective rumination (i.e. frequent, automatic perseverative thinking) about work issues may be considered as a proxy indicator of insufficient recovery (Cropley & Millward Purvis, 2003). Affective rumination and detachment have been found to have different effects. A tendency to ruminate has been linked to increased consumption of unhealthy foods whereas detachment has been associated with more healthy eating (Cropley, Michalianou, Pravettoni & Millward, 2012). Rumination has also been linked to reduced sleep quality (Cropley, Dijk & Stanley, 2006). Since sleep is an important recovery mechanism, the effects of insufficient recovery will be further compounded if rumination impairs sleep quality. This may be a particular problem for fire service personnel due to the characteristics of the job that could impair detachment and encourage affective rumination and sleeping difficulties. The need to recover is likely to be particularly important for operational fire service staff as research has highlighted greater fatigue compared to office workers (Bos, Mol, Visser & Frings-Dresen, 2004) and sleeping disturbances (Lusa, Hakkanan, Luukkanen, & Viikari-Juntura, 2002).

This study examined the impact of bi-directional work-life conflict and enhancement as well as the main and moderating affects of affective rumination and detachment on sleep and work well-being in fire service personnel.

Participants

An online survey was completed by 197 UK Fire and Rescue Services personnel across three services. Eighty-one per cent were male, 83% were married or co-habiting and 63% had children. The mean age of staff was 43 (SD = 8.08). Staff worked on average 46 hours per week (SD = 15.75) and had worked for the service for 18 years (SD = 8.84).
Measures

Work-life balance was measured using a scale developed by Fisher, Bulger and Smith (2009) to assess relationships between work and non work. This consists of work→non work conflict (α = .87) and enhancement (α = .67), and non work→work conflict (α = .85) and enhancement (α = .83). Rumination was measured using two subscales from Cropley et al. (2011) consisting of affective rumination (α = .95) and detachment (α = .82). Work well-being was assessed by Warr’s (1990) anxiety-contentment (α = .90) and depression-enthusiasm measure (α = .91) and these were summed to produce a total measure of positive/negative job-related mood (α = .94). Sleep was assessed using the sleep quality, duration and latency sub-scales of the Pittsburgh sleep quality index (Buysse, Reynolds, Monk, Berman & Kupfer, 1989), which were summed to produce a measure of overall sleep quality.

Results

Work→non work and non work→work conflict and affective rumination were significantly related to poorer overall sleep quality and work well-being. Work→non work and non work→work enhancement and detachment were significantly associated with better sleep and work well-being.

Regression analyses were conducted to predict overall sleep quality and work wellbeing. The four bi-directional work-life measures were entered on step 1, the recovery strategies (affective rumination and detachment) were entered on step 2 and the eight interactions between the two were entered on step 3 to examine potential moderator effects of the two different recovery strategies.

In predicting work well-being, the work-life variables explained 46% of the variance (F = 39.05, p < .001), rumination added 22% (F = 64.64, p < .001) and the interactions added only 2% (F = 28.88, p < .001); a total of 70%. In the final model increased work→non work enhancement (β = .40, p < .001), reduced affective rumination (β = -.65, p < .001) and the interaction between work→non work enhancement and affective rumination (β = .15, p = .05) significantly predicted better work well-being.

In predicting overall sleep quality, the work-life variables explained 19% of the variance (F = 9.83, p < .001), rumination added 4% (F = 8.52, p < .001) and the interaction effects added 5% (F = 4.40, p < .001); a total of 28%. In the final model reduced non work→work conflict (β = .22, p = .005), increased non work→work enhancement (β = -.15, p = .05) and increased detachment (β = -.20, p = .05), and the interaction between affective rumination and non work→work enhancement (β = -.21, p = .02) significantly predicted better overall sleep quality.

Discussion and conclusions

The findings of this study highlight the important role of the work-non work interface in predicting work well-being and also sleep quality in fire service personnel. The recovery strategies utilised by employees also appear to have an impact on these outcomes, with affective rumination being problematic for work well-being and detachment being helpful for sleep quality. The direction of conflict and enhancement also seems to play a key role with only non work→work influencing sleep, and only work→non work influencing work well-being. Based on previous research in other occupations (e.g. Cropley et al., 2006; Williams et al., 2006) it may be expected that work→non work conflict and affective rumination would negatively impact sleep. However, in the present research, perceptions of personal life conflicting with the work role predicted poorer quality sleep, and perceptions of personal life enhancing work, as well as detachment were related to better sleep. Additionally, affective rumination acted as a moderator, in that the relationship between low non work→work enhancement and poor sleep quality is stronger for people who ruminate more. Thus people who experienced reduced non work→work enhancement experienced poorer sleep if they tended to ruminate about work issues, whereas not ruminating had a protective affect for those with low levels of non work→work enhancement. It is possible that only non work→work conflict and enhancement have an influence because fire service personnel have generally spent a period of time away from work prior to sleep, and may be less
likely than workers in other occupations to work at home during this time. Thus prior to sleep, non work issues may be more salient and people may be anticipating the impact of these issues on their next shift at work. If they have managed to detach themselves from work this will also aid sleep quality.

In terms of work well-being, perceptions of work enhancing personal life predicted better work well-being and affective rumination predicted poorer well-being. Additionally, affective rumination acted as a moderator, in that the relationship between low work→non work enhancement and poor work well-being is stronger for people who ruminate more. Thus people whose work role enhanced their personal life were more likely to experience better work well-being if they tended not to ruminate about work issues, and not ruminating also had a protective affect for those with low levels of work→non work enhancement. The relationship between low work→non work enhancement and poor work well-being is stronger for people who ruminate more. The focus on work having the potential to enhance personal life and vice versa is novel, as much previous research in the work-life balance field adopts a conflict perspective. Thus investing in the future well-being of fire service personnel should focus interventions on increasing opportunities for bi-directional enhancement, possibly using an action research approach. This should be combined with helping employees find positive ways to unwind outside of work to avoid unhealthy rumination. Detachment may be a helpful alternative strategy for promoting sleep but it did not aid work well-being in the present research. A focus on the positive in combining work and personal life may also help reduce the experience and impact of conflict. Interventions could benefit organizations as well as individual employees since poor sleep quality and negative work-related mood are likely to have adverse impacts on both job performance and personal health.

References


**T64: Short Paper**

**Understanding and Improving Organisational Resilience: A Proactive and Socio-Technical Perspective**

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**Theme** Organisation

**Background**

Given contemporary organisations exist in highly complex and fluctuating contexts, there is an ever growing need for organisational resilience. There are broad ranges and frequencies of threats facing organisations; ranging from acute (e.g., floods) to chronic shocks (e.g., climate change), and from internal (e.g., staff shortages) to external (market fluctuations) shocks. When organisations’ operating systems are under threat, resilience enables them to cope, minimise the loss of function and service, and to return to normal operations as smoothly and quickly as possible (Hamel & Välikangas, 2003).

Furthermore, aside from helping organisations to ‘bounce back’, organisational resilience could enable organisations to capitalise on changes in order to improve and thrive (Lengnick-Hall, Beck & Lengnick-Hall, 2011). Given organisations are striving to keep providing the service, or producing the product/output for which they have been designed – looking for ways of improving organisational resilience is addressing a real issue facing organisations in practice. The research focuses on what organisations can do proactively, on a day-to-day basis, to either mitigate risks or lessen the impact that un-preventable risks have on their ability to meet their service/output requirements. This approach is influential as it considers organisational capabilities prior to, and not as a result of, crisis (Smith, 2005).

More specifically, organisational resilience is a systemic capability. In the same way that knowledge produced by a team is greater than the sum of the team’s individuals’ knowledge; organisational resilience is more than the sum of employees’ personal resilience (Burnard & Bhamra, 2011). It can be seen as an intermediary output (a latent capability), which if displayed in the presence of disturbances, could then be linked to increased production output and competitive advantage.
Research Objectives

1) To bring together two sets of ideas within the literature: organisational resilience and the socio-technical systems (STS) perspective of how to understand organisations.

2) To access a suitable research site (a utility company) whereby the worth of the resilience and STS framework could be empirically tested using a mixed methods design (interviews and questionnaires).

3) To investigate how useful the resilience framework (with its six constructs) was in helping employees to understand their resilience capabilities and to explore exactly how they were manifested (or could manifest) within the organisation.

4) To investigate the extent to which the six STS constructs were geared towards the six resilience capabilities within the organisation - e.g., to explore the extent to which there were ‘goals’ (an example STS node) for ‘anticipating’ (an example resilience capability).

5) To explore employee’s perceptions of their teams’ performance levels at each of the resilience and STS capabilities.

6) To explore whether there were group differences (according to role, team and site) with regards to employees’ perceptions of their teams’ capabilities at these resilience and STS factors.

Theories

Hollnagel’s resilience framework (Hollnagel, 2010), which states that organisational resilience capabilities comprise of anticipating, monitoring, responding, and learning, was used and extended to include the actions of plan/innovate and implement. A reactive take on organisational resilience was given (the capabilities of monitoring and responding were considered), alongside a proactive take (the capabilities of learning, anticipating, planning and implementing were considered). After all, no matter how forward thinking an organisation is, there will always be the need for some reactive action in the event of disturbances.

Complementing this resilience framework with a socio-technical systems (STS) framework represented the need to consider three social and three technical facets compromised within an organisation (see figure 1). After all, in order to improve resilience capability, organisations need to do more than simply invest in more infrastructural or technical solutions. For example, following the Deepwater BP oil spill, millions of pounds worth of technical solutions are being made (which may end up not being necessary), whilst much cheaper and essential investments in behavioural factors (which mostly caused the disaster) are being ignored (=implications for science=).

Figure 1: A Socio-technical Resilience Framework
The specific STS framework used was the ‘hexagon’ (see Davis, Challenger, Jayewardene & Clegg, in press), which originated in the field of organisations and was developed from Levitt’s (1965) organisational change framework. Through joint consideration of the social and technical elements, this organisational perspective is not an added luxury for times when organisations can afford to consider softer aspects within the work place. Instead Occupational Psychologists’ involvement in this work is essential through its manner of considering the soft side of the hard, technical workplace functions (‘implications to practice’). In this way Occupational Psychology has a role to play in terms of understanding human behaviour in their work environment, over and above the role played by human resources practices.

Two novel contributions were made (‘implications to science’; ‘originality’):

1) Hollnagel’s framework was extended, more formally tested and applied to a wider context of uncertainty management over and above safety considerations (for which the framework was originally designed).
2) A STS framework was incorporated into the research, going further than previous papers which have merely stated the need for a socio-technical perspective.

Methodology

Concurrently, 16 semi-structured interviews and 66 surveys were conducted.

Findings

Nearly Full Support for the Resilience Framework

Analysis of the interviews revealed high face validity for all six resilience constructs, and hence the full resilience framework. Interview analysis helped unpick exactly what was meant by each resilience capability, i.e., how they could be displayed.

Exploratory factor analysis revealed six resilience factors. Factor loadings (correlations between items and factors) were high. Furthermore, Cronbach’s alpha reliability analysis showed that each set of items were collectively reliable at measuring the constructs onto which they loaded. However a factor of ‘resources’ was found rather than one for ‘implement’. Three explanations were given:

1) ‘Implement’ was not a necessary independent construct and was instead dispersed across the other resilience constructs.
2) The framework needed a ‘resources’ construct as well.
3) Methodological limitations could have accounted for not finding the ‘implement’ construct.

Nearly Full Support for the Resilience STS Framework

The interview discussions, of how the organisation performed the different resilience capabilities, were successfully coded in terms of the six STS facets, thus supporting the full Resilience STS framework.

Exploratory factor analysis revealed five out of the six resilience/STS factors. Again factor loadings and Cronbach’s reliability analyses were high. However ‘culture’ was not supported; possibly because it was submerged across other STS nodes, or because of methodological limitations.

Performance at the Capabilities
The organisation appeared to be worse at proactive than reactive resilience and better at employing technical rather than the social facets.

Perception differences in Performances

Some group differences regarding perceptions of the organisation’s resilience capacities were found and discussed. This reinforced the need to consider organisational resilience capabilities across all employee roles, levels and teams.

Conclusions

Limitations of the research were reflected on so that it could act as a pilot for a three year PhD into further developing and validating this framework and then using it to test formal hypotheses. The next phase will be to publish a metric paper, whereby the framework will be statistically validated within a larger sample of multi-sector organisations, with the added incorporation of objective as well as subjective measures. Furthermore, through testing for mediation, future work aims to explore the STS factors as mechanisms for achieving the resilience actions. From such work, organisations stand to reap the benefits of less service/production down-time, which in turn will lead to happier employees and customers. Finally, there are two major ‘gains to conference delegates’ from this research: 1) an understanding of how to diagnose and improve organisations’ abilities to withstand shocks and 2) a socio-technical framework which can be applied outside of resilience to any complex, organisational level problem.

References


The Development of a Coaching Psychologist Competency Framework (CPCF) to Enhance Effective Coaching Relationships

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Theme Individual

Coaching has been increasingly applied in leadership and organisational development and also in work with individual coachees. Although the number of coaches (47,500) world-wide (ICF, 2012) has considerably increased and coaching is also rated as the most effective element of Talent Management programmes in the U.K. (CIPD, 2012); coaching is not a standardised accredited profession due to the diversity of coaches' professional backgrounds (Bennett, 2006) . Psychologists have more publicly become involved in the coaching in recent years given that the ultimate objective of
coaching is sustained behavioural, cognitive and emotional change (Douglas & MacCauley, 1999) which those with psychological training are well placed to deliver. Nevertheless, more robust evidence is required to ascertain whether psychology plays an essential role in the field of coaching.

In parallel, the research focus has been shifted to the development of coaching relationship and process. Traditionally, focus in the field of coaching are on specific models, approaches and techniques, directed towards ultimate goals for people’s overall learning and development (de Haan & Sills, 2012). However, some studies (e.g. de Haan, 2008) indicated there is no significant difference in effectiveness between different coaching techniques. The quality of the coaching relationship as well as the coach and the coachee’s role in the process were identified as the most effective active ingredient for a positive coaching result. A number of quantitative studies have also examined a positive correlation between a good coaching relationship and coaching results, such as coachees' self-efficacy. (Baron & Morin, 2009; Jackson, Boyce & Neal, 2010; de Haan & Duckworth, 2012). Thus, people and interpersonal interactions play a key role in the coaching process (Palmer & McDowall, 2010 and O’Broin, 2010). Nevertheless, the existing evidence does not provide clear guidance on which specific personal attributes are associated with effective coaching relationships (de Haan, 2008 and Passmore & Fillery-Travis, 2011). For instance, rigorous studies to investigate whether a background in psychology for a professional coach benefits the establishment of an effective coaching relationship are required. Prior to any primary research, it would be helpful to review the evidence in Coaching Psychology systematically to determine how any new research can address existing knowledge gaps through a transparent and systematic process.

Taking stock of this growing body of evidence, a previous Systematic Review (SR) on Coaching Psychology (submitted for publication) indicated that a well-designed study on the development and validation of a Coaching Psychologist Competency Framework is needed. This SR summarised key attributes a Coaching Psychologist should acquire to enhance the coaching relationship and results, which were elements, attributes and common factors for an effective coaching relationship. These were then integrated into an initial Coaching Psychologist Competency Framework (including psychological knowledge and concepts, personality/attributes and behaviours/skills); this draft framework could be a foundation for further Coaching Psychology research.

Whilst many governing professional associations world-wide, such as BPS, ICF, AC and EMCC have developed frameworks coaching standard in consultation with members to outline the benchmark required for people who would like to practice as a professional coach. However, such frameworks do not necessarily meet standard criteria for competency analysis (Woodruffe, 2007; Bartram, 2012), which include a clear evidence-based development process, focusing on the future, visible dimensions, simple and brief, user-friendly and the level of analysis. The existing competency frameworks (BPS, ICF, AC and EMCC) relevant to coaching and Coaching Psychology, appear to lack a rigid development and validation process, as no detail is available on whether these are actually based on any data and analysis. They also lack differentiated levels for the rating of competence; and appear akin to a list of behaviour definitions rather than an articulated set of components / dimensions. The researcher searched the official websites and papers of these coaching relevant associations, there was no detailed development information of ICF’s competency framework. The frameworks from BPS, AC and EMCC were all developed and defined through in consultation with the coaching experts in their societies or integrated the research results from coaching literature studies. In addition, a well-developed competency framework needs to identify relevant competencies that differentiate high performers from others at the same job level (Woodruffe, 2007). Merely ICF and EMCC developed levels for the behavioural indicators in their competency frameworks for rating. However, the process to define these differentiated levels for the behavioural indicators was also based on their coaching experts’ personal experiences in the societies.

Thus, the aim of the present study was to investigate and examine the precise behavioural indicators for a professional coach to facilitate an effective coaching relationship through a rigorous role analysis process.

Research Methods

There were two main research stages:
(1) To elicit the effective coach's behaviours for facilitating a constructive coaching relationship through interviewing 25 participants (coaches with psychological background or trainings, coachees and organisational stakeholders). Thematic Analysis and Q-sorting in collaboration with eight occupational psychology experts (including two coaching psychologists) were undertaken to extract and define key behavioural indicators.

(2) To examine the reliability and validity of the identified behavioural indicators for a Coaching Psychologist by conducting a cross-validation study with Working Alliance Inventory (WAI). A total of 107 (N=107) questionnaires were collected, from 77 professional coaches with average 12.8 year coaching programme providing experiences and 35 coachees who had taken part in coaching sessions for average 12.4 months.

Findings
(1) A total of 100 initial effective coach's behavioural indicators for establishing a constructive coaching relationship were elicited through Critical Incident Interviews and clustered into 13 competencies (e.g. Active Communication Skills) by Q-Sorting method from the first stage.

(2) The identified effective behavioural indicators were reviewed and screened based on item analysis and an explanatory cross-validation with WAI. Thus, a total of nine competencies with 75 underpinned behavioural indicators were validated as a preliminary Coaching Psychologist Competency Framework (CPCF) focusing on a constructive coaching relationship. This framework comprises of three broad categories: they are seven fundamental elements (e.g. actively listening) which have to be met as a "baseline" for any coaching session, 38 trainable behavioural indicators to determine degree of effective competency (e.g. establishing mutually agreed goals) and 30 supplementary behavioural indicators (e.g. providing appropriate feedback to coachees) which will strengthen the coaching relationship and toward goal achievement.

Conclusion
Comparing to the coach competency frameworks developed by BPS, AC, EMCC and ICF, CPCF is the first framework which has been developed through rigorous and evidenced-based role analysis processes. It comprises four coaching roles' (coaching experts, coachees, organisational stakeholders and internal coaches) perspectives on effective coach’s attributes for establishing a constructive coaching relationship. Two main research stages include qualitative (Critical Incident Interviews and Q-sorting) and quantitative (cross-validation with WAI) methods were undertaken. In order to reduce the bias of data analysis process, nine research collaborators with psychology background (including two coaching experts) were invited to analyse and integrate the research findings together. In contrast with the frameworks from ICF and EMCC, this study classified the identified effective behavioural indicators into three broad categories (levels) through a cross-validation questionnaire study with WAI: fundamental elements, trainable and supplementary behavioural indicators. The table below summarises the features of existing frameworks by these governing professional associations and the Coaching Psychologist Competency Framework developed from this study.

<table>
<thead>
<tr>
<th>Association</th>
<th>Structure</th>
<th>Development and validation process</th>
<th>Level for rating</th>
<th>Psychological perspective</th>
<th>Emphasising on Coaching Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPS Standard</td>
<td>4 broad clusters</td>
<td>Meta-analysis of previous research</td>
<td>Not specifically refer to more generic</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Framework for</td>
<td>112</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. The Comparison of Existing Coaching Competency Frameworks
<table>
<thead>
<tr>
<th>Framework</th>
<th>Number of Competency Groups</th>
<th>Number of Competencies</th>
<th>Number of Behaviours</th>
<th>Processes Used</th>
<th>Development Methodology</th>
<th>Validation Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching Psychology (2008)</td>
<td>1</td>
<td>Competences</td>
<td>Coaching expert’s personal experiences and coaching competencies such as listening, building rapport, managing the process.</td>
<td>No information</td>
<td>Yes (3 levels)</td>
<td>No</td>
</tr>
<tr>
<td>ICF Professional Coaching Core Competencies (2009)</td>
<td>4</td>
<td>11 competences</td>
<td>70 behaviours</td>
<td>No information</td>
<td>Yes (3 levels)</td>
<td>No</td>
</tr>
<tr>
<td>EMCC Competency Framework (2009)</td>
<td>8</td>
<td>12 categories</td>
<td>Developed through an extensive Europe-wide consultative process, drawing on both expert and practitioners' experiences</td>
<td>Yes (4 levels)</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>AC Coach Accreditation Scheme Integrated Coaching Competency Framework (2011)</td>
<td>12 categories</td>
<td>74 behaviours</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>The Coaching Psychologist Competency Framework (CPCF)</td>
<td>9 competences</td>
<td>75 behaviours</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
In this framework, competencies associated with engagement, mutual empathy and goal focus (e.g. Engaging, Pearson Correlation=0.460) have stronger significant correlation with WAI than those relevant to developing certain coaching interventions or framework in the coaching sessions. Coach's interpersonal skills (such as listening actively and demonstrating understanding of coachees' issues, reactions and difficulties) were identified as the fundamental elements for an effective coaching relationship, which have to be met as a "baseline" for any coaching sessions. The effective behaviours concord with coachee's goal setting and coaching structure management (e.g. establishing mutually agreed goals and establishing boundaries and terms and conditions before the first session) are trainable behavioural indicators for Coaching Psychologist to facilitate a productive coaching process. This finding suggests a constructive coaching relationship is on the basis of maintaining the balance between harmonious interactions with coachee (e.g. engaging and commitment) and goal-focused process (e.g. developing realistic tasks and actions). In addition, this study integrates some controversial coaching research findings: interpersonal communication skills (e.g. listening and understanding) were identified as the key ingredients for coach to facilitate an effective coaching relationship (de Haan, 2008). Nevertheless, another coaching study (Baron & Morin, 2012) examined only the ability to facilitate learning and results (e.g. establishing development plans and tracking learning progress) was significant correlated with coaching relationship. The present development framework (CPCF) emphasises a balance between effective interpersonal interaction and focused development process benefits to the coaching relationship and toward effective outcomes. This finding also aligns to the differentiation between coaching and psychotherapy as the general purpose of coaching is more outcome-related (Peliter, 2001).

Further, this study ascertains the psychological standings in the field of coaching as the identified effective attributes were mainly drawn on experiences of coaches' (16 of 25 interview participants) who hold psychological degree or had relevant training. Also this framework indicates having a deeper understanding of coachee's feelings, emotions and motivation for change plays an essential role (such as ensuring coachees have a receptive and positive mindset and enhancing coachee's motivation to change) in the process of establishing effective coaching relationship.

To sum up, a well-defined competency framework should be evidence-based and articulate a set of relationship by specifying how the components related to each other (Bartram, 2012). In order to present a well-articulated set of model for further assessment (user-friendly), the next research stage will focus on how this competency framework add values to the coaching relationship through a quasi-experiment study. A training workshop will be designed based on this presented framework and tested through real coaching sessions, it will examine to what extent this competency framework facilitates coach to establish an effective coaching relationship with coachee and toward goal achievement.

**T66: Short Paper**

**Predicting performance from personality: Fewer factors produce feebler forecasts**

*Rob Bailey*, OPP Ltd,  *Fiona Young*, Oxford University,  *Leonie Nicks*, Oxford University

**Theme**  Research

**Introduction and background**

Central to Occupational Psychology is the ideal of evidence-based practice. Therefore, when a new theoretical perspective claiming to predict work performance starts to make waves in academia, its practical significance begs investigation. This is the case with the Single Factor of Personality (SFP). It is the idea that personality can be summarised in the most parsimonious way not by five big factors, but by the smallest possible number: just one factor. For this reason, we propose the following presentation for Research. It builds upon work first presented to the DOP Conference in 2013, but goes further by exploring multiple datasets and new criteria, including measures of engagement, salary, promotion, and 360 measures of work performance.
The most accepted model of conventional personality theory is the Big Five/Five Factor Model (FFM, McRae & Costa, 1999). Due to observations of inter-correlations among the traits (e.g. Digman, 1997) some researchers have suggested a two-factor structure, for example:

Alpha/Beta model (Digman, 1997)
Stability/Plasticity (DeYoung et al, 2001)

Following this reductive trend, researchers have proposed a universal single-factor structure of personality, claiming it predicts overall work performance (The General Factor of Personality, GFP, e.g. Musek, 2007; van der Linden, Nijenhuis, & Bakker, 2010).

Opponents of the SFP point to three major issues:

1. the SFP appears to be due largely to socially desirable responding and thus it tends to diminish significantly in non-applicant samples (as opposed to applicant samples) (Ziegler, 2012)
2. the SFP appears to diminish when problematic questionnaire items are corrected so that they are not disproportionally more attractive to endorse than others (Björklund & Bäckström, 2013)
3. it has been argued that broad descriptors obscure relationships between personality and criterion measures (Hough, 1992). The FFM has been criticised for being too broad to be helpful in understanding behaviour (Block, 1995); therefore the SFP is unlikely to be any better.

With these issues in mind, we decided to evaluate the utility of the SFP to see which structure of personality gives the appropriate level of detail.

Following findings of Judge and Mount (2002), whose Big Five and job satisfaction research showed Anxiety to be a significant predictor of satisfaction, this study looked at the relationship between the SFP and work engagement.

Following the claims of SFP supporters, we examined the same for the SFP, Big Five, 16PF scales and work, performance and promotion.

Method
Datasets used

1. UK and Republic of Ireland gender-balanced sample comprising 1,212 individuals representative of the UK/IE working population (for age, region, ethnic background, etc.). Data was collected for research purposes. This group completed the 16PF5 and a battery of self-reported criteria questions including work outcomes
2. UK personnel sample, comprising 63,921 individuals who completed the 16PF5 for a variety of recruitment and development activities
   a. gender-balanced UK personnel sample, with 15,000 males and 15,000 females randomly selected from the UK personnel sample
3. US dataset from the US 16PF website, comprising 30,567 individuals who had completed the 16PF5 for a variety of recruitment and development activities
4. US manager dataset, comprising 279 individuals on a management course who completed the 16PF5 and the Benchmarks 360 assessment of competencies and derailers.

Analysis
Multiple analyses were conducted:

- PCA Exploratory Factor Analysis of the UK Standardisation sample, UK personnel sample and gender-balanced UK personnel sample to look for the SFP

- bivariate correlations to look at which 16PF questions and personality factors were most strongly correlated with Impression Management (IM) in the UK standardisation sample (IM is the 16PF's Social Desirability scale)

- the 16PF was split in half to create a 'Socially Desirable' version of the 16PF containing the questions most correlated with factor IM and a 'Socially Ambivalent' version of the 16PF containing those that correlated least. These were analysed using PCA Exploratory factor Analysis

- linear multiple regression analyses to look for relationships between personality models and IM with work performance and engagement.

**Results**

The following observations were found:

Factor analysis across all datasets found that a 2 factor model had the best fit to the data, not a single factor. These 2 factors are unlike previous models (Alpha/Beta or Plasticity/Stability). Extraversion and Independence load positively and strongly onto Factor 1 as well as Tough-mindedness in the negative direction. Tough-mindedness also loaded strongly but positively onto Factor 2 as well as negative Anxiety and positive Self-Control.

The Factor Analysis was repeated with IM added, but a SFP still did not emerge.

We considered that perhaps the SFP may only emerge when only the items most closely related to IM were selected for analysis. Even with the 16PF split into halves for Social Desirability, a single factor structure was not found in either half. Two factors emerged, accounting for 65% of the variance.

Regression analysis with the standardisation sample showed that IM was a significant predictor of Engagement at Work (R = .252, p < .001) but was not a significant predictor of salary or promotion. Further, in the Benchmarks dataset IM was found not to correlate with ratings of work performance from an individual themselves, their boss, peers or their direct report.

Regression analyses were conducted to determine which model of personality provided the best predictive model of performance in the workplace. A 2 factor model (R = .151), 5 factor model (R = .252) and 16 factor model (R = .312) all significantly predicted salary (p < .001). The 5 factor model also significantly predicted self rating of performance (R = .234, p = .009) and peer rating of performance (R = .213, p = .026). However, the 16 factor model predicted both self rating of performance (R = .359, p = .002), peer rating of performance (R = .346, p = .006) and additionally boss rating of performance (R = .344, p = .008), explaining a greater percentage of the variance than the 5 factor model did.

The same pattern was found in regressions predicting engagement at work from personality. The 2 factor model (R = .291, p < .001) and 5 factor model (R = .295, p < .001) explained less variance than the 16 factor model (R = .348, p < .001). The overall finding across our data shows that the more factors that are used as predictors, the greater the percentage of variance explained.

**Discussion**

The lack of an overall single factor of personality in the 16PF contradicts the idea that there is a universal Single Factor of Personality. If one exists, it should occur universally.
It is our view that the SFP does not occur in the 16PF as the questions ask respondents to choose between two bi-polar ends of a 3-point Likert scale; both sides of response options are designed to be appealing, so may reduce the influence of social desirability in responding (e.g. to say if they would prefer to be an architect or a counsellor).

With regards to Social Desirability, adding IM into the factor model did not provide any additional 'glue' to bind the factors into one SFP. Additionally, IM in itself does not predict job performance.

Instead (unsurprisingly) traits desirable to the workplace lead to better predictions of ratings of performance, salary and engagement. The desired traits appear to be Extraversion, Independence (less agreeable), Tender-mindedness (more openness to new experience), less Anxiety, and more Self-control (Conscientious). All of these are more socially desirable (with the exception of Independence which is desirable for success, rather than socially desirable); however, the traits are more predictive than Social Desirability itself.

The study also showed increased predictive power when using more granular personality data. Two Factor and Five Factor Models are much worse predictors (when it comes to critical metrics such as boss rating of performance, both models were not even significant).

**Conclusion**

In research, the use of broad factors is convenient, but damaging to the profession - it underestimates the relevance of personality to crucial real-world outcomes (such as job performance and engagement). This in turn is likely to lead to diminished credibility of work-place use of psychology and psychometrics.

If researchers wish to use the Big Five to employ a common language, that is understandable, but we assert that they should collect data with any of the many good measures that use more detailed subscales within the Big Five.

In practice, use of broad factors in recruitment situations is unforgiveable. Broad factors may play a role in self-development applications where simple summaries help individuals to explore and remember their main personality traits. However, when it comes to high-stakes decisions over the careers of individuals and the future of organisations, there is no excuse for using broad measures of personality, given that more specific and more accurate ones are widely available. The predictive power of personality is not in broad/generic concepts, but in the specifics.

**Additional information**

People are likely to be concerned about the idea that personality could be reduced down to one single factor - implying that any individual could be judged according to just one 'score'. Studies focusing on broad factors have dominated personality research; it is less usual to see mapping of specific personality factors to discrete job criteria.

**Interactivity and materials**

For interactivity, we aim to promote critical thought by asking attendees to:

- order occupations by those most likely to respond in a socially desirable manner (we have the results)
- identify which questions they think are most likely to elicit socially desirable responses
- discuss personal experience of interpreting socially desirable questionnaire responses.

**References**
Religiosity and its influence on coping and well-being
Roxane L. Gervais, Health & Safety Laboratory

Theme Individual

The working environment has changed considerably over the past century; with it can be stated, continuous and holistic changes over the past twenty to thirty years. These changes have incorporated the use of the Internet as a daily resource; whilst globalisation, migration, the ageing workforce, the move from jobs being mainly manufacturing to more service oriented, together with greater diversity of the working population, have forever changed organisational landscapes. As change is ever constant, it is useful to explore the types of resources with which workers may engage to help them in dealing with these changes. Resources, such as the levels of social support and work control or autonomy that are available to workers, are essential for them in maintaining their health and well-being (see e.g. Bakker & Demerouti, 2007; Johnson, 1986; Karasek, 1979). However, workers may use resources outside of the work context to assist with work-related demands and thereby indirectly influence job outcomes, such as well-being, job satisfaction or job performance. A belief system, such as religiosity, could be one of those external resources that workers may use to obtain better health, which in turn could affect how they relate to the work environment.

Ryan and Deci (2001) in defining well-being, proposed that it could encompass an “eudaimonic” component, which focuses on meaning and self-realisation, and thereby acknowledging that well-being could be understood in terms of the degree to which a person is fully functioning having gained his or her sense of meaning in life. In this respect, religiosity, which incorporates religious belief, values, practices or behaviours, has been found to have a positive effect on physical and mental well-being (McCullough et al., 2000) and is a component that allows individuals to follow more
healthy well-being practices, such as doing more exercise, having more social contacts and drinking less alcohol (Strawbridge et al., 1997). The links between religiosity and meaning in life has been established (Steger & Frazier, 2005), and this relationship may in turn have some bearing on individuals’ eudaimonic well-being, and perhaps their overall well-being while at work.

This present study explores the influence on religiosity on workers’ well-being, and explores the research question: Does religiosity assist in achieving higher levels of well-being among workers and support better coping mechanisms?

Method

Participants and Procedure

The respondents (N = 34) were full-time employees who worked in service organisations in the Caribbean. They consisted of more women (62%) than men and were fairly young (M = 27.33; SD = 8.06) and were more likely to be single than married (M = 1.76, SD = 0.43). The design was cross-sectional in nature, which allowed the respondents to be administered with a comprehensive set of questionnaires that generated information on work characteristics, outcomes and demographics. The scales consisted of religiosity (Jessop & Jessop, 1977), meaning in life (Steger et al., 2006), job satisfaction (Warr, Cook & Wall, 1979) work locus of control (Spector, 1998), performance (Gervais, 2002), the management standards for stress (HSE, no date), well-being (anxiety, depression and fatigue; Gervais, 2002) and coping (Carver et al., 1989).

Data Analysis

The data were subjected to initial analyses, inclusive of reliability and factor analyses to evaluate their consistency in a non-Western sample. These were followed by correlation analyses to gain a perspective of their relationships, as well as multivariate analyses. The size of the sample restricted the types of analyses that could be conducted, but did facilitate an exploration of relationships.

Results

Most of the scales realised acceptable levels of consistency (Cronbach’s alpha) and were above the accepted reliability coefficient of .70 (Nunnally, 1978). In terms of the level of religiosity in the sample, 74% of the respondents considered themselves to be religious, while 82% considered themselves as belonging to a particular religion or faith. Close to half of them (47%) admitting to attending services at least once per week, 38% once per month or less often, 9% not attending service, with 6% not responding. Just over one-third of respondents went to religious services as it ‘connected them with a higher being’, with just over one-quarter, stating that they felt better about themselves when they went. See Table 1.

Table 1: Reasons for attending religious services

<table>
<thead>
<tr>
<th>Why do you attend services?</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>It connects me with a higher being</td>
<td>35</td>
</tr>
<tr>
<td>I feel better about myself</td>
<td>26</td>
</tr>
<tr>
<td>I feel calmer</td>
<td>18</td>
</tr>
<tr>
<td>I don’t go to services</td>
<td>9</td>
</tr>
<tr>
<td>I have to attend</td>
<td>6</td>
</tr>
<tr>
<td>No response</td>
<td>6</td>
</tr>
</tbody>
</table>
The correlation analyses showed that religiosity correlated with meaning in life (presence): $r = .49, p < .01$; religious coping: $r = .49, p < .01$; humour coping: $r = -.37, p < .05$; substance use: $r = -.46, p < .01$; and well-being, anxiety: $r = -.38, p < .05$; depression: $r = -.44, p < .05$ and fatigue: $r = -.41, p < .05$. It did not correlate with meaning in life (search), work locus of control, any of the scales on the management standards, performance and job satisfaction. The $t$-tests showed that women reported higher levels of religiosity ($t(30) = -2.79, p < .01$); as well as meaning in life (presence) ($t(31) = -2.43, p < .05$), with men more likely to use humour for coping ($t(32) = -2.87, p < .01$). There were no other differences between the groups. Marital status did not reflect any differences between the single and married individuals, while the analysis of variance (ANOVA) of the age groups showed that those aged 26 to 35 were more likely to have better relationships at work ($F[2,26] = 4.01, p < .05$).

A bivariate regression analysis was conducted, controlling for age and gender where religiosity was regressed on well-being (anxiety, depression and fatigue). The results were statistically significant for depression ($\Delta R^2 = .142, F[1, 25] = 4.35, p < .05$), but not for anxiety or fatigue.

Discussion/Conclusion
Religiosity is not considered usually as a resource that organisations might consider assessing as one that could assist their employees in improving or maintaining their well-being. However, as this present research has shown it is a resource that could benefit both the individual and the organisation. It is a useful construct in investing in the future of the workforce, due to its positive relationship with well-being measures. A fairly recent investigation by the American professional body the Society for Human Resource Management (SHRM, 2008) found that organisations that accommodated workers’ religious beliefs realised a return on these adjustments through increased employee morale (62%), retention (38%) and loyalty (37%). Organisations benefit when workers feel supported by the organisation. Moreover, as Strawbridge et al. (1997) found, religious beliefs could affect the lifestyles in which individuals engage, with those who attended services more frequently, were more likely to engage in better health practices. This healthy attitude and behaviours could in turn result in these employees having lower absenteeism and presenteeism rates and thereby facilitate lower costs to the organisations in addressing ill health concerns.

The SHRM (2008) report mentioned also that the doctrines that many religions promote actively, for example acting with integrity and treating others with respect, could be behaviours that could easily be integrated into workplace conduct, especially in the context of moving forward with an ethical compass.

It was interesting that religiosity correlated positively with meaning in life (presence), but not with meaning in life (search). This could mean that the respondents are comfortable with where they are in their life at present. Steger and Frazier (2005) found that meaning in life was able to act as mediator between religiousness and psychological health. Other studies have highlighted the positive relationships between well-being and meaning in life (See Zika & Chamberlain, 1992; Santos et al., 2012). This finding may relate also to the respondents’ lower ratings of substance use as a coping mechanism; whereby an external substance is not required to cope with challenging situations. This present research supported the research question as religiosity seemed to assist individuals in gaining better well-being and using more appropriate coping mechanisms.

Limitations
Due to the small sample size, these findings cannot be generalised, but they do provide direction for expanding the resources that could assist workers with their health and well-being while at work. This is especially as workers are
required to stay within the work environment for a longer period than before and would need to utilise every resource at their disposal.

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T68 Short Paper

**Qualitative research: Narrative and Story**

Dr William Fear, Birkbeck University

Theme Research

Qualitative research has taken another step towards being fully recognised as a valid research enterprise within the discipline of psychology. However, we retain a legacy of some common misconceptions with regard to research generally, and qualitative research in particular. One such misconception is the notion that we can judge research by the 'quality of the question' on the one hand and the requirement for 'a question' on the other hand. Indeed, much research, and especially much qualitative research, and arguably the most insightful research, begins with an observation, a hunch, a feeling, a guess, and so on and is not driven by a clearly defined question. To assume the requirement of an a priori definitive question is to transpose a positivist model of hypothesis testing on an enterprise that is relative and interpretive. This is not to suggest, however, that qualitative research cannot be used to address an a priori question. It is simply to acknowledge that an a priori question is neither necessary nor sufficient.

In this paper I present a case study of a body of work on Patient Safety and Quality of Care in Healthcare. I will show how the study emerged following a period of intense scrutiny of the current discourse around these topics and the clear absence of evidence of improvements in either safety or quality in healthcare since the inception of the 'modern' Patient Safety movement in 1999.

Using Bruner's (1991) model of narrative I will show how the existing narrative of the safety of medicine was breached in Anaesthesia in 1954 and in Hospitalised care in 1964 and how both narratives were consolidated into a new narrative some 30 years later. There are pragmatic considerations in terms of resource acquisition, institutional development, and personal career development.

In addition to this I will consider: a) the important, but typically overlooked, difference between narrative as a process and narrative as an artefact (Vygotsky, 1978; Wartofsky, 1973); and b) the essential distinction between narrative and story (which are typically conflated and confused and in the literature).

Highlighting different approaches, methods, and constructs this paper provides an important contribution to the development of qualitative research in the field of psychology and begins to address some of the existing confusion around approaches, methods, and constructs. It also explores how qualitative research impacts on practice and the potential for qualitative research to impact on policy and practice on a global scale.

T69: Short Paper

**Scenario planning: a participatory approach to modelling organizational change**


Theme Organisation
Whilst there is much support for socio-technical design principles, their uptake within the occupational psychology community is low. This is in part due to the lack of socio-technical design tools available for use and a lack of standardized methodologies (Baxter & Sommerville, 2011). This paper will present a scenario planning tool that brings together socio-technical design principles and scenario planning methods, to provide a holistic framework for modelling the implications of potential future organizational change.

In a turbulent economic climate organizations require techniques that enable them to prepare for potential eventualities (Hiltunen, 2009). For example, government spending cuts have implications for how local authorities are able to operate in the future and developments in technology open up new possibilities for the organization of work and the delivery of services. Scenario planning methods are a process in which potential changes or ‘future scenarios’ are constructed and their implications evaluated. Future scenarios do not have to be predictive of what is likely to happen in the future; rather they are alternate ways of being (Kennedy & Avila, 2013). Evaluating future scenarios can help organizations explore new possibilities and provide an understanding of change before costly implementation (Kennedy & Avila, 2013). As a technique grounded in a practitioner based approach there is much variation in scenario planning methodology; differences can be seen in the number of scenarios generated, the way scenarios are constructed and stakeholder participation (Amer, Daim & Jetter, 2013). Of the various scenario planning techniques none are underpinned by socio-technical design principles, which state that the people, culture, goals, processes, technologies, infrastructure and the like are all part of an interdependent and interacting system (see figure 1 for visual representation); to achieve successful outcomes all aspects of the system need to be understood, designed and improved jointly (Clegg, 2000).

Figure 1: A visual representation of the socio-technical hexagon adapted from Davies et al. (2013)

Traditionally, scenario planning has been used by managers to assist in long-term organizational decision making (Mintzberg, 1994); as a result techniques have tended to draw on the knowledge of external experts rather than the complete spectrum of system stakeholders. According to socio-technical approach choosing to not to engage system stakeholders (including end users) risks the validity of the design process, as individual values and mind-sets are central to design (Clegg, 2000).

This paper will therefore outline a scenario planning tool based upon socio-technical design principles, which are well evidenced at creating highly successful change initiatives (Axtell, Pepper, Clegg, Wall & Gardner, 2001).

Session objectives:

- To highlight the advantages and current limitations of scenario planning techniques
- To outline the importance of taking a socio-technical approach in scenario planning and organizational change
To outline a scenario planning tool based upon socio-technical principles of design

Present current research findings (a case study within the NHS)

To get any feedback or advice from people operating with this field

Method and data analysis:

This is multidisciplinary project, funded by the Technology Strategy Board (TSB), working with four NHS sites in the Yorkshire and Humber Region. The aim of the project is to understand and address the barriers to the mainstreaming of telehealth in the UK and to create sustainable future business models. The project constitutes several phases of research; phase one, is to map and model current instances of telehealth, and to identify the issues that limit current service delivery, modelling potential change.

Phase one has included 146 interviews across the four sites with system stakeholders, including patients, carers, front line staff, managers and service commissioners. A template analysis was conducted on the interview transcripts to generate themes of issues that reportedly limit service delivery in each site. These issues were representative of all stakeholders; for example, staff reported issues around patient referral criteria, whilst patents reported fear of telehealth replacing in-person care. Issues we organised according to the socio-technical approach shown in Figure 1 and presented back to each of the four sites in the form of two workshops, where members of all stakeholder groups were present. During the first workshop participants were asked to carry out several pieces of work; one exercise included the generation of evaluation criteria; a second, asked participants’ to prioritise the top three issues that currently limited service delivery. These issues were recorded and thematically analysed to produced themes and sub-themes of priorities for change.

In the second workshop, participants were put into several groups, one to represent each overarching priority for change. Each group was then asked to select one priority from the list of sub-themes. Each group defined the existing scenario (which creates the issue) and two alternate future scenarios (which aimed to overcome the issue) according to the template in table 1. Scenarios could be as radical or as incremental as the group felt appropriate. Once the scenarios were outlined, participants we then asked to rank them according the evaluation criteria they had generated, see table 2.

Table 1: Scenario template

<table>
<thead>
<tr>
<th>Scenario 1 (Existing scenario)</th>
<th>Scenario 2 (Alternative)</th>
<th>Scenario 3 (Alternative)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vision/goals/values</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reason for vision</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>How does it work?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>People</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Processes/practices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Scenario ranking template (1 = this goal is not met at all, 5 = this goal is met to an acceptable level, 10 this goal is met completely).

<table>
<thead>
<tr>
<th>Criteria/metric</th>
<th>Scenario 1 (Existing scenario)</th>
<th>Scenario 2 (Alternative)</th>
<th>Scenario 3 (Alternative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Qualitative patient outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Patient health outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Cost of healthcare</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Changes in clinical practice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Integrated telehealth equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Other?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (out of 60)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results and discussion

It was identified from the scenario planning exercise, that two levels of change planning are required by each site; one operational, to incrementally improve performance of current processes and one strategic, to model future change before implementation. As this research is ongoing, current research findings will be used to create a second process of scenario planning, which will constitute phase two of the research methodology.

The scenario planning and research interviews have identified a range of dilemmas sites face during the design of telehealth services (e.g., choice of equipment, choice of roles or provision, choice of outcome), as well as several potential external influences such as policy, regulations and budget. Therefore, a second process of scenario planning, that helps sites model several alternate future scenarios, based upon these contextual factors and dilemmas, is proposed. The exercise will further seek to explore the impact of different choices on system design, as well as implications for long-term sustainability and scale. As this research it ongoing, further research findings and discussion will be available by January.

References


In personnel selection research and practice, there has been increasing interest in the search for important ‘dark side’ subclinical traits (derailer) as determinant of extreme behaviours. To date, most research has taken a variable-centric approach, focusing on examining relationships between the individual traits, with the underlying assumption that the population is homogenous and the inter-traits relationships observed apply equally to all members of the population. Although the approach provides useful information on identifying the key traits, it misses the key point that different traits do not function in isolation from each other within a person, but function as a coordinated traits system or pattern. Taking a ‘person-centric’ approach, the study focuses on differences between individuals relative to the traits of interest and seeks to identify various maladaptive personality profiles pattern.

This study examines the latent profile clusters of maladaptive personality using data from the Dimensions personality questionnaire (Talent Q). The Dimensions questionnaire defines eight personality characteristics which could lead to derailment. Latent class analysis is applied to a dataset of 2271 (UK population).

Results suggests a four multidimensional personality profiles provides the best fit to the data and identifies meaningful qualitatively distinct derailment profile patterns. A person-centric treatment to dark side personality offers considerable promise beyond the traditional ‘variable-centric’ approach. Theoretical and practical implications are discussed.

Over the last six years, two major incidents concerning fire personnel have come to the public's attention. These two incidents are Atherstone on Stour (2007) where four fire-fighters lost their lives and Galtson Mine incident (2008) where a member of the public lost her life. Major enquiries were made into both incidents alongside recommendations for change. As a result of these incidents, West Midland's Fire Service wanted to assess the risk of its fire service and personnel being put in a position similar to the two incidents previously mentioned. This paper discusses the development of a situational judgment test to assess 'Operational Preparedness' relating to the behaviours of fire personnel within West Midland's Fire service and their ability to deal with such incidents. Legal issues were being investigated separately. Operational preparedness has been defined (based on the aims of the project) as individuals,
crews and stations being prepared to carry out their assigned tasks and roles with minimal risk to public and fire personnel safety. No definition of operational preparedness for fire personnel has been cited in the literature, the main focus being on military personnel (McCarley, 2012). At present, no test of operational preparedness exists for the fire service.

The development of the SJT was conducted using focus groups with 30 exemplar fire personnel from a variety of roles and levels within the organisation. A critical incident approach was undertaken to elicit information regarding incidents they had been involved in and how they decided how to react to such an incident as the use of critical incident situations has been shown to allow for discrimination between successful and less successful performance (Koch et al. 2009). Examples of excellent decisions and poor decisions were obtained in order to analyse what led to good decisions and what led to bad decision making. Thematic analysis (Braun and Clarke 2006) was employed with five main themes emerging related to operational preparedness; Trust, Information Gathering, Incident Learning, Skills and Experience 21 sub-themes. These key themes related to behaviours associated with decision making. Thirteen scenarios and related item responses were developed using reports from previous incidents, and the thematic analysis. Verbal protocol analysis was employed to validate the scenarios and responses. The SJT was piloted on 50 personnel for face validity, amended and then rolled online to 282 personnel from fire stations across the West Midlands. Results showed that WMFS is operationally prepared according to the analysis of the five themes, except for the theme of information gathering for those having 21-25 years service with roles of crew, watch and station commander. Internal reliability was 0.7 for the measure. A discussion of the concept of familiarity heuristics is provided as an explanation of these results as well as suggestions for taking remedial action to rectify this issue. Further development of the SJT will be outlined.

This short paper will provide the audience with an overview of issues encountered by blue light service personnel in terms of how they act in stressful environments and the way organisations can help prepare their staff to deal with such situations.

The novel aspect of this paper is the identification of factors that contribute to fire-fighters being operationally prepared to deal with unusual incidents as well as a new tool to assess preparedness. At present no other assessment method exists. With incidents such as Atherstone on Stour having legal implications for both incident commanders and the fire-service, everything possible should be done to ensure appropriate measures are in place to reduce risk. Whilst the project does not assess or make recommendations on legal requirements, it does allow for issues within the fire service to be identified and remedial action suggested.

This paper will promote discussion from the audience on ways to reduce risks in organisations and for individuals. Discussion on appropriate assessments will also take place.

Reference


Friday 10th January

F01 BPS Divisional Chairs Session
Please refer to your programme book

F02: Standard Paper
The influence of personality on people's choice of organizations.
Dave Bartram, CEB, Thames Ditton, Yin Lin, CEB, Ben Schneider (Bartram, Lin & Schneider) CEB
Theme Organisation

The attraction-selection-attrition (ASA) model (Schneider, 1987) holds that people in any organization are unique in that they are the ones attracted to, chosen by, and who have chosen to remain in that organization. The model holds that the key factor influencing this is the degree of fit between the individual's personality and the modal personality of the organization.

Recent developments in multi-level analysis techniques and the availability of large multinational and multi-organizational data sets have provided new options for testing this model. Bartram (2013) reported on country level differences in a large multinational data set of OPQ32r personality scales. A subset of this data includes information about people's organization (either the one they were attracted to and being assessed for, or the one they were already employed in) and the industry sector the organization belongs to. As the organizations are multinational, it is possible to use crossed multi-level analyses to examine the separate effects of country and organization on explaining personality variance.

Support of the ASA model is important for investing in the future, as it will help us understand the extent to which people self-select organizations as potential employers and how organizations make decisions about which people to employ. It is also relevant to an understanding of what organizations can do to ensure they attract the right people and retain them once employed.

The research investigated the following hypotheses:

1. According to the ASA model, organizations will account for personality scale variance over and above any effects of country.
2. If modal organizational personality is independent of industry sector, industry sector will account for less personality variance than organizations.
3. If organizations within industry sectors are more similar in cultural terms, then industry sector should account for some (or all) of the organizational level variance.

Method
Personality data: OPQ32.
The instrument used in the study was the OPQ32r. This is widely used in occupational assessments around the world for selection and development and is available in more than 30 languages. OPQ32r was introduced in 2009 as the replacement for OPQ32i (see SHL, 2013). It has a forced-choice item format and consists of 104 sets of item triplets: each triplet is a set of three statements, where each statement relates to a different scale. For each triplet the candidate chooses one statement as 'most like me' and one as 'least like me'. OPQ32r uses a multi-dimensional IRT model to produce normative scale scores (SHL, 2013).
Twenty five of the 32 OPQ scales are used to compute the Big Five scales. Subsets of scales are combined with positive or negative loadings as appropriate. It should be noted that for the OPQ32 Big Five scales, Neuroticism is reverse scored and labelled Emotional Stability. Around 50% of the variance in OPQ32 primary scale scores is typically explained by the Big Five personality factors.

In short, individual (Level 1) and aggregate (Level 2) data were available for OPQ32r primary scales (32) and Big Five scales (5).

Sample structure: Countries, client organizations and industry sectors

Between October 2009 and February 2011, 113,746 usable OPQ32r score records were collected covering 44 different countries. These data were predominantly obtained during recruitment procedures, though some were from post hire development assessments. For the data obtained during recruitment it is not possible to identify the subset of those assessed who were selected by the client organization.

For the present analyses a minimum country sample size of 100 was set. With that as a minimum, there were 113,480 cases (69,586 male and 43,894 female) included from 39 countries. The data set was further reduced to 37 countries to ensure that criterion measures were available on all countries. This resulted in a final sample size of 93,511 comprising 490 client organization samples with sizes ranging from n=3 to n=4,244 per client. The client organizations could be mapped onto 22 different industry sectors, with industry sector sample sizes ranging from n=300 to n=16,888.

The majority of client organizations (61.02%) were multinational. The average number of cases per country within clients was 83.1 (SD=102.8). 90% of the client organizations had people drawn from between one and eight countries in their samples, with half of the remaining 10% having 12 or more countries in their samples. The maximum number of countries covered by a client organization was 31 of the possible 37.

Of the 22 industry sectors none contained a single country sample. The minimum number of countries per industry sector was 3 and the maximum 33. The average number of people per country within industry sectors was 177.6 (SD=135.5).

Of the 18,620 (i.e. 37 by 490) possible country-by-client combinations, 12.35% had non-zero sample sizes. For the 836 (i.e. 37 by 22) possible country-by-sector combinations, 57.78% were non-zero.

Country level criterion covariate measures

Seven country level variables were used as covariates to account for variance in personality. References and full descriptions are presented elsewhere (e.g. Bartram, 2013). They included Hofstede's four main cultural values dimensions: Individualism (IDV) Power-distance (PDI) Masculinity (MAS), and Uncertainty Avoidance Index (UAI). They also included three country 'performance' or 'outcome' measures:

1. The United Nations Human Development Index (HDI) is an overall index based on three sub indices: quality of education, life expectancy and gross domestic product. Data from three consecutive years was used to maximise stability over time.

2. The Global Competitiveness Index (GCI) produced by the World Economic Forum (WEF). The GCI has three main sub-indices covering the 'basic requirements' of economies, 'efficiency enhancers', and 'innovation and sophistication factors'. Again, to maximise stability over time, the GCI was drawn from three consecutive years.

3. The Corruptions Perception Index (CPI) is produced by Transparency International. A high score on this index indicates low levels of perceived corruption and a low score, high levels. Data were available for two consecutive years.
All 37 of the countries in the OPQ32r sample were matched with data for Hofstede's four dimensions, GCI, HDI and CPI data.

Method of analysis
Client organizations were nested under industry sector but both were partially crossed with country. As a result, the data were analyzed using a cross-classified multilevel model with the SPSS Mixed procedure.

Results
Client organization and country effects

The variance accounted for by country, client and the two combined for each of the Big Five personality scales is shown in Table 1. Without introducing Country Level covariates the average total variance accounted for is 11.69%, with 6.20% accounted for by country and 5.49% by client organization. This shows that client organization accounts for almost as much variance as country differences. Introducing the Level 2 country level covariates reduces the variance remaining for countries (to an average of 2.93% per scale) but has no effect on the between client variance (which is at 5.69%).

For emotional stability, PDI, MAS and GCI are all significant covariates. For Extraversion, PDI, MAS, CPI and GCI are all significant and for Openness, PDI and UAI are significant.

Table 1: client organization and country effects.

<table>
<thead>
<tr>
<th></th>
<th>Variance accounted for by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Country</td>
</tr>
<tr>
<td>k=37</td>
<td>k=490</td>
</tr>
<tr>
<td>Without Level 2 country covariates</td>
<td></td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>9.09%</td>
</tr>
<tr>
<td>Extraversion</td>
<td>5.83%</td>
</tr>
<tr>
<td>Openness</td>
<td>4.42%</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>7.63%</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>4.02%</td>
</tr>
<tr>
<td>Average</td>
<td>6.20%</td>
</tr>
<tr>
<td>With Level 2 country covariates</td>
<td></td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>2.86%</td>
</tr>
<tr>
<td>Extraversion</td>
<td>1.80%</td>
</tr>
<tr>
<td>Openness</td>
<td>3.75%</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>3.25%</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>3.01%</td>
</tr>
<tr>
<td>Average</td>
<td>2.93%</td>
</tr>
</tbody>
</table>
When the same analysis is performed using client organizations clustered into industry sectors it is found that relatively little variance is accounted for by sector (an average of only 2.11%). As for the client organizations analysis, introduction of the country level covariates reduces personality scale variance accounted for at country level from an average of 6.46% to 3.99% while having no effect on variance accounted for by industry sector.

While Big 5 average scale scores for each of the industry sectors, averaged across countries, show relatively little variation in personality scale scores between industry sectors, there are some points to note. For example we see a high score on Agreeableness for non-profit organizations and a low score for the Media sector. Media are also distinguished by being high on Extraversion and Emotional stability. Non-profit are also high on Emotional stability. Organizations in the education sector are relatively low on both Extraversion and Emotional stability. None of the industry sectors are associated with particularly high or low scores on either Conscientiousness or Openness.

Discussion
The present results show that those who are attracted to apply to an organization are more homogenous than the general population they come from. Information is not available that would allow us to differentiate between the total applicant pool and the selected subset. However, the results clearly indicate that attraction is associated with a degree of homogeneity that is comparable in magnitude to that associated with country effects. Furthermore, organizational effects are independent of country effects and are more substantial than industry sector effects.

It might be thought, that these effects are unfortunate as they would seem to imply that organizations employ 'clones'. However, it should be emphasized that there is still a lot of personality variance left after taking account of these Level 2 effects. What is does suggest is that people have preferences for the sort of organizations they work for, and organizations have preferences for the sort of people they employ.

The implications of these results for organizational recruitment and selection procedures will be discussed in the 15 minute Q&A session. In particular, the question will be raised as to whether organizations can use this phenomenon to gain a business advantage by fitting their 'personality' to a profile that is associated with the key competencies that lead to successful business outcomes.

References


F03: Standard Paper
Sustaining employee engagement for future organisational health
Rachel Lewis, Kingston Business School and Affinity Health at Work, Emma Donaldson-Feilder, Affinity Health at Work, Taslim Tharani, Kingston Business School
Theme Individual

Although the term employee engagement is widely used in management practice and literature, definitions vary widely between academia and practitioners. Organisational definitions of engagement tend to refer to engagement with the organisation and describe it in terms of employee behaviours (such as going the extra mile, demonstrating commitment to the organisational values and objectives). Academic definitions, in contrast, tend to place more emphasis on
engagement with roles and tasks and define engagement as a cognitive state (what engagement feels like rather than what it produces).

In our research, we aimed to define employee engagement in a way that encompasses the range of definitions across academic research and practice, as follows: 'Being focused in what you do (thinking), feeling good about yourself in your role and the organisation (feeling), and acting in a way that demonstrates commitment to the organisational values and objectives (acting).’ (Lewis et al, 2011)

Why is employee engagement important?
Employee engagement is important for two reasons: firstly that it is consistently believed across business to have powerful effects on productivity (for instance 94% of the world’s most admired companies believe engaged employees creates a competitive advantage - cited by Engage for Success, 2012); and secondly, that it does have powerful effects on productivity. The recent publication by the Engage for Success task force entitled ‘Nailing the Evidence’ (Rayton, Dodge, D’Analeze, 2012) presents a detailed business case, showing a positive impact of engagement at the organisational level (on operating income, revenue growth, productivity, innovation, profitability, retention, customer service, reduced absenteeism, safety), and at the individual level (job satisfaction, mental and physical wellbeing).

The fragility of engagement in a changing world
Despite its importance, employee engagement may be becoming increasingly fragile and difficult to sustain. Indeed, figures suggest that, in the UK, engagement levels are worryingly low: that only one third of employees in the UK are engaged (Wiley, 2009), that those strongly engaged may be less than 10% (CIPD, 2010) and that two thirds of employees are disengaged, unsupported and detached (Towers Watson, 2012). It is likely that both the financial and technological changes in both the organisational landscape, and the way we work have meant that employees are enabled, and impelled, to work harder and longer. Recent surveys (e.g. Towers Watson) show that employees are more anxious, and more worried about their futures than in previous years. Employees were found to be working longer hours, taking less time off to recover and experiencing higher levels of stress. They may also be more likely to take sickness absence and intend to leave their organisation.

It is possible that the way engagement tends to be defined within organisations may actually be exacerbating its fragility and the potential negative impact on psychological wellbeing. If engagement is perceived as and measured in terms of employees 'demonstrating additional effort', this could create an unsustainable situation where engaged employees are expected to work ever longer and harder to demonstrate their commitment. Over time, working in this way could negatively impact on an individual's wellbeing. (Of course, just working longer hours isn't necessarily detrimental. Research suggests that it is not the hours worked, but the underlying motivations behind the hours that is key. Therefore, working longer hours isn't a problem if that individual is doing so for enjoyment and vitality. However, if the individual is working longer for reasons such as they feel they have to, or feel a compulsion to, then this is likely to be problematic.)

From this perspective, if engagement is measured in terms of working long and hard, it may mean that employees who are seen as, or rewarded for being 'engaged' may not be feeling 'engaged'. Research by CIPD and Kingston Business School (Gourlay et al, 2012) reinforced this, exploring the motivations behind employee engagement. Their work defined two types of engagement. Both types may involve similar behaviours from employees, such as putting in additional effort at work: but one, termed emotional engagement, was where employees enjoyed work and identified with the work values; and the other, termed transactional engagement, where employees were displaying engaged behaviours because they were interested in reward or were in fear of losing their job/reward if they didn't. Emotional engagement was associated with positive outcomes of increased wellbeing and decreased family conflict and burnout; whereas transactional engagement was associated with increased family conflict and burnout. In addition, the research suggested that emotionally engaged employees could shift to being transactionally engaged if they were given
increasingly high work demands and pressures. Therefore, measuring engagement by employee outcomes may be both clouding the evidence, and potentially worsening the problem. Instead, employers need to engage employees in a way in which is sustainable and healthy.

Wellbeing + Engagement = Sustainability
There is evidence to suggest that employee engagement and psychological wellbeing work together in predicting outcomes (Fairhurst & O’Connor, 2010), in that those employees who were highly engaged and had high levels of wellbeing were the most productive and happy; and those disengaged with lower levels of wellbeing were likely to contribute least to the organisation. There is also preliminary evidence (Robertson & Birch, 2010) that employee psychological wellbeing is important for sustaining employee engagement by enhancing the relationship between employee engagement and productivity. This suggests that if organisations only focus on initiatives that target employees' commitment and 'going the extra mile', without nurturing employee psychological wellbeing, the impact will be limited and unsustainable.

How managers can sustain employee engagement
Various reports highlight line managers as one of the most important influences on engagement (e.g. Alfes et al, 2012; McLeod & Clarke, 2008). It has also been consistently shown that managers are key to the health and wellbeing of employees. For instance, Dame Carol Black’s review of the health of Britain’s working age population (Black, 2008) stated that ‘good line management can lead to good health, wellbeing and improved performance’ and a recent review of evidence by Kelloway and Barling (2010) stated ‘sufficient data have now accumulated to allow the unambiguous conclusion that organisational leadership is related to, and predictive of, health and safety relevant outcomes in employees’. This suggests that one of the key ways to achieve sustainable engagement in employees will be to focus on improving line manager skills and relationships.

Methodology
Management behaviour for sustainable employee engagement
Our recent research has brought together two frameworks from our previous work: management behaviour for enhancing employee engagement on the one hand; and management behaviour for preventing and reducing stress at work on the other hand. The methodology taken is shown in the flowchart below. For the full methodology used for development of the 'Management behaviour for enhancing employee engagement' framework, see Lewis et al. (2011), for development of the 'Management behaviour for preventing and reducing stress' framework, see Donaldson-Feilder et al. (2009), and for the development of the management behaviour for sustainable employee engagement framework, see Lewis et al. (2012).
Phase 1: Eliciting behaviours. Interviews with 48 employees of a global services provider. Competency framework for managing engagement produced.

Phase 2: Preparing Managing engagement QR. Behavioural statements extracted. QR tested qualitatively (n=17) and quantitatively (n=127). Reliability analysis resulted in 102 item QR.

Phase 3: Validating 'Managing Engagement' Framework. 7 organisations, 506 DRs, 126 managers responded to QR. Also asked on health, performance, engagement, job design. Reliability and factor analysis resulted in 41 item ‘Managing Engagement’ QR.

Phase 4: Validating managing engagement QR and producing sustainable engagement QR. 3 months later. 7 orgs, 378 DRs, 108 managers responded to QR on managing engagement and MCPARS. All additional qs from Phase 3 also included. Reliability and factor analysis resulted in 54 item ‘Sustainable Engagement’ QR.

Results

The results revealed a 'Managing for sustainable employee engagement' framework made up of five behavioural themes, or competencies, as follows:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Brief Description</th>
</tr>
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<tbody>
<tr>
<td>Open, fair and consistent</td>
<td>Managing with integrity and consistency, managing emotions/personal issues and taking a positive approach in interpersonal interactions</td>
</tr>
<tr>
<td>Handling conflict and problems</td>
<td>Dealing with employee conflicts (including bullying and abuse) and using appropriate organisational resources</td>
</tr>
<tr>
<td>Knowledge, clarity and guidance</td>
<td>Clear communication, advice and guidance, demonstrates understanding of roles and responsible decision making</td>
</tr>
<tr>
<td>Building and sustaining relationships</td>
<td>Personal interaction with employees involving empathy and consideration</td>
</tr>
<tr>
<td>Supporting development</td>
<td>Supporting and arranging employee career progression and development</td>
</tr>
</tbody>
</table>
Conclusion
In the current economic and workplace context, employee engagement could potentially help organisations survive by improving productivity and performance. However, the same context that makes engagement desirable also makes it potentially fragile. It is important that managers behave in ways that engender both engagement and wellbeing in their teams. The newly developed 'managing for sustainable employee engagement' behavioural framework offers opportunities to support this. Implications for practice, research and wider policy will be discussed.

The presentation will include 15 minutes for plenary discussion about the concept of sustainable engagement and the issue of whether current conceptualisations are 'killing' employee engagement.

References


F04: QOccPsych (Stage 2) Information Session for Candidates on the Qualification In Occupational Psychology
Karen Moore, Rosemary Schaeffer & David Carew, QOccPsych Qualification Board
Theme Profession
This session will provide an opportunity for candidates to ask questions of the Board of the Qualification. We will structure the time available to enable us to answer your questions and provide the information you need. We will be able to share our experience on a wide range of issues, such as how to write a successful entry, how to find a supervisor and what support you can expect from them. We will not be able to go into detail about very specific issues you may have; these can be discussed in individual support sessions which will be available throughout the conference at the Qualification’s stand. All members of the Division, whether qualified or still in training, will be aware of the 8 Areas Review Project. This session will include a discussion of the potential implications for current and future candidates.

**F05: Standard Paper**

**Employability of Occupational Psychologists**

**Vicki Elsey**, Northumbria University

**Theme** Profession

This presentation forms part of a Professional Doctorate in Occupational Psychology looking into the employability of Occupational Psychologists from a UK University.

'Employability' has been a focus of research since the 1950s (Hogan, Chamorro-Premuzic and Kaiser, 2013; van der Heijde and van der Heijden, 2006), studied in many fields from psychology to management literature (van der Heijde and van der Heijden, 2006) each with a different definition of employability and metrics of success. Employability is currently top of the public policy agenda (Hogan et al, 2013) and while economic issues play a huge part in the current level of interest, psychologists are increasingly interested in the role of the individual in maintaining their own employability (Berntson, Näswall and Sverke, 2008; Fugate, Kinicki and Ashforth, 2004; van der Heijde and van der Heijden, 2006). There is agreement that in reality individuals need to be more adaptable in order to succeed in the ever changing work environment. Career research suggests that traditional organisational structures and "jobs for life" no longer exist, individuals and organisations are more fluid and the employee now has more control over their work than the employer (Arthur and Rousseau, 1996; Fugate et al, 2004). Careers are described as 'boundaryless' (Arthur and Rousseau, 1996) or 'protean' (Hall, 1976) rather than traditional, emphasising not only a change in the organisational structure but also in the requirements of employees. Fugate et al (2004) describe that changing organisational structures has led to employees becoming more proactive in their pursuit of work and in making changes to their workplaces. It is clear that in order to succeed in an ever changing work environment, where the "job for life no longer exists", employability skills will continue to be important for employees and employers and in turn HE providers who ultimately 'supply' the workplace with employees (Fugate et al, 2004; van der Heijde and van der Heijden, 2006).

Van der Heijde and van der Heijden (2006) expand upon research into employability as a skill (i.e. completing a specific task) and reconceptualise it as a competence (i.e. completing multiple tasks well). Their definition of employability is "the continuous, fulfilling, acquiring or creating of work through the optimal use of competencies" (van der Heijde and van der Heijden, 2005). This definition makes it clear that acquiring employability competence is a continuous process throughout an individual's career; it is the application or transferability of this competence which may make the difference in career success. Many definitions of employability exist, however most refer to the idea of the individual using their transferable skills in securing employment, the former relating to the individual's ability and the latter also includes economic issues (Tymon, 2013). Most employability research therefore discusses the challenges of measurement in that an individual may be 'employable' but may not be in 'employment' i.e. employability does not guarantee employment (Fugate et al 2004, Wilton, 2011).

The perceived lack of an outcome measure has also made quantifying employability challenging. Within the University sector, first destination survey results have been used to identify whether students are employed and therefore employable following their degree courses. Harvey (2001) argues that the use of arbitrary measures of 'employability' through first destination survey results by Universities is a narrow view, but also fails to take sufficient account of the
individual in securing their own employment. Harvey (2001) argues for example that a distinction needs to be made between getting a job and being prepared for employment.

In order to research this issue further, many researchers have opted for satisfaction levels. Van der Heijde and Van der Heijden (2006) used career success as an outcome measure of employability. Their interest was both in objective (e.g. number of promotions, gross income, number of periods of unemployment) and subjective (job satisfaction, interpersonal success, life satisfaction etc.) career success. The theory suggests that an individual's career success may lead to improved organisational success (Ng, Eby, Sorenson and Feldman, 2005). Career success has been defined as "the accumulated positive work and psychological outcomes resulting from one's work experiences" (Seibert and Karimer, 2001). De Vos, De Hauw and Van der Heijden (2011) discuss how research on career success and employability has been developed in tandem which they believe implies poor understanding of how the two concepts relate to one another. They describe employability as being a critical factor in career success.

Employability of Occupational Psychologists

Currently there is much interest in the training of Occupational Psychologists evidenced by the review of the curriculum which is underway. Employability of Occupational Psychologists although hinted at in the review, is not a formal focus of the DOP at present. While it is a relatively niche area of Psychology it is not unique in that it crosses paths with other business related activities. The lack of a clear career path has always been accepted as the norm. However the type of work that Occupational Psychologists do has rarely been the focus of research. Likewise the demand for and understanding of the benefits that can be gained by an organisation through recruiting Occupational Psychologists still awaits investigation. Now that the curriculum is changing, it is timely to also look externally to what the market requires and what Occupational Psychologists have to offer. In 2012 an "Expert Panel to Review the Future Education and Curriculum for Occupational Psychologists" was conducted. The findings which relate to employability include:

- Employability skills of communication, networking and project management are not being taught to current students
- Internships, bringing practitioners and recent graduates together, competency checklist and encouraging students to expand their network were identified as ways in which the Division of Occupational Psychology could lead on the career development of their members
- There is a mismatch between reality and what is taught in academic contexts
- There was a "lack of accurate information" in relation to DOP membership including where OPs work and their areas of competence.

Employability was therefore identified as an area for concern by the DOP.

There is a lack of consensus, or at least no easy option in developing the employability of graduates. It is not simply a case of developing certain skills which will then lead to higher employability. However, developing an awareness of the factors which lead to career success may be potentially useful in taking employability forward within this context. Whilst all students on MSc Occupational Psychology programmes receive the same (or very similar) education, it is expected that their career success will differ. The research aims to identify the factors which lead to higher employability and career success/satisfaction of alumni from a UK university since the inception of the programme.

Methodology and Results

The conference presentation will briefly summarise the methodologies that have been employed so far in this Professional Doctorate in Occupational Psychology which include:
Focus group with a cross section of Occupational Psychologists which further established the rationale for looking into employability of Occupational Psychologists as well as identifying themes for a later questionnaire study with alumni from a UK University. Factors which make Occupational Psychologists unique include using an evidence base, making a difference, continuing professional development etc.

Diary study with a current cohort of MSc Occupational Psychology students identifying their development as early career occupational psychologists, followed up with interviews to track the progress of these graduates and identify themes in improving their employability

Questionnaire with alumni from a UK University since the programme was established to identify the factors which led to improved employability and career success. This questionnaire draws together academic literature in the area of employability as a general concept, career success and the researchers own qualitative and desk based research into employability of Occupational Psychologists, as a professional group from a range of sources e.g. OP-First, focus group etc. The presentation will also include data relating to the reliability and validity of the questionnaire.

(NB: all studies received ethical approval from the Faculty ethics committee)

The results presented serve to encourage debate as to the current employability of Occupational Psychologists as well as the factors which lead to increased employability and career success. The researcher aims to identify which factors are ‘trainable’ and discuss options for how to improve the employability of Occupational Psychologists. This, it is hoped will be interesting for the OP community as well as employers who do or have the potential to employ them.

**Links to the conference aims**
The presentation will link to the conference aim of Theme Profession. The results of the Professional Doctorate Research to date will identify the factors that contribute to employability of Occupational Psychologists. This will inform:

- education providers of the factors which may be worth considering in programme design
- early career Occupational Psychologists who can then shape their CPD activities to enhance their employability
- more experienced Occupational Psychologists in their CPD and also in the supervision of practitioners in training.
- longer term, the researcher hopes that this work will also engage employers with the potential benefits of employing Occupational Psychologists.

Having a compelling and convincing story to tell employers is an area where the researcher believes Occupational Psychologists can improve. The research links many years of employability and career success work with the career of Occupational Psychologists, a currently under researched area.

**References**


In the summer of 2012 the Department for Education (DfE) introduced new guidelines for selection onto Initial Teacher Training (ITT) programmes. These included the requirement to assess behaviours such as resilience and interpersonal skills. By ensuring that the right people are trained as teachers at this early stage, schools and universities should create stronger teaching cohorts and bring the children of tomorrow only the highest quality of learning.

But what makes a best in class trainee teacher? The authors worked with a large number of ITT institutions across the UK to explore this question, develop a behavioural framework and validate this with current teacher training cohorts.

### Design and Methodology

#### Model development

The conceptual development of the model drew on government reports detailing consistent findings from current literature that linked behaviour to effective teaching, information from professional bodies such as Teach First and focus groups conducted by the authors.

From these activities, the model produced comprised ten key behavioural areas: Interpersonal Skills, Communication, Resilience, Adaptability, Support, Respect, Self-Organisation, Proficiency, Leadership and Passion.

A behavioural fit score was also proposed as follows:

\[ \text{Fit score} = 8 \times \text{Communication} + 8 \times \text{Resilience} + 8 \times \text{Support} + 8 \times \text{Leadership} + 6 \times \text{Interpersonal Skills} + 6 \times \text{Respect} + 6 \times \text{Passion} + 4 \times \text{Adaptability} + 4 \times \text{Self-Organisation} + 4 \times \text{Proficiency} \]

Dimensions from a self-report 108 item behavioural questionnaire were mapped to the behavioural model to enable measurement of each of the behavioural areas included.

Two different studies applying the new model are presented.

#### Study 1: Profiling ITT applicants

The authors collected self-report data on 3124 individuals applying to 9 different ITT institutions in the UK. Mean scores on behaviours were then compared with those of a population of UK graduates from a variety of backgrounds (n=4021). The ITT sample was then broken down further by group to examine differences between learning level (i.e. Undergraduate vs Postgraduate) and teaching level (i.e. Early Years vs Primary vs Secondary).

#### Study 2: Validating the model

The authors collated self-report data on 139 current ITT students from 2 different ITT institutions, where tutors’ ratings of effectiveness (on a 1 – 7 point scale) and Ofsted grade data (on a 1 – 4 scale) were also available. Self-report scores were correlated with ratings of effectiveness and grade data to explore the impact of the differences observed in study 1. The behavioural fit score was also validated.

### Data Analysis

#### Study 1: Profiling ITT applicants
ITT applicants (n=3124) were compared to a sample of general UK graduates (n=4021). For each ITT applicant, STen scores were computed using the sample of general UK graduates as a benchmark. Mean STen scores were then calculated for each behavioural area for the ITT applicant group (the mean of the UK graduate population would always be 5.5).

Large differences were observed on the Support and Respect scales, where ITT applicants typically scored 2 stens higher than general UK graduates. A moderate difference was observed on the Passion scale, where ITT applicants typically scored 1 sten lower than general UK graduates. Graph 1 depicts how, on average, ITT applicants differ from general UK graduates across all 10 behavioural areas.

To understand the differences between different groups of ITT applicants, the group was broken down by learning level (Undergraduate vs Postgraduate) and teaching level (Early Years vs Primary vs Secondary) as follows:

- Undergraduate Early Years n = 184
- Postgraduate Early Years n = 116
- Undergraduate Primary n = 555
- Postgraduate Primary n = 271
- Undergraduate Secondary n = 198
- Postgraduate Secondary n = 234

Mean STen scores were then calculated for each behavioural area for each group and compared against the general UK graduate population. The patterns of results observed were very similar, regardless of ITT applicant group. The largest differences occurred on the Communication scale, where applicants to Early Years courses scored on average between 1 and 1.5 STens lower than those to Secondary courses and general UK graduates. Graph 2 depicts how, on average, different groups of ITT applicants differ from general UK graduates across all 10 behavioural areas.

Graph 1. Mean STen scores of ITT applicants against UK graduates on the 10 behavioural areas

Graph 2. Mean STen scores of ITT applicants (by group) against UK graduates on the 10 behavioural areas
To understand further how ITT applicants as a whole (n=3124) differed from general UK graduates, differences in the underlying mapped behaviours were examined, using the same methodology.

Behaviours underlying the Support scale include Understanding People, Inviting Feedback and Team Working (the latter carries less weight in the model than the two former). ITT applicants typically scored 2.0, 1.0 and 1.6 STens higher than general UK graduates on each of these behaviours respectively. High scorers on Understanding People, where there was the greatest difference between the two groups, show empathy, listen to people and understand people’s motivation.

Behaviours underlying the Respect scale include Valuing Individuals and Upholding Standards (again, the latter carries less weight than the former). ITT applicants typically scored 2.0 and 1.6 STens higher than general UK graduates on each of these two behaviours respectively. High scorers on Valuing Individuals, where there was the greatest difference between the two groups, show consideration, tolerate others and trust people.

Behaviours underlying the Passion scale include Pursuing Goals and Taking Action (both carrying equal weight). General UK graduates typically scored 0.5 and 1.5 STens higher than ITT applicants on each of these two behaviours respectively. High scorers on Taking Action, where there was the greatest difference between the two groups, make things happen, use initiative others and invest energy.

Study 2: Validating the model (Note. All correlations discussed are p<.05, two tailed)

Behavioural Fit: Self-report overall behavioural fit scores were calculated for each individual based on the equation described earlier and correlated with Ofsted grades (n=136) and tutors’ ratings of overall performance, broken down into three broad areas: Applying Specialist Expertise, Accomplishing Objectives and Demonstrating Potential (n=139).

The behavioural fit scale correlated with Accomplishing Objectives (.57, $r_c$-corrected for criterion unreliability), Demonstrating Potential (.27, $r_c$) and Overall Performance (comprising all three areas of performance) (.36, $r_c$), lending support for the validity of the proposed equation. Further support is lent by the correlation observed between the behavioural fit scale and Ofsted grades (.18) (no correction applied to Ofsted grades).

To better understand the impact of the group differences observed in study 1, individuals’ self-report scores on Support, Respect and Passion were correlated with tutors’ ratings of performance and final Ofsted grade.

Support: The Support scale correlated with Accomplishing Objectives at .49 ($r_c$), but did not demonstrate significant correlations with Applying Specialist Expertise and Accomplishing Objectives.

To further support this observation, additional analysis was conducted based on the Great Eight Competency Framework (Kurz & Bartram, 2002). Great Eight scores were calculated for each individual based on mapping by subject matter experts (MacIver et al, 2009). These scores were correlated with ratings of performance. Supporting & Co-operating, the Great Eight competency most aligned to Support, demonstrated a strong positive correlation with Accomplishing Objectives (.50, $r_c$).

These observations are of particular note as they contest the notions drawn from results of validation studies on mixed occupational groups that show negative correlations between predictors of Supporting and Cooperating and ratings of overall performance (Bartram, 2005).

Further analysis examining the behaviours underpinning Support revealed that Inviting Feedback (.37, $r_c$) is more important than Understanding People (.13, ns) to Accomplishing Objectives.

Neither the Support scale, nor the Great Eight Supporting and Co-operating scale demonstrated significant correlations with Ofsted grades.
Respect: The Respect scale failed to demonstrate significant correlations with any of the three areas of overall performance, or Ofsted grade data.

Passion: While the Passion scale failed to correlate with tutors’ ratings of overall performance, it did demonstrate a significant correlation with Ofsted grade data (.20). Again, to further support this observation, additional analysis was conducted based on the Great Eight Competency Framework (Kurz & Bartram, 2002). Enterprising & Performing, the Great Eight competency most aligned to Passion, demonstrated a strong positive correlation with Ofsted grade data (.27). Further analysis looking at the behaviours underpinning the Passion scale revealed that Pursuing Goals (.23, r.) was more important for Ofsted grades than Taking Action (.13, ns).

Discussion
Points for discussion include:

- The behavioural fit equation proposed at the start of this paper is a sound predictor of performance, particularly Accomplishing Objectives and Demonstrating Potential
  - The implications of this for ITT institutions are great – they have the opportunity to effectively and reliably screen out individuals with low fit, relieving an admissions system that currently sifts through tens of thousands of application forms for a few hundred places
- Applicants to ITT courses typically see themselves as considerably stronger on Support and Respect, compared to a general UK graduate population
  - While Respect is not explicitly linked to performance, Support is linked to Accomplishing Objectives in teacher training
  - It seems to be the willingness to acknowledge and act upon feedback, rather than valuing others; this reflects the learning style encouraged on ITT courses.
- Applicants to ITT courses generally see themselves as considerably less action oriented than the general UK graduate population. This may be due to the relatively structured career path of a teacher. Those few with greater ambition and drive may go on to lead departments and schools.
  - Interestingly, while the Passion scale failed to correlate with tutor ratings, it did correlate with Ofsted grades, where Pursuing Goals was observed to be more important than Taking Action.

Q&A

1. Personality theories, particularly Kurz & Bartram’s (2002) Great Eight and links to success in teaching

2. The session links to Communities because of how the research discussed is being applied to the selection of trainee teachers, who will be going on to teach the adults of tomorrow. By getting the right people into teaching, we raise the quality of our education system and our children will have a better chance at a better future. The research also has the potential to inform future initiatives of the DfE and wider government policy

3. The use of psychometrics in the selection of trainee teachers was until last summer still relatively unheard of and the content discussed demonstrates the value behavioural research can add to the selection and development of trainee teachers

4. The topic is likely to be of interest to conference attendees with a particular interest in personality in different occupations, however, the practical implications of this piece of research are likely to resonate with most
people living in the UK, simply because of the vast impact the quality of our education system has in schools, at home and in future workplaces

5. We will make slides available to all attendees

6. We will provide a number of opportunities for interactive points to the session, including a conceptual mapping exercise and discussion of what people think makes a best in class teacher

F07: Standard Paper

The Design, Development and Evaluation of a Model and Metric of Workplace Engagement
Mark Slaski, C Knight, J Schulz, University of Hertfordshire

Theme Organisation

Whilst there is much research interest surrounding engagement at work, there is a paucity of quality research investigating the psychosocial drivers that lead to workplace engagement (for reviews see Halbesleben 2010; Gatenby, Rees, Soane and Truss, 2008; Macleod & Clarke, 2009). It is believed that such an approach would provide models and metrics with greater practical utility to occupational psychologists and organisations alike.

The aims of this on-going research are multiple. Firstly to explore the workplace as a psychosocial environment and to model the key factors of the environment that lead to superior engagement. Secondly, to operationalise a new factor model of workplace engagement through a reliable and valid questionnaire. Thirdly, to test the model against other organisational outcome variables such as job performance, wellbeing and organisational commitment.

Whilst many researchers define engagement as a state of mind characterized by energy, vigour and absorption in a particular task (e.g. Schaufeli, Salanova, González-Romá, & Bakker, 2002; Cziksentmihalyi, 1990), others view employee engagement as more dynamic and interactive, taking greater account of a holistic, emotional and social process (e.g. Macleod and Clarke, 2008; Kahn, 1990). In taking the psychosocial approach we believe that the workplace offers a dynamic and unique environment in which employees have specific needs and expectations that are both psychological and social. When these needs are met employees experience a sense of ‘engagement’ which in turn leads to increased job-performance, wellbeing and commitment.

To explore the psychosocial elements of the workplace the author conducted five focus groups with staff employed in different private and public sector organisations (n=75). The aim of the focus groups was to explore both positive and negative aspects of the workplace. Analysis of the results revealed a number of common themes, and that engaged workplaces are ones where employees have: good relationships founded on trust and a sense of involvement; where their role is clear and they have choice; and where their reward is praise for a job well done and an opportunity to develop and grow. These findings were combined with evidence and research from a broad range of academic literatures within numerous scholarly areas: motivation and needs theories; literatures on stress and emotions; emotional intelligence; social and group psychology and evolutionary theory; and not least the large quantity of material published on engagement in both psychology and management forums. The combined results of the focus groups and thematic analysis of the literature resulted in the emergence of the following seven-factor model of workplace engagement: Voice, Togetherness, Challenge, Clarity, Freedom, Recognition and Growth. It is believed that these seven psychosocial factors account for a large percentage of the variance within workplace engagement.

In order to test this hypothesis the author designed a 28-item questionnaire to test the seven factors of workplace engagement; the Workplace Engagement Questionnaire (WEQ28), this questionnaire aims to capture an individual’s feelings, beliefs and experiences surrounding the work she does and the people she works with. A seven-point Likert scale was used as the response format. Face validity checks of the WEQ28 were conducted with employees from different organisations, Human Resource specialists, and an expert psychometrician.
The aim of this research was to test both the model and the metric of workplace engagement. Specifically to test the construct and concurrent validity of the 7-factor model of engagement and the psychometric properties of the WEQ28 measure of engagement. In order to do this the WEQ28 was embedded in a larger research questionnaire also measuring Morale, Distress, Belonging and demographic data and additionally two open-text boxes inviting comments about positive and negative experiences at work.

This questionnaire was then administered to staff in six different organisations (N = 1180). A variety of sampling strategies were employed, including convenience and clustered random sampling. The total sample consisted of 65% males and 34% females, between 17 - 67 years of age. Psychometric analysis of all these data revealed very high internal consistency of the WEQ28 (Cronbach's alpha = .96) and very good construct validity, confirming the unidimensionality of the scale. Structural equation modelling (SEM) suggested high construct validity of the final model, with each outcome variable able to explain a large amount of the variance in engagement. Results of content analysis of two open questions cross-validated these results.

Confirmatory factor analysis was used to examine the structural validity of the seven factors of engagement. The analyses revealed three highly correlated domain specific factors: 'work relationships', 'work role' and 'personal reward'. Their considerable amount of common variance clearly implied a strong second-order factor; one which we could call 'engagement'. The more complex factor structure also suggests that engagement as a higher-order psychological construct is based on a broad range of attitudes, goals, personal values and experiences in relation to work, the working environment and the current job role. Engagement, as we see it, thus represents work related views and experiences that are more holistic in nature rather than merely reflecting the willingness, motivation and enjoyment of an individual to fully engage with her job role and perform to a high standard. To establish the construct validity of the WEQ28 we fitted a multivariate regression model to evaluate the impact of the seven factors of engagement on several important criterion variables. As a set of predictors they explained a substantial amount of variance in Morale (59%), Organisational Belonging (49%) and Distress (31%). Furthermore, on-going research using job-performance data suggests a significant difference between star performers and others in their levels of engagement as measured by WEQ28.

The seven-factor model of engagement and the WEQ28 could potentially be of great practical value to occupational psychologists and organisations wishing to maximise positive organisational outcomes as it identifies strengths and vulnerabilities within the organisation and at different levels such as team or department or region. In turn this informs the design of specific and targeted interventions aimed at raising engagement, wellbeing and job performance.

F08: Standard Paper

**Oops! How social identity theory can help you to step smartly with spoiled safety leadership in a factory**

*Kieran Duignan*, The Positive Measures Partnership

**Theme Organisation**

As the Health and Safety Executive (1999) outlined, safety at work is considerably shaped by influences on behaviour of employees at all levels and by reducing errors particularly through user-centred design of what psychologists classify as 'human-machine interaction'. Ford and others (2013) highlight how social identity theory (SIT) can address interpersonal miscommunication at the core of failures in human-machine interaction in safety management; while Haslam and others (2011) discuss leadership influence and power in terms of 'prototypicality', applying the design task of prototyping to embodiment of the qualities of followers of leaders through aligning principles of judgment described as comparative fit and normative fit.
An original pioneer of SIT, Turner (1999:13) explained how: 'Comparative fit is defined by the principle of meta-contrast which states that a collection of stimuli is more likely to be categorized as an entity (a higher order unit) to the degree that the average differences perceived between them are less than the average differences perceived between them and the remaining stimuli which comprise the frame of reference.....For example, any collection of people will tend to be categorized into distinct groups to the degree that the intra group differences perceived within the relevant comparative context are smaller on average than the perceived intergroup differences. Normative fit refers to the content aspect of the match between category specifications and the instances being represented... .Their similarities and differences must be consistent with our normative beliefs about the substantive social meaning of the social category'.

The intervention
To test facets of how leaders in Firm Alpha (n=200) conducted this task of prototypicality, I agreed with the Environment Health and Safety (EHS) Manager to report on risks of cumulative musculoskeletal injuries (Pheasant and Haslegrave, 2006) to six operatives (4 m, 2 f; ages 21 to 51) in a unit assembling industrial and marine pumps. The salient context included recent lost time absence of a female operative who required surgical intervention to relieve her condition of Carpal Tunnel Syndrome; the facts that musculoskeletal injury through manual handling has been the main category of absence from manual work in the UK for more than a decade and that Firm Alpha's parent American/Chinese company had expressed very strong dissatisfaction about rises in the level of insurance premiums for 'ergonomic injuries', failings of the firm to comply with provisions of the Provision and Use of Equipment at Work Regulations 1998 and lack of knowledge of physical and cognitive interfaces on the part of the EHS Manager necessary to diagnose the root problems.

My report to management included photographs extracted from videos I recorded, which illustrated how the design of tasks and of work flow, workbenches and power tools required operatives to continually resort to mal-adaptive postures, use of force, stretching and repetitive wrist, arm and shoulder motions which relevant research associates with the symptoms of musculoskeletal injuries reported. It also stated that two females and one male reported chronic daily symptoms of lower-back and upper limb pains, for which they used medication each evening to endure the pain; and that one reported that she had not availed of physiotherapy offered to her for fear of being high on the list for any forthcoming redundancy on account of time absent. It which included indicative costings of contextual adjustments needed to reduce risks of foreseeable injury to operatives in the work unit. The primary emphases of recommendations for improvements was on improving the fit between equipment and handtools and on the lengths of the body segments of users and on associated training for workers and team leaders. A supporting emphasis was given to evidence-based use of social communications through notice boards, smartphones, warnings and in particular to a poster in the most prominent thoroughfare of the workplace, which proclaimed an aspiration that was simply physically impossible with human beings still living. The EHS Manager and the Quality Manager very strongly welcomed the report and endorsed the practical recommendations for adjustments to the work environment.

I made a photograph-illustrated presentation about these findings was made to two groups of managers, A and B in a period of 55 minutes including time for questions and comments The thrust of the presentation was on empirical information about interface design and on economic implications arising from failure to adapt or replace noxious or malfunctioning interfaces. With the social identity model of leadership in mind, I anticipated that the content of any expressions they voiced would provide indicators of the apparent texture of prototypical leadership about safety within the company.

Hypothesis-testing
Accordingly, the structure of the hypotheses tested about the responses to the presentation of evidence about ergonomic risks to operatives to the two sets of leaders was:
Null hypothesis: There is no difference in the number of responses (number of questions asked and comments) made by two groups A (team leaders, n = 12) and B (senior managers, n = 11) to a presentation of evidence about the influence of physical interfaces on risks to workers' safety for whom they are responsible.

Two-tailed alternative hypothesis: There is a difference in the number of responses (number of questions asked and comments made by two groups A (team leaders, n = 12) and B (senior managers, n = 11) to a presentation of evidence of the influence of physical interfaces on risks to workers' safety for whom they are responsible.

Results
Group A made 10 responses yielding a proportion of 0.833 responses for 12 members; Group B made 1 response yielding a proportion of 0.0909 responses for 11 members. The difference in proportions was 0.7424. With a Z test, p = 0.0004; confidence interval = [0.4816, 1.000]

Discussion
The sole comment voiced in response to the presentation by a member of the Senior Managers group appeared to have hit the proverbial bull’s eye of Turner’s characterisation of ‘comparative fit’; for the H R Manager’s statement, ‘They always blame management’, in tandem with the silence of all other managers present epitomised Turner’s observation that any collection of people will tend to be categorized into distinct groups to the degree that the intra group differences perceived within the relevant comparative context are smaller on average than the perceived intergroup differences. The behaviour of the Senior Managers’ group was apparently an expression of self-perceptions as a group smaller relative to unspecified alleged blaming attributed to a group of unnamed ‘they’. Despite the relative status of the Senior Managers’ group, the character of the meta-contrast expressed in their choice of comparative fit was one of ‘siege’ in relation to the workers’ group who were subject to their influence and power. The senior managers Group addressed no questions raised in the presentation about the 'narrative fit' between cognitive interfaces they authorised in particular values they proclaimed in the most prominent areas of the workplace about absolute safety of employees.

Questions and comments of the team leaders’ group addressed those parts of the cognitive interfaces over which they had some modest control, in the form of warnings, spot coaching about safe postures and lifting operations as well as work pacing. The meta-contrast at the essence of the comparative fit they expressed acknowledged both their lack of power and little influence while also suggesting a predominant belief that differences within their group were larger on average than those of worker groups they led; their engagement with the content of the presentation was compatible with the character of the meta-contrast as one of ‘service. The team leaders’ lack of power to make financial decisions necessary to make changes to physical interfaces necessary to safeguard their users injected a form of tension such that the narrative fit of their responses to the presentation casts into satirical style of The Threepenny Opera (Brecht and others, 2005) the proclamations of values of absolute safety by senior managers in cognitive interfaces.

The contrasting patterns of group responses to the presentation presented the EHS Manager with information about a need for him personally to consider options for better display of prototypicality by embodying qualities that a sufficient proportion of senior managers might recognise as paths to ameliorating comparative and normative fit. Pressures towards resolution of deadlock within the senior managers group required the EHS Manager to begin what Ford and others (op.cit.) referred to as ‘priming’ social identity by re-evaluation of cardinal cognitive processes with which he maintained his role. Recalibrating two specific processes, totally within his personal control, were central to exercise of prototypicality on his part. One was: the process of self-categorisation (Turner, op cit) he used to regard himself as an interchangeable member of a category defined as holding credentials of membership of a professional association determined by technical and legal knowledge that set him apart from other senior managers; and the other was process of stereotyping (McGarty, 2002) he used to view them as members of a group with statutory responsibilities for
safety without regard for the levels of stress which they reported to him they were overwhelmed with, to the point that some replied to his repeated unyielding injunctions to them with the words, 'Safety is not worth laughing at!'.

**Conclusion**

As the sample sizes were small, the study is exploratory in nature. To the extent that any replications of the study support this exposition of differences in enacted values about safeguarding workers between management strata, it supports the enlargement of prevailing policy debates about applying psychology to safety by recruiting social identity theory to direct attention of researchers and practitioners to potentially very influential sources of variance in safety performance inadequately addressed in research and practice, and in particular to the effect sizes of interventions inspired by social identity research. During a sustained phase of nontrivial winnowing of the regulatory structures for workplace safety in the UK, emerging opportunities bid fair for occupational psychologists willing to apply SIT to prevent or resolve costly deadlocked situations that threaten physical safety of workers.

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**F09: Short Paper**

**A Dynamic Developmental Model of Personality and Work: Implications for Practice and a Call for Research**

**Stephen A. Woods** Ph.D. C.Psychol, Aston Business School

**Theme** Research

**Background and Introduction**

Over the past quarter century, personality research has maintained a position as a key focus in industrial, work, and organizational psychology. The centrality of personality in so much organizational behavior theory is all the more remarkable because it represents for personality trait theory particularly, a dramatic turnaround of fortune. Most notably, in the now famous meta-analyses of the 1990s, but also since their publication, research has established the predictive associations of personality with a broad range of organizational criteria (for an overview, see Judge, Klinger, Simon, and Yang, 2008).

Despite the obvious successes of such research, there are key trends within the literature that are problematic for further development of theory and understanding of the role of personality in organizational behavior. These trends stem principally from a persistent preoccupation of researchers on the question of personality trait validity; the use of personality trait assessments to predict performance immediately following selection. This topic has detracted from an
integrated understanding of how personality traits relate to organizational behavior across people’s working lives in the longer term.

Two important limitations in the current literature are highlighted. First, the relations of personality and criteria are implicitly treated as static. The vast majority of published studies are either cross-sectional or longitudinal across only two time points. However, is it reasonable to assume that these relations remain the same in the long-term? Most people would intuitively accept that performance demands change over time (Murphy, 1989). Working lives and the demands and contexts that they present are dynamic and changeable and so it follows that the relations of traits and criteria may also dynamically change over time and at different career stages. This perspective is rarely acknowledged in research.

Second, in almost all studies in organizational behavior, personality is treated solely as a predictor variable. For the purpose of theory building, it is convenient to conceptualize personality as a stable property of the person that predicts behavioral, emotional, or attitudinal outcomes. However, in other domains outside industrial, work and organizational (IWO) psychology, the possibility that personality traits may both affect, and be affected by work, has been recently considered (e.g., Wille, Beyers, & De Fruyt, 2012; Wu & Griffin, 2012). Work is a core part of everybody’s lives, and to purport that the direction of influence from personality to work is only one way, rather than reciprocal, seems a rather narrow perspective to adopt.

These limitations have recently been addressed in a review and position paper (Woods, Lievens, De Fruyt & Wille, 2013). In their review, Woods et al. examined the longitudinal and dynamic influences of personality traits at different career stages, and also the emerging literature on the influence of changing life roles on personality. Their paper proposed that the interplay of personality and work may be considered to be in flux over the course of people’s working lives (i.e. relations of traits and criteria are dynamic), but also that the influences are reciprocal, so that people’s experiences of work have an impact on their traits (i.e. there is a developmental influence of work on personality).

The Dynamic and Developmental Model (DDM)
In their DDM of personality and work, Woods et al. (2013) conceptualized traits as being in constant interaction with work-related activities and environments, and expressed differently at people’s career stages and within specific job contexts.

This interaction begins in early life, where traits lead children to develop preferences for certain work activity (Woods & Hampson, 2010), learn associated competencies and skills, and establish vocational identities. These processes set people on a pathway of education and training, which in part reflect their interests, and within which success is further dependent on particular traits (e.g. Conscientiousness, Emotional Stability and Openness), which help to motivate people to work hard, master new things, and approach tasks without fear of failure. As such traits are activated and used, they are strengthened and deepened, so that by giving advantage in education, they may give similar advantage in working life, explaining the longitudinal association of these traits with career and life success. Over time, the influence of particular traits changes, so that traits that may be important at one point in time may be less so at others.

As people enter the working world, their choices are influenced by personality and preferences for occupational characteristics and specialty features (e.g. Woods, Koczwara, & Patterson, 2013). People are attracted to tasks and activities that appeal to and suit their traits, and the longer a person works in a particular career path, the more invested she or he is, and the deeper the dependence of traits on work experience. The repeated activation and automatization of situational responses to work demands leads to work becoming a core part of people’s personality. While people remain on a stable and established career path, these mechanisms also contribute to the long-term stability of identity and personality.
Implications for Practice
In this short paper, a key objective is to elaborate the applied implications of the DDM of personality and work, and to stimulate discussion and interest in exploring these through research and collaboration. Some key implications are:

**Development and Personality Change:** Although in employee development, we typically consider personality to be stable and resistant to change, the DDM invites a reconsideration of this assumption. For example, we might consider the effects of development interventions that:

a) Actively encourage behavioural change in response to work situations (e.g. mindfulness of behaviour);

b) Place people in job activities or scenarios that are incongruent with their traits (e.g. asking people low on Extraversion to make presentations to audiences more frequently);

c) Engage people in long-term coaching to develop behaviours and new competencies (e.g. in Executive Coaching).

As a consequence of such intervention, practitioners may not consider any change in assessment scores as representing “real” personality development or change. The DDM provides a framework for understanding such developmental effects. There are questions for practice about whether such changes could or should represent, for example, evaluation criteria for development interventions.

**Recruitment and Selection:** Acknowledgement that traits may be changeable also presents practical questions for the use of trait assessments in selection, particularly if it were to emerge that some traits are more develop-able than others. The role of socialization and induction may be further reinforced in selection if so.

A Call for Research
A further objective of this short paper is to prompt collaborative research between academics and practitioners attending the presentation. In particular, the DDM represents a new theoretical lens through which existing data sources may be analysed and scrutinized. The paper calls for practitioners or academics with relevant data to collaborate and examine such data in ways that would test and enhance the model, and understanding of personality and organizational behaviour more broadly. In particular, important potential data sources are those that examine:

- Longitudinal associations of traits and criteria at more than two time points;
- Trait change following training or development;
- Criterion relations or traits for people at different careers stages within similar or the same jobs.

References


The Universal Leader: Validating the new 3P model of leadership

Tom Hopton, Peter Saville, Rab MacIver, Jake Smith, Saville Consulting

Theme Individual

Leadership research remains one of the most fascinating and topical areas of psychological inquiry. A body of evidence suggests that there are certain personality traits which underpin successful leadership. For example, Judge et al.’s (2002) meta-analysis revealed relatively strong correlations between the Big Five personality factors and leadership success. With a multiple correlation across all five factors of .48, the strongest factor was Extroversion (.31), followed by Conscientiousness (.28), Openness to Experience (.24), Emotional Stability (.24) and, finally, Agreeableness (.08).

A number of researchers have also highlighted the importance of the context of leadership. Perhaps the greatest contribution from the situational approach to leadership is the idea that there is no single “best” style of leadership. The most effective leaders are those who adapt their style to the contingencies at hand. Blake and Mouton (1964) produced the widely-used Managerial Grid Model, which considers the two variables “Concern for people” and “Concern for production”. They later added “Flexibility” as a third important determinant of a leader’s approach. Vroom & Jago, two key figures in this well-researched area, reiterated plainly in 2007 that “leadership depends on the situation.”

However, a purely situational approach can overlook the empirical findings that people often do exhibit behavioral consistency across situations (e.g. Furr & Funder, 2004; Mischel et al., 2002). Zaccaro (2007) adds that combinations of traits and attributes, integrated in conceptually meaningful ways, can reflect a stable tendency to lead across “disparate organizational domains”.

Our research aim was to validate our new 3P leadership model, which consolidates a wide range of extant leadership research. Specifically, in this paper we seek to clarify the empirical relationships between the scales in our model and a range of different workplace performance criteria, focusing on both situational and broader aspects of leadership.

Design

N=308 individuals completed Wave Professional Styles and the Multifactor Leadership Questionnaire (MLQ). For each of these 308 individuals a set of independent performance ratings was concurrently collected from a stakeholder (typically, colleagues and bosses.)

The performance ratings collected included:

1. Ratings of 3 overall measures of workplace performance:
   a. Applying Specialist Expertise
   b. Accomplishing Objectives
c. Demonstrating Potential

2. Ratings of 8 “Great Eight” competencies (Bartram, 2005)

The 3P model we have developed is based on 30 critical leadership constructs. These constructs are measured using the 108 Wave Professional Styles facets. 24 of the constructs are specific “Leadership Styles”, designed to make differential contributions to the forecasting of leadership effectiveness in different situations. The remaining six constructs are designed as broader measures of an individual’s general leadership potential across situations.

The constructs were conceptually grouped into three areas – Professional, People and Pioneering – which respectively reflect the recognised People and Task distinction in the leadership literature, as well as our new concept of “Pioneering Leadership”.

Having confirmed the three-factor structure of our 3P model in a separate factor analysis, we then specified a priori which criteria each construct would be expected to forecast.

Scales underpinning the Professional Leadership factor were expected to correlate with the overall performance criterion of Applying Specialist Expertise, as well as the Great Eight performance criteria of Analysing & Interpreting and Organising & Executing.

Scales underpinning the People Leadership factor were expected to correlate with the overall performance criterion of Accomplishing Objectives, as well as the Great Eight performance criteria of Interacting & Presenting, Leading & Deciding, Supporting & Cooperating and Adapting & Coping.

Scales underpinning the Pioneering Leadership factor were expected to correlate with the overall performance criterion of Demonstrating Potential, as well as the Great Eight performance criteria of Creating & Conceptualising, Leading & Deciding and Enterprising & Performing.

In order to validate the three-factor model, we correlated it with:

1. The MLQ scales
2. The independent ratings of workplace performance

Results

Construct Validity

Many of the MLQ scales showed expected overlap with the scales in our leadership model. For example, our Transformer scale correlated .41 with the Overall Actual Transformational Leadership scale in the MLQ. The composite overall Universal Leader scale in our model also correlated .43 with the Overall Actual Transformational Leadership scale in the MLQ.

Criterion-Related Validity

In the validity tables which follow, the a priori hypothesised relationships are highlighted according to the colour of the aligned leadership factor.

“r” represents the uncorrected validity coefficient. “rc” validities have been corrected for attenuation based on the reliability of the criteria (based on 263 pairs of criterion ratings). No further corrections were applied (e.g. restriction of range, predictor unreliability). Any raw correlation higher than .12 is statistically significant at the p<.05 level (two tailed) and any raw correlation higher than .10 is statistically significant at the p<.05 level (one tailed).
Table 1. Correlations of the Universal Leader composite scale, the 3P leadership factors and their 6 sub-scales against performance criteria (N=308).

Table 2. Correlations of the 24 leadership styles against performance criteria (N=308).
**Discussion**

This study provides validity evidence supporting our 3P model of leadership. As expected, the six broad leadership scales show stable and positive relationships across a range of different performance criteria, while the 24 leadership styles reveal a more intricate picture with differential forecasting of different performance criteria.

We have explicitly aligned our three factors to performance criteria in order to clearly demonstrate their individual contribution to the forecasting of leadership effectiveness. Professional Leaders are likely to be effective at leading specialists or supplying professional or technical knowledge to specialist functions. People Leaders are likely to be effective at managing a wide range of people across teams or functions. Lastly, Pioneering Leaders are likely to be effective at driving success, change and organisational growth.

The hypotheses we articulated in this study were broad and more specific hypotheses could be generated to look in greater depth at the differential relationships amongst the 24 leadership styles. Nevertheless, the overall trend reflects our assertion that there exist both broad, stable leadership characteristics which manifest across different situations, as well as more specific leadership styles which are narrower in focus and more contextually-bound.

Our new factor of Pioneering Leadership encompasses some of the most valid scales in our model. Our suggestion is that many leadership models focus on Professional and People Leadership, while neglecting the entrepreneurial and...
revolutionary behaviours which underpin some of the most effective forms of leadership. It may be that models focusing on Professional and People Leadership are dealing more with current management, while Pioneering Leadership represents future leadership potential.

A related debate within the leadership literature is the extent to which Transformational and Transactional approaches contribute to leadership and/or management effectiveness. Our research shows that both have an important contribution to make, with our Transformer and Transactor scales each showing good levels of validity against relevant work performance criteria. Our equation for Transactor specifies well the organisational and managerial constructs sought and therefore offers greater levels of validity than has typically been found in other models.

Finally, we question the need to use separate leadership models in order to optimally forecast leadership effectiveness. The validity evidence for our 3P model of leadership demonstrates that the forecasting of leadership effectiveness can come from clearly-defined, straightforward and empirically-researched models which align directly to the Big Five taxonomy.

Our link with the main conference theme and the chosen strand
The effective deployment and development of current and future leaders represents one of the clearest opportunities for occupational psychologists to make a contribution to investing in the future of the global workforce. We have chosen the strand “Investigating in the Future of the Individual” because improving the accuracy of the measurement of leadership effectiveness can have a profound impact on many individuals in the workplace.

The most novel or innovative aspects of the ideas being presented
The focus in our new leadership model shifts to assess the impact of leadership not only on the management of people and tasks, but also on Pioneering Leadership characteristics which contribute to the growth of organisations.

Based on the empirical evidence which has guided our research from the outset, we also take the innovative view that while certain leadership characteristics impact across a range of different contexts and situations, others will have a differential contribution depending on the specific situation in which they occur.

Which aspects we think conference delegates and potentially the wider public will find most informative and stimulating
Judging by the extent of media coverage and academic investigation of the subject, leadership appears to be something which many people are very interested in. Our research has new, clear and practical implications for optimising the assessment and development of leaders, which will be informative for anyone who works with leaders.

The materials we intend to make available to attendees
Printed hand-outs will be used during the interactive case study.

How we will ensure that at least 15 minutes of the session is interactive
After the presentation of our research, there will be 15 minutes dedicated to an interactive group session. This group session will take the form of a case study. All groups will be asked to consider the potential developmental areas of a hypothetical leader in a named role, using our leadership model and theory as the basis for their discussions. Authors will be on hand to help facilitate these group discussions and to answer any questions raised, before the groups are brought together for a summary discussion and final questions.

References

Disentangling Constructs in Situational Judgment Tests: Acknowledging Design and Aggregation Level
Duncan J. R. Jackson, University of East London, Dan Hughes, Haydn Chapman, Ali Shalfrooshan, a&dc Ltd, UK
Theme Individual

Situational judgment tests (SJT) represent a popular approach to the measurement of a variety of constructs through the presentation of multiple job-related scenarios. These scenarios describe a situational problem or dilemma against which participants call upon their knowledge, skills, abilities, and other characteristics in order to rate the appropriateness of a particular response to a set of situation-relevant items (Weekley, Ployhart, & Holtz, 2006).

A key issue that limits our understanding of SJTs relates to a lack of research attention to the constructs that they purportedly measure. Evidence for the criterion-related validity of SJTs has long been established, with meta-analytic estimates in the realm of .34 (McDaniel, Finnegan, Morgeson, Campion, & Braverman, 2001). However, many studies of SJTs focus on the relationship between overall SJT performance and outcome criteria (e.g., Chan & Schmitt, 2002). The importance of relating specific constructs to relevant job criteria was raised by Christian, Edwards, and Bradley (2010), who categorized SJTs into construct domains. The authors found varied validities associated with different SJT constructs applied in particular performance domains. Christian et al. highlight the importance of appreciating the nature of the underlying constructs of interest in SJTs as separated from their methodological features in order to properly understand predictor/criterion relationships (also see Arthur & Villado, 2008).

Responding to a similar construct problem, Putka and Hoffman (2013) applied VCA to an assessment centre (AC) dataset. The authors took aggregation into account (cf. Kuncel & Sackett, 2012) when summarising across multiple contributors to AC variance and found that the relative degree of construct-to-exercise variance depended on sensitivity to design characteristics and level of aggregation. An attempt to partition trait-versus-situational sources of variance in the context of SJTs using structural equation modelling was achieved by Westring et al. (2009). The authors found that situational factors explained around 43% of overall variance and that traits only explained about 13.6%. This study, did not, however, account for all of the potential sources of variance that could have been partitioned in their data (see below). Moreover, the effects of aggregation level were not clear in their analyses.

In the present study, we therefore sought to apply VCA to an SJT. To our knowledge, VCA has not yet been applied to SJT research data in this manner. The aim was to achieve greater clarity by disentangling a range of variance sources in an SJT whilst taking aggregation level into account. This approach should be beneficial for advancing our knowledge about construct variance in SJTs and for introducing a new angle for future research into this area.

Method

Participants
Participants in this study involved 226 candidates for police officer positions based in the United Kingdom (125 under 25 years, 91 between 25 and 40 years, 10 between 41 and 55 years; 51 females, 175 males; 87% White British).

**Materials and Procedure**

Participants completed a bespoke SJT (called SIFT) based on scenarios that police officers might face. SIFT was designed using input from existing police officers to generate scenarios and trial test content. The SJT consisted of 20 scenarios which were based around four competency dimensions: *Decision-Making, Leadership, Managing Performance* and *Strategic/Organisational Perspective*. For each scenario, four possible responses were presented, and candidates were required to rate the effectiveness of each response item on a five point scale ranging from *counterproductive* to *very effective*.

The test was configured such that all participants \((p)\) completed sets of four response items \((i)\) of eight in total) that were nested in each of 20 scenarios \((s)\). Sets of five scenarios were, in turn, nested within each of four dimensions \((d)\), such that \(p \times i:s:d\). Data were analysed using a VCA (Putka & Hoffman, 2013) that was configured to reflect these design characteristics. VCA forms the basis for the Generalizability theory (G theory, see DeShon, 2002) framework. In line with the suggestions of Putka and Hoffman (2013), restricted maximum likelihood (REML) procedures were used in the estimation of variance components. The VARCOMP facility in SPSS (Version 20) was used in this analysis.

**Results**

Based on the results of a VCA, two levels of aggregation were established for the SJT in this study (see Table 1): One where the intention was to measure dimensions only (dimension-level) and the other where the intention was to acknowledge a combination of both situational responses and dimensions (dimension/situation-level). At the dimension-level, variance was spread across general performance \((p, 75.95\%)\), participant and dimension interactions (analogous to trait variance; \(pd, 12.15\%)\), participant and situational interactions (analogous to situational variance; \(ps, 6.57\%)\), and residual error \((5.33\%)\). At the dimension/situation-level, the spread of variance was across \(p (87.41\%), pd (3.50\%), ps (7.56\%), and residual error (1.53\%).

**Discussion**

Using an approach that was sensitive to design characteristics and aggregation, these results suggest that dimension variance can be found to outweigh situational variance in SJTs. This was in contrast to the findings of Westring et al. (2009), who reported a notably higher proportion of situational relative to dimension (‘trait’) variance. However, additional sources of variance could have been partitioned in the Westring et al. study (e.g., \(p\), and analogues of \(d, s:d,\) and \(i:s:d\)) and aggregation-level was not explicitly taken into account in the presentation of their findings.

It has been implied previously in the SJT literature that situational variance should be minimized in favour of construct (trait/dimension) variance (e.g., in Westring et al., 2009). When accounting for SJT design and for aggregation in the present study, we found a greater proportion of dimension to situational variance. However, the results suggest that the picture is not simple. General performance was found to play a notable role in the present study, regardless of aggregation level. General performance has similarly been found to represent an important aspect of the outcome performance domain (Viswesvaran, Schmidt, & Ones, 2005). Situational responses have also been found to predict work outcomes in the AC literature (Lance et al., 2000). The present results identified such responses as contributing to SJT score variance, albeit to a relatively lesser degree. In a similar vein to progressions in the AC literature (e.g., Monahan, Hoffman, Lance, Jackson, & Foster, 2013), the suggestion here is that SJTs should be considered as multifaceted.

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6 Each scenario was designed to assess one primary competency dimension, although it was recognised that SJTs could be construct-heterogeneous, even down to the response item level.

7 In the context of confirmatory factor analysis (CFA), this configuration is analogous to a second-order factor model where items represent observed variables and situations and dimensions represent first- and second-order factors, respectively, with the addition of a general performance factor. See Woehr, Putka, and Bowler (2012) for a comparison between CFA and VCA.
construct measures. The present study extends the definition of focal constructs in SJTs as traits only (as in Westring et al., 2009) to constructs as defined by general performance, interactions among participants and dimensions, and interactions among participants and situations as separated from residual error and method-specific sources of variance.

Only by understanding the constructs of interest in SJTs and why they relate to work outcomes can decision quality be optimised and utility maximised for practitioners and organisations. Specifically, the results of studies based on VCA and G theory can help practitioners to (a) realistically test trait-to-scenario variance, (b) on the basis of this, decide on whether to suggest that clients use trait, scenario, or a combination of trait and scenario variance when making employment decisions, and (c) decide on the optimal number of items and scenarios that should be used in a given SJT.

Several limitations should be considered when interpreting the findings presented here. The sample size included in this analysis was not large, which may result in standard errors of a non-trivial nature. In addition, this is a single study based on a particular design, within a particular context. As such, further studies in different contexts would allow for judgments to be drawn on cross-sample generalizability.

### Table 1

<table>
<thead>
<tr>
<th>Sources of Variance</th>
<th>Item-Level Responses</th>
<th>Dimension-Level Aggregation</th>
<th>Dimension/Situation-Level Aggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variance Estimate</td>
<td>% of Total Variance</td>
<td>% of Among-Candidate Variance</td>
</tr>
<tr>
<td>Reliable Among-Candidate Variance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p</td>
<td>.002</td>
<td>.77</td>
<td>.87</td>
</tr>
<tr>
<td>pd</td>
<td>&lt;.001</td>
<td>.12</td>
<td>.14</td>
</tr>
<tr>
<td>psd</td>
<td>.004</td>
<td>1.39</td>
<td>1.50</td>
</tr>
<tr>
<td>Unreliable Among-Candidate Variance</td>
<td>.256</td>
<td>86.31</td>
<td>97.49</td>
</tr>
<tr>
<td>Other Sources of Variance</td>
<td>.000</td>
<td>.00</td>
<td>-</td>
</tr>
<tr>
<td>s</td>
<td>.013</td>
<td>4.57</td>
<td>-</td>
</tr>
<tr>
<td>i</td>
<td>.021</td>
<td>7.10</td>
<td>-</td>
</tr>
</tbody>
</table>

**Note.** Dimension- and Dimension/Situation-Level Aggregation refer to expected magnitude of variance components when summarizing scores at the dimension-level or dimension/situation-level respectively. Shown here are sample-specific estimates across 60 items, 20 scenarios, and 4 constructs. p = participants, d = dimensions, s = situations, i = items, psd = highest level interaction confounded with residual error.

### References


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8 Method-specific variance is considered here to include effects for dimensions, scenarios, and items, which are not, in and of themselves, directly involved in inter-individual comparisons.


F12: Short Paper

**Emotionally unstable? It spells trouble for work, relationships and life**

Rob Bailey, OPP Ltd & Tatiana Gulko OPP Ltd

Theme Individual

Psychological resilience is, with good reason, a fashionable topic right now in the HR world (see for example: Developing resilience: An evidence-based guide for practitioners, CIPD 2011). However, to psychologists, this is not a new concern; resilience has been defined as “a dynamic process encompassing positive adaptation within the context of significant adversity” (Luthar, Cicchetti, & Becker, 2000). Similarly, writing about the 16PF personality questionnaire in 1989, H.B. Cattell (cited in Cattell and Schuerger, 2003) says that Emotional Stability underpins the ability ”to overcome the obstacles that humans inevitably encounter as they attempt to sustain their lives and meet their needs”.

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This presentation explores a range of personality studies completed with the 16PF personality questionnaire, where resilience is measured by the global construct of Anxiety (similar to the Big Five’s Neuroticism) and specifically by the scales Emotional Stability, Vigilance (a lack of trust in others), Apprehension and Tension. It is proposed for the DOP Conference theme of Individual because of the relevance to individuals wishing to lead successful rewarding lives. We feel that it has a general public interest because of the number of important life experiences related to Anxiety and Emotional Stability. The depth and breadth of this presentation collates several themes together in one place for the first time.

Over several years of working with 16PF data, the authors have noted how Emotional Stability seems very closely related to successful functioning in several areas of everyday life (not just adversity), both in and out of the workplace. Although the main aim of the presentation is to explore the impact upon the workplace, examples of home-life distress are also given. This is to show the wide-ranging implications of low Emotional Stability, but also to remind occupational experts that emotional concerns are not likely to stay at only home.

Additionally we note the work of Judge and Bono (2001) who present a meta-analytic study showing the significant the relationship of 4 traits: self-esteem, generalized self-efficacy, locus of control, and Emotional Stability (low neuroticism) with job satisfaction and job performance.

Separately, Cook's (2005) Big Five study examined the dimension of Emotional Stability and explored its relationship to work outcomes. Results demonstrated that all Big Five personality dimensions were significantly, positively related to job performance, job satisfaction, and career satisfaction.

Interestingly, Cook also looked at levels of Emotional Stability for different job categories. Individuals in jobs that were considered "high stress" had higher mean scores on Emotional Stability. Cook concludes, "In addition to supporting previous research findings, this study contributed unique information by demonstrating that Emotional Stability contributes unique information to the prediction of job outcomes."

In this paper, various relationships between the Global Factor of Anxiety and work/non-work outcomes were evaluated. The main purpose was to see the extent to which Anxiety predicts these outcomes over and above other personality factors, as we hypothesise that the importance of this personality characteristic would lead it to have a unique and meaningful contribution. The outcomes included engagement, promotion, tenure, happiness, satisfaction with romantic relationships, and perceptions of how lucky people feel themselves to be.

**Methods**

Data from different sources were analysed; all participants had completed the 5th Edition 16PF personality questionnaire (Cattell, & Cattell, 1995) in UK English:

UK and Republic of Ireland standardisation sample - 1,212 gender-balanced, representative of the UK/Ire working population (for age, region, ethnic background, etc.). This group also completed a battery of self-reported criteria questions examining: work outcomes, lifestyle choices, and demographics. All results in this presentation relate to this dataset with the exception of those referred to as 'Psychological Fitness'.

Psychological Fitness study: a 106 item questionnaire was created to measure constructs of Helplessness, Defensiveness, and Powerfulness; 49 individuals from many different countries right across the world and from various occupational backgrounds completed both the 16PF5 and the Psychological Fitness questionnaire.

**Results**

The following observations were found:

From the UK Standardisation dataset (N1,212)
Analysis of correlations between Anxiety (and its subscales) and the criteria below helped to identify which to study further with regression (for example moderate correlations included: Emotional Stability and self-reported luckiness (.285), poor health (-.320), and Anxiety and work engagement (-.259); strong correlations included: Emotional Stability and happiness (.540); weak correlations included the number of leadership positions outside work and Anxiety (-.110) and Emotional Stability and taking time off work sick due to stress (-.127).

Regression analysis showed that Anxiety contributed unique variance in the prediction of many criteria. These are shown in the table below. Further regression analysis at the Primary Factor (subscale) level, showed when Emotional Stability, Vigilance, Apprehension and Tension were the best predictors. 'High' or 'Low' denotes the relationship direction between the variables.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Anxiety (ANX)</th>
<th>Emotional Stability (C)</th>
<th>Vigilance (lack of trust) (L)</th>
<th>Tension (Q1)</th>
<th>Apprehension (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work engagement</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Time off due to boredom</td>
<td>High</td>
<td>Low</td>
<td></td>
<td>Low</td>
<td></td>
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<tr>
<td>Time off due to sickness</td>
<td>n/s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time off due to tiredness</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-reported better state of health</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambition</td>
<td>n/s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luck</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion within the organisation</td>
<td>Low</td>
<td></td>
<td></td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Promotion outside the organisation</td>
<td>n/s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positions of leadership outside work</td>
<td>Low</td>
<td></td>
<td>Low</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>General happiness</td>
<td>Low</td>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological fitness</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Satisfaction with romantic partner</td>
<td>Low</td>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A seeming relationship between Anxiety and Ambition led us to look for possible mediation effects. Analysis (confirmed by Sobel tests) showed the following mediation relationships:
Higher Extraversion leads to Promotion within the same workplace, but is mediated by Anxiety (where higher Anxiety makes it less likely).

Lower Anxiety leads to higher Ambition, but is mediated by Extraversion and Independence (both of which increase Ambition).

Also observed in this dataset was a tendency for anxious people to worry more about the impact the recent recession had upon them than less anxious people.

From the Psychological Fitness questionnaire

Clear links were found between Psychological Fitness constructs and the 16PF Global Anxiety factor, and with various primary factors. Anxiety was found to correlate .62 with Defensiveness, .48 with Helplessness and -.42 with Powerfulness: all results were significant to .01 (one-tailed).

The table below shows more detail for the significant correlations between the Anxiety subscales and Psychological Fitness.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Total Helplessness</th>
<th>Total Defensiveness</th>
<th>Total Powerfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>C (Emotional Stability)</td>
<td>-.52**</td>
<td>-.29*</td>
<td>.49**</td>
</tr>
<tr>
<td>Q4 (Tension)</td>
<td>.32*</td>
<td>.60**</td>
<td>-.35*</td>
</tr>
<tr>
<td>O (Apprehension)</td>
<td>.34*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L (Vigilance)</td>
<td></td>
<td>.49**</td>
<td></td>
</tr>
</tbody>
</table>

* Correlations are significant at the .05 level, ** Correlations are significant at the .01 level

From the data on relationship satisfaction (also from the standardisation sample)

Less emotionally stable individuals are more likely to experience relationship dissatisfaction (r=.344, p=.000). This was the aspect of personality that had the most influence of all on someone's happiness in relationships. The emotional instability of the partner is related to less satisfaction in the relationship (r=-.253, p=.000).

The age-old saying "opposites attract" was found to be somewhat untrue. We found that individuals who are more similar in personality to their partner experience greater relationship satisfaction (r=.191, p=.000). This was found across all types of couples, regardless of how long the couple had been together. We also found out that if one of the couple is satisfied with the relationship, it's likely that the other will be too (r=.660, p=.000).

Discussion

Anxiety and, frequently, Emotional Stability show important relationships with subjective and objective measures of promotion, tenure, satisfaction and engagement (including attendance), but also to self-reported health, happiness, perception of own luckiness, ambition, and relationship satisfaction. As such, these personality characteristics seem very important to many critical areas of people's lives.

Due to the correlational nature of the data collected here it could be argued that life-events may create greater Anxiety and Emotional Stability in adults; however, the authors' view is that there is enough existing research to suggest that it is personality that generally leads to the negative outcomes we have observed, not the other way around. This is not to deny the effect of adversity on Emotional Stability, but to point out that anxious individuals create a fair amount of their
own dissatisfaction. For example, the finding that more emotionally robust individuals tend to be found in high-stress roles suggests that these roles are not creating a workforce of nervous wrecks.

As the 16PF is a measure of normal adult personality, the exploration of resilience in these studies was limited to what can be measured by a non-clinical personality measure. This makes the findings relevant to Occupational Psychologists, but does not deny the contribution that healthcare practitioners such as Clinical Psychologists will be able to make with clinical assessments of anxiety and depression.

Conclusion
Although business might expect employees to leave their emotions at home, this is unrealistic, especially for employees who are less emotionally stable. Workplace support is likely to help to mitigate against low engagement, higher turnover and higher workplace absence. The employer prepared to offer interventions such as Employee Assistance Programmes, which typically offer advice that extends to employee wellbeing outside the workplace, may find that they reap the benefits during work hours.

Effective ways to have a more emotionally resilient work-force include: to support them, ensure they have a good person-role fit, and to recruit for Emotionally Stable individuals. Occupational psychology and in particular personality assessment have at least some role to play in all of these activities.

Materials to be shared with delegates
Handouts would be provided for the interactive parts of the session. Due to the likely general interest of several aspects of the presentation to the delegates, interactive aspects will include not only questions and answers, but activities asking delegates to predict which personality characteristics are likely to predict which outcomes.

A PDF format version of the slides can be provided before the start of the conference for distribution.

References


F13: Standard Paper
The well-being outcomes of employment support for job seekers with mental health conditions
Dr Peter Robertson, Edinburgh Napier University
Theme Communities

Research objectives
This research aimed to assess the extent to which a career guidance/employment support intervention had an impact
on the mental health and well-being of a specialist client group: unemployed adult job seekers with common mental health conditions.

Research design
Ten services users participated in research interviews of one hour duration six months after registering with the service. Of this group, six attended follow up interviews at twelve months after registration. In addition 114 service users agreed to complete paper based assessments of their mental well-being at three points of time: at registration; at 6 months after registration; at 12 months after registration. The instruments used were the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) and the Hospital Anxiety and Depression Scale (HADS).

Data analysis and results
Qualitative data was analysed using Interpretative Phenomenological Analysis (IPA). Most participants in the research interviews reported improvements to their mental well-being, and attributed these changes at least in part to engagement with their employment support agency. Different aspects of the service worked for different participants. Some partial deterioration was reported after engagement with the service was completed. Quantitative data suggested improvement in mental health and well-being at least for the period participants were engaged with the service. This provided some confirmatory evidence to support the qualitative data, but a very high attrition rate and absence of a control group means that little weight can be placed on the quantitative evidence.

Discussion and conclusions
The evidence generated suggests that, at least in one context, there is reason to believe that employment support can promote positive mental well-being. It remains less clear if gains made are durable beyond the end of a programme of support. A theoretical rationale, drawing on career counselling theory, can be generated to explain a causal link between employment support and mental well-being outcomes. The combination of a sound rationale and a developing evidence base may in future suggest a health promotion role for employment support agencies, many of whom deal with job seekers at risk of common mental health conditions.

1. What are the main psychological theories, models and research underpinning your session? Note - references can be included if desired but must be within the maximum character limit of your content.

A model describing the potential causal relationship between employment support and well-being outcomes will be presented. This will draw on multiple (career) counselling theories including social-cognitive, person centred, goal directed and narrative approaches. However theory will not be the main focus of the presentation; participant’s own accounts of their lived experience as service users will be highlighted.

2. How do you see your proposal linking with the main conference theme of Investing In The Future, and what makes it apt for the particular strand you have chosen?

This session is very closely related to the theme of the 'Communities' strand. Specifically there are four connections to this theme:

- Unemployment: the research focuses on experiences of an unemployed population
- Diversity and inclusion: the research focuses on agency seeking to promote inclusion in work for adults with mental health conditions
- Career guidance: the presenter approaches the topic from a career guidance perspective and the research seeks to explore the effectiveness of employment advice in a specialist context
- Public policy: the session includes a discussion on wider policy implications (see below)
3. What do you consider to be the most novel or innovative aspects of the ideas being presented?

The focus on mental health and well-being outcomes of employment interventions for unemployed groups has not been extensively researched, and this study contributes to this gap in knowledge.

4. Which aspects of your session do you think conference delegates and potentially the wider public will find most informative and stimulating about your session?

This is an interesting service user group that presents some challenges. Delegates may be interested in the possibility that employment support is an appropriate setting to promote mental health and well-being, because this has wider implications for public policy. Unemployed job seekers may be a target group that would particularly benefit from health promotion activities.

F14: Short Paper

Evidence that male dominated workplaces may undermine women's occupational identification

Kim Peters, The University of Queensland, Michelle K. Ryan, University of Exeter & Helen Fernandes, Addenbrooke’s Hospital, Cambridge

Theme Communities

Leaks in the pipeline: Evidence that immersion in a male dominated workplace may undermine the progression of female surgical trainees.

1. Psychological theories, models and research.

Although recent decades have seen a substantial improvement in the representation of women in many workplaces, historical gender differences have persisted in many traditionally masculine occupations, such as construction or STEM related fields. This wide disparity in the extent to which the representation of women has changed across different occupations is clearly illustrated within the medical profession. Reflecting the dominance of women in caring and health related professions more generally women make up an increasing majority of medical school students in the UK (in recent years, about 60 percent of entrants have been women). As female medical students have flowed along the career pipeline, there has been a corresponding increase in the number of women across many medical specialties, including general practice, paediatrics and anaesthetics.

However, one speciality has been bucking this general trend: in surgery, women only make up about 16 percent of surgical trainees and 8 percent of surgical consultants. This is in part due to the fact that the vast majority of applicants for surgical training in the UK are men (in recent years, there have been three male applicants for every one female). However, there is evidence that the small number of women who embark on surgical training are less likely to complete it than their male colleagues. For instance, women made up 14.8 percent of trainees in 1998, but only 7.7 percent of consultants a decade later (on average, it takes trainees 8 to 10 years to finish their training and attain their consultant post). Therefore, it seems that the surgical career pipeline is broken and that travelling its distance is not a straightforward proposition for women.

This broken pipeline is problematic for a number of reasons, including the wasted investment in trainees who do not complete their training and the current shortage of consultants in many surgical sub-specialties. If surgery is not able to improve the training completion rates of women, this is likely to have consequences for the well-being of the aging UK public, which has a growing need for surgical procedures. It is, therefore, imperative that we develop an understanding of why it is that women are more likely to opt out of their surgical training (and career) than their male colleagues.
Recent research suggests that one reason that the representation of women in stereotypically masculine occupations, like surgery, remains stubbornly low may be women's perceptions that they do not fit in with (i.e., that they are not similar to and do not belong among) the prototypical 'macho' individuals that dominate in these masculine professions. Importantly, this research has shown that in a number of different occupational domains perceptions of poor fit are associated with a reduction in occupational identification and an increased desire to opt-out of careers. In this research, we aim to investigate whether there is evidence that gender differences in perceptions of occupational prototypical fit emerge over time, such that immersion in a male dominated workplace steadily erodes women's perceptions of fit relative to their male colleagues. Specifically, we hypothesize:

H1: As training progresses, female trainee's perceptions of surgical prototype fit will diminish relative to their male colleagues' perceptions of fit.

We also aim to investigate whether these dynamics can account for trainees' occupational identification and perceptions of training performance (and in this way, may affect decisions to opt out of surgical training). Specifically, we hypothesize:

H2: As training progresses, women's perceptions of occupational identification and training performance will also diminish relative to their male colleagues.

In the current paper, we will discuss research that aimed to test these hypotheses by measuring the fit, identification and performance perceptions of surgical trainees as a function of gender and cohort (i.e., length of immersion in the surgical environment) in a large-scale cross-sectional study. Participants were 1149 UK-based trainee surgeons who voluntarily completed an online survey on surgical trainee experiences that was advertised over email by the Royal Colleges of Surgeons of England. The majority of respondents were male (N=735) and their average age was 31.57 years (SD=3.59). On average, participants were almost half way through their surgical training (M=3.49; SD=1.87), although they ranged from those who had just started their training to those that had recently completed it.

Participants completed an online questionnaire that assessed their perceptions of surgical prototype fit (8 items; e.g., "I see a place for myself among surgical consultants", a=.87) and their surgical identification (6 items; e.g., "Generally, I feel good when I think about myself as a surgeon", a=.73). Participants responded to these items on identical 7-point Likert scales (1=strongly disagree, 7=strongly agree). Finally, participants rated their perceptions of their own training performance (2 items; e.g., "Overall, my performance has been": 1=much worse than average, 4=average, 7=much better than average, r=.69, p<.001). On average, trainees reported moderately high levels of fit (M=5.25, SD=0.99), ambition (M=5.59, SD=1.01) and surgical identification (M=5.02, SD=0.90). They also reported above average levels of performance (M=4.84, SD=1.60).

In order to test our hypotheses, we conducted moderated regression analysis whereby the dependant variables were regressed on participant gender (-1=female; +1=male), cohort (mean centred) and the interaction between these variables. When we conducted the above analysis for participants' perceptions of surgical prototype fit, the model was able to account for a significant amount of the variance in fit perceptions, R2=.04, F(3,1130)=16.25, p<.001. This analysis revealed that men (b=.21, p<.001) and older cohorts (b=.07, p=.032) reported greater perceptions of surgical prototype fit. Importantly, in line with hypothesis 1, there was the expected significant interaction between gender and cohort (b=.10, p=.003), such that this gender difference emerged over time (and indeed, was not evident among the newest cohort of trainees).

When we repeated this analysis with trainees' levels of surgical career identity, a very similar pattern of results emerged, R2=.01, F(3,1130)=5.48, p=.001. Specifically, while men reported higher levels of surgical identification on average (b=.14, p<.001), in line with hypothesis 2, this was again qualified by an interaction with cohort (b=.09, p=.014),
such that the expected gender differences between male and female trainees only emerged over time. (The main effect of cohort was not significant). The same general pattern was observed for trainees' perceptions of their performance, R²=.06, F(3,887)=17.40, p<.001. Specifically, while men generally perceived that they were performing better than their peers (b=.24, p<.001), in line with hypothesis 2, this effect became stronger over time (b=.10, p=.006). Therefore, these analyses supported hypothesis 1 and 2.

To examine whether the changes in trainee's surgical identification and performance perceptions over time could be accounted by the changes in trainees' perceptions of fit, we used OLS regression with bootstrapping to test the indirect effects (using 1000 bootstrap samples). This revealed that the indirect effects of the gender by cohort interaction on surgical identification and perceptions of performance through fit perceptions were significant.

In sum, this large-scale survey of UK based surgical trainees found that there were gender differences in perceptions of prototype fit, surgical identification and perceptions of performance, such that men generally reported more favourable levels of these variables. However, importantly, and in line with the idea that one factor that may account for the broken surgical pipeline is the continued immersion in a male-dominated environment, these gender differences only emerged over time. Together, these results suggest that practitioners who seek to seal leaky pipelines in need to attend to subtle dynamics whereby underrepresented groups perceive a lack of fit with occupational prototypes which increases their tendency to disidentify from their career and potential opt out of it all together.

2. Links with Communities.

This proposal links very strongly with the theme of Communities, which includes the topics of demographic change, diversity and inclusion. This research speaks to one psychological phenomenon that may subtly undermine attempts to increase the representation of minority groups in high status occupations. This is especially important in the examined occupational setting of surgery because there are current shortages in many surgical specialties in the UK, and these are predicted to increase in the future with the aging population. Therefore, it is very important that all trainees have a very good chance to complete their training.

3. Novel or innovative aspects.

This research is innovative in its application of social psychological theories around social comparison, belonging and identification in order to shed light on a real world social problem in the health service, but with relevance through the UK workplace more generally (in an increasingly diverse and globalised world, and the challenges that brings).

4. Aspects of interest.

In addition to the light that this sheds on an ongoing societal problem, it is likely that delegates and the wider public will be impressed by the nature of the sample (very high response rates; surgery as a visible and high status profession) and the message that very social comparison processes can, over time, have subtle but potentially important consequences for the career outcomes of highly able and motivated individuals.

F15: Short Paper

Not just a reaction: An alternative view on the role of emotion in psychological contract experiences

Dr Michelle McGrath, University of Winchester, Dr Lynne Millward, University of Surrey, Dr Adrian Banks, University of Surrey

Theme Individual

Extant psychological contract literature focusses primarily on the importance of emotion as a reaction to an event or experience, however, the role of emotion in contractual experiences is more complex than this. Applying Rousseau's (1995, 2011) conceptualisation of psychological contracts, specifically the distinction between transactional and
relational contract types, this research develops understanding of the conceptual links between emotion and psychological contract perceptions and experiences.

**Methodology**
Longitudinal daily diaries (n=104) and an on-line survey (n=412) were completed by full-time employees from a variety of organisations and occupations in two separate studies. Daily diaries were completed over 10-consecutive working days and were analysed using regression analysis. The survey data was analysed using SEM with AMOS.

**Findings**
The findings propose a link between emotion valence and psychological contract type. Findings from survey data also propose a mediating role of emotion in the link between psychological contract type and experiences of an exceeded promise.

**Implications to science/research**
Theoretically this study identifies an additional role of emotion within psychological contract perceptions and experiences; suggesting that emotion can influence contractual experiences as well as be influenced by them.

**Implication for practice**
Ensuring the emotional well-being of employees is of paramount importance to organisations; identifying contract perceptions that foster more positive emotions and experiences will, therefore, be of benefit to both employee and employer.

**Originality/value**
This study takes a unique theoretical perspective of the psychological contract and emotion literature whilst also adopting an underutilised method of data collection to inform this perspective; daily diaries.

**F16: Short Paper**

**The outcomes of organizational embeddedness in Greece**

_Aikaterini Kampa_, Manchester Business School, _David Holman_, Manchester Business School

_Theme_ Research

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

Early in the last decade, Mitchell, Holtom, Lee, Sablynski and Erez (2001) focused on why people stay rather than on why they leave and thus introduced the job embeddedness construct. Job embeddedness is defined as “the combined forces that keep a person from leaving his or her job” (Yao et al., 2004, p.159). Apparently, the concept of job embeddedness challenges the conventional wisdom and research that dissatisfied people leave and money makes them stay. Job embeddedness suggests that employees often stay because of links and fits that they have established within the company or the community where they live (Lee et al., 2004).

To be more specific, job embeddedness focuses on the factors that encourage an employee to remain with an organization. Job embeddedness theory captures two key components: on-the-job factors, such as bonds with co-workers, the fit between one’s skills and the job characteristics, and organization-sponsored community services, and off-the-job factors, such as personal, family and community commitments (Holtom et al., 2006).

Although job embeddedness is a relatively new concept, it has received a lot of attention and several studies have indicated that it actually uniquely explains the variation in employee turnover, beyond job attitudes and job alternatives (Jiang et al., 2012). Moreover, job embeddedness has been found to predict a larger percentage of the variance in
retention, after controlling for traditional turnover predictors such as job satisfaction, employee engagement, employee commitment and quit intentions (Mitchell et al., 2011).

The findings are promising, however up to 2012 most of the research has been limited to empirical testing of limited potential outcomes (turnover intentions and job performance) of job embeddedness. Only a few studies have tried to advance the development of job embeddedness research and explore other potential outcomes and/or examine potential moderators and/or mediators.

In line with these ideas, and in an attempt to extend the theory and research on job embeddedness, this study used a self-report survey (completed by 245 call center agents in Greece, 2012) measuring organizational embeddedness, job performance, occupational stress, burnout, skill utilization and self-efficacy. Then, in another survey, their immediate supervisors were asked to rate the agents’ performance. Exploratory factor analysis, multiple regression and mediation analysis were carried out to test the study hypotheses. It was found that organizational embeddedness is negatively related to turnover intentions and positively related to job performance. Moreover, organizational embeddedness was found to be negatively associated with burnout, but positively associated with skill utilization and self-efficacy. Finally, burnout was found to act as mediator in the relationship between organizational embeddedness and intention to leave the organization.

Figure 1: Conceptual model of the study (OE=Organizational Embeddedness, SU=Skill Utilization, SE=Self-efficacy, IL=Intentions to leave, JP= Job Performance).

2. How do you see your proposal linking with the main conference theme of Investing In The Future, and what makes it apt for the particular strand you have chosen? & 4. Which aspects of your session do you think conference delegates and potentially the wider public will find most informative and stimulating about your session?

The challenge to retain key employees is intense. Researchers and practitioners spend large amounts of time, effort and money trying to figure out how to keep their best employees from leaving and satisfied. The study’s findings, while concentrating on call centre agents, add to the knowledge of organisational embeddedness, turnover intentions, and job performance, by examining the relative impacts of burnout, skill utilisation, and self-efficacy.

3. What do you consider to be the most novel or innovative aspects of the ideas being presenting?
Job embeddedness is a fairly new topic that has received a lot of interest worldwide with regards to its potential in preventing turnover intentions. This study extends theory and research on job embeddedness as the research's results are quite strong and there is very little published linking Job Embeddedness to Burnout, Skill utilization and Self-efficacy.

F17: Short Paper

The Factor Structure of the OPQ: is there a Basis for a General Factor of Personality?

Mathijs Affourtit, CEB - SHL
Theme Individual

In the recent literature the structure of personality has gained new interest. It has been suggested that personality can be represented by one factor at the top of the hierarchical structure of personality, analogous to Spearman's g the general factor of mental ability, (Musek, 2007). Big Five factors could be merged into one overall construct called the Big one or the General Factor of Personality (GFP), with this one score reflecting an overall level of personality. High scores on the GFP would indicate a positive, socially desirable personality that is open, conscientious, extraverted, agreeable, and emotionally stable (van der Linden, 2010). To derive the GFP from Big Five scores often the first unrotated factor of exploratory factor analysis is used. Also the sum of big five or great eight scores has been suggested as alternative method of computing the GFP (Kurz & Maclver, 2013). In the literature there is ongoing debate on whether this factor represents a substantial construct or whether it represents methodological or statistical artifacts (bias), see for example de Vries (2011a).

Previous studies have focussed on measures of the Big Five using rating scale instruments. This study will apply the research methodology employed by previous studies to data collected with both a forced-choice (OPQ32r) and a rating scale format (OPQ32n) of the OPQ. And therefore add to the breath of instruments and response formats used in GFP research. It will look at how well a GFP would represent the data, and how much variance this factor explains. In addition there will be a comparison between GFP and Big Five in relation to manager ratings on the great eight competencies.

Method
The instrument

The Occupational Personality Questionnaire (OPQ) measures 32 dimensions of people's preferred or typical styles of behaviour. Both a forced-choice and a normative version of the OPQ are available. The forced choice format of the OPQ32r (SHL, 2009) combats uniform response bias and combines the benefits of forced choice format with IRT-based scoring that recovers a normative data structure (Brown & Maydeu-Olivares, 2011). OPQ32n uses a rating scale format measuring the same 32 scales as OPQ32r.

Exploratory factor analysis is used to determine the number of factors that would be retrieved using minimum eigenvalue of one as criteria, the amount of variance explained by the overall solution, and the amount of variance explained by the first factor. The OPQ32r sample consisted of 22612 participants, collected through online testing for selection and development purposes. The OPQ32n sample consisted of 2366 volunteers.

In addition GFP and Big five scores are used to predict manager ratings on the Great Eight scores, using a sample 804 participants where both OPQ and manager rating were available. Correlations are computed between GFP and manager ratings and hypothesised Big Five scales and manager ratings. Hypothesised relationships between Big Five scales and Great Eight competencies are based on Batram (2005). Big Five scores are retrieved from the OPQ using factor analysis. When factor analysing the OPQ to retrieve Big Five score a sixth factor remains relating to Achievement, which will be included in the hypotheses.
Results

Factor analysis of the OPQ

Factor analysis of the OPQ32r retrieved eight factors. The first factor explained 17.75% and 16.39% of the variance using principal component analysis and principal axis factoring respectively. Factor analysis of the OPQ32n retrieved seven factors. The first factor explained 20.09% and 18.48% of the variance using principal component analysis and principal axis factoring respectively. When using Big Five scales derived from a subset of OPQ scales the amount of variance explained increased. However this is however based on aggregated scales and so therefore variance will have been lost when creating these scores. See table 1. for further details.

Table 1: Variance explained by first factor using exploratory factor analysis

<table>
<thead>
<tr>
<th>Input data</th>
<th>EFA method</th>
<th>OPQ32r</th>
<th>OPQ32n</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 OPQ Scales</td>
<td>PC</td>
<td>17.75%</td>
<td>20.09%</td>
</tr>
<tr>
<td></td>
<td>PAF</td>
<td>16.39%</td>
<td>18.48%</td>
</tr>
<tr>
<td>Big Five Scores</td>
<td>PC</td>
<td>35.80%</td>
<td>42.57%</td>
</tr>
<tr>
<td></td>
<td>PAF</td>
<td>29.08%</td>
<td>32.09%</td>
</tr>
</tbody>
</table>

Correlations with manager ratings

Correlations between GFP and manager ratings on the great eight are displayed in the second column of Table 2. Results show that GFP correlates highly with Leading and Deciding and Enterprising and Performing. These correlations were compared with hypothesised relationships Big Five and Great Eight scores. The hypothesised scales and their correlations with manager ratings can also be found in Table 2. High correlations are found between a number of hypothesised Big Five scales and manager ratings.

Table 2: Correlations between manager ratings and, GFP and hypothesised Big Five scales.

<table>
<thead>
<tr>
<th>Great eight</th>
<th>Correlation with GFP</th>
<th>Hypothesised Big Five scale</th>
<th>Correlation with hypothesised scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leading and Deciding</td>
<td>0.20</td>
<td>Extraversion</td>
<td>0.20</td>
</tr>
<tr>
<td>Leading and Deciding</td>
<td></td>
<td>Achievement</td>
<td>0.18</td>
</tr>
<tr>
<td>Supporting and Cooperating</td>
<td>-0.07</td>
<td>Agreeableness</td>
<td>0.20</td>
</tr>
<tr>
<td>Interacting and Presenting</td>
<td>0.15</td>
<td>Extraversion</td>
<td>0.16</td>
</tr>
<tr>
<td>Analyzing and Interpreting</td>
<td>0.06</td>
<td>Openness</td>
<td>0.04</td>
</tr>
<tr>
<td>Creating and Conceptualizing</td>
<td>0.16</td>
<td>Openness</td>
<td>0.13</td>
</tr>
<tr>
<td>Organizing and Executing</td>
<td>0.01</td>
<td>Conscientiousness</td>
<td>0.07</td>
</tr>
</tbody>
</table>
## Discussion

In studies looking at GFP, often the first unrotated factor of an exploratory factor analysis is used as measure of GFP. It is claimed that this one factor reflects the overall level of personality, with high scores being indicative of a socially desirable personality. Using both forced-choice and rating scales OPQ data this study showed the first unrotated factor explained relatively small amount of variance. Using Big Five scores as starting point for the factor analysis more variance is explained, but this is based on aggregate scores and variance will have been lost when creating these scores. Overall results indicating a general factor of personality would not be a good representation of the data.

When comparing predictions of job competencies, we find that GFP predicts certain constructs well, mostly related to Extraversion and Emotional Stability. Other studies have also found that these constructs form an important part of GFP (van der Linden, 2010). It’s likely that GFP would predict job performance well for jobs where these competencies are required. This is illustrated by Sister (2013), where the GFP was found to predict Sales performance.

In this study the GFP approach is compared to an approach more in line with how personality is used for selection, where job analysis is carried out to determine which competencies and personality traits would lead to high job performance. When correlations between GFP and Great Eight competencies were compared to correlations between hypothesised big five scores and great eight competency relationships, the analysis showed higher correlations for the hypothesised big five scales.

The concept of GFP is interesting as research construct and could add value in settings where no job analysis is available. However better predictions could be made using job analysis and measuring job specific and relevant constructs available from multi-scale personality measures such as the OPQ.

### References:

Average life expectancy is increasing, and with this we will increasingly come to see an aging workforce. It has been estimated that the percentage of individuals over the age of 50 (in Europe and Central Asia) will rise from 28% to 40% in 2050 (World Bank, 2011, cited in Lieberman, Wegge, and Muller, 2013). Recent elevation of mandatory retirement age will create a more age-diverse workforce. It is more important than ever to evaluate the way in which age influences employees' perceptions of job characteristics.

Personality is an important variable that influences perceptions of our workplace. How does personality change over the lifespan, and what are the implications for how we work? How does getting older impact both personality and work preferences? Are differences in work preferences in different age groups partly due to changes in personality? Answers to these, and other related questions may lead to shifts in how we design the workplace. This may lead to important improvements for the employee, thus fitting the DOP Conference theme of Investigating the Future of the Individual - Participation and Engagement. The interplay of age, personality and perception of the workplace is therefore explored in this paper.

Mean scores on the Big Five traits of Conscientiousness and Agreeableness increase with age, while scores on Neuroticism decrease (Soto, Gosling, John and Potter, 2011; Terracciano, McCrae, Brant, & Costa, 2005). The research provides an illuminating account of how age plays a role in personality. However, further analysis is needed, using a larger set of traits, and to see what the age-personality link means for organisational psychology. We therefore hypothesised that age will influence some personality traits, and not others.

According to lifespan aging theories (Baltes and Baltes, 1990), characteristics of the workplace influence individuals of varying ages differently. We therefore hypothesised that age will influence how comfortable people are with different job characteristics.

Method
Participants
A nationally representative sample of working age adults with an equal gender split (n=1212) was used. Data was collected via an online panel. Participants completed the 16PF questionnaire, alongside additional questions, including age and work preferences. Age ranged from 16 to 65 (mean = 39.08).

Measures
Personality was measured using the 16PF 5th Edition Questionnaire (Cattell, & Cattell, 1995). This measures 16 personality traits, and provides a more fine-grained analysis of personality than is given by the five-factor model alone. Use of this questionnaire will provide a comprehensive account of the interplay between age, personality and job characteristics.
Participants were asked questions about their work preferences (e.g. how comfortable someone would be working in a particular environment, such as an organisation which has clear role clarity or values the skills of the individual). Age was measured as a continuous variable.

**Results**
Linear regression was used to explore the relationship between age, personality and job characteristics, and to identify mediation effects. Significant results are presented below (Figures 1 and 2).

Figure 1: Age and Personality Traits

<table>
<thead>
<tr>
<th>Personality trait</th>
<th>Relationship with age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional stability (C)</td>
<td>0.13**</td>
</tr>
<tr>
<td>Liveliness (F)</td>
<td>-0.17**</td>
</tr>
<tr>
<td>Rule Consciousness (G)</td>
<td>0.11**</td>
</tr>
<tr>
<td>Abstractedness (M)</td>
<td>-0.11**</td>
</tr>
<tr>
<td>Apprehension (O)</td>
<td>-0.12**</td>
</tr>
<tr>
<td>Self-Reliance (Q2)</td>
<td>0.19**</td>
</tr>
<tr>
<td>Tension (Q4)</td>
<td>-0.10</td>
</tr>
</tbody>
</table>

** - Significant at the 0.01 level

Personality characteristics unaffected by age were Warmth (A), Dominance (E), Social Boldness (H), Sensitivity (I), Vigilance (L), Privateness (N), Openness to Change (Q1) and Perfectionism (Q3).

Figure 2: Age and Work Environment

<table>
<thead>
<tr>
<th>Job Characteristic (How comfortable would you be working in an organisation with the following...)</th>
<th>Relationship with Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role clarity</td>
<td>0.11**</td>
</tr>
<tr>
<td>Emphasis on employee independence</td>
<td>0.13**</td>
</tr>
<tr>
<td>Emphasis on employee loyalty</td>
<td>0.11**</td>
</tr>
<tr>
<td>People from many different backgrounds</td>
<td>0.09**</td>
</tr>
<tr>
<td>Employees with responsibility for many different areas</td>
<td>0.11**</td>
</tr>
<tr>
<td>Insecure job, but with opportunity for high pay</td>
<td>-0.14**</td>
</tr>
<tr>
<td>Small organisation where everyone knows each other</td>
<td>0.13**</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Employees viewed as individuals, with unique skills</td>
<td>0.13**</td>
</tr>
</tbody>
</table>

** - Significant at the 0.01 level

Regression analyses following the Baron and Kenny (1986) approach to mediation and Sobel tests showed the following mediation effects:

- Increased age leads to more comfort in an organisation where employees have responsibility for many areas: this relationship is partially mediated by higher Emotional Stability
- Increased age leads to less comfort in an organisation where jobs are insecure, but there are opportunities for high pay: this relationship is partially mediated by lower Liveliness
- Increased age leads to more comfort in an organisation where employees have role clarity: this relationship is partially mediated by higher Rule Consciousness and higher Self-Reliance; and lower Abstractedness
- Increased age leads to more comfort in an organisation with emphasis on employee loyalty: this relationship is partially mediated by lower Abstractedness

**Discussion**

Age shows a relationship with level of comfort with different characteristics of the workplace. Findings suggest that older people are more comfortable in jobs with: more role clarity; emphasis on loyalty and independence; responsibility for many areas; everyone knowing one another; people from many different backgrounds; and where employees are viewed as individuals with unique skills. Older workers are less comfortable in insecure jobs that have opportunity for high pay. With age, Emotional Stability, Rule Consciousness, and Self-Reliance increase; whereas Liveliness, Abstractedness, Apprehension and Tension decrease. Personality characteristics may also explain some of the age-work characteristic interactions, as shown by mediation effects of some personality traits.

Our results are consistent with previous research. Emotional Stability, Apprehension, and Tension are all facets of the global Anxiety factor of the 16PF. The findings that Emotional Stability increases, while Apprehension and Tension decrease with age, are all consistent with trends that neuroticism and anxiety show a decline as people mature (Soto et al, 2011). This is not surprising, given that, as individuals get older, they become more efficient in emotion-regulation strategies, and alleviate some of the negative feelings they experience (Helson and Soto, 2005). Employee age is negatively correlated with customer stressors, and use of emotion control and active coping are more effective in alleviating emotional exhaustion in older workers (Johnson, Holdsworth, Hoel, and Zapf, 2013). Our findings are also consistent with longitudinal data (Roberts et al, 2006).

The finding that older workers are more comfortable in an organisation, with employees being responsible for many different areas is consistent with work of Zaniboni et al (2013), which found that older workers were less likely to have turnover intentions if they had increased skill variety. Zaniboni et al (2013) propose that a theory called socioemotional selectivity theory (SST; Carstensen, 1991, cited in Zaniboni et al, 2013) accounts for such a finding. This theory posits that younger adults focus more on pursuit of future-oriented activities, whereas older adults are less concerned with career development, and enjoy a job that allows them to use their wide-ranging skills and get more fulfilment.
SST can also explain our findings that younger workers are more comfortable working in jobs that are less secure but with higher pay. A job with higher pay may appeal to their future-oriented goals, which may involve financial investments in their future. This study not only supports this theory, but can arguably add more dimension to it, by adding personality as a factor. The findings that personality may somewhat explain the relationships between age and work characteristics (e.g. that higher Liveliness may partially account for our observation that younger workers are more comfortable working in jobs that are less secure but with higher pay) suggest that personality plays a role too. It may be that it is not only situational and motivational factors (e.g. younger workers wanting to focus on the future), as argued by SST, but also the gradual shifts in personality traits that come with age.

This is a cross-sectional sample and causation cannot be implied. Furthermore, cohort effects may play a role, such that individuals born in a particular generation may have been growing up in a different environment, which may favour certain traits over others, and the effect, therefore, is unique to that generation (Soto et al, 2011). Nonetheless, the findings of this study are in line with findings observed by longitudinal studies (e.g. Roberts et al, 2006).

**Conclusion**

This study has found that age is a pertinent factor in influencing how comfortable people are with certain characteristics of the workplace. Furthermore, the association of age with certain personality traits may partly explain this relationship. Given the imminent age diversification of our workforce, knowledge of the way in which age and personality influence perceptions of job characteristics can help employers with attraction, selection and retention of employees, as well as addressing the challenge of motivating employees of diverse age groups, perhaps with help of appropriate job redesign or employee assistance programmes. Such knowledge can also help individual employees to ensure that they craft a workplace, in which they feel comfortable and fulfilled. After all, according to the Job Characteristics Model (Hackman and Oldham, 1976), job characteristics exert powerful influences on motivation and satisfaction.

**References**


The HSE Management Standards approach conceptualises and assesses stress as a workplace hazard similar to physical threats to wellbeing. This risk assessment process compares the performance of organisations or sectors against a set of benchmarks in order to measure employers' performance in preventing workplace stress (Mackay et al, 2004). The elements of work activity (or psychosocial hazards) that are assessed are demands, control, role, change, support from colleagues and managers, and relationships.

There is a body of research, both nationally and internationally, that suggests that levels of perceived stress and work-life conflict in the higher education (HE) sector are high. Studies undertaken over the last decade highlight a significant shift in the nature of academic work, brought about by increased student numbers, reductions in the level and source of funding, increased pressure to undertake and publish research, more rigorous teaching and learning policies, increased focus on commercialisation and commercial activity, and increased working hours (Kinman; 2001; Tytherleigh et al., 2005; CHERI, 2007, Bucholdt and Miller, 2009).

It is clearly important to assess psychosocial hazards over time and their links with wellbeing outcomes. This study compares data from two national surveys in 2008 and 2012 to examine changes in the levels of HSE hazards in academic staff, and the relationships between these and levels of perceived stress and work life conflict. Major changes to the UK Higher Education (HE) system were implemented between Time 1 (2008) and Time 2 (2012), for example: significant reductions in the teaching grant and the first round of the new Research Excellence Framework, therefore the review of workplace hazards and their impact in HE is timely. As well as assessing change within the sector results are compared against HSE benchmarks for other occupational groups (Webster & Buckley, 2008)

Links to the conference theme: Health and Safety at work, developing and monitoring intervention programmes, developing organisational wellbeing.

Methods
A cross-sectional correlational approach was utilised. An online version of the HSE Stress Indicator Tool was electronically distributed to all active members of the University and College Union (UCU) in both 2008 and 2012. 7,196 (50% female) and 12,635 (55% female) academic staff completed the survey in 2008 and 2012 respectively.

<table>
<thead>
<tr>
<th></th>
<th>2008 (SD)</th>
<th>2012 (SD)</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demands</td>
<td>2.61 (.68)</td>
<td>2.45 (.71)</td>
<td>9573.52</td>
<td>.000</td>
</tr>
<tr>
<td>Control</td>
<td>3.73 (.65)</td>
<td>3.62 (.71)</td>
<td>124.70</td>
<td>.000</td>
</tr>
<tr>
<td>Manager Support</td>
<td>2.88 (.94)</td>
<td>2.89 (.98)</td>
<td>.22</td>
<td>.641</td>
</tr>
<tr>
<td>Peer Support</td>
<td>3.36 (.80)</td>
<td>3.37 (.84)</td>
<td>.71</td>
<td>.401</td>
</tr>
<tr>
<td>Relationships</td>
<td>3.55 (.84)</td>
<td>3.51 (.88)</td>
<td>9.66</td>
<td>.002</td>
</tr>
</tbody>
</table>
Perceived stress was measured using an index of three questions relating to perceptions of stress at work, participants were asked to indicate the extent to which they felt each statement described their experience. Low scores indicate a low level of perceived stress. Five items measuring work interference with personal life (Fisher, Bulger and Smith, 2009) were utilised to measure work life conflict. Respondents indicate the frequency with which they have feel a certain way where 1= not at all and 5= almost always.

**Analysis and results**

Mean scores were calculated across each HSE dimension, with lower scores representing lower wellbeing and higher scores denoting higher levels of wellbeing. ANOVAs were used to compare the means of each dimension in 2008 and 2012. Results indicated significant reductions in scores in 4 out of 6 dimensions (Demands, Resources, Change (p<.001) and Relationships (p<0.01). No significant changes were found in levels of peer or manager support between time 1 and time 2.

<table>
<thead>
<tr>
<th>HSE Benchmark</th>
<th>2008</th>
<th>Difference</th>
<th>2012</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demands</td>
<td>3.44</td>
<td>+0.83</td>
<td>2.61</td>
<td>-0.99</td>
</tr>
<tr>
<td>Control</td>
<td>3.32</td>
<td>+0.41</td>
<td>3.73</td>
<td>+0.3</td>
</tr>
<tr>
<td>Manager Support</td>
<td>3.77</td>
<td>-0.89</td>
<td>2.88</td>
<td>-0.88</td>
</tr>
<tr>
<td>Peer Support</td>
<td>4.03</td>
<td>-0.67</td>
<td>3.36</td>
<td>-0.66</td>
</tr>
<tr>
<td>Relationships</td>
<td>4.13</td>
<td>-0.58</td>
<td>3.55</td>
<td>-0.62</td>
</tr>
<tr>
<td>Change</td>
<td>3.54</td>
<td>2.46 (.89)</td>
<td>2.61</td>
<td>49.26 (.002)</td>
</tr>
<tr>
<td>Role</td>
<td>3.68</td>
<td>-1.08</td>
<td>3.68</td>
<td>-0.96</td>
</tr>
</tbody>
</table>

Comparisons with Target Industries:

Scores for each of the dimensions in 2008 and 2012 were compared against the results of the Health and Safety Executive's 2008 survey "Psychosocial Working Conditions in 2008" (Webster & Buckley, 2008). 2012 scores indicated that all dimension scores fell below the HSE benchmark targets except for control. Comparisons with 2008 scores indicate that the demands dimension has dropped below the benchmark over the four year period. Although control remains higher in academic staff than the benchmark, there is a narrowing of the gap, indicating a worsening situation.

Perceived stress: In 2008 73% of the sample reported moderate to high levels of perceived stress (as indicated by scores of 3, 4 and 5) with a mean of 3.1 (SD.38). 2012 results indicate an increase in perceived stress with a mean of 3.65 (SD .82) and 86% of the sample reporting moderate or higher levels of perceived stress. The mean score for work life conflict (2012 sample only) was 3.62.

Relationships between perceived stress, work interference and the HSE dimensions:
Significant relationship were found between all HSE domains and perceived stress (all p<.001) with strong associations observed with job demands, control and relationships. Hierarchical regression analysis controlling for gender found that the HSE dimensions accounted for 54% of the variance in perceived stress. The strongest predictor was job demands which explained 47% of the variance, followed by peer support (4.4%) and control (1.7%).

A similar pattern of relationships was found between the HSE dimensions and work-life conflict (all p<.001) s. The HSE dimensions accounted for 55% of the variance in the model after controlling for gender. Again, the strongest contribution was made by job demands (50%), followed by control (1.8%) and manager support (1.4%)

Conclusions

Both national surveys of academic employees working in UK HEIs indicate that the majority of HSE benchmarks for the management of work-related stress are not met. Additionally, comparison of the results across the 2008 and 2012 samples indicates that levels of wellbeing in relation to job demands, control, change and relationships have worsened over time, whilst peer and manager support have remained static.

The significant increase in job demands is of particular concern. Job demands were the strongest predictor of perceived stress and work-life conflict, with hazards relating to control, peer and manager support made significant contributions.

Changes in the funding, reporting and research structures across the UK higher education system at sector level, plus organisation level responses to this may explain the significant increase in reported job demands. Additionally, control, whilst remaining within the HSE benchmark, is dropping across the sector. There is evidence that autonomy may protect employees from the negative impact of job related stressors (Karasek, 1979), however, if this continues to drop, any protective benefit may be lost.

The importance of monitoring the wellbeing of employees at a sector level using a validated tool over time has been highlighted. Changes over time at both sector and organisation level can lead to changes in the work related stress experienced by staff groups. The results presented indicate that changes over time, if monitored can identify emerging issues, support the evaluation of intervention programmes and identify new areas for action. Monitoring and review are key principles in the HSE management standards approach (HSE, 2007). This is particularly useful for a sector that is responding to change on both national and local levels. The processes and management of change can have negative impact on employees (Ashford, 1988) and result in a range of negative outcomes including increased anxiety, low morale and uncertainty (Ferrie et al, 1998). Organisational engagement in monitoring, using valid tools that are benchmarked against sector can support decision making and determine where intervention is most effective within the institution.

The findings from both National surveys and the trend towards poorer wellbeing outcomes for academic staff across the sector identify the need for intervention. It might be fruitful to target interventions at institutional level with specific local aspects of work and wellbeing identified, targeted and reviewed. Where such interventions have been piloted across the Higher Education sector, results have been promising (Shutler-Jones, 2011) However, sustained improvement requires strategic level commitment at both institutional and sector level (Kinman and Court, 2010; Shutler-Jones, 2011).

References


It is widely (but not universally) accepted amongst contemporary researchers that there are five basic dimensions of personality. Factor analytic research by several independent teams of researchers has identified five broadly similar higher-order traits, often referred to as the "Big 5" personality traits. A considerable amount of research evidence has accrued over several decades to support the existence of a five-factor model (FFM), with the factors often labelled as Openness (O), Conscientiousness (C), Extraversion (E), Agreeableness (A) and Neuroticism (N). The FFM is purely descriptive and is not based on any single theory of personality, but it does encompass scales that operationalise a number of theoretical perspectives (McCrae & Costa, 1985a, 1985b).

Whilst the FFM is very well-known, it is by no means the only model in widespread use. One alternative classification model is based on Jung's theory of psychological types. This approach is widely used in the business community by HR professionals, despite being held in poor regard by many within the professional psychology community who cite a number of objections to it (Lloyd, 2012).

The practical application of personality models usually takes the form of personality questionnaires, administered to individuals to produce personality profiles. Two of the best known are the NEO Personality Inventory (NEO-PI,
developed by Costa and McCrae) and the Myers-Briggs Type Indicator questionnaire (MBTI, developed by Katherine Briggs and Isabel Myers). The NEO PI is a measure of the FFM, whilst the MBTI questionnaire is an operationalisation of Jung’s type theory. It sorts people into one of 16 personality types, based on preferences in four dimensions:

- Where you focus your attention - Extraversion (E) or Introversion (I)
- The way you take in information - Sensing (S) or iNtuition (N)
- How you make decisions - Thinking (T) or Feeling (F)
- How you deal with the world - Judging (J) or Perceiving (P)

In a well-known piece of research, McCrae and Costa (1989) sought to assess the MBTI from the perspective of Jungian theory and the FFM of personality, as measured by self-reports and peer ratings on the NEO-PI. Amongst their findings, they uncovered considerable evidence of convergence between the four MBTI dimensions and four of the five traits measured by the NEO-PI. This study and others have found that the scales that share the name Extraversion have the highest correlation (around 0.7), but substantial correlations (ranging from .4 to .7) are also consistently found between Openness and Intuition, Agreeableness and Feeling, and Conscientiousness and Judging. None of the MBTI dimensions are found to correlate significantly with Neuroticism.

Moderate intercorrelations, however, by no means suggest that the respective constructs may be regarded as identical. Thus, in addition to the clear correlations between two models, various research conducted during the past decade has also suggested that the MBTI dimensions measure constructs distinct from existing ones, adding information to them (cf., Furnham and Crump, 2005, with regard to personality traits and disorders; and Sjöberg, 2001, with respect to emotional intelligence, to name a few examples).

Extending this line of research, we used Confirmatory Factor Analysis (CFA) to test three different models describing the relationships of the MBTI Scales (E vs. I, S vs. N, T vs. F and J vs. P) with four of the FFM traits as measured by the NEO-FFI (a short form of the NEO PI):

Model 1, assuming that the respective MBTI and NEO-FFI scales would measure identical latent factors for each pair of scales;

Model 2, the one conforming to our theoretical assumptions, assuming that the respective MBTI and NEO-FFI scales would measure correlated, but distinct latent factors for each pair of scales;

Model 3, assuming that the respective MBTI and NEO-FFI scales would measure two uncorrelated latent factors for each pair of scales.

**Method**

**Participants**

Participants in the study comprised a heterogeneous sample of 435 psychology students (255 women and 180 men) with a mean age of 37.5 years. The sample was acquired using the snowball method by psychology students studying at the Alpen-Adria-Universität Klagenfurt, Austria.
Measures

The German versions of the Myers-Briggs Type Indicator Step I questionnaire (Myers & Briggs Myers, 2001) and of the NEO Five Factor Inventory (NEO-FFI, Borkenau & Ostendorf, 2008) were administered to all participants. The MBTI Step I questionnaire consists of 88 forced-choice items measuring the four dimensions of "Extraversion vs. Introversion", "Sensing vs. Intuition", "Thinking vs. Feeling", and "Judging vs. Perceiving". The NEO-FFI consists of 60 items designed to measure the Big 5 factors of personality on a five-point Likert scale ranging from "Strongly Agree" (scored as "0") to "Strongly Disagree" (scored as "4"), with 27 items scored in the reversed direction.

Results

Intercorrelations between scales on the two instruments are shown in Table 1. These results correspond broadly with the findings from previous research summarised in the introduction.

<table>
<thead>
<tr>
<th></th>
<th>NEO-N</th>
<th>NEO-E</th>
<th>NEO-O</th>
<th>NEO-A</th>
<th>NEO-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion (E)</td>
<td>-.25**</td>
<td>.63**</td>
<td>.09</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td>Introversion (I)</td>
<td>.27**</td>
<td>-.62**</td>
<td>-.10*</td>
<td>-.07</td>
<td>-.05</td>
</tr>
<tr>
<td>Sensing (S)</td>
<td>.06</td>
<td>-.21**</td>
<td>-.52**</td>
<td>-.15**</td>
<td>.23**</td>
</tr>
<tr>
<td>Intuition (N)</td>
<td>-.05</td>
<td>.19**</td>
<td>.48**</td>
<td>.11*</td>
<td>-.29**</td>
</tr>
<tr>
<td>Thinking (T)</td>
<td>-.16**</td>
<td>-.15**</td>
<td>-.17**</td>
<td>-.50**</td>
<td>.01</td>
</tr>
<tr>
<td>Feeling (F)</td>
<td>.19**</td>
<td>.10*</td>
<td>.10*</td>
<td>.35**</td>
<td>-.12*</td>
</tr>
<tr>
<td>Judging (J)</td>
<td>-.03</td>
<td>-.10*</td>
<td>-.11*</td>
<td>-.01</td>
<td>.58**</td>
</tr>
<tr>
<td>Perceiving (P)</td>
<td>.03</td>
<td>.10*</td>
<td>.13**</td>
<td>.00</td>
<td>-.58**</td>
</tr>
</tbody>
</table>

Notes:

* p < .05; ** p < .01

MBTI scale preference clarity index scores were used to calculate correlations.

The next stage was to use Confirmatory Factor Analysis (CFA; Bollen, 1989) to establish the fit of the unidimensional scales. A model was formulated, explaining the fit of items assigned to each scale with one latent factor. A review of the fit indices revealed an acceptable fit with the unidimensional models of NEO-FFI and MBTI (c2/df ratios all ≤4, Comparative Fit index (CFI) and Tucker-Lewis index (TLI) >.8 for all of the NEO-FFI scales and four of the MBTI scales; the remaining scales >.7, the Root mean square error of approximation (RMSEA) and the Standardised root mean square residual (SRMR) all <.1).

For all four scale pairs, Model 2, assuming distinct but correlated latent factors of MBTI and NEO-FFI, yielded a statistical fit significantly superior to the statistical fit found for model 1 (which had assumed identical latent factors of MBTI and NEO-FFI respectively) and model 3 (which had assumed uncorrelated factors for the respective scales of the two instruments).

Although, due to the large sample size, the c2-test statistic was significant for all four scale pairs, Model 2 can be considered to have acceptable fit (c2/df Ratio < 3, CLI and TLI < .9, RMSEA < .1, SRMR < .1).
Latent correlations of the respective MBTI and NEO-FFI factors are in the .60 to .80 range, confirming our hypothesis that the corresponding constructs pertain to conceptually related and statistically correlated, though by no means conceptually identical constructs.

**Discussion**

Consistent with previous research, we found evidence of considerable convergence between the four MBTI dimensions and four of the big 5 factors measures by the NEO-FFI. This could be seen as providing support for the Big 5 against critics who claim that it is lacking a theoretical basis. At the same time, the convergence of MBTI dimensions with empirically-derived factors known to have meaningful association with various external criteria could be seen as being supportive of use of the MBTI instrument.

Expanding on this, the results of the CFA supported our expectations that the NEO-FFI adds important aspects of personality to the MBTI and vice versa.

Preferring a structured and planful approach to life (central to the MBTI Judging preference) is distinct from being a competent and dependable person in the sense of NEO-FFI Conscientiousness. Individuals characterised by the MBTI Thinking dimension, still may act empathically, warm, and likeable - behaviour attributed to NEO-FFI Agreeableness. Similarly, being broadminded in the sense of NEO-FFI Openness does not necessarily correspond with a preference for the 'big picture', which is characteristic of the MBTI Intuition dimension. As far as Extraversion is concerned, the Jungian definition differs in several ways from the NEO-FFI operationalisation of Extraversion. This makes them conceptually related but distinct constructs.

Thus, for the German versions of the two questionnaires, in line with our expectations, our research has shown that both instruments are able to add important information to each other.

These results confirm that the NEO-FFI, measuring the dimensions of the FFM of personality and the MBTI, representing Jung's theory of personality possess considerable incremental validity over each other and can be used facilitate more effective personal development. Additional studies, employing different types of samples in various cultures are encouraged in order to replicate the present findings and to deal with obvious limitations, resulting from the restricted size and composition of the present sample.

**References**


**F21: Keynote Session**

**Searching for Good Politicians - How Can Psychology Help Us Find Them?**

**Professor Jo Silvester**, Professor of Psychology, Cass Business School, City University London, UK

Politicians are a notoriously difficult group to access for empirical research; relatively little is known about the individual qualities, skills and knowledge needed to perform political roles, or what constitutes good political leadership. Yet occupational psychologists, have paid very little attention to these political workers despite the considerable body of theory and research about performance in other types of work roles. I will argue that the discipline has much to contribute to building a broader understanding of political work and the factors that influence the effectiveness of the individuals we elect to rule us. However, I will also argue that occupational psychologist have much to learn by studying politicians, particularly in relation to recognising the influence of more informal, tacit processes on work performance. Building on work with national and local politicians I will describe the opportunities and limitations of using traditional occupational methods with politicians and political parties, and examine the extent to which individual differences can impact on performance in politics.

**F22: Workshop**

**Using the 16PF questionnaire**

**Ken Rowley**, OPP, **John Hackston**, OPP, **Rob Bailey**, OPP

**Theme** Profession

The 16PF questionnaire has been around for over 60 years; and this workshop will show how it is still alive and kicking. Through interactive sessions that focus on how to use the questionnaire and reports in career guidance, selection and coaching it will show how you can enhance your professional skills by adding the 16PF to your toolkit. For those with a Master's in Psychology (or equivalent), with training in psychometrics, you will be eligible for registration to use the 16PF instrument.

**Overview**

The 16PF questionnaire has been around for over 60 years and with this pedigree it is not surprising that some psychologists wonder if it still relevant. It is a trait based questionnaire developed by Raymond Cattell which has been continually updated and revised over the last 60 years, and this workshop will show how it is still alive and kicking as a robust measurement of an individual's behaviours and personality. It is particularly insightful as it is a holistic measurement of an individual's personality, and does not solely focus on work behaviour, which can be quite liberating for a client.

The workshop is designed for delegates with a Master's in Psychology or who are Chartered as an Occupational Psychologist (or equivalent), with training in psychometrics to highlight how they can add the 16PF as an additional tool to their professional skills in Occupational Psychology. Based on their previous qualifications and training they will have access to the 16PF questionnaire and this workshop is designed to provide guidance regarding how they make use of the tool, especially in career advice, selection and coaching. This links clearly with the theme of **Theme Profession** as it can provide accreditation in the use of this psychometric test as well as showing how to use the instrument to enhance their professional skills as an Occupational Psychologist.

The learning objectives would be:
- Gain an understanding of the 16PF framework and its development
- See how to use the questionnaire for a number of applications, including:
  - Selection
  - Coaching
  - Career guidance
- Learn how to use electronic reports to support and add value to your work as a practitioner
- See what research underpins the use if the 16PF and have an opportunity to get involved in future research.

We would also like participants to pre-register for the workshop, as this will provide the opportunity for them complete the 16PF before the course so they can review their profiles during the workshop.

Content
The three hour session will focus on the theory, practical applications and research on the 16PF. The main focus will be on the practical applications of the tool. An outline of the agenda is provided below:

**Introduction** (approximately 30 mins)
This will provide a background to the session including learning objectives and how they can access the 16PF based on their previous training. It will also introduce the framework and how the tool was developed. This session is mainly focused on the theory behind the tool. We will not spend too long on what each of the factors mean as material will be available providing descriptions; and resources will be made available afterwards that will provide more depth for understanding the framework. In addition, the application exercises will help to accelerate their understanding of the factors.

**Applications** (approximately 120 mins)
This is the main focus of the workshop and will be on how they as practitioners can use the 16PF. The nature of the exercises will start to help participants build their skills in interpreting the 16PF profile. The group will be divided into 3 (maximum of 20 per group) and they will alternate between 3 different application exercises. Each of these exercises will last approximately 40 minutes so that participants can attend each of them. In each of the exercises they will have at least one 16PF profile to analyse and it will also involve highlighting the resources that are available for the application. These sessions are designed to be fully interactive, using practitioner case studies participants will analyse profiles with the opportunity to discuss interpretations within a group discussion in relation to the application they are exploring.

The sessions are designed to provide inspiration and reflection about how they can practically use the tool. Taking an accelerated learning approach, these will designed as quick and fun exercises, where participants can quickly see the benefit of the tool and how it can be applied. To further embed the learning there will be resources available after the workshop to increase their understanding of the tool and how to apply it. Ideally the room can be initially set out in theatre style (rows of seating with no tables), however to help make the workshop more effective it would be beneficial to have three separate areas within the room that participants can break into (with either additional seating or easy for participants to move seats). The three application sessions will be:

**Selection**
This will involve an exercise analysing what competencies are required for a customer service role, how these competencies can be measured using the 16PF and then analysing the data to consider how different profiles might fit within the role. The aim of the exercise is to provide the participant with the tools to use the 16PF effectively within
selection and to be aware of supporting material to aid their practice. The exercise will also highlight new and innovative approaches to using the 16PF in selection, for example the 16PF Competency Report.

**Coaching / one-to-one development**

Using a case study we will analyse a profile to see how the 16PF can be utilised in a coaching scenario with an underperforming manager. The exercise will allow the opportunity for participants to explore how the issues highlighted with the manager can be linked to the individual’s 16PF profile and discuss the steps they would go through to make use of the tool in this context. Participants will also be able to take away resources to help them use the 16PF in coaching contexts (e.g. a guide highlighting issues that are likely to arise due to a client’s profile; but also consideration of the potential advantages and disadvantages of their profile as a coach). The exercise will also explore innovative ways that the practitioner can provide feedback to a client when using the 16PF in one-to-one development. The aim is for participants to start to appreciate how they can make use of the tool in one-to-one development work such as coaching.

**Career guidance**

This case study will focus on a client who is considering whether to continue her education at University while also exploring her potential career options. Participants will be able to analyse a 16PF profile alongside background information to consider what are likely to be the potential themes and areas to explore during the feedback session. It will also highlight the practical resources they can use to help them with career guidance and development discussions. The session will also highlight how the 16PF is linked to Holland's Occupational Themes, which is a well established model used in career guidance. The aim of the exercise will be for participants to start to understand the different ways the 16PF can be used in career guidance, for example using the new 16PF Career Success Report aimed to provide career insights for students.

To be able to achieve this depth of exploration of how the tool can be used in various applications, it would be difficult to deliver these 3 practical sessions in less than 2 hours (with the whole workshop taking 3 hours). This part of the workshop participants are likely to find the most informative, stimulating and practical as it will relate to the skills they will be applying as a practitioner. Participants will receive printed resources that will relate to the exercises and that they will find beneficial as a practitioner.

**Research and next steps** (approximately 30 mins)

This last part of the workshop will highlight some of the latest research based on the 16PF and interesting common patterns we see with 16 profiles based on various studies. It will also describe opportunities for participants to conduct or participant in research using the tool. Finally, it will also cover next steps about registering as 16PF practitioners (if they meet qualification requirements) and an opportunity for any final questions.

Materials to be provided to participants:

All participants who pre-register and complete the 16PF questionnaire will take away a copy or their own 16PF Profile Report, and all participants will receive detailed notes describing the factors. In addition, the following materials will be supplied to those who take part in each applications session:

**Selection:**

- OPP Competency cards
- Instructions and sample profiles for the selection exercise

**Coaching**

- PDF on using the 16PF in coaching
Organisation: The workshop provides a practice-based perspective into attracting and managing talent. Inherent in talent management is a future-focus, i.e., the identification of those with potential to succeed in the future and to take on leading roles. It serves to aid delegates to better understand how talent management supports organisations' business strategies and future leadership.

Although both themes are relevant, in that this workshop is more about OP practice and not an evaluative paper on talent management per se, I think it is more apt for the Future of our Profession stream.

Workshop Details

What is novel or unique about this workshop? Most training we receive in occupational psychology is 'practice unidimensional.' That is, we learn about a practice area in isolation, such as a given personality tool or assessment centres. The world of work doesn’t work like that. This workshop looks at an HR practice area from the perspective of a talent manager, and explores concepts and practices across leadership, selection, placement, development, and engagement.

What aspects will delegates find most informative and stimulating? Delegates will find most interesting that which is deceptively simple and that which is somewhat more sophisticated. There are a few practices in every-day talent management that are not 'rocket science'; the 9-Box Model, a simple 3x3 matrix of performance by potential, is a great example, and delegates will be surprised at how powerful such a simple tool can be when used appropriately. Delegates will also be stimulated by some more sophisticated research directions, including the use of learning agility as a core proxy for potential and other instruments that purport to assess potential.

What materials will delegates receive? Delegates will receive a hardcopy workbook to work from during the session. They will also receive an electronic copy of the slides. Where possible, copies of psychometric measures of potential will be distributed.

Teaching & learning methods. The format is an interactive workshop. I will be showing many practical tools. Where possible, delegates will work through the tools individually and in groups. Group discussions will critique current practice, as well as the practicality of best practice. I will follow adult learning principles, drawing upon the expertise in the room and encouraging sharing of experience.

Target audience/Level of expertise. This is an introductory workshop, familiarising delegates with the concepts, practices, and tools of talent management. Delegates will have had no or very little exposure to talent management. It would suit recent graduate or entry-level OPs, or someone more experienced in general with no background in talent management. The level of expertise is basic, as it will cover a wide array of talent practice areas, techniques, and tools.

There is no accreditation nor certification for this workshop.

References
The nature and purpose of the session
To provide delegates an experiential introduction to ACT in the context of career decision making.

What are the main psychological theories, models and research underpinning your session?
Acceptance and Commitment Therapy (ACT) is an intervention approach based on a theory of language and cognition (Hayes, Kirk and Strosahl, 2004). The ACT approach was first outlined in 1984 by Steven Hayes. No outcome research was published between 1986 and 2000 as during this time the focus was on developing the theoretical and philosophical underpinnings of ACT. It is therefore built on strong philosophical (functional contextualism) and theoretical (Relational Frame Theory, RFT) grounds (Hayes, Kirk, Strosahl and Wilson, 1999). Since 2000, the majority of outcome research has been carried out within clinical settings, although research has begun to move across into workplace settings.

Psychological flexibility is the individual difference developed through ACT and is defined as an ability to focus on the present moment as a conscious human being, and, based on what the situation affords, acting in accordance with one’s chosen goals and values (Hayes, Luoma, Bond, Musada & Lillis, 2006; Bond, Flaxman & Bunce, 2008). Psychological flexibility is made up of 6 core components of ACT which fall within two groups: acceptance and mindfulness processes and commitment and behaviour change processes (Hayes et al., 2006). Acceptance or mindfulness refers to an individual’s willingness to experience undesirable internal events (thoughts, feelings, sensations) without having to avoid, control or change them (Donaldson-Fielder & Bond, 2004). This acceptance of internal events frees up emotional resources, energy and attention which can then be used towards achieving ones’ values and goals resulting in...
commitment and behaviour change processes; an individual’s ability to take effective action towards chosen goals and values (Hayes et al, 2006; Bond, & Flaxman, 2006).

Outcome research since 2000, has provided preliminary evidence to suggest that psychological flexibility is an important antecedent of employee health (mental well being, job control) and performance (innovation, learning) (Bond and Bunce, 2000; Bond and Bunce, 2003; Donaldson & Bond, 2004; Bond and Flaxman, 2006; Bond, Flaxman and Bunce, 2008). There is also preliminary evidence to suggest that psychological flexibility may enhance the effect of transformational leadership training (Bond, 2012 cited in Flaxman, Bond and Livheim, 2013).

In addition, ACT has been used within career coaching, helping individuals to get ‘unstuck’ and take action towards a more meaningful career and even life, based on their values (Flaxman, Bond and Livheim, 2013).

How do you see your proposal linking with the main conference theme of investing in the future, and what makes it apt for the particular strand you have chosen?

Investing in ourselves, learning how to relate more flexibly to our thoughts and feelings, enables individuals to make more effective career decisions, and wider life decisions which are based on their values. Often our fears prevent us from moving forward, and taking action towards the careers and life that we truly want. Developing psychological flexibility, is one way that individuals can invest in themselves, and therefore in their future careers and life. It enables individuals to ‘feel the fear, and do it anyway’

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

The fact that it is an experiential workshop, the best way to learn is to really experience it yourself. ACT in itself is new and emerging third wave therapy, it is only in the last decade that research is being published and coming to the forefront of academia. Functional contextualism and relational frame theory provide a new way of understanding language and how we are constrained by it. In addition, ACT is a mindfulness based approach, which again is a new and innovative approach to well-being and performance in the workplace.

Which aspects of your session do you think conference delegates and potentially the wider public will find most informative and stimulating about your session?

The ‘Headstuck’ material will be extremely informative and stimulating. Based on evolutionary psychology, cognitive psychology and neuroscience, this material will demonstrate how we get trapped by the way our minds have evolved, which leads us to feeling ‘stuck’ between a rock and a hard place. This new approach to working with difficult thoughts and emotions, that may stop us from living our values and taking action to further our careers is exciting, new and refreshing.

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

What are the learning objectives and outcomes for attendees?

1) To gain an overall understanding of the ACT model.

2) To experience mindfulness exercises that individuals can use themselves and potentially with clients.

3) To identify values relating to an individual’s careers, and commit to at least one action they can take to live these values within the following week.
4) To provide take away exercises that can be incorporated into participants everyday lives, in order to support 
effective career decision making, as well as to enable delegates to live a more meaningful and richer life.

What specific content is to be taught in the workshop?

• An overall understanding of the ACT model

• Mindfulness based exercises, tools and techniques, together with values identification exercises and ‘committed 
action’ (taking action towards goals) exercises

• An overview of how the ACT model can facilitate career decision making

• An understanding of how six cognitive biases combine to keep people ‘headstuck’ and how ACT model can 
accommodate the mind’s biases so that individuals can become more flexible, and make more effective career 
decisions.

• Links to further reading and resources will be provided

What teaching and learning methods will be used? (include any skills practice sessions)

The workshop will be experiential with a combination of presenting, exercises and discussions.

What is your target audience (postgraduates, practitioners, researchers?)

The target audience is broad; it is aimed towards anyone who is ‘headstuck’ or anyone who currently works in coaching 
and is interested in exploring a new coaching paradigm.

At what level will the workshop be aimed (e.g. basic, intermediate or advanced)

Introductory level

Will participation lead to any recognised certification or accreditation? No

References

of Organizational Behavior Management, 26, 25-54.

of Organizational Behavior Management, 26, 25-54.


Bond, F. W. & Bunce, D. (2003). The role of acceptance and job control in mental health, job satisfaction, and work 

Bond, F.W. & Flaxman, P, E.,(in press). Learning is a mediator by which job control and psychological acceptance affect 
flexibility and job control to predict learning, job performance, and mental health. Journal of Organizational Behavior 
Management, 26, 113-130.


F25: Workshop
ESCI-U Workshop
Melody Moore, Hay Group
Theme Individual

The emotional and social competency inventory - university edition (ESCI-U) is a special, low-cost version of Richard Boyatzis' and Dan Goleman's 360 EI tool. It is the most thoroughly validated and widely used measure of EI, and is used in schools and colleges and at undergraduate, masters and doctoral level in many countries. This interactive workshop will introduce you to the ESCI-U and equip you to use it with students in order to develop their emotional and social competencies.

Psychological Theories
The ESCI-U is based on the work of Daniel Goleman ('Working With Emotional Intelligence', 1998), which drew on the work on Boyatzis (Boyatzis et al 1995) and the Hay/McBer generic competency dictionary (as documented in Spencer and Spencer 'Competence At Work - Models for Superior Performance', 1993).

In 1998 The Emotional Competence Inventory (ECI) was developed by Boyatzis and Goleman, in partnership with Hay Group. In 2007 Boyatzis et al re-conceptualised the ECI as a measure of emotional and social intelligence, and introduced the Emotional and Social Competency Inventory (ESCI) with a reduced number of competencies and a higher psychometric standard.

The ESCI-U is a version of the questionnaire that is specifically designed for use with students.

Link to Conference Theme
We have chosen 'Individual' as the strand most appropriate for this workshop. Better emotional intelligence builds students' personal development, independent learning and employability. This research-based tool measures the emotional and social intelligence competencies that differentiate outstanding employees in a range of roles and sectors.

The tool comes from the behavioural perspective, and is based on the belief that emotional and social intelligence can be learned. Therefore receiving feedback via a 360 tool such as the ESCI-U is the first step in raising students' awareness of their competence in these areas, allowing them to focus developmental effort in the appropriate way. The workshop will equip academics to use the ESCI-U with their own students, thus investing in their self development and future employability.

Innovation/Novel Aspects
The issue of employability is a hot topic in universities, as students increasingly base their choice of academic institution and course on how likely they are to achieve a job post qualification. There is therefore an increased focus on helping
students develop skills and behaviours that equip them to excel in the world of work. The ESCI-U is one of a small number of tools that are specifically designed to help students develop these important skills.

Interest to Delegates
We will share our research that links emotional and social intelligence competencies to success in a wide variety of roles and sectors. We also believe that the topic of employability will be of interest to both students and academics.

Materials
Delegates will receive copies of ESCI-U workbooks and an invitation to complete the online 360 version of ESCI-U so that they can receive feedback on their own emotional and social competencies. They will also receive a sample 360 report.

Agenda/Content
The workshop will be a combination of lecture, interactive discussion, individual, paired and group activity.
The agenda will be roughly as follows:
- Introductions and expectations
- Best boss / worst boss exercise - group activity exploring leadership behaviours
- Overview of ESCI-U model, its development and validation research - lecture and interactive discussion
- Applications of the ESCI-U - lecture and interactive discussion
- Practice feedback - paired activity

Learning Objectives/Outcomes
Delegates will:
- Gain an understanding of the development of the ESCI-U model and diagnostic
- Receive materials that they can take away and reflect on their own emotional and social competencies
- Receive an invitation to complete a 360 to further develop their understanding of their own emotional and social competencies
- Develop their understanding of how they can utilise the ESCI-U to develop student's emotional and social competencies
- Gain confidence in introducing the ESCI-U to students and helping them interpret their own feedback

Teaching/Learning Methods
As mentioned in the 'Agenda' section, the workshop will be a combination of lecture, interactive discussion, individual, paired and group activity. Participants will get the opportunity to build their coaching skills through practicing giving feedback using ESCI-U sample reports.

Target Audience
The target audience for this workshop is students and academics. Others interested in learning more about emotional intelligence can also attend, but they will not be allowed to use the ESCI-U (they are eligible to use the non-university ESCI, but accreditation is required for this). Priority should be given to students and academics.

Level of Expertise
The workshop will be suitable for beginners and above. No Level 1 or 2 (A or B) qualification is required.

Accreditation
The workshop will give information that will enable participants to use the ESCI-U, but will not lead to accreditation as it is not required to use the ESCI-U.

F26: Workshop
The individual perspective in OD: Applying Lewin's concept of 'unfreezing' to today's world
This workshop will cover an overview of Kurt Lewin’s 3-stage change theory (unfreezing, changing, freezing) and Edgar Schein’s further development of the psychological processes that individuals need to experience within each stage, as well as recent critiques of the model.

The workshop will expand on the unfreezing stage.

Skill development practice will include a demonstration and a short practice session. The aim is to understand the underlying mechanisms that support successful change interventions.

Our approach will be to cover the theory behind the model to enable participants to get to grips with it in a lively way. The practical exercises will bring the theory to life using coaching as the medium of engaging with individuals. We see the short workshop as a combination theory and skill building.

Introduction to the Theories

There are two underlying theories on which this workshop is based.

Lewin’s model states that organisational change involves a move from one static state via a gradual shift, to another static state. The model, consists of a process of 1) unfreezing, 2) moving and 3) freezing.

A major part of Lewin’s model is the idea that psychological change is a journey rather than a simple step. He saw behavioural change as a slow process; however, he did recognize that under certain circumstances, such as a personal or organisational crisis, the forces can shift quickly and profoundly. In these situations, established behaviours break down and the status quo is no longer viable; new patterns can rapidly emerge and a new equilibrium is formed.

Enlarging on Lewin’s ideas, Schein indicated that the key to successful change ‘. . . was to recognise that change, whether at the individual or group level, was a profound psychological dynamic process’. (Schein, 1996) In his theory he identifies the processes necessary to successfully pass through the 3 stages of Lewin’s process.

Unfreezing:

Individuals needs to feel:

- frustrated or dissatisfied (receive disconfirming data)
- guilt or survival anxiety
- psychologically safe

Moving:

In order to take in and respond to new information individuals need to:

- redefine concepts and standards (cognitive redefinition)
- identify with a role model
- scan the environment, try out new ideas and develop new insights

Freezing:

To embed the new behaviours/changes, individuals need to feel that:
there’s a fit between their new responses and their personality and attitudes

there’s a fit between their new responses and the individuals around them

Schein and the unconscious

This workshop will focus on the first stage – how to turn the frustration and dissatisfaction that the status quo has been disrupted into positive behaviour change.

Schein recognises that sometimes disconfirming data have existed for a long time but because of a lack of psychological safety, the individual or organisation has avoided anxiety or guilt by denying the data’s relevance, validity, or even its existence. “It is our capacity both as individuals and as organizations to deny or even repress disconfirming data that makes whistle blowing or scandals such powerful change motivators.” (Schein, 2004) . We will briefly explore the less conscious aspects of resistance through Freud’s concept of the superego to aid understanding of denial and repression of data.

Conference presenters will discuss the theory behind the models, and then demonstrate a coaching session showcasing the identification of disconfirming data and addressing the issues of anxiety and psychological safety.

Attendees would then have a chance to practice in small groups as consultants with facilitators acting as the coachee.

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<th>Outline Agenda</th>
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<td>- Lewin’s 3 stages of change,</td>
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<td>- Forcefield analysis (Importance of reducing restraining forces)</td>
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<td>Focus on psychological processes involved in unfreezing</td>
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<td>The role of the unconscious during change and its impact on unfreezing</td>
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<td>Skills required by change agents to help unfreezing</td>
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<td>Demonstration by facilitators using these skills</td>
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<td>Practice session with small groups of participants as consultants and facilitators as coachee</td>
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<td>Debrief</td>
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F27: Workshop
PCL Certification in 360 degree feedback
Geoff Trickey, Psychological Consultancy Ltd
Theme Organisation

The workshop will introduce delegates to P:M360™ assessments that are based on the key competencies for any job role. In this approach, an individual's self-rating of performance is compared to observer ratings from their line manager, their peers, direct reports or clients. Uniquely, in the P:M360™ approach, standardised performance ratings are also considered against the background of candidate potential - the extent to which their personality is likely to facilitate performance. This all-round perspective provides a particularly robust assessment, and a sound basis for reviews, appraisals and personal development. Equipped with best practices for implementing a successful 360 process, you will be able to facilitate constructive and meaningful 360-degree feedback programmes across all levels of an organisation.

Learning Objectives
Setting up a 360-degree feedback process - P:M360™

Accurately interpret a P:M360™ Feedback Report & Coaching Supplement
Structuring a 360-degree discussion session for maximum development

Guide the development planning and follow-up with candidates

Improve competencies and inter-personal performance - MATCH:UP 360™

The P:M360™ reports provide a wealth of information for Consultants on which to support your candidate’s future personal development decisions - set goals, decide on strategies, implement life changing development plans. Delegates will also have the advantage of practicing the interpretation of reports and feedback skills required for a successful 360 feedback session. All participants will receive three free 360 Feedbacks with Coaching Supplements – cost of nearly £400.

Suitable for Occupational and Business Psychologists, HR/Talent Management professionals, trainers, and coaches who offer 360 feedback. Level of information –

Posters

DOP01
The impact of psychological empowerment on the job satisfaction and performance of Saudi Arabian Women.
Ahad Aloitobi, University of Westminster
Theme Communities

Key points
There is an increasing amount of research and theory on psychological empowerment of women, undertaken primarily in developed nations. Yet this has limited applicability to developing and under-developed nations where religious beliefs, traditions and practices play a central role in shaping societal norms. The lack of research on female empowerment within different socio-cultural contexts, such as in Muslim countries, represents a challenge to the degree to which such theories can be applicable in such different socio-cultural contexts (Roomi, 2013). This is particularly true of Saudi Arabia with strong prohibitions on the expectations and behaviours of women.
**Introduction to theory**

Saudi Arabia has been witnessing growing reforms related to empowering Saudi women to play a bigger role in the society, as part of the overall women rights' reforms. For example, there has been increasing interest in allowing Saudi women to vote and have senior roles in the society. However, these reforms have been criticised for being slow and in many cases insignificant (Butters, 2009). For example, a recent report by the UNDP (2009) has ranked Saudi Arabia 106th amongst world nations in gender empowerment, behind most GCC nations (i.e. United Arab Emirates, Kuwait, Qatar, Bahrain and Oman).

Slow reforms are often attributed to Saudi culture being a very religious society, where religion plays a large part in defining "social norms, patterns, traditions, obligations, privileges and practices in society" (Al-Saggaf, 2004). For example, women rights in Saudi Arabia are defined by both Islamic law (Sharia) mainly based on Qur'an and tribal traditions influenced by the interpretations of the righteous predecessors 'Salaf'.

The concept of psychological empowerment in general, and female empowerment in particular, has been gaining increasing interest in practice as well as in research. In practice, for example, many nations have been taking important steps for empowering women, in light of the call by the United Nations (UN) to make female empowerment on top of its agenda for the Millennium (Varghese, 2011).

Research has found a relationship between job performance and psychological empowerment (Geisler (2005) and Kuo et al, 2010). However, most of the available research on the impact on psychological empowerment on job satisfaction and performance has also been mainly conducted in more developed nations, limiting their applicability to developing and under-developed nations (Al-Gahtani et al., 2007). Al-Gahtani et al. (2007) argues that there are some socio-cultural factors that impact on women taking professional work in Saudi Arabia. This is due to some "rigid boundaries" related to the "social roles and expectations for women compared to men in Saudi Arabia". This is evident, for example, in the considerable gap between the number of women in professional knowledge worker roles in Saudi Arabia, in contrast to their male counterparts (Al-Gahtani et al., 2007).

The aim of this research was to investigate the impact of female empowerment on job satisfaction and performance of professional Saudi women, while taking into consideration their socio-cultural context. The research is based on a critical review of the literature related to female empowerment, satisfaction and performance and in the Saudi socio-cultural context. Quantitative data on the impact of female empowerment on job satisfaction and performance of professional Saudi women will be analysed and the results discussed in the context of current theory.

**Research method**

The research philosophy underpinning the investigation is mixed methods, integrating both quantitative and qualitative research. The research methodology is based on integrating case study research methodology and survey questionnaire methodology. Data is collected from a sample of employees of a single case study of a Saudi organisation - the Human rights commission in Saudi Arabia.

**Results**

The results will evidence the relationship between the psychological empowerment of Saudi Arabian women and their job satisfaction and performance. The implications of the findings will be discussed in the general socio-cultural context of Saudi Arabia and in particular in the context of the Human Rights Commission. Recommendations will be made in terms of promoting psychological empowerment within a culture influenced by strong religious beliefs.

The study will advocate further investment in the Saudi Arabian community in particular within the female population. This can be effectively promoted through informed and equitable educational policies and methods, allowing females to aspire and to achieve senior levels in both public sector and private sector organisations.
This research is founded on psychological theories of empowerment, job satisfaction and performance at work. It comprises a unique approach to a significant problem affecting the lives of a nation of women and their families. It contributes to psychological empowerment theory by addressing a gap in research that studies psychological gender empowerment, within the context of socio-cultural beliefs, traditions and practices in Saudi Arabia. In addition, the research is of value in practice by providing insights to policy makers in Saudi Arabia in relation to factors that impact on the psychological empowerment of Saudi women, their job satisfaction and performance. It will be of relevance and interest to an international audience interested in the application of psychological theory to the improvement of the lives of individuals and communities. Papers will be available on the day for colleagues.

References


DOP02
Evaluating training effectiveness and Return on Investment - A practical guide
Rob Bailey, OPP Ltd, Paul Deakin, OPP Ltd, Katarina Karringer, Lund University
Theme Individual

In a mature and competitive market for workplace training, clients may justifiably want evidence of how the intervention will help them remain profitable, and thus training providers need to be prepared for questions about the Return on Investment (ROI) likely to result from training courses.

However, the evaluation process of such interventions seems to be of low priority: fewer than 5% of all training programs are assessed in terms of their financial benefits to the organisation (Swanson, 2001, cited in Aguinis & Kraiger, 2010).

Previous studies seem to agree that many organisations evaluate trainees' reactions and learning, whereas very few evaluate their actual behaviour changes and the organisational results (Blanchard et al., 2000; Hughes & Campbell, 2009; Kraiger, 2003; Sitzmann et al., 2008). Furthermore, a recent study by Saks and Burke (2012) shows that transfer of
training is more likely to occur in organisations that evaluate their training programs. Consequently, if training and evaluation is not done properly, the ROI is likely to be unsatisfying.

Here we propose a theoretical framework which aims to give practical advice on how to perform structured ROI analysis and present a step-by-step guide designed for businesses that offer coaching, training and workshops. The guide will serve two main purposes; primarily, it will help the company to sell more training workshops and, secondarily, it will give the training providers valuable insights into the training they offer and how improvements can be made. This is done by examining individual and environmental factors before, during and after training which may affect the learning transference into the workplace, and thus, the ROI.

Theory

Our proposed 6-step-guide is an integration of three established models; The Kirkpatrick hierarchy (Kirkpatrick, 1983); The Importance-Performance Analysis model (Siniscalchi et al, 2008) and ROI calculation (McGovern et al, 2001).

The Kirkpatrick hierarchy is a widely used framework for evaluating training programs. Kirkpatrick proposes four levels of evaluation:

- Level 1 - Reaction - Captures the trainees' satisfaction with the training course
- Level 2 - Learning - Assesses the trainees' ability to demonstrate mastery of terminal performance objectives in the training environment
- Level 3 - Behaviour - Measures the extent of actual on-the-job performance
- Level 4 - Results - Determines the benefit for the organisation.

The Importance-Performance Analysis (IPA) model is a simple evaluation tool that is used to understand customer satisfaction and prioritise areas for improvement. It contrasts the importance of an attribute with an evaluation of how well that attribute is being performed. This information can help put evaluation from data into context and form the basis for prioritised action planning.

The model consists of four quadrants:

- High importance/High evaluation = important aspects of the training that are being delivered well (good work!).
- High importance/Low evaluation = important aspects of the training that are not being delivered well (i.e. high priority for improvement).
- Low importance/High evaluation = less important aspects of the training that are being delivered well (is this overkill?).
- Low importance/Low evaluation = less important aspects of the training that are not being delivered well (i.e. low priority for improvement).

The ROI calculation measures the potential monetary value of the workshop, based on trainees' estimations of financial benefit and training effectiveness.

Each respondent is asked to:

a) List the tangible, measurable changes or improvements to their (or their team's) business results they have seen since they attended the workshop (irrespective of whether these changes were directly as a result of their attendance).

b) Estimate the financial benefit of each change (either per year or over a 3-year period).
c) Indicate the respondent’s level of confidence in the value given at stage (b), as a percentage.

d) Estimate the extent to which the workshop contributed to this change, as a percentage.

e) Indicate the respondent’s level of confidence in the estimate given at stage (d), as a percentage.

These estimates are then used to produce a very conservative estimate of the financial value of the training course attendance, accordingly to the formula:

\[
\text{ROI (\%)} = \frac{\text{(Adjusted ROI - Workshop Costs)}}{\text{Workshop costs}} \times 100
\]

For example, if the result in this equation is 530%, it means that the company obtained a return of 5.30 times the initial investment in the workshop.

A practical guide

By combining the three models presented above, it is possible to capture both individual and environmental factors on different levels of the evaluation. We suggest that this is done in 6 practical steps:

Step 1: Pre-workshop questionnaire
Two weeks before the workshop, trainees complete pre-workshop questionnaires that capture trainees’ motivation levels towards each of the workshop objectives.

Step 2: Attendance
Trainees attend the workshop.

Step 3: Workshop Evaluation Form & IPA Plot
At the end of the workshop, trainees report their perceived level of importance and performance on each workshop objective, immediately after their attendance. There should be room on the form for additional comments on the workshop.

Step 4: Exam results/Assessed feedback performance
At the end of the workshop, trainees complete an exam, which captures their levels of learning.

Step 5: Post-workshop questionnaire
Two weeks after the workshop, trainees complete a post-workshop questionnaire which captures their behavioural change.

Step 6: Follow-up survey
Six months to one year after the workshop, trainees estimate the monetary value of behaviour changes with McGovern’s multistep approach, which captures their possible ROI.

Conclusion
Our guide is a practical combination of 3 different models of training evaluation. The aim is to increase the rate of learning transference into the workplace, and thus the ROI. By letting trainees evaluate the intervention in clearly structured steps (before, during and after the workshop), they are more likely to keep the knowledge alive and change their actual on-the-job behaviour. The behavioural changes will then help to estimate the impact/effectiveness of the
training. This is likely to enable greater re-commissioning of good training providers, better learning outcomes for the trainees and therefore higher ROI for organisations.

References

Additional information:
How do you see your proposal linking with the main conference theme of Investing In The Future, and what makes it apt for the particular strand you have chosen?

It is intended to help practitioners to evaluate and improve training programmes. The benefits of this are threefold: firstly, to give delegates a greater chance of improving their workplace skills and knowledge, secondly, to improve organisational effectiveness, and thirdly, to increase the effectiveness of occupational psychologists and their services.

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

It is a synthesis of three different, but complementary approaches, with the aim of prompting better evaluation of ROI; in an ideal world, we would not find this to be novel, however, we suspect that to many practitioners it will be. Research quoted in the introduction suggests that our industry still needs to do more to evaluate how effective our interventions turn out to be for training delegates and their organisations.

Which aspects of your session do you think conference delegates and potentially the wider public will find most informative and stimulating about your session?

Simply put: find a method that will tell you whether or not training works.
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 PDF format version of the poster can be provided in advance for distribution through electronic media. Paper copies for delegates to take away can be made available next to the poster.

DOP03
The Impact of Leaders' Changing Group Membership on Followers' Perception
Iain Ballantyne, Portsmouth University
Theme Individual

Following the theoretical perspective of Haslam and colleagues (2012) and in conjunction with Steffens, we conducted an experiment at a modern University, the details of which follow. The aim of the experiment was to further develop understanding of one idea that has been in the Social Identity (SIT) literature connected with Leadership for some while - that the Charisma (of a leader) is an attribution of followers rather than a competency. 'Leadership is in the eye of the beholder' (Nye and Simonetta, 1996).

One of the tenets of SIT makes this paper somewhat difficult to place as one of the limitations of much recent study of leadership is, like many things American, strongly focused on the individual leader. Indeed the submission strand 'Individual' specifically identifies Leadership as an Individual point of focus. The perspective of Haslam and colleagues in SIT is that this focus on leadership as what one might loosely term an individual competence ignores one of the most important points, which is that whatever leadership is, it takes place in the context of a group.

For the sake of clarity, and to head off an obvious critique, this is not of course an either/or discussion. Many of the well-established theoretical perspectives take due cognisance of the work group as an important part of the context in which Leadership is manifested, most notably, though not exclusively, Hersey and Blanchard, who major on the characteristics of subordinates as a significant situational variable. Even so, this is presented as a factor that the leader has to take into account when making decisions, rather than an explanation of how leaders come to exert influence in the group they belong to. Likewise, some of the early work on transformational leadership (Shamir, House and Arthur, 1993)(Lowe et al 1996) majored on the idea of followers' self-concept being affected by (appropriate) leader behaviour. For all that, the emphasis is still very much on the leader driving the process and demonstrating the four 'I's; Individualised Consideration, Intellectual Stimulation, Inspirational Motivation and Idealised Influence to achieve Transformation.

Nothing is said from these perspectives, about the extent to which Leadership, particularly emergent leadership, is or is not a consensual process. From the point of view of this study, we need only to focus on the idea of Charisma, which we can acknowledge has a presence in almost all thinking about leadership since the time of Cicero, if not Plato, and clearly has a part in the thinking of Great Man, Behavioural and many other 20th and 21st century schools of Leadership thinking. For the most part this is seen as a personal competency closely connected with exceptional rhetorical capability, possibly combined with a commanding physical presence, vision, emotional intelligence and so on. To be fair, most of us do recognise that there are people we notice as they walk into the room and would be happy with the inference that they are, at the very least, more likely to be able to engage with their audience in the short term, than a person who is inarticulate. One of the issues to bear in mind with this study is that the person at the centre of it has good rhetorical skills which are recognised by all 4 camps in the 2x2 matrix to come, but the perception of his effectiveness is altered by the extent to which he is perceived as 'One of Us', a phrase that should be familiar to anyone even loosely acquainted with this school of thought.
In terms of the Future, the author suggests that this line of research (Social Identity Theory) opens up the possibility of much clearer constructs than have prevailed up to this point on two things. One is the development of a line of theory that may give us a better perspective of, for want of a better phrase, the collective/collaborative experience of being led. The other is the possibility of some testable hypotheses, which could have the potential to change the way in which we look at selection, among other things.

At this stage, the results are rather tentative and a little unexpected, so we hope to engage the audience in the debate that colleagues continue to have over the possible explanation of these results. Following a fairly tight initial presentation, delegates will be shown the video that was used in the experiment and asked to engage in a brief discussion to predict the outcome of 4 questions that this experiment addressed, before the actual results are revealed.

The Experiment

During a normal class session, which was focused on careers in Psychology, the audience was asked to watch a very short video presentation of a character called Sam and complete a questionnaire which was designed by one of Haslam's senior researchers, Nikolas Steffens, immediately after the presentation. They were told that this was an assessment of a student leader as an example of the sort of thing that an Occupational Psychologist might be employed to do.

Prior to the video sequence, aside from seeking consent, they were first asked to indicate their commitment to the University (4 questionnaire items). Subsequently, they answered a number of questions that were identical, save that half the group were led to believe in the biographical data that Sam he was a student in the existing University who would leave to finish his studies at another local University with a higher research profile. The other half of the group were led to believe the opposite condition, that Sam was a student at the other institution and was completing his studies at the local University.

These differences were described on the questionnaires that were distributed to all present in the session but not discussed or emphasised in any other way. Thus we have one half of a 2x2 matrix which is current in- becoming out-group leader, the other current out- becoming in-group leader. The other half of the matrix was determined by the extent to which students identified themselves as having a strong relationship with the home team.

Students were allocated entirely at random to either group, literally by giving different questionnaires to the left hand or right hand half of the room.

Participants

University students at a modern university: 82 in total, 58 female, 24 male; age range 19-48 years (M= 20.24, SD = 1.11)

All students were undergraduates in the Psychology faculty

7 responses rejected because they got a check question wrong (Which University is Sam at now?)

Questionnaire content

A number of items around the following themes: commitment to the University, Sam’s prototypicality (as a student), personal identity with Sam, charisma, trust, effectiveness, approval rating and buying into Sam’s key message (which was an exhortation to become more engaged).

Results and what we should discuss.

Quite a number of results worked out in the predicted direction, but there were a number of surprises, one of which was the very clear and generally strong differences between the relatively low identifiers and relatively high identifiers.
with their leader. The differences were particularly marked when we add in the ingredient of whether the leader is currently in-group about to become outgroup or vice versa, but this was not in a universal direction. Some of the particulars follow

Charisma

Current out-group becoming in-group leader (incomers for short) was not seen as any different overall by low or highly identified students. However, in the reverse condition (outgoers for short) higher follower identification was associated with higher charisma, whereas lower follower identification was associated with lower perception of charisma. In other words, it seems that the more we are committed to our own team/institution, we are more likely to see out leaders as charismatic.

Looking at this in reverse, it seems that weakly identified followers perceive an outsider who is coming in to be more charismatic than the other way round. We may speculate that this is closely related to the widely observed phenomenon that we expect 'life to be greater on the other side'. Is this some form of cognitive dissonance?

Similar results

Broadly, although there are differences of the scores, the same general trend is observed for most other categories. People who declare themselves highly identified with the institution are more likely to identify with in-group leader, expect to have a personal relationship with the leader, see the leader as effective and endorse them as a leadership candidate to a much greater extent than someone from outside. Equally, low identifying followers tend to see the outsider as more of these things, although generally their assessment does not exceed that of the high identifier group. There are two exceptions

Exceptions

In a way that is not statistically significant, low identifiers tend to see the outsider coming in as more effective than the high identifier group does.

Perhaps most interestingly, the low and high identifiers in this study show about the same level of support for the proposal (to get more engaged) of the outsider coming in, but otherwise the same general trend as with everything else.

Discussion

It's too early to say whether this is significant new research or whether it is a one-off. However, taking it for the time being that this may be replicated elsewhere we need to go on to think why this might be so. For the time being, we can simply submit that these results suggest that followers' perception of leadership charisma, inter alia, are more strongly affected by their concerns about their anticipated shared identity than any perceived competence of the leader in this study group. There may be many alternative explanations, some of which we hope may be advanced by delegates at this event. Space does not permit a full graphical display of results in this abstract, but will be disclosed at the conference, as indicated earlier, to form the foundation for an audience discussion.

References


**DOP04**

**Innovations in testing for multi-profile, multi-lingual and high volume testing**

David Bearfield, European Personnel Selection Office

**Theme** Organization

The European Union (EU) has set a key aim to develop as the major centre for knowledge workers in the 21st Century. In line with this aim, five years ago the European Personnel Selection Office (EPSO) was mandated to design and implement a complete overhaul of the processes through which the EU civil servants who staff the EU Institutions are selected and recruited. The scale and diversity of the project extends to 28 member states, and across 24 languages. This requires robust, reliable and fair assessments on a very large scale across the board. The major innovations embraced are three-fold:

- Test content, where there has been a need to find the appropriate balance between cognitive abilities, professional skills tests, and general competencies in order to ensure high predictive validity of future job performance.
- In order to cope with high volume testing delivered across Europe (above 70,000 on a yearly basis), the increased use of cutting-edge testing methods and technologies.
- The development of tailor-made solutions for the EU Institutions' broad range of profiles and needs, such as audio-visual computer-based tests for interpreters, new professional skills tests created for EPSO which target specific profiles and which concern competencies in accuracy or prioritising and organising, or the introduction of Situational Judgement Testing. Learn more about this incredible journey of EPSO towards the ambitious target of being a centre of excellence for selection processes in the public service. The session will be relevant to anyone involved in multinational testing and assessment, responsible for or managing large scale global testing programmes.

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DOP5
Reflecting on the job demands and personal risk as a police officer
K.L. Boots, D.M. Biggs, & J. Elcock University of Gloucestershire

Theme Individual

Police work is not only a dangerous profession but also arguably one of the most stressful and complex occupations to undertake (Ainsworth, 2002; Klinger, 2004). This qualitative research project aimed to develop an understanding of why individuals choose this field of work, and what are some of the risks and excitement factors that stand out as memorable for them.

A police officer may be called upon and expected to undertake many different tasks during their career, from being asked for directions through to specialist policing. Public opinion echoes this in that they believe that the police service is just that - a service (Southgate & Ekblom, 1984).

Jackson and Bradford (2009) explained that society has its beliefs and values set in how criminals should be dealt with and for this to be achieved they first accept that the police will catch a criminal or deter them. If they are caught then the assumption is that the appropriate level of justice will be administered leading on to the prison service administering the punishment levied at the criminal. Jackson and Bradford (2009) therefore purport that individuals will regulate their behaviour to stay within these law abiding societal norms. However, although the public report a keenness to see a visible presence of the police on the streets they do not like it when they themselves become the focus of attention (Jackson & Bradford, 2009).

There is often a ‘them and us’ perspective in relation to the police and the public. This “them” may be adversaries (thieves, murders, paedophiles) but could as easily be members of the public. This creates a notable egocentrism in the police which is compounded through their uniforms and primarily as being up holders of the law (Ainsworth, 2002). Ainsworth (2002) points out, while a police officer may use violence against an offender. He or she may not be reprimanded. However, if the offender uses violence against a police officer the judgement will be a lot harsher. The more positive aspects of the egocentric elements of the police force enable the officers to apply a higher level of solidarity and mutual support than might be found in other careers, which is extremely beneficial and vital in a dangerous and unpredictable role (Ainsworth, 2002; Brown, 2000).

In London alone, 160 officers were killed on duty in the years 1990-1999 of which 14 of these were from shootings (Kyriacou, Monkkonen, Peek-Asa, Lucke, Labbett, Pearlman, & Hutson, 2006). In the Merseyside police force over 40 officers a month suffer injury whilst on duty (Gates, 2006). As a front-line resource, the police themselves deserve to be protected when in the process of protecting the public and property (Heslop, 2009).

Given the risk to life and limb, this research was interested in finding out more about working as a police officer and how individuals coped with this role. A qualitative method was chosen as the animated and emotional stories given by the police officers would add context to the research. Retired police officers were also sought in order to engage with their most salient memories of working on the force in their long careers.

Research design
Participants: The criteria for participant selection was that the officers had frontline policing experience and handling of 999/Emergency Calls. The National Association of Retired Police Officers (NARPO) was idea in contacting relevant
people of which six were chosen for the study. The retired officers had all worked in the police force between 22 to 33 years.

**Design:** The approach adopted for the interviews was that of Conversational Partners (Rubin & Rubin, 2005). This allowed for low/semi structured interviewing but allowing the participant to control more of what was said on the topic (Rubin & Rubin, 2005; Hugh-Jones, 2010). This was important not only to allow key memories to flow from one to another but to allow the participant to stop and change to another memory if they felt the current one could either identify them or due to the nature of a police officer’s work might cause them undue stress through the reawakening of distressing situations. Due to the topic and the need for trust between the researcher and the participant it was felt that face to face interviewing was preferable to other options. Interviews were transcribed and then analysed for salient themes.

**Analysis**
In initially analysing the data, the principal researcher immersed herself in the transcriptions and any keywords or thoughts that stood out were drawn out in a mind map (see Figure One). This enabled comparison of each of the interviews and the formulation of codes for the study. Thirty codes were initially generated which contributed towards three themes: being a police officer (9 codes), the use of force (6 codes) and coping (15 codes).

**Figure One: Initial coding of the interviews depicted as a mind-map**

![Mind Map](image)

**Discussion**
This research sought to improve our understanding of why a person would choose the role of police officer and remain in that service. The resultant themes therefore became: what it was like to be a police officer; the use of force by both police officers and the public; and how officers coped with the stress and risks they faced.

The requirements made on the police force was eloquently put by one officer recalling what a colleague had told him early in his career:

*If the ambulance service goes to a job and it goes wrong they call the police, if the fire service get to a job and it goes wrong they call the police, there’s nobody we can call, we’ve gotta deal with it*

This is echoed in the statement of Loader (1997) who explained that the police officers role is to intervene in situations of disharmony or disorder to bring about a speedy resolution and remain there until peace and order are restored. When it came to deciding on a career most of the officers preferred the appeal, which Ainsworth (2002) described as variety:
I wasn't too keen on nine to five office work and the police appeared to offer a lot more than that and it lived up to that expectation ... you never knew what was round the corner

What was found during these interviews was that for the police force, “round the corner” has a very literal meaning. One officer describes coming across people collapsing and dying in front of him whereas another turned a corner and came across a domestic fight in the street.

On the whole the job seemed varied and exciting enough to out shine the dull moments. This is in keeping with the discussions of Ainsworth (2002) who likened the role of police officer to that of an All Action career. Other officers concurred with this and can be seen from the succinct summation offered by one officer:

I did the full thirty, well thirty three years and I did everything that the police force had to offer I went from looking after Mrs Smith with her stolen milk bottles to IRA bombs

Throughout any situation there is a danger primarily due to the volatility and capricious nature of the situation or the offenders own use of force. This led to our second theme where the police may need to apply the use of force, specifically non-lethal weapons.

Peters and Brave (2006) state that there is a continuum of force whereby an officer should be looking to apply the least amount of force at any given time, based on the behaviour of others and the situation. In describing the use of force one officer pointed out:

as police officers we’re trained to use reasonable force we are allowed ... you know you can’t allow an individual to start fighting with you just because they were drunk that’s not an excuse ... we didn’t want to have to use force but occasionally we would have to

For two of the officers the use of force at higher levels was inevitable for most shifts, as they were both dog handlers and the latter also worked on the riot van. However, this did not mean they applied the force even when it was suggested to do so. For instance:

the shop’s phoned in and said we’ve [been] burgled ... [but these kids had nicked some sweets] I wouldn’t go after them for sweets I couldn’t justify letting 55 kilos of German Shepard onto a sixteen year old kid for nicking two mars bars

When he described this situation the officer was visibly angry from the lack of ability of the control room to get sufficient information and through the disbelief of being asked to use a police dog in such circumstances. Heslop (2009) described how the Northumbrian police had been trained to use a five cyclical approach to incidents and the use of the force. These being: intelligence, threat assessment, tactical options, power of arrest and action. It would seem that a variety of this had previously been in place in other forces as described by the participants.

A police officers job is deemed to be one of the most stressful careers (Ainsworth, 2002; Klinger, 2004). It is considered to have two types of stress: Acute (dealing with incidents) and Chronic (built up overtime i.e. heavy workloads) (Anderson et al, 2002). Tehrani and Piper (2010) found that officers rarely choose to discuss the elements of their jobs with their partners and families as follows:

I wouldn’t go into the graphic details and I think most police officers are the same, they don’t want to upset their family and tell them what you know some of the things they had to deal with ... the grim details

Coping mechanisms listed included alcohol in moderation, exercise and the use of humour. Alcohol is often seen as a maladaptive coping strategy (Brown, 2000; Ainsworth, 2002) but these officers felt that moderate alcohol allowed them to cope, but excessive drinking was a sign of needing help. In terms of exercise, it is deemed to be adaptive only when it
is moderate and pleasurable (Gerber et al, 2010). For these officers it was described more as excessive, but retained a pleasurable quality to it and may therefore not be as maladaptive as Wester et al (2010) may define it. On the job coping was down to knowing what was expected of them and getting on with the task at hand which was in keeping with the research of Tehrani and Piper (2010).

References


DOP06
The relationship between political skill, worker relations and career success
E.J.H. Boustred, & D.M. Biggs, University of Gloucestershire
Theme Individual
Political skill has been characterised by some key features, such as the ability to be socially aware of changing situational needs and to alter behaviour accordingly. This social perceptiveness allows the individual a sense of personal security as they are able to influence those around them through interpersonal interactions. As opposed to legitimate authority, a person with political skill can be at the same authoritative level as another person in the same organisation. However through their interpersonal style and social perceptiveness, they can guide the interaction along to their way of thinking. Perrewé, Zellars, Rossi, Ferris, Kacmar, Liu and Hochwarter (2005) claim that this effect also creates a buffer for potentially stressful situations, with research results suggesting that the politically skilled individual suffered from a decreased level of strain. In their research ‘strain’ was operationalized as general anxiety, job satisfaction/dissatisfaction and job tension.

Wells and Kipnis (2001) studied the inter-relationship that exists between control, power and trust. They proposed that a person will be inclined to alienate themselves from a person they depend on but do not trust. This same person would also be more likely to attempt to control those they do not trust. These tactics of influence were supported in the study and interestingly, these trust and control strategies were utilised by both managers and employees alike. This could be due to ‘power’ being seen as subjective and differing from legitimate authority. Thus this links in with political skill in that forms of persuasion can be used regardless of authority status. However, there is a reverse to the control, power and trust relationship in those controlling strategies of others that can foster distrust, potentially causing animosity. At this point it becomes apparent that when critically analysing the beneficial relationship that can exist within the realm of political skill there is also present the possibility of misuse that can arise from such dynamic interpersonal interactions.

Nauta, van Vianen, van der Heijden, van Dam and Willemsen, (2009) maintained that by management facilitating as well as implementing a constant dialogue of positive self-development, worker relations will improve and have benefits for employers and employees alike. Worker relations consist of the interactions amongst individuals and their colleagues, supervisors as well as their organization (Biggs, Swailes and Baker, 2014). This is not a new concept, it has been existed for at least forty years with Cross (1973) originally creating a measure of worker relations.

Employee engagement contains concepts of employee commitment, organisational citizenship behaviour and job satisfaction along with other management related constructs, is generally accepted that employee engagement occurs in a reciprocal manner between employers and employees. The impact of worker relations should also be considered as it is less directly controllable by organisations. However the relations maintained between colleagues could have a positive or negative effect on employee attitudes and behaviour in the workplace, thus impacting upon overall career satisfaction (Markos and Sridevi, 2010).

Wolff and Moser (2009) studied the relationship between networking and career success, with findings showing that salary growth over time along with career satisfaction increases along with networking. This indicates the potential benefits of networking from a commercial perspective and is pertinent to this study in the sense that it shows support that individuals working together are more likely to add value to themselves along with others. The importance of cooperation and communication cannot be highlighted enough, and the benefits to the individual and the organisation should encourage the implementation of these concepts into future research as well as being realised within the commercial sector.

There is the argument that if an organisation over invests in the development and training of their employees then an employee may realise the benefit of leaving their current employment for the chance of a greater salary, or a more appealing contract with another organisation. Todd, Harris, Harris and Wheeler (2009) have expanded upon this, in that by investing in human capital an organisation increases the value of its individual employees to the point whereby the parts are greater than the whole. Thus employee turnover increases despite employee satisfaction within that organisation. However, Todd et al (2009) findings indicate that this is not a negative impact of training and
development, rather it is a natural occurrence and those that do leave the organisation will act as goodwill ambassadors which could be utilised through networking.

The purpose of this study is to investigate the relationship between political skill, worker relations, organisational commitment and career satisfaction. This study investigated a model consisting of worker relations (consisting of its three subscales co-worker, supervisor and organisation relations), organisational commitment and career satisfaction predicting political skill.

Research design

Participants: The sample for this study consisted of 69 participants, 43 female and 26 males with a mean age of 32 years (with a standard deviation of 13 years). The majority of participants were recent graduates. To ensure the sample was representative of a varied workplace the questionnaire included demographic questions. The length of employment ranged from a minimum of one month to a maximum 36 years, the mean being 5 years 8 months with a standard deviation of 4 years 2 months. This showed a diverse range of time spent for participants working with their respective organisations. Of the sample, 44 were full-time, 17 part-time, 6 self-employed, 1 temporary and 1 other.

Materials: Political skill was measured utilising the political skill inventory (PSI), a six item scale (Ferris et al, 1999). The PSI is a self-report measure that uses a seven point Likert scale between 1, which equals strongly disagree, to 7, equalling strongly agree. The Worker Relations scale (Biggs, Swailes and Baker, 2014) consisted of nine items divided into three subscale measures of worker relations, which are: relations with co-workers (I), relations with supervisors (S) and relations with organisations (O). The British Organisational Commitment Scale (BOCS) (Cook and Wall, 1980) consists of nine items that express the way in which an individual feels about themselves as members of their organisation. The Career Satisfaction scale was used for this study (Greenhaus, Parasuraman and Wormley 1990). The scale consists of five items that represent the extent an individual feels satisfied with their career. All of these measures had good levels of reliability and validity reported.

Procedure: The sample was opportunistic, with participants being approached in person to take part in a study. Participants could also opt to take part electronically whereby collected data was password secured by the researcher a point made clear to participants. It was paramount to ensure anonymity of results and confidentiality of personal information. Participants received a consent form which was attached to the questionnaire and verbal instructions were given. It was made clear that the participants have the right to withdraw themselves or their data at any point, that their personal details would be kept confidential and that their data would be kept anonymous. Participants then filled out the questionnaire, with the location dependent on where the participants were due to the study not being based in any particular venue. The researcher still attempted to ensure the participants were not disturbed from start to finish while participating in this study. Furthermore, it was made clear that there was not a time limit so that participants would not feel harried to complete the questionnaire under any sort of pressure. After having filled out the questionnaire participants were asked if they had any questions. The questionnaires were then collected and stored in a secure location accessible only by the researcher to maintain confidentiality of participants’ personal details. Furthermore to protect anonymity of the participant’s results, the consent forms and questionnaire were then coded into participant numbers before being divided and stored separately.

Results

The first part of the analysis was to check the assumptions of normality distribution. This was done utilising a measure of Skewness and Kurtosis which were then divided by their standard errors. The values needed to be in the range +/- 2.58 for Skewness and +/- 2 for Kurtosis so that normal distribution could be assumed. The data range satisfied normality assumptions. The Cronbach alpha internal consistency reliability estimate for political skill was α=.69, which was adequate. The Cronbach alpha internal consistency reliability estimate for worker relations overall in this study was α=.72. The internal consistency reliability estimate for worker relations as: relations with co-workers α=.57, relations
Table 1 Pearson’s Correlations

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<td>3. Worker relations</td>
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<td>4. Worker relations</td>
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<td>5. BOCS</td>
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<td>.124</td>
<td>.262*</td>
<td>.635**</td>
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<td>6. Career satisfaction</td>
<td>.276*</td>
<td>-.008</td>
<td>.298**</td>
<td>.236*</td>
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* indicates p < 0.05  ** indicates p < 0.01; N = 69

Pearson’s correlations (table 1 see above) indicated that the largest shared variance was between political skill and organizational commitment. This was then analysed further by splitting worker relations into its three subscales; relations with co-workers (I), relations with supervisors (S) and relations with the organization (O). Interestingly, political skill was correlated with worker relations at the organisational level and not at an individual (colleague) or supervisor (immediate boss) level. A regression model was created that showed political skill as having a significant correlation for the predictors consisting of worker relations, organisational commitment and career satisfaction (F(25 68) = 6.134, p < .05).

Discussion

The present study found the largest predictors of political skill was organisation commitment and worker relations at an organisational level. These results suggest that individuals more entwined into the larger objectives of the organisation are more likely to engage in political behaviour to increase their power within an organisation. For the individual it could be inferred that the use of political skill increases as an individual if that person feels positively toward the organisation for which they work. The other implications are that relations with colleagues do not impact upon the use of political skill.

The current literature offers strong support for the relevance of studying organisational commitment. The impact it can theoretically have on an individual and the way that they perform at work has been consistently supported. To illustrate this Rousseau (1998) showed support that an individual can be far more motivated to perform to a higher calibre if they work for an organisation whose values they can relate to and view from a similar perspective. The aligned goals and objectives of the organisation become shared with the individual and this engages the employee in their role at work. The reverse therefore can also be true, that the disassociated worker may not perform to the same level that is set by
the worker who has a highly associates sense of organisational commitment. This illustrates the importance of nurturing the employee in a holistic sense (Abraham, 2012).

Relations maintained between colleagues could have a positive or negative effect on employee attitudes and their behaviour in the workplace this can then lead to overall career satisfaction being impacted upon (Markos and Sridevi, 2010). Wolff and Moser (2009) studied the relationship between networking and career success their findings showed that salary growth over time along with career satisfaction increased along with networking. This relates to the modern attitude towards careers that are no longer confined within one organisation.

References


**DOP07**

**Promoting the Assessment of Disabled Talent in Employee Selection and Development**
**What is disability and what is disabled talent?**

Under the US Americans with Disabilities Act (ADA) (United States Department of Justice, 1990), disability refers to a physical or mental impairment that substantially limits one or more major life activities, which may include but are not limited to, caring for oneself, performing manual tasks, seeing, hearing and walking. Disabled talent refers to individuals who have a disability and who are also seeking to enter work or are already in employment.

**Why is it important to consider this topic?**

The Campaign for Disability Employment emboldens employers to understand how much value and talent people with disabilities add to America's economy. Despite this, in 2010 only 50% of disabled adults living in the UK were in employment, compared to 79% of non-disabled adults (Equality and Human Rights Commission, 2010). Given that one in five adults living in the UK reports being disabled or living with a limiting long-term illness, there is potentially 5,000,000 currently unemployed individuals who would significant add value to the UK employment market. This number is likely to increase as a consequence of the ageing population, population growth and medical advances. With demand increasing to recruit and retain talent, embracing the potential of disabled talent, as well as providing barrier-free recruitment processes and assessments will be key.

The ADA and the UK Equality Act state that employers have a duty to provide reasonable testing adjustments and accommodations in order to facilitate optimal performance in their employees with disabilities. A reasonable adjustment refers to any modification made to an individual's environment or situation that allows them to demonstrate their optimum performance. However, few formal recommendations have been made and little is known about the effect of reasonable accommodations on test performance.

**What has been done already?**

While the literature on disabled workers is sparse, it is suggested that disabled are more likely to stay in a job for longer compared to their non-disabled peers (United States Department of Labor, n.d.). Furthermore, despite some employers' fears about the cost of providing adjustments to disabled workers, around 50% of workplace adjustments costs were provided at no cost (Hendricks, Batiste, & Hirsh, 2005).

The literature on the predictive validity of assessments made with adjustments is likewise sparse, however, the educational literature provides some guidance. Braun, Ragosta and Kaplan (1988) investigated disabled student exam performance (?) and found that end of high school and college entrance examinations did not predict college or graduate school performance. Furthermore, they found that college performance was significantly over predicted for some students who had received additional timing, especially in students with specific learning disabilities. This indicates that the provision of extra time needs to be better matched to disability type. Further research is needed to determine a standard. A second study showed that the medical school performance of some disabled students given extra time on the Medical College Admission Test (MCAT) was also significantly over-predicted (Oppler, Mitchell, Mueller, Dunleavy, & Glenn-Dunleavy, 2010).

Additionally, while there is no apparent research on candidates' reactions to assessments, anecdotal evidence suggests complaints from disabled candidates are increasing. It appears that disabled candidates' reactions to online psychometric assessments are not routinely collected.

At SHL, we recently partnered with The Clear Company, who audited our current practices and helped us identify several opportunities for the development of an inclusion strategy. We now provide guidance, reference documents, and training opportunities to our consultants and clients. We are also improving the digital accessibility of our
assessment solutions and technical platforms, are expanding expertise in our consultancy service, and are embracing inclusion in our own recruitment process. Finally, we are investing more resources into disability inclusive assessments.

**What are the difficulties facing research in this area?**

Little research has been conducted in this area, which may be attributed to the vast array of disabilities and the possible reasonable adjustments that could be made. Furthermore, the sheer numbers of cultural and legislative differences that exist between different countries make creating a standard inclusion strategy difficult. For example, solutions may be country specific; an adjustment that works in the UK may not work in China. Given that SHL CEB is an international group with a presence in over 70 countries, this increases the size of the task. Given the complexity of various anti-discrimination acts, there may also be uncertainty about relevant legislation or even anxiety around how to approach testing. It may also be the case that professionals exist who do have knowledge of best practice with disabled talent but have not yet disseminated this.

Researchers in this area face a number of issues including small sample sizes, heterogeneity of the disabilities and needs of the disabled group, and inconsistency in the adjustments currently provided to disabled candidates.

**What more should be done?**

More research is needed on the impact of disabilities on psychometric testing within I/O settings and the validity of the reasonable accommodations currently being offered. At present, talent management companies provide their clients with best practice recommendations and aim to facilitate reasonable accommodations where possible. However, when challenged on the validity of these accommodations and the scientific basis of the recommendations, there is little to fall back on.

Research on group differences is fundamental to understanding the extent to which test scores vary as a function of disability. This can inform us of the magnitude of score differences and the extent to which there is potential for adverse impact against disabled candidates. It may also inform us of the types of adjustments that can ameliorate score differences.

Research on candidate reactions to online psychometric assessments is also important, since the people who know most about disabilities and the impact of having a disability on taking tests are the disabled talent group, it seems pertinent to use their expertise to help us understand the issues they face. This research could then contribute to future assessment development, as well as clarifying what reasonable accommodations are frequently required and may not be currently available.

**What SHL is doing?**

SHL is looking into ways to make our assessments more accessible to disabled candidates. We are not only investing in terms of developing our technology to improve the compatibility with assistive technology, but placing an emphasis on providing help and support to our clients, and more importantly, investing in research.

Currently we provide Disability Guidelines for employers and recruiters on our website to guide them through seeking best possible adjustments when recruiting disabled talents. This is available in several languages and we are working on progressing it into all languages in which SHL provides products so that we can adequately support clients across the globe. Other tools and internal/external documents have also been created to help our sales and consulting staff as well as clients and candidates.

We are currently recruiting research partners for the following four research scenarios: 1) companies already involved with SHL for their graduate research programs, 2) large employers with diverse employee populations, 3) charities and other organisations working with disabled candidates, students or graduates, and 4) current or past SHL users with archival documents of applicants’ and employees’ disabilities or requests for adjustments. Our research is focussed on
two broad themes: 1) investigating group differences on various types of psychometric assessments commonly used for employee selection and development, with a particular focus on understanding the adjustments that mitigate the potential for adverse impact, and 2) understanding the user experience for disabled candidates.

**Discussion**

What have you done that you want to share with us?

What have you read about this topic that you think is important?

What other difficulties are you aware of?

What would you like to suggest we do to overcome these difficulties?

What defines a reasonable adjustment?

By providing adjustment to disabled talent, how do we ensure this is not making the assessments 'unfair' to other candidates?

How do we ensure the adaptive versions of assessments are comparable with standard versions of assessments when testing disabled talents?

When assessments cannot be made compatible to assistive technology (and therefore cannot be accommodated to disabled talents), alternative methods have to be used. How do we consider the results when comparing with other candidates?

**References**


Introduction
The 21st century has seen the internet play a particularly prevalent role in much of the world’s social interactions. Online Social Networks (OSNs) such as Facebook, Google +, Twitter, and MySpace are platforms for people to conduct interpersonal relationships in a virtual environment and on a global scale. The United Kingdom alone has an estimated 30,633,520 active members on Facebook making it the seventh most active nation on the online social network, although it should be noted that these figures have not been verified by academic sources (Social Bakers, 2012). With this seeming omnipresence in contemporary society it is no surprise that social networking websites, particularly Facebook, have begun to be used outside of their originally intended purpose. It has been well documented in the popular media that many organisations use the abundance of information available on social network websites to inform their human resources decisions which often include employee recruitment, hiring and discipline (Becker, 2012; Brassfield, 2012; Viscusi, 2012).

While Facebook and many of its contemporaries (i.e. Google+ and Twitter) were created for social purposes other OSNs such as LinkedIn use a similar model but aim to help online users further their professional pursuits. It would seem logical for human resources decisions to be made using information found on LinkedIn (due to its professional orientation) but it has been acknowledged that OSNs, in particular Facebook, are utilised more often by human resources professionals when making work related decisions (CareerBuilder, 2010; Roberts & Roach, 2009). This is likely because more people are active on Facebook than LinkedIn and there may be a sense that a better view of personality can be gained from Facebook profiles rather than on LinkedIn as people are more likely to portray themselves in a positive light on the professionally oriented site. Facebook is most often used as a screening tool, to get a sense of potential employees’ personality as well as values, and a recent investigation suggests that 53% of UK companies surveyed used the information found on OSNs to influence their hiring decisions (Career Builder, 2010). Furthermore, academic scholarship suggests that this practice is often conducted without the knowledge or consent of applicants as the practice is often informal and without a set of rules (Jones, Schuckman & Watson, 2007).

Most of the study into the use of online social networks in the hiring process has been from an employer’s point of view. Much enquiry has been made with regards to the legality, validity and reliability of using online social networks for the purpose of screening applicants; however, very little attention has been paid to employees. Bohnert & Ross (2010) indicated that 56% of social network users consider it unethical for companies to investigate them using OSNs as they believe it to be a breach of their privacy. Madera (2012) shifted the focus of research by investigating employees’ feelings on the use of online social networks in the hiring process in depth. Madera (2012) used a participant pool of 171 hospitality management students to assess their opinions regarding the fairness of the use of social networking in the hiring process. The results of this study indicated that applicants perceive companies that use Facebook in the hiring process to be less fair than those who do not. Similarly the results of the study indicated that participants were less likely to want to pursue positions at companies that openly used social networking websites as a screening tool.

Madera’s (2012) work opens up a new line of enquiry as to what exactly employees perceive to be unfair in the use of online social networks as a screening tool as well as the effects that this has on psychological contracts and future organisational commitment. The present research aims to expand on the findings of this study by conducting an in depth, idiographic analysis of employees’ perceptions of organisations that use Facebook screening in the United Kingdom.
The Present Study
The present study will use interpretive phenomenological analysis (IPA) to examine the perceptions of employees whose Facebook profiles may have been used in the selection process. Interpretive phenomenological analysis has been utilised in this project in order to gain a closer perspective of employees’ feelings of justice and commitment with regards to OSN screening in the hiring process.

Research design
Participants: The sample consisted of two male and four female participants (N=6) with ages ranging from 22 to 35 years old. In order to take part in this study participants had to meet two main criteria: firstly that they had to be employed at a time in recent history and secondly, at one point participants were required to have had and used a Facebook account. A snowballing sampling technique was used for recruiting participants.

Procedure: Semi-structured interviews were used in which participants were asked a prescribed set of questions in order to anchor the discussion and further questions were asked based on responses from participants. This effectively allowed participant responses to lead the interview. The interview schedule asked questions about job selection processes that participants had been through in the past as well as their feelings on the possible use of Facebook in these processes and their resulting organisational commitment. All participants were given voluntary informed consent and all transcribed data was kept anonymous by the allocation of pseudonyms for each participant.

Findings and discussion
The theme of responsibility was the most prevalent across all conducted interviews. Within the specific context of this study responsibility can succinctly be described as the burden of obligation of either candidates or employers to protect themselves during the course of hiring. Candidate responsibility refers to the idea that job applicants have an obligation to be conscious of the ways they present themselves throughout the course of employee selection and this extends to the image they portray online. In the conducted interviews this concept manifested itself in three ways. Firstly, participants stated that candidates are responsible for appearing professional in interpersonal settings throughout the selection process; secondly, some participants noted that applicants are responsible for managing their personal online image; and lastly but most important to the current discussion it was acknowledged by all participants that applicants are responsible for ensuring their own online privacy. It was frequently stated by participants that potential employees were responsible for portraying a professional image and thus presenting themselves in a positive light during the selection process. Most participants stated that this professional portrayal was necessary during interpersonal contact with employers which included interviews and e-mail correspondence:

I have some friends who do an awful lot of kind of like charity work and stuff like that. So obviously that’s going to look amazing to an employer, someone who’s going out and giving their time.

This notion of portraying a positive online image is supported by Bohnert & Ross’ (2010) study which found that Facebook profiles which portrayed professional or family images were rated more favourably than those which showed excessive alcohol use by students posing as hiring managers.

While the importance of the projection of a professional image was stated by participants, not everyone agreed that this should extend to the social domain of Facebook. Despite this, all participants did state that job applicants were responsible for their online privacy to the degree that they decided how much of their Facebook profiles were available to the public. All who were interviewed for this study stated that applicants should be cautious of how open their Facebook profiles were to the public particularly if their Facebook pages depicted behaviour (such as excessive alcohol and drug use) that was not likely to impress employers.

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On the other side of the responsibility coin, many participants spoke about the idea of employer responsibility. This idea refers to the obligation of employers to protect themselves by selecting the right candidates and doing so in a fair and appropriate manner. In interviews, many participants underscored the importance of selecting employees who would be able to do the job and it was stated on different occasions that this was ultimately the responsibility of organisations as they needed to look past the image presented by candidates in the selection process to see who had the skills to perform well within the role. The selection of correct candidates would effectively ensure that companies were not wasting money on incompetent employees. These views can be seen in the following transcript extracts:

if you employ someone to your company you give them the responsibility to make money for the company in whatever role they have you need to make sure the person is reliable and they say they are who they are.

In interviews participants stated that employers needed to make sure that they were hiring the correct candidates and needed to use appropriate and diverse selection methods to do so. However despite the acknowledgement that it was necessary to pick correct candidates there was discord with regards to whether or not it was fair to use Facebook to do so. On participant did felt the use of Facebook for screening as was a breach of privacy. Another felt that employers responsibility to hire the right employees allowed them to check Facebook profiles even going as far as to state that, “I respect their hiring process more for being more thorough” when asked about how comfortable she would feel about a company using Facebook screening.

There was an undercurrent running through the conducted interviews that suggested that employers were to be held responsible for not discriminating against employees based on factors that would not affect their jobs. One female participant stated that Facebook screening could cause employers to discriminate based on physical appearance:

When you go out with your friends and you go for a night out and you go to the beach and they put pictures up of you or they tag you, depending on what you wear or how you expose yourself you sometimes don’t want your employers to see that. If it’s a lady being interviewed and the interviewer is a man they are seeing past the attire you wore to the interview and they are seeing a previous version of you that you probably didn’t expose in such a way. In that case it is a breach of privacy because you never go to work in a bikini.

While it was never expressed explicitly all of these comments have an undertone of employers discriminating on Facebook due to reasons that would not have any real bearings on their ability to do the job or their ability to form relationships with their co-workers. Their expression of this would also insinuate that they believe employers should be responsible enough to not discriminate during the hiring process based on such extraneous details. This is in line with much literature on the ethics of using Facebook screening, as concern has been expressed over the unintentional or intentional discrimination that may occur as a result of the practice (Juffras, 2010; Massey, 2009).

References


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**DOP09**

**Exploring Managerial Humour Types in the Workplace**

**T. Evans**, Coventry University, **G. Steptoe-Warren**, Coventry University

Theme **Individual**

**Introduction of Main Theory and Research**

The main aim of the current study was to empirically analyse the validity of the relationships suggested by the Organisational Humour Model (Romero and Cruthirds 2006). This theoretical model reported how use of different humour types by management are associated with various workplace factors: creativity, stress, culture, social-distance, power, communication and group cohesion.

Utilising the well-established categorisation of humour by Martin et al. (2003), the current study explores subordinate ratings of their managers’ affiliative, self-enhancing, self-defeating and aggressive humour. Romero and Arendt (2011) explored group cohesiveness and stress with these humour types, along with participant sex and age. The current study explores the complete Organisational Humour Model, and uses further potential moderating variables (manager sex, relationship type, months working together, work type and work environment) to gain a more accurate model of how managerial humour operates within a workplace.

**Research Overview**

Data was collected from over 150 employees, reporting their managers humour use and workplace variables through an online psychometric battery that incorporated established psychometrics and custom-made measures. Using a regression design, variables which contributed to the explanation of variance in each workplace factor were identified.
Hierarchical regression was conducted where stage one contained demographic variables, then humour types were added to create a second stage.

Regression revealed the detailed dynamics of relationships and how humour provides additional value to the prediction of organisational outcomes beyond moderating demographic variables. Results suggest humour is not related to polychronic culture (the degree to which you carry out tasks simultaneously or sequentially) or manager-subordinate social distance. Results highlight the importance of affiliative humour, where greater use was related to greater creativity, communication, perceptions of managerial power, and lower stress. Greater aggressive humour use was also related to lower workplace creativity, and greater use of self-defeating humour was related to lower group cohesion.

Original hypotheses were inconsistently supported, suggesting the complexity of the workplace is beyond the reductionist Organisational Humour Model. Relationships between organisational outcomes and humour types are influenced by many factors, and the current study is the first to create and test hypotheses using the complete model within an applied setting, using additional moderating variables. The current study provides unique insight into the role of variables typically neglected by previous analyses, and thus proffers significant direction for future longitudinal research to explore the value of humour in the workplace.

Practical recommendations for managerial practise based upon the present research must be approached with caution due to the small statistical values and as causality cannot be assumed. Regardless of statistical values however, best evidence to-date, including the present study, suggests positive efforts by managerial staff directed towards subordinates e.g. affiliative humour, tea and biscuits, will always have value (Mallett 2008).

Investing in the Future and the Individual
The authors of the model being tested recommended using humour as a toolkit, with the manager using the humour type associated with the facet they want to improve. Although the current research suggests other factors that are implicated and the greater complexity of the interactions, it does suggest humour is a valuable skill for individuals in management. The current research is thus very much fitting for the conference theme as it suggests that individuals, teams and organisations can be invested in by the use and awareness of humour. Each individual reading the poster can invest in themselves by learning about the potential and consequences of humour, and improve their use for significant benefits for the future.

Novel Elements
Humour in itself is a relatively novel research area, with little acknowledgement of the various impacts it may have upon the workplace environment. The current study is the first to take a more holistic approach to explore managerial humour by studying many demographic or background factors, in combination with interactions between different humour types and numerous workplace facets. Previous research has failed to explore the model and relationships proposed, and thus the current study has a unique footing within the literature by exploring these within a holistic, detailed and thus more accurate way than ever before.

Stimulating Aspects
Audience and public interest will be aroused by the interesting and clear results which can be easily applied to their daily work lives. As noted above, the topic of humour is naturally attention-grabbing, and once individuals are aware of the different types of humour and the current research, it is easy to understand the reasons for, and effects of, humorous communications within their workplace. Raising awareness of the different humour types and the specific benefits of affiliative humour is a clear message that is both informative, interesting and potentially beneficial to all.
Extra Materials
An electronic copy of the poster will be made available to all attendees. An email address will be provided here for any post-conference questions, debates or suggestions to be directed to.

Key Pitch Points
The pitch will first evoke the audience to question how they use humour, making reference to the different humour types and how they may operate differently within a workplace. I will then briefly summarise the research aim of exploring the relationships between managerial humour types and workplace factors, before inviting those interested to read the poster, where I can provide more information and answer any questions.

Presence with a Difference
The current study is a perfect catalyst for professional discussion of workplace humour. From past experience, I have found humour to be a topic that often initiates conversation, and the poster will have unique appeal due to this. In addition to the typical presentation and content, the poster will also feature a small summary section for those interested in identifying the main findings and applications but short of time to read the whole poster.

References


DOP10
Maximising the benefits of goal achievement.
Filia J Garivaldis, Regent's University London
Theme Individual

Introduction: Performance in the workplace often involves goal setting and goal achievement. The benefits of goal achievement to the individual have long been established, and involve not only social/external rewards, such as recognition, but also intrinsic/internal rewards, such as explicit feelings of accomplishment (Higgins, 1987), the ability to broaden one’s attention (Gable & Harmon-Jones, 2011), and move on to other tasks (Carver, 2003). However, not all individuals may be able to reap these rewards to the same extent. Goal achievement is predicated on the ability to initiate behaviour, make timely decisions, and focus on the task at hand. Individuals with a state orientation—a reduced ability for self-regulation—exhibit deficits in these behaviours (Koole, & Jostmann, 2004). These deficits may compromise the opportunities to obtain the aforementioned rewards.

Aims, methods, & results: This presentation presents the results of a study with a strong scientific focus. Two studies were conducted, which aimed to explore the emotions associated with goal achievement, and the roles played by goal type and self-regulation ability; action vs state orientation. Experimental priming techniques were used, as well as an innovative scale of implicit emotion (IPANAT; Quirin, Kazen, & Kuhl, 2009), to activate fulfilled and unfulfilled goals, and their affective associates, respectively. Study 1 demonstrated that participants with a state orientation, compared to an
action orientation, experienced reduced approach-related emotions that are necessary for goal progress after they recalled unfulfilled goals. These emotions were elevated only after these individuals recalled fulfilled goals. These individuals also had reduced attentional broadening in a subsequent task (Study 2). Approach related emotions are necessary for the activation of the autonomous nervous system, which provides the motivational intensity to act. The present results, therefore, may indicate that state oriented individuals have difficulty regulating the autonomic nervous system, or the reward circuitry of the brain, and consequently the implicit internal processes necessary for goal directed action are inactive. In addition, these results have implications for further behaviours requiring these internal processes, such as brainstorming, creativity, attentional flexibility, and working memory performance.

**Innovation:** Two points of innovation include the use of an implicit scale measuring emotion (IPANAT), and the use of a model of self-regulation. The IPANAT was developed this century, and has demonstrated sensitivity as both a trait and state measure of emotion. According to the theory of affect congruency (Chan, Ybarra, & Schwarz, 2006), positive or negative affective experiences facilitate attention to, and retrieval of, positive or negative information respectively. Accordingly, when participants complete the IPANAT, their affect is projected onto their subjective judgements of the artificial words in the respective direction. I believe that the impact and importance of implicit emotion on behaviour is the most informative and interesting aspect of this presentation, for both conference attendees and the wider public.

Self-regulation is an area of psychology which focuses on the intra-individual changes that occur within individuals according to context and circumstances, rather than inter-individual differences. That is, self-regulation is concerned with the conditions within which a single person can become more creative, more efficient, more decisive, more analytical, etc.

**Link to conference theme:** The reasons for which I believe this presentation is appropriate to the conference theme, is that attention needs to be re-directed to the individual within an organisation. The more the mechanisms that underlie self-regulation are understood, intervention strategies aimed to increase performance and well-being may be improved. For instance, with reference to the results of the present research, some employees (who report a state orientation) experience the activation of the internal processes necessary to engage in goal directed action only after a previous success. Thus, training and development initiatives may involve a breakdown of tasks into sequences that heighten the chances of success, and activate the motivational intensity for goal directed action. Further research into the nature of these initiatives is warranted.

**References:**


With the economic uncertainty glooming over the UK, more organisations are actively searching for employees with strong managerial abilities to manage the organisation more efficiently. Studies have shown that individuals who are considered to having managerial ‘success’ are highly motivated and possess pragmatic, dynamic and achievement-oriented personal values, while less successful managers had more static and passive values (i.e. George & Raymond, 1974 and O'Reilly III & Chatman, 1994). This in turn, has led to studies which suggest a positive link with well-being, job satisfaction, citizenship behaviour and work performances (Staw & Barsade, 1994; Tsui, Pearce, Porter & Tripoli, 1997; Grant, Christianson & Price, 2007).

Furthermore, in order for employees to rise up the organisational hierarchy ranks, it would be expected that employees have to demonstrate sound managerial skills, including effective judgement in management situations. For example, Rosenkrantz & Hennessey (1985) found that successful managers exhibited more behaviours related to decision making, planning and coordinating, and the ability successful interact with outsiders and socialising/politicking. Thus, it is of great interest to the HR managers to understand the association between managerial achievement and overall managerial judgement.

This research adopted Situational Judgement Test (SJT) specifically to assess the relationship between managerial achievement and overall managerial judgement. Situational Judgement test are assessments designed to measure judgement in occupational settings (Weekley & Ployhart, 2006). It presents critical work related situations to respondents and request that the respondent evaluates and select from a range of possible responses to the situation. While early research have used SJTs as a construct method (Michael, Edwards & Bradley, 2010), there has been a growing number of research to propose that SJTs are primarily used as a measurement method (Whetzel & McDaniel, 2003).

Research has also shown that, the ability to make judgements is a multivariate attribute, determined by a combination of cognitive ability, personality, experience and knowledge (see McDaniel, Whetel, Hartman, Ngyuyen & Grubb, 2006). SJTs are flexible and can be designed to assess a broad range of construct. SJTs are often designed to reflect competencies; however, as they do not measure behaviour, they can assess only the element of competency that relates to judgement. Thus, making SJTs as a key assessment method in measuring an individual’s ability to elicit a specific behaviour in a given situation.

Moveover, two meta-analysis studies have been published about the general criterion-related validity of SJTs. The first study (McDaniel et al, 2001) produced an estimated mean population correlation of 0.34 between SJTs and job performance criteria. In the more recent meta-analysis by McDaniel et al (2007), the estimated correlation with job performance was 0.26.

However, there are a limited number of studies that has specifically investigated the relationship between managerial achievement and managerial judgement. Therefore, in this research, managerial achievement level was selected as a representation or proxy for job performance to measure managerial achievement. Managerial achievement is a composite score, which is calculated based on the level of managerial position divided by age (Blake and Mouton, 1964). Therefore, the hypothesis is that there is an uptrend in the SJT results, with executive managers performing better than middle or first line managers. Furthermore, by using the composite score, we are able to discount the influence of age variance and measure only the relationship between managerial achievement and managerial
judgement. Thus, the research provides a clearer picture of whether managers of various levels, regardless of age, could possess better managerial judgement.

Participants
A total of 4306 participants responded to the questionnaire. After examining the biographical section (i.e. employees who are unemployed) and excluding invalid or incomplete questionnaire, a total of 3517 (81.68%) were eligible for the cross data analysis. 54% (N= 1905) were males and 45.7% (N=1603) were female participants. 0.3% (N=9) did not indicate their gender.

Within the overall sample participants (3517) who have completed the SJT, 3059 participants were classified according to 4 main age groups (‘21-30’, ‘31-40, ‘41-50’ & ‘51-60’). 15 participants were grouped under ‘less than 21’, 23 participants were categorised under ‘60 and above’, and 420 participants did not reveal their age. Thus, these 458 participants were excluded from the analysis.

The final sample was also broken down into several norm groups (i.e. ethnic differences, industry sectors, professions & managerial levels) for further analysis.

Procedure
Participants were invited to complete the SJT via email with an attached web link to the assessment. Participants who were involved in this research were applying for managerial roles across a large number of industry sectors, ranging from public/government sector to small, medium and large private organisations.

The email comprised of information relating to the completion of the SJT through an online assessment platform. A username and password was created specifically for the participant to log into the online assessment platform. Participation in the study was entirety voluntary. Participants had to complete the bio- and demographic information, including two practice questions prior to the actual test. The assessment took approximately 45 minutes to complete. Upon finishing the test, the results and a feedback report was generated for the participants and a debrief was provided upon request.

The SJT consists of four competencies, which were identified to be common across managerial roles and could be reasonably assessed in a Situational Judgement Test. The four competencies were Leading Others, Planning and Coordinating, Managing Performance and Managing Relationships. Each competency was represented by two competency elements. There were 3 scenarios developed for each competency element. Each scenario had four actions. In total, there were 24 scenarios with 96 items. The Cronbach’s alpha coefficients for the various time reference periods ranged from 0.62 to 0.74. In this research, the alpha was 0.62, which is considered to be at a moderate level for most psychometric assessment. However, alphas could be argued as an inappropriate estimate of the reliability of SJTs because it is often construct heterogeneous at the item level and typically assesses multiple constructs (McDaniel & Whetzel, 2005). Thus, we conclude that the alpha is within the acceptable level.

Data Analysis
Initial analysis suggests significant differences between the SJT score and levels of managerial position (executive, middle and first line managers), with higher managerial position attaining better score. We also predict that the composite score (management achievement) would be expected to have a positive relationship with managerial judgement.

The data set is currently broken down into separated norm groups and being analysed at the moment. The final results will be presented and discussed in the DOP conference.
Discussion
The aim of this research was to advance the knowledge of using SJT as an assessment procedure in personnel selection. Additionally, the focus of this research was to:

- Investigate and compare managerial achievement with managerial judgement;
- Investigate for any result differences between managerial judgement and various managerial levels;
- Test the robustness of the SJT framework using various statistical methods.

While this study accounted for the unique variances of age, it did not take into account job experience and the size of the organisation, which could prove to be a critical factor to job performance. Furthermore, the study suggests a positive relationship between managerial achievement and managerial judgement, but it does not provide conclusive evidence to suggest the prediction of one variable over the other. It would interesting to run an regression analyse to measure the predictive validity between the two elements.

As the current research has suggested a positive relationship between managerial judgement and managerial achievement, it would be worthy to replicate this study in several geographical locations and within various industry sectors to so that the results can be generalised to a wider population. Moreover, it would be interesting to compare the effects of affective levels and managerial judgement on a longitudinal term. This could potentially measure the influence managers’ well-being with the ability to rise above the rank based on their level of good or bad managerial judgement in critical situations.

Reference


Increasing Attraction into Core Training in Psychiatry

Safiatu Lopes, Work Psychology Group, Professor Fiona Patterson, Work Psychology Group, Dr Maire Kerrin, Work Psychology Group, Emma Rowett, Work Psychology Group, Professor Damien Longson, Royal College of Psychiatrists

Theme Organisation

Background
Despite evidence that a career in Psychiatry can be a rewarding and satisfying occupation (Pringle, 2010), historically the numbers of doctors in the UK applying for early career posts in Core Psychiatry Training (following the completion of two years of foundation training placements in hospitals) has been low. To illustrate, in 2011 following two selection rounds only 84.2% of the available first year Psychiatry posts were filled and the overall competition ratio was calculated to be 1.9. There is also evidence that trainees are leaving training programmes after the first and second year, and that there were fewer appointable applicants than posts at second and third year of training in 2010 (Carr, 2011). The Royal College of Psychiatrists (RCPsych) thus recognises the need to increase overall attraction and retention to Core Training in Psychiatry and achieve higher fill rates in their most recently published ‘Recruitment Strategy’ (RCPsych, 2011). More specifically, their aim is to increase recruitment to the first year of Core Training in Psychiatry, achieving a 50% increase in applications and a 95% fill rate by the end of the 5 year campaign.

Rationale & Aim
Continuing economic strains have prompted significant changes in the strategic framework of the National Health Service (NHS). A recent job analysis study which examined the role of General Practitioners (GPs) in the UK, found that whilst the skills and experience necessary to be a GP are still aligned with those in 2005, the domains have broadened considerably to include new responsibilities associated with balancing multiple agendas, including commissioning (Patterson et al. 2013). It can be presumed that role requirements and expectations of many other medical specialities, including Psychiatry, have also been affected by cultural shifts in the NHS and economy. For example, the European Working Time Directive has placed strict limits on the hours junior doctors can work, resulting in the widespread adoption of shift working. Although the reduction in juniors’ hours is welcome, the net effect is reduced availability of junior doctors in normal working hours, likely meaning that the increased daytime workload will fall predominantly to consultants. The major changes in training for junior doctors currently being implemented through Modernising Medical Careers (Department of Health, 2004) will also influence future training roles for consultants.

Best practice selection is based on defining a model of job-relevant competency domains, as this identifies the criteria upon which selection decisions are made. Criteria identified in a job analysis helps to lay the foundation for selection
method choice and implementation (Smith & Smith, 2005). Research consistently demonstrates that processes built
upon such principles have greater predictive validity, are more robust and legally defensible (e.g. Patterson et al., 2008)
and states that best practice is to revisit a job analysis every five years. In going forward with the objective to improve
the recruitment strategy for Core Training in Psychiatry, the RCPsych has recognised a need to review and refresh the
selection criteria and methodology, to ensure that it is still relevant and targets knowledge, skills, and attributes which
are deemed as key to successful completion of training.

The main objective of our study is, therefore, to develop a revised model of selection criteria with corresponding
behavioural indicators for use as assessment markers, covering the psychiatry role and the attributes required to be
successful in training, via a job analysis using a multi-source, multi-method approach.

Method
The first step of the job analysis was to conduct a review of relevant research and policy documentation, both in the UK
and the European Union. Key stakeholders within the Royal College of Psychiatrists (n=8) were then approached to take
part in a one hour semi-structured telephone interview, in order to capture a range of beliefs and attitudes regarding
the current training programme and recruitment strategy, as well as explore any foreseeable shifts in role requirements.
Critical Incident Technique was also used to explore differences between high performing and low performing trainees.
In summary, the questions were mostly centred on the following matters:

- Background of role and relevance to recruitment strategy
- Key knowledge, skills, behaviours and attributes required for effective performance in the current and future
  Psychiatrist role
- How such key knowledge, skills, behaviours and attributes may differ from other medical specialties
- Key differences between a high performing trainee and average or poor performing trainees
- Relevance of current competency domains used in selection
- Knowledge, skills, behaviours which Psychiatrists will require greater support in developing in training

More recently, a focus group also took place which invited core psychiatry trainees (n=5) to express their opinions on
similar issues regarding what they felt were important attributes to possess within their role, as well as explore their
understanding of the difficulties in attracting trainees into Psychiatry. As the project is still on-going, there is the
potential for some behavioural observations of trainees on the job to be carried out (n=2-3), to collect another source of
data in the form of observations of the dilemmas and tasks that a trainee would face within their role.

Anticipated Findings
The outputs generated from interviews with key stakeholders (n=8), the focus group with core psychiatry trainees (n=5)
and, possibly, behavioural observations of trainees in their role, will need to undergo a qualitative thematic analysis in
order to generate an updated person specification of future Psychiatry trainees. We anticipate that there has been a
change of breadth of the role, although most of the core competencies will still remain relevant (e.g. Empathy and
Communication). This work is the first phase in a larger scheme on evaluating how to improve the recruitment and
retention process, with the potential for further work to be carried out, linking the results to broader issues within
selection, curriculum and training.

Relevance to DOP Conference
NHS, social and informal care costs £22.5 billion per annum in England (2007 figures). These costs are projected to
increase by 45% to £32.6 billion by 2026 (at 2007 prices), mainly due to an increase of £9 billion in treatment and care
for people with dementia (McCrone, Dhanasiri & Patel, 2008). The government spends £102 billion in the NHS in England annually – 7.7% of GDP (Department of Health, 2010). Following a decade of investment and growth, the NHS needs now to make £15-£20 billion in efficiency savings by 2013/14. Ways have to be found to release money from the whole system to reinvest in quality improvements. The focus will be on redesigning services to improve quality and productivity, encouraging innovation, and preventative interventions.

An independent review of the Psychiatry specialty selection criteria and methodology has not recently been carried out to date, which has become more imperative given the rapidly changing context of the NHS. As such, we believe this study links appropriately to the theme of ‘Organisation’, as the overall results of this study will be prominent in contributing to operationalization of the RCPsych Recruitment Strategy 2011-2016 aims. In particular, this serves as an illustration of how the profession of Occupational Psychology can help to contribute in a theoretical and practical way, to an important area, by helping to redesign recruitment criteria within the NHS. Outputs from this study may also have direct implications in terms of cost-reduction to the NHS and improving the quality of service offered to patients.

Lastly, we believe that this topic will be of special interest to the conference delegates, due to the overlapping similarities between Psychiatry and Psychology, mainly the overarching goal of advancing knowledge and the treatment of mental illnesses.

References


**DOP13**

**Differentiating development needs across occupational sectors**

Jo Maddocks, JCA, Occupational Psychologists

Theme *Individual*
The author has collected data on over 12,000 individuals completing the Emotional Intelligence Profile (an online self-report questionnaire) since 2001. One segment of this analysis has been to examine differences between nine occupational sectors across sixteen dimensions of Emotional Intelligence (EI). This paper will present findings on the significant strengths and development areas for each of the occupational sectors and their implications.

The nine occupational sectors include: Students, Technology, Financial services, Retail/Services industry, Professional, Health, Sales, Human Resources, and Self-Employed.

The results of the study found significant differences between job sectors in terms of overall EI, EI on specific scale and EI for clusters of scales.

The paper will present the results, interpretation of results, their implications and recommended actions for the occupational sectors.

Example discussion of results:

<table>
<thead>
<tr>
<th>Financial sector</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Result 1:</td>
<td>Scored significantly lower on scale cluster of interpersonal effectiveness</td>
</tr>
<tr>
<td>Interpretation 1:</td>
<td>This sector may attract individual who are more task and less people oriented (Grandin 2005)</td>
</tr>
<tr>
<td>Implication 1:</td>
<td>If accepted, this may perpetuate a culture in the finance industry where low people skills become the accepted norm.</td>
</tr>
<tr>
<td>Recommendation 1:</td>
<td>The finance industry needs to reconnect with its customers, an emphasis on interpersonal development may therefore be a priority</td>
</tr>
</tbody>
</table>

Despite the breadth of research on EI there is relatively little cross sector research on occupational groups. The paper will share many fascinating and informative findings that will:

- Identify specific EI strengths and development areas across nine occupational sectors
- Explain how EI at an individual level may impact at an organisational and national level; e.g. underperformance in the health sector, and the growth of the self-employment sector.
- Provide a benchmark for measuring development of EI within each sector
- Inform where to invest for personal development within each sector

Sample interpretation of results (for Self employed sector)

Self-employed people on average score somewhat higher on EI than any other group. This may be because there is a greater need to be emotionally intelligent if you are dependent mostly upon yourself for your business success. This would typically require good interpersonal skills (Regard for Others, Awareness of Others and Personal Connectedness) and a degree of self-confidence (Personal Power) in your abilities. Incidentally, these attributes are also similar to those found in successful entrepreneurs (Cross, 2003). The Self-employed group scored less well in areas that are usually important in larger organisational structures; for example they were Over-Trust ing, Over-Optimistic (risk-taking) and Over-Independent (less team-oriented).
Introduction
This presentation will begin by introducing the social cognition of categorization processes. When an organizational merger or acquisition takes place, workers are faced with a ‘crossed-categorization context.’ In order to understand the socio-cognitive consequences of such an organizational context, for the workers, we will briefly review experiments which have manipulated the categorization context and explored the potential consequences.

Consequences of a crossed-categorization context
These can be cognitive, behavioural and/or affective. Cognitive outcomes involve the workers’ mental representations about the group context, and their categorizations concerning who is in the ingroup and who is in the outgroup. Behavioural outcomes involve the workers’ actions towards other workers, clients or stakeholders relevant to their group membership in the crossed-categorization context. Affective outcomes involves the issue of how positively or negatively the worker feels towards other workers who are in the ingroup or outgroup.

Factors to consider
In order to accurately predict what will happen in a crossed-categorization context, we need to consider the following factors:

a) **The category dominance**: There are multiple salient dimensions that differ in terms of their relative salience within a given worker’s cognitions. There is the possibility of dominance in one organizational category and inhibition in the other.

b) **Single salient categorization dimensions**: There is the possibility of dominance by one organizational category without corresponding inhibition in the other.

c) **Subgroup categorization**: There is the possibility of categorization on broad independent dimensions not related to the merger/acquiring organizations. That is, the worker breaks down the ‘new’ whole into multiple sub-groups, such as based on departments or specialism, rather than based on the old/new category dimensions

Predictions
This PhD research is exploring the theoretical basis for a number of predictions, to answer the question about what happens (cognitively) to workers after a merger or acquisition. Social identity predictions. The predictions draw from social identity theory, self-categorization theory and theories/experimental findings in social cognition. There are the following possible hypotheses:

$H_{A1}$: There will be modified category differentiation
There will be category differentiation leading to the elimination of one category

There will be category differentiation leading to the reduction in the importance of one category. This is further broken into three sub-hypotheses:

There will be category conjunction, meaning that the ‘old’ and ‘new’ organization will periodically exchange the dominant position from one subjective context to another

There will be category dominance, meaning that the members of the acquiree group will be perceived as partial outgroups, as ‘old’ organization label should provide the dominant basis for classification

Hierarchical ordering predictions, meaning that ‘old’ or ‘newcomer’ classification will be higher in impressional importance, as this dimension will be more informative for the acquirer group as compared to the newly acquired dimension and group membership.

Theoretical conclusions
This PhD research is currently at the literature review stage, and so the above predictions are early hypotheses based on the literature review so far. This presentation will welcome a discussion about other cognitive or social underpinnings of categorization processes for employees, following a merger/acquisition (e.g., issues of branding).

Practice implications
Understanding the social cognition of workers’ reactions to a merger or acquisition is the key to preventing the turnover and dissatisfaction problems which tend to arise. Workers are torn between their old organizational identity and that of the new organization, or a blended dual identity. The starting point for these identity processes is categorization, which has been explored by the present paper. Occupational/organizational psychologists can help organizations smoothen the cognitive pitfalls of mergers or acquisitions, to help workers deal with the new categories and new identities, and to enhance the cognitive, behavioural and affective outcomes. We suggest the following practice implications:

i. Occupational/organizational psychologists should advise organizations planning a merger or acquisition about the staffing implications. Involving workers as early as possible may help deal with the problems of category dominance/inhibition which can produce friction, dissatisfaction and turnover intentions.

ii. Occupational/organizational psychologists should encourage workers to talk about and explore their cognitive and affective reactions to a merger or acquisition. There are benefits to making what are otherwise sub-conscious processes conscious. This can prevent harmful behavioural outcomes (e.g., ingroup bias, hostility to outgroups).

iii. Occupational/organizational psychologists should explore evidence-based ‘templates’ for good organizational mergers or acquisitions. How have successful cross-categorization contexts dealt with issues of branding, organizational identity and socialisation or induction of employees following the merger/acquisition?

iv. Involvement of occupational/organizational psychologists as early as in the pre-merger phase is key to predicting individuals’ cognitive, affective and behavioural responses in a crossed-context and hence, design and implement techniques for the teams to conceptualize themselves as being one. Transforming the competitive context into a cooperative context and inducing cognitive interdependence state is shown to be a successful technique for reducing intergroup bias. This task makes the role of occupational/organizational psychologist in a merger or acquisition setting essential for achieving post-transaction organizational performance.
DOP15
Investigating the Role of Trait Perfectionism on Individuals’ Achievement Goal-orientations and Feedback-seeking Behaviour in the Workplace.
Sofia Parkinson, University of Surrey and Dr. Rachel Avery, University of Surrey Lecturer
Theme Individual

This study investigates the notion that there are differences between adaptive- and maladaptive-perfectionists' achievement goal-orientations and that these contrasting profiles result in divergent feedback-seeking behaviours exhibited in the workplace. Both trait perfectionism and achievement goal-orientation are thought to influence feedback-seeking behaviour via commonalities between these two constructs regarding approach and avoidance tendencies towards a task. A four factor framework of achievement-goal orientation is investigated including mastery-approach (developing competence), mastery-avoid (avoiding decrements in competence), performance-approach (demonstrating competence) and performance-avoid goals (avoiding demonstrating lack of competence). An online questionnaire was completed by an opportunistic self-selected sample (N=122) who, at the time of participating, were employed or had prior experience of employment. The questionnaire comprised items measuring individuals' trait perfectionism (predictor variable), achievement goal-orientation and feedback-seeking behaviour (outcome variables), as well as age, gender and employment status (co-variates).

A MANCOVA revealed a significant multivariate effect of perfectionism type on achievement goal-orientation and feedback-seeking behaviour (Pillai's Trace=.30, F=2.17, p<.05, η²=.15). Follow up ANCOVAs revealed this significant multivariate effect was due to the significant univariate effects of perfectionism type on mastery-approach (F=7.11, p<.001, η²=.11), mastery-avoid (F=3.24, p<.05, η²=.05) and performance-approach (F=6.56, p<.05, η²=.10) goal-orientations. Against expectation, the effect of perfectionism type on performance-avoid goal-orientation and feedback-seeking behaviour was non-significant. Planned contrasts revealed adaptive-perfectionists scored higher on mastery-approach and lower on mastery-avoid goal-orientations compared to maladaptive-perfectionists (t=1.99, p<.05, d=.54; t=2.49, p<.05, d=.59, respectively). The variation in performance-approach scores was due to perfectionists (both adaptive and maladaptive) scoring higher in this goal-orientation compared to non-perfectionists (t=3.63, p<.001, d=.66).

The results suggest that perfectionism type does account for differences in individuals' achievement goal-orientations. However, these divergent cognitive preferences present within the different perfectionism types do not appear to manifest as differences in feedback-seeking behaviour. Despite the lack of a significant effect of perfectionism type on feedback-seeking behaviour, the significant effect of perfectionism type on achievement goal-orientation, contributes towards an enhanced understanding of the role individual differences play in predicting an individual's motivational goal preferences, in the workplace. Hence, for professions where particular achievement goal-orientations may be more advantageous than others, the study's findings acknowledge the importance of considering such individual differences throughout the talent-management cycle from recruitment and selection through to training and development.

DOP16
Graduate Employability: Understanding what it means to be employable
Saffron Passam, Professor Kate Bullen, Professor John Grattan, Aberystwyth University
Theme Individual

The following abstract details the first stage of a doctoral research project which considers the psychological parameters of graduate employability and furthermore seeks to develop a concept of meta-employability (utilising the principals of meta-cognition). The project is mixed-methods and this initial qualitative stage sought to explore the understandings and lived experience surrounding employability with undergraduate students. This knowledge will be used to inform further phases of the project including the development of an employability measure. This abstract is considered
appropriate for an “Individual” theme through its positioning of the individuals as central to the development of employability whilst acknowledging the context in which they exist, the overall intention is to maximise the employment potential of individuals through the development of rigorous pedagogic research.

The employability of graduate students remains a key concern for Higher Education Institutions (HEIs) who are under pressure to produce graduates with the skills that enable individuals to compete in a changing labour market. Investment in employability is seen by many as an essential means of reducing future unemployment (National, Skills, & Findings, 2010). Influencing educational policy such as the introduction of Key Information Sets (UNISTATS, 2012) and Higher Education Achievement Reports (Universities UK, 2012), both of which are intended to highlight employability to UK students. Employability is recognised as complex and fuzzy, influenced by economic and societal forces its definition is influenced by the context in which it is situated. An adopted definition of employability developed for the HEI context is "A set of achievements – skills, understandings, and personal attributes - that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy"(Yorke, 2006 pg.8). This definition reflects that employability makes an individual only more-likely to gain employment and acknowledges pressures from multiple external forces such as economic, gender, social and intergenerational mobility (Blanden, Gregg, Machin, & Trust, 2005). Employability is evidenced to be associated with a number of psychological concepts; self-efficacy (Chen, Gully, & Eden, 2001), learning motivation (De Vos, De Hauw, & Van der Heijden, 2011), ambition, and commitment (Rothwell, Herbert, & Rothwell, 2008). In addition, a fluctuating and potentially non-traditional labour market puts pressure on the individual to hold multiple identities and roles (Forrier & Sels, 2003) and the formal and informal networks, known as social capital, operate as influencers of career outcome (Chen & Lim, 2012).

There is very limited research about how graduates themselves understand employability. This research seeks to explore these understandings, giving a voice to the students and providing lines of enquiry for further research.

Method

Design

Between February and May 2013 five mini-focus groups (4/3/3/2/3) were carried out with the intention of promoting natural talk about the concept of employability. The project had received ethical approval.

Participants

Fifteen undergraduate students from a rural university participated from the disciplines of psychology and geography. The participants ranged in age from 18-21 (M=18), this age range deliberately excluded mature students (aged +21) since they are more likely to have a pre-established career history) with nine identifying as female (Male=6), 13 identified as British, 1 Welsh and 1 x Eastern European.

Procedure

Each focus group took 1 1/2-2 hours including an ice-breaker activity. Two activities based on a card sort developed by ESECT (2011) were utilised. In the first, statements relating to the concept of employability were discussed. In the second, behaviours associated with employability were discussed.

Analysis

Audio tapes were transcribed using play-script method, followed by thematic analysis using guidelines from Braun & Clarke (2006). This allowed for the inductive development of themes from the accounts of lived experience provided by the participants.

Results

Analysis identified four main themes; (a) Being sociable, (b) It’s who you know, not what you know, (c) Gaining work
experience, (d) Not knowing what to do. It is anticipated that these themes will be developed and finalised prior to the DOP annual conference:

(a) Being sociable

Jela & Will “…there’s not many jobs that you don’t have to be sociable for”-“…well unless you work in a funeral parlour” (Pseudonyms using throughout)

Being sociable, in addition to experience, was positioned as a necessity for gaining employment. Referred to as being extravert, charismatic, or friendly, this was placed in contrast to being introverted and shy. In particular, a focus on being loud and confident, there was a shared understanding that there is no place for being quiet in the workplace. A need to manage personal characteristics to fit into a company image was expressed, in particular balancing charisma with “having a laugh”. Participants expressed anxiety about selecting and presenting the identities required, in support of Forrier & Sels (2003) suggestion that employment exerts pressure to manage multiple identities.

(b) It’s who you know, not what you know

Marco: “…I think it’s definitely about who you know rather than what you say you know”

Formal and informal connections were expressed as a necessity for gaining employment, evidencing the importance of social capital to the participants (Chen & Lim, 2012). With reference to parental and influential-other involvement the participants expressed anxiety at not having connections, equally annoyance towards others that do, and spoke of strategies for “playing” people to achieve outcomes. However, in contradiction some discussion related to connections leading to pressure to accept unwanted employment, and a limitation of career choice or potential. Future employment potential without connections was generally understood to be limited and this was positioned as much more important than what you know, as evidenced by the use of words in the example quotation.

Gaining work experience

Jenny: “you have to have previous experience and that is the biggest pain, and puts you off actually wanting to go and get a job”

Gaining work experience dominated the discussions with participants expressing disappointment about their experience of applications, with potential implications for self-efficacy (Chen et al., 2001). There was an understood suspicion that job applications were intended to catch you out, that there is a successful formula, and that you need to tell employers what they want to hear. Participants expressed that it’s difficult to gain experience without experience, and that employers are not sympathetic to the difficulties of finding early employment. However, somewhat in contradiction to the previous concerns, participants frequently reflected that individuals are solely responsible for gaining their own experience and developing employability skills.

Not knowing what to do

Toby “the older generations everybody knew what they wanted to do since they were four”

Generally participants did not know what they wanted to do in the future: only one student expressed a clear path following graduation. Family stories were often provided to evidence why this might be: that parents’ were still undecided or had multiple-career changes, or that they were considered too young to decide. Decisions were frequently based on what they didn't want to do rather than what they did, for example not wanting to: do a vocational course, become employed, live at home, follow their parents’ career path, or to live at home. Not knowing what to do was expressed as an anxious rather than comfortable state, a position which was not understood by others, who potentially
had less choice and thus an easier time deciding. It is considered that this lack of direction may influence motivation and goal driven behaviours (Rothwell et al., 2008).

Concluding Summary
The results of this research provide an opportunity to consider the nuances of employability from a novel undergraduate perspective. Psychological concepts such as identity and self-efficacy as seen at work in influencing the student’s attitudes, decisions, and behaviour. The presentation will focus on the talk of the students and developed themes, it is anticipated that conference delegates will appreciate the opportunity to consider these themes and what they may mean for their own practice. The results have been used to inform a questionnaire, The Graduate Employability Indicator (GEI), this will be summarized within the conclusion.

A poster will be produced following conference guidelines. It is hoped to use QR-codes to enable delegates to listen to snippets of the talk. Printed A4/A3 copies and PDF versions of the poster will be available at the presentation and poster. Electronic copies of the presentation slides will be available prior to the conference for distribution.

Reference list
DOP18
Insights from the experience of ACT-based Resilience Training
Lisa Pobereskin, City University, London
Theme Individual

The key objective for this research was to gain a deeper insight into the experience of ACT-based resilience training in the workplace. While quantitative studies have indicated that ACT-based interventions have considerable benefits for reducing psychological distress and increasing wellbeing in the workplace, very little qualitative research has been conducted. This session will therefore be unique in disseminating valuable insights based upon understanding the experience of participants to a greater level of depth and nuance.

The session will include a very brief explanation of ACT, followed by a more in-depth discussion of research findings. It will conclude with succinct implications for practice and future research.

Link to the conference theme
Investing in our workforce’s wellbeing and resilience is an essential element of Investing in the Future. Recent research has shown that a quarter of UK workers experience psychological distress (e.g. anxiety and depression) at levels equating to a minor psychiatric disorder. Indeed, the percentage of workers experiencing distress reaches 40% in certain occupational groups such as social workers and public administrators. These figures appear to reveal a concerning lack of resilience in the UK workforce, and are particularly relevant to Occupational Psychologists wishing to invest in the future for two reasons.

Firstly, these figures raise very serious concerns for the health and wellbeing of individuals; especially as social and economic turbulence may continue to demand resiliency from individuals for some time to come. It is for this reason that this session is particularly apt for the Individual strand. Secondly, these mental health issues present an extensive problem for organisations and national economies as sickness absence and work cutback days lead to considerable losses in productivity. While this intervention is conducted at the level of the individual, it also stands to offer considerable benefits for organisations.

Applicability to the workplace, underlying theory and research

There are four key reasons why ACT may be well suited to developing resilience in the workplace:

1. ACT has been successful in reducing psychological distress and developing more efficacious behaviours across a wide range of psychological problems. This broad applicability is explained by ACT’s assumption that just two fundamental factors underlie psychological vulnerability; and implies that ACT may help develop resilience in individuals with wide ranging causes of low resilience.

2. ACT’s mindfulness skills can be developed by groups of individuals with varying degrees of distress and lack of resilience. This ability to train heterogeneous groups together makes ACT highly practical. Additionally, group processes such as sharing insights, observing others and publicly committing to goals may aid ACT skill development.

3. ACT’s emphasis on clarifying values and goals is not only underpinned by considerable evidence for the value of goal-setting, but is likely to be familiar to individuals who are used to setting goals at work.

4. ACT’s emphasis on acceptance aligns well with the fact that some work circumstances (e.g. external deadlines) are out of the control of individuals.
The ACT model asserts that two features of language and cognition underlie most forms of psychological distress. One of these is cognitive fusion; this occurs when the literal content of thoughts dominate a person’s behaviour and leave them detached from present---moment experience. The second feature is experiential avoidance; an unwillingness to experience and the attempt to avoid difficult thoughts or feelings. ACT aims to evade these unhelpful experiences by developing psychological flexibility, the ability to be present in the current moment and to deliberately choose how to behave based on chosen values.

Research investigating ACT, its underlying model and its applicability to the workplace has been encouraging. Studies have found that a workplace ACT programme improved employee’s general mental health, innovation potential and levels of depression. In addition, ACT training appears to also have the potential to enhance the positive effects of organisational approaches to reducing stress. This suggests that ACT may have considerable value not only as a stand alone intervention, but also as a moderator of other interventions. Further evidence has revealed ACT’s potential to help professional care-givers maintain equanimity despite facing frequent danger and human suffering, and to reduce burnout in palliative care workers. In sum, there is increasing evidence for the benefits of ACT and the development of psychological flexibility in improving both mental health and work performance---related outcomes (e.g. absence rates, computer input errors).

This research used Interpretative Phenomenological Analysis to examine data collected in semi-structured interviews. Interviews took place over approximately one hour, and participants were all NHS employees.

Most informative and stimulating aspects

I believe that conference delegates would find the richness and depth of the data collected from these interviews particularly interesting. This study truly captures the human experience of ACT and also what ‘resilience’ means to each individual. Themes of authenticity, balancing the self and others and the exceptional value of training in a group will be discussed. The session aims to offer food for thought for all individuals and particularly for delegates wishing to hone and tailor workplace interventions to best support psychological health and productivity.

Materials to be made available

I would make electronic copies of slides available for interested attendees.

**DOP20**

Implicit bias in selection: Should we take account of hirers’ automatic associations?

**Tom Saunders, University of Worcester**

Theme **Communities**

**Introduction**

The reduction of prejudice and discrimination towards social groups is an important goal of society. In occupational psychology, we have a duty to ensure the fair treatment of employees; employers have a legal and moral obligation to treat job applicants fairly, for example, and yet discrimination still exists in several organisational processes. In this paper we were concerned primarily with gender discrimination in selection, and how unconscious, automatic, unintentional or incidental processes may influence ratings of applicants.

**Gender discrimination/gender gaps**

The body of evidence documenting gender gaps within employment is vast. The BBC (2012) analysed data from several government and independent sources and found that women held less than a third of senior level positions. Additionally, women held less than 12.5% of corporate board positions in FTSE 100 companies in 2010, with many top
companies having no female directors (Davies, 2011; Sealy & Vinnicombe, 2012). While improvements in gender representation do appear to be taking place, the rate of gender diversity is incredibly slow (Equality & Human Rights Commission, 2011), and there are some indications of moving backwards in terms of board representation (Boardwatch, 2013). A large scale study by the CMI (2013) suggested male managers’ bonuses were on average double those of their female counterparts (and that their salaries were already 25% higher). This is despite women outperforming men throughout education and university, and making up 60% of university graduates (Thompson & Bekhradnia, 2009). Gender representation may be better at junior staff levels than at the top, and the suggestion that women face greater barriers further up the career ladder is also congruent with the glass ceiling hypothesis (Baxter & Wright, 2000; see also Ryan & Haslam, 2005: ‘glass cliff’ research).

Effects of bias (diversity)
Having a poorly represented workforce can have a negative effect on the performance of employees and organisations, while diversity has benefits. Several studies support these claims. For example, employees’ perceptions of organisational discrimination and the diversity climate have been implicated in organisational commitment, job satisfaction, work tension (stress) and turnover (Sanchez & Brock, 1996; McKay, 2007). Ostergaard, Timmermans and Kirstinsson (2011) also found that gender diversity was related to the likelihood of organisations implementing innovative ideas. Impressively, McKinsey (2007) found a positive relationship between the number of women in boardroom positions in European companies and company performance indicators, a finding that has been replicated in a longitudinal design (Credit Suisse, 2012), including better return on equity, operating result and stock price growth. These findings have encouraging and potentially persuasive effects for organisational diversity, and send an important message to employers.

The automaticity of behaviour
Shiffrin and Schneider (1977) made an influential distinction between controlled processing (slow, serial, conscious, deliberative) and automatic processing (fast, parallel, unconscious, incidental). When applied to social psychology, researchers often distinguish between attitudes activated at a conscious level and attitudes activated automatically without deliberate thought (Fazio, Jackson, Dunton & Williams, 1986). Studies conducted by John Bargh and colleagues have documented a number of ways in which automatic processes may guide our everyday behaviour, and it is not too much of a leap to conjecture that such automatic processes may operate within personnel selection.

Measuring attitudes with implicit techniques
Over the last two decades, researchers have established new techniques for measuring attitudes, claiming to tap unconscious or automatic processes. Rather than self-report, these techniques often utilise simple tasks with a high degree of automaticity (or little conscious effort) where the respondent has to ‘react’ to various stimuli with key presses. These approaches typically use response latencies and errors as their primary dependent variables, and are said to be implicit due to the respondent’s relative lack of control over their resulting score. This lack of control means that such measures may have particular utility in uncovering socially undesirable attitudes, especially as they are less susceptible to faking than explicit, self-report measures (McDaniel, Beier, Perkins, Goggin & Frankel, 2009). Indeed, in one study conducted by Phelps et al. (2000), participants’ underlying neural response to racial faces was predicted by an implicit measure but not by a standard self-report racism scale.

A widely researched example of such an implicit technique is the Implicit Association Test (IAT; Greenwald, McGhee & Schwartz, 1998). This is an unambiguous, serial stimuli categorisation task in which the participant’s relative ease and fluency of processing different combinations of paired concepts is assessed. Larger effect sizes are presumed to represent closer associations in memory between a particular pair of concepts. The IAT has been shown capable of predicting a wide variety of outcomes; some of these include the prediction of voting behaviour one month prior to an election, doctor’s differential treatment of medical conditions according to race, identifying sex-offenders in amongst a
Implicit bias in hiring

While very much under-researched, a handful of studies have employed implicit measures as part of an effort to document the role of automatic processing in hiring. Often these involve student samples; however, some utilise the correspondence method or interviewer bias in actual hiring scenarios. A common methodology is to obtain participant ratings for resumes or CVs of identical skill sets but with different names. The participant then completes an IAT assessing the appropriate implicit stereotype. Thus far, evidence has suggested that the IAT is capable of predicting biases towards applicants of different social groups in both student and employer samples, including racial bias, obesity bias and within-gender bias (e.g. Rudman & Glick, 2001). Moreover, the IAT elicits incremental validity over and above explicit measures (e.g. Agerstrom & Rooth, 2011). Thus, the IAT appears capable of predicting hiring biases; however, no studies appear to have documented the predictive usefulness of the IAT in relation to general gender bias. We set out to close this gap, using an IAT that would appear to have face value when applied to organisational settings, the gender-career IAT, in a simulated hiring context.

Method

All participants (N=27) completed two tasks: a simulated hiring task and a gender-career IAT. In the hiring task, participants rated eight job application letters (4 female; 4 male) which were based on the applicant requirements of a UK public service. Each letter had an opposite-sex counterpart with an identical skill-set. Gender was manipulated by changing the name of the applicant, and the manipulation was within-subjects. Participants read each letter, rating how hireable the individual was on a five-point Likert scale and also stated whether they would hire the applicant. Participants then completed the gender-career IAT, which assessed the strength of associations between the concepts male/female and career/family.

Results

Despite a mean d-score of 0.82, indicating a strong implicit bias in favour of the stereotyped association of male-career and/or female-family, we were unable to yield any correlation between the IAT and the hiring task.

Discussion

The present study attempted to build upon previous research by documenting a hypothesised relationship between gender bias in a simulated hiring task and an implicit measure of stereotyped gender attitudes. While we were unable to support this hypothesis, it is argued that the small but growing body of evidence in favour of the general relationship between hiring and implicit measures would override the present results. The gender concept is generally considered more complicated than other stereotyped attitudes, in that the structure of gender attitudes may be complex and therefore need to be taken into account. This is one possible reason for our non-significant finding, and further research should attempt to elucidate the role of implicit gender stereotypes in hiring. This is especially the case since previous research in this area suffers from methodological or sampling caveats.

A Proposal and Relation to Conference

While diversity training and other efforts to improve diversity are routine within HR departments, the evidence suggests that discrimination still takes place. Indeed, if unconscious biases are playing a part in such discrimination, efforts to reduce prejudiced attitudes may be futile, at least at the implicit level, since automatic processes may develop early, be well-embedded within an individual's associative network and be difficult to change. Thus, one alternative approach is to accept that unconscious biases occur, whilst measuring and accounting for them as best we can. One possibility
would be to weight the ratings/decisions of those involved in personnel selection according to their implicitly measured attitudes towards protected social groups and characteristics, or at least to take stock of these biases prior to decision making, with the intention of reducing discrimination. More research is clearly needed; however, in order to invest in the future of communities, it is argued, we should be thinking more about the role of automatic processes that guide everyday behaviour, not only in selection but in occupational psychology as a whole. Perhaps such an approach can provide another perspective from which to tackle the societal goal of improving diversity.

Key Points
- The persistence of discrimination in employment related outcomes, despite efforts to reduce it, suggests it may be fruitful to consider whether more deeply ingrained prejudices are implicated. Recent research backs up the idea that implicit stereotypes play a role in hiring but more research is needed.
- Implicit bias in hiring is an under-researched area that deserves further scientific attention.
- Implicit measures are under-used in occupational psychology in general; we have been slow to exploit their advantages.
- **Novel proposal:** Should we use implicit measures to assess hirer competence? Should we take implicit biases into account when considering hirers' ratings of applicants?
- **Conference Theme:** These are important issues for the future of communities and for the issue of diversity.

**Most interesting aspects of the proposal**
- The notion that even experienced hirers are susceptible to implicit hiring biases.
- The potential to measure such bias with relative ease.
- The possibility of accounting for such bias in selection.

**Additional Materials**
Handouts will be made available and potentially a very brief, pen-and-paper demonstration of the IAT.

**DOP21**

**Gendered Language in the Workplace: Subconscious Inequality?**

**Katy Schnitzler,** Kingston University

**Theme** Communities

Could it be evident that despite the major transformations in women’s working lives and society in general, that gendered discourse is apparent, and can even negatively impact on women’s progression in the workplace? Language arguably discloses social and psychological processes, which ultimately influence norms and behaviour in society (Pennebaker 2011). Where gendered discourse is apparent, there is arguably increased gender inequality, exclusion and disadvantage (Prewitt-Freilino, Caswell & Laakso 2012). Making this visible can create awareness and promote equality, a fundamental and relevant topic in today’s world of work (Speer 2005).

**Social Role Theory**
Social Role Theory suggests that biological sex differences enforce ascribed gender categories, for example, men should provide for the family, whilst women should care for the children. These in turn influence the formation of social roles (what people believe to be gender appropriate behaviour), which ultimately transpires into the workplace (Eagly, Wood & Diekman 2000).

**Gender Schema Theory**
Gender Schema Theory describes how expectations of women can essentially obstruct their progression within the workplace. This is because people form schemas (concepts to make sense of the world), which are based on culturally accepted norms. Therefore, because women are often perceived to encompass nurturing personalities and ‘soft’ communication styles which are associated with home life, these are frequently rejected as being useful skills within top executive positions. However, skills associated with males are often correlated with organisational achievement (Berdharl & Anderson 2005).

Hess, Senecal, Kirouac, Herrera, Philppot and Kleck (2000) propose that women often complain that this ‘soft’ stereotypical assumption undervalues their capability. Conversational techniques are said to play a fundamental role in the construction of these gendered conjectures, and has even been found to hinder women in the workplace.

This socialisation process can enforce implicit gendered communicative styles, a phenomenon which has been of significant debate over the past few decades. Some feminists concur that language is in fact not a neutral process of expression; rather a factor which is fundamental to the construction of gendered identities. Some writers even go so far to say that it is one of the core elements of oppression (Speer 2005).

Studies have often found that men interrupt more so than women, take longer when speaking, often take the role of sole speaker and speak in a direct manner (Tannen 1990). Whereas, women are supposedly more likely to use modalising techniques (terminology such as ‘perhaps’, and ‘maybe’) which positively promote inclusive communication strategies, however could reflect a lack of confidence (Holmes 1992).

Collaborative pronouns have been observed to be recurrent in women’s speech; these include ‘us’, ‘we’ and so on. In comparison to males who are said to resort to using more egocentric pronouns, such as ‘I’ and ‘me’. Men apparently seldom use modalisers, which arguably convey a more intelligible and confident approach (Barrett & Davidson 2006).

Case (1994, as cited in Barratt & Davidson 2006) found that women were more likely to use tags (‘you know’, ‘isn’t it?’ and so on), which appeared to create a sense of insecurity or self-protection, rather than as facilitating devices as observed when utilised by men.

Women who make it to top management positions are said to do so due to their possession of male typical communication styles. This means that they discard their own identities in order to adopt contrasting linguistic customs. The irony lies within the notion that women who possess stereotypically male traits are often viewed negatively by both other women and men (Bergvall 1999).

Men were observed to use pauses, volume, and repetition which perpetrate tensions and silence others, in comparison to women who often self criticise, apologise and discontinue talking when interrupted. It has even been evident that women view other women who interrupt men as offensive (Barrett & Davidson 2006).

Some writers have found that sexist comments are preluded with a disclaimer, or even masked as humour or affection. Names affixed to women are often subordinate labels, such as ‘doll’ and ‘princess’ (Irigaray & Vergara 2011).

With the apparent increased demand for transformative leaders (one who adopts exceptional communication skills, such as active listening), will gender differences within discourse be less apparent? Will this allow women to succeed using their natural speech patterns and not needing to compromise by altering their identities in the workplace? (Barrett & Davidson 2006).
Alternative explanations?

Various situational factors have been found to eliminate gender as the reason for communication differences. For example, the amount of power the person holds within the group (Barratt & Davidson 2006). A person’s ethnicity, sexual orientation and social class can also impact on communication style (Irigaray & Vergara 2011). Interpersonal relationships and knowledge level can also eliminate gender differences.

A recent study utilising conservation analysis provides evidence that women do contribute with competence in workplace meetings, and interactions are not gender specific. Interviews within the same study also showed that none of the women disclosed gender as being obstructive during meetings. It was suggested that personality, intelligence and childhood socialisation explained communication differences. This challenges concerns that gendered discourse hinders women. However, crucial to note is that four participants did state how outspoken women are regarded as obnoxious, whereas one male said that his outspokenness was useful (Houxiang 2011).

The current literature within the field of gendered discourse certainly implies a varied message. Some writers proposing that gendered language is still very much of an issue for women’s success in the workplace, others putting forward the notion than males are actually adopting more female stereotypical communication styles. Crucial to note is that several frameworks and theories are based on evidence from the 1990s, as well as studies being conducted on non-Western cultures, therefore just how much resonance these findings hold in recent times is debatable.

Bloomer (2013) has emphasised how much of the evidence on gendered discourse is based on research from three decades ago, furthermore, early studies often utilised formal and quantitative procedures – particularly structured questionnaires to gain data. This study shall address this problem by providing a qualitative and up-to-date study.

Method

This study utilised qualitative research, and was underpinned by social constructivism philosophy and an inductive research strategy. This is because the current research aimed to discover, rather than to verify an established theory, this is due to the notion that the extant literature did not provide one sole theory, rather an eclectic mixture of diverse findings.

The study utilised a case study design, thus acquiring rich data of a ‘true’ situation, yielding high ecological validity (Willig 2001). Alasuutari (1995) puts forward the term ‘extrapolation’ to refer to how a case study can be used beyond the small scale project because it can be applied in a wider context.

Case studies employ purposeful, as opposed to random sampling, which was of particular benefit due to its practicality. The researcher observed one typical team meeting within a well established food delivery chain in North Devon for the pilot study. The main observation utilised a typical team meeting involving lecturers within a Further Education College in North Devon. This research required data derived from conversations between mixed-sex groups. These were carried out within the natural setting within the organisations and enabled high ecological validity.

Discourse Analysis (DA) was the chosen data analysis technique. This enabled the researcher to analyse the conversations in great detail. DA considers that words are not to be taken as the true internal beliefs of a person; and it is more concerned with the way in which it has been put across. For example, when a person uses the disclaimer ‘I am not sexist but...’ DA does not take this as a literal ‘truth’, and would see it as the individual is fully aware that their opinion is not socially acceptable (Willig 2001).
DA is particularly useful when considering gendered discourse because it is concerned with looking at how certain discursive practices are used by men but not by women and vice versa. DA is most suited to studies which use naturally occurring conversations, which was pertinent to the project. DA can consider pauses, hesitations, interruptions, changes in volume and so on, which was very useful for the current research (Willig 2001).

Results, Discussion and Conclusion
At the time of the presentation, full results, discussion and conclusion will be available. The results will be discussed in terms of their implications on future research and practice. It is predicted that males will be more likely to interrupt females, apologise and use modalisers less often than women. However, the scale of the gender differences is debatable due to the notion that other factors, such as role, age, race and so on may play a part in discourse.

References

DOP22
Age bias? What would that look like?
Neil Scott, Cassin-Scott Associates Ltd
Theme Communities

This paper seeks to highlight the methodological problems with identifying age bias in assessment tools and selection/promotion processes. Our ageing population and high levels of youth unemployment suggest this is an area of increasing concern for the future; for individuals, organisations and society. Using ability based psychometric tests as an example, we will briefly summarise the current state of knowledge (20% theory) including the presentation of previously unpublished data (20% research), before giving practical examples from our own experience of barriers to the effective identification of age differences and bias (60% practical).

The work is based within the psychometric model but applies more broadly to assessment. The key message is that we are not currently equipped, as a profession, to adequately identify and communicate age-based effects. The paper is
innovative in that it confronts the assumptions about how we measure differences and bias and shows that they may not be relevant to the assessment of age effects and the need to resolve this should prove stimulating and challenging for attendees and the broader public. We will make the paper available on the internet and by e-mail for those who would like a copy.

Introduction
Age is increasingly becoming an issue in our society with an ageing population and increasing youth unemployment. For ethical, practical and legal reasons it is critical that those involved in assessment for employment, whether it be selection or promotion, should be able to identify tools and techniques that will unfairly disadvantage any particular age group. Whilst there is a wealth of literature on e.g. the impact on gender and ethnic groups of using cognitive ability tests, there is relatively little on the impact on age. Further, age is very different to the other diversity related issues that makes the assessment of unfairness even more complex. Psychologists are well placed to take a lead in this area and the principal aims of this paper are to explore the issues involved.

Context
Intelligence or General Mental Ability (GMA) is the area of psychometrics that has been the most controversial and the best documented. A glance at the norms for IQ tests reveals that younger people have a higher IQ than older people. The well known ‘Flynn Effect’ (1987) suggests that IQ levels, internationally, are rising at the rate of 5-25 IQ points with each generation. The weight of the literature (e.g. Horn, 1986) suggests that IQ doesn’t fall during your life span until the 60s or 70s (and then much of this is related to illness), and the Flynn Effect is due to each successive generation is outperforming the previous ones.

Estimates suggest a correlation between age and scores on GMA tests of around -.28 (Hartigan & Wigdor, 1989). A more recent meta-analysis of UK public sector data (Scott, 2007) suggests the following;

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<td>GMA Battery</td>
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<tr>
<td>Verbal</td>
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<tr>
<td>Numerical</td>
<td>-.03</td>
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<td>Clerical</td>
<td>-.25</td>
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<td>Speeded tests</td>
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Effect sizes are small but consistent; only numerical tests showing any positive correlations with age.

We know therefore that age is related to performance on test scores. It matters for three main reasons;

1. **Practical** – we need to ensure the assessment of ability isn’t biased so that we can select the best staff role for the role.

2. **Ethical** – we must be fair in the way we select

This issue is likely to attract more attention in the future; an ageing population means people will have to work meaningfully to a much later age whilst high levels of unemployment amongst the young raise concerns about the opportunity to get a first job and develop experience. There are accusations of unfairness against the old, who want and need to continue to contribute to the workforce, and against the young who lack experience.

The need to assess the fairness of psychometrics isn’t new; there is a wealth of data on the impact of gender and ethnicity in particular. Age, however, has not received as much attention and presents far more complex methodological problems. There are two key elements;

1. How do we measure age based differences in test and job performance

2. If we can do this, how can we detect if ‘bias’ is occurring.

1. Measuring differences

With gender and ethnicity we were dealing with categories. E.g. we compare male performance with female and we typically do this by comparing $mean scores or pass rates for different groups, using e.g. the four-fifths rule or $d$ values respectively (both of which we will define). With age we are dealing with a continuous variable. Correlations are the obvious tool but the relationships are not necessarily linear so genuine effects may not be identified. Most mean test scores increase into the early twenties then plateau before beginning a gradual decline.

Measurement is further confounded by non-normal distributions. Samples for assessment are often greatly skewed. Typical external applicant pools for entry and supervisory levels are heavily positively skewed, those for fast-track programmes even more so. If the bulk of the sample is aged 21-25, as is often the case, then differences between this group and 40 year olds will be masked by the skew. For example, the following shows the mean score at each age for a sample of 8,242 test takers with three quarters aged 24 and for whom the correlation between age and test score is only -.13.

An alternative is to divide ages into groups. If we make it two groups we can use the standard indices of $d$ values and the four-fifths rule familiar to researchers in this area. However, there is no obvious dichotomy to favour. ‘Older’ is often defined as 50+ in organisations, but this involves lumping those in the 40s with those in their 20s. Academic studies vary in where to place the dividing line. Wherever the cut-off is made, these indices again summarise the effect at one point and don’t explain the pattern of effects for different age groups.
There are also confounding effects of ethnicity e.g. in many applicant groups black applicants are older than Asian or white ones (Scott, 2007). Further, age effects are not consistent across groups; there is a greater age effect for black applicants than for whites or Asians (Scott 2007). Whilst there is little difference between genders, there are interactions with ethnicity

2. Bias

As with all group differences, identifying differences is not the same as identifying unfairness or bias. For example, a difference between two groups on their test scores may reflect genuine differences in their job performance. Those differences might be caused by unfairness e.g. because the lower scoring group doesn’t have the same educational and developmental opportunities as the other group, but we cannot now say that the test under-predicts the performance of the lower scoring group; it may reflect existing unfairness but reflect that the higher scoring group will function more effectively for some tasks in that role. Studies that have identified differences have rarely identified that the test is predicting differently for the different groups.

A number of reasons for the Flynn effect have been suggested. In particular it has been noted that each generation has spent more time in education than its predecessor. Other factors implicated are better nutrition, more stimulating environments and greater opportunities for travel and so exposure to new ideas and stimuli. While others suggest later generations merely have more experience of test taking, we cannot assume that the differences in scores are either irrelevant or biased.

A particular difficulty arises in deciding what fairness would look like. Consider a promotion process. We have worked with organisations to consider targets for gender and ethnicity. This is relatively easy. Ideally we would like the same grade distribution for males and females. We may acknowledge that it will take time and that other factors such as length of service need to be taken into account, but the goal is generally equality.

For age we do not expect to have the same age distribution at the most senior grades as at the junior grades, neither do we have a model of what a ‘fair difference’ would look like. This would be achievable if all people of the same ability level, (both realised and potential) developed and progressed at a uniform rate, or that they all achieved suitability for a particular level at the same age, but none of us expect this to be the case. For example, average age to achieve Grade 7 in the UK Civil Service was 45 where the average age to achieve Grade 5 (a more senior grade) was 40. This was because only a small proportion are expected to achieve grade 5 and a relatively high proportion of those reaching the grade move through it to more senior roles. This group makes up a small proportion of those reaching Grade 7, a grade which can be attained relatively late and is the final grade for many who reach it. With this sort of profile, how can we say what the age distribution of an organisation should look like, or how transferable it would be across functions or organisations?

Unlike ethnicity and gender, age is inextricably linked with a factor related to performance and suitability for many roles; length of service and so, potentially, experience. It is not possible to remove the variance explained by length of service from an analysis of age related to performance without decimating the sample. As a profession we need to agree a new approach to metrics for this.


Over time organisations have undergone major restructuring to survive in such a highly competitive global market. In order to invest in the future of their organisation they have introduced new patterns of working and advanced technology to gain a competitive edge (Kinsman 1987; Hakin 2000). Technology has therefore become ‘a principal mediator of work’ (Mansell et al. 2007), with modern day company’s spending their annual budgets more on technology than anything else (Dewett, Jones 2001). Despite research attempting to keep up-to-date with the advances in technology, the fast paced penetration of wireless devices has resulted in an inability of the academic literature to keep up-to-date (Price 2010). In 2012 it was reported by Ofcom that smart-phone penetration rose 12% from 2011. It is therefore important that more up-to-date research into the usage of these devices within organisations, such as the research within this proposed session is made available to those within the field of occupational psychology, organisations and the wider community in order to invest in future research, professionals, communities, organisations and individuals.

This session is of high importance to Individual as it will focus on the impact wireless communication devices have on individual employees. Employees are often in direct and constant contact with these devices and therefore are the most effected in relation to well-being and work-life balance. It is essential that organisations acknowledge the impact these devices may have on their employees, and that they invest in the future of these individuals, as in turn this will help them to invest in the future of the organisation itself.

The main psychological theories, models and research

The Conservation of Resources (COR) theory (Hobfoll 1989) is the main psychological theory underpinning this session, which will provide a more focused and in-depth view of a comparison study which was based closely on the research of Richardson and Thompson (2012). Richardson and Thompson (2012) studied the relationship between work connectivity behaviour after-hours and work-family conflict and well-being, as well as the potential mediators of this relationship from a COR approach. This study however was conducted within a US organisation and a need for further investigation was highlighted to indentify if the findings still hold within another country and organisation. A comparison study was therefore conducted focusing on Blackberry devices within an organisation based in the UK.

The most novel or innovative aspects of the ideas being presented

Past literature suggests positive and negative outcomes associated with the usage of wireless communication devices within organisations, although little research provides an adequate theoretical explanation for this paradox with the exception of Richardson and Thompson’s (2012) study. This later comparison study provides a theoretical explanation, however also provides new and more up-to-date knowledge of the usage of wireless communication devices within UK organisations, and the potential impact this usage has upon employees. The ideas which will be presented therefore will be highly contemporary and informative.

The most informative and stimulating aspects of the session
This session will help conference delegates and potentially the wider public to form a more holistic view of wireless communication devices and identify whether the overall usage is positive or negative. As well as the various similarities found between the US and the UK which will be highly informative, the differences identified between them will be extremely thought-provoking, encouraging both interest and further research into such an important area within occupational psychology.

Hypotheses for the Current Research

Hypothesis 1: Blackberry use for work purposes during non-work hours will be positively related to work-family conflict and negatively related to psychological well-being.

Hypothesis 2: The relationship between Blackberry use for work purposes during non-work hours and a) work-family conflict, and b) well-being will be mediated by job control. Hypothesis 3: The relationship between Blackberry use for work purposes during non-work hours and a) work-family conflict, and b) well-being will be mediated by detachment from work.

Hypothesis 4: The specific indirect effect of detachment from work as a mediator between Blackberry use for work purposes during non-work hours and a) work-family conflict, and b) well-being will be greater than the specific indirect effect of job control as a mediator.

Methodology

Design: A correlational survey design was employed in order to collect and analyse data via an online questionnaire sent to 230 potential participants.

Sample: Respondents were 90 working adults based in the UK and employees of a world leading communications service company who supply their employees with Blackberry devices for work purposes. During data screening 4 outliers with extreme values were identified and removed due to response bias resulting in 86 participants. The age of participants ranged from 24-63, with a mean age of 48.60, 65 of which were males, 21 were females, 53 were senior managers and 33 were junior managers.

Procedure: Following ethical approval, a senior manager within the organisation emailed junior and senior managers explaining the purpose of the research and provided an URL link to the web-based questionnaire. A variety of procedures were followed in order to meet the Health and Care Professions Council (2010) and the British Psychological Society (2012) guidelines for ethical requirements.

Materials: With the exception of one scale a variety of previously validated scales were used, with all responses on a likert-type scale. The Cronbach’s alpha reliability coefficients for each of the scales ranged from .73 to .92 indicating high internal consistency (Printed copies of all materials will be made available for attendees to view).

Data Analysis

The bivariate correlations were first examined to test Hypothesis 1. In order to investigate the remaining hypotheses the procedures for testing a multiple mediation model outlined in Preacher and Hayes (2008) were followed. To allow for comparison between frequency and duration of use, two models were created for each dependent variable (DV).

Summary of the Key Findings

Consistent with the findings of Richardson and Thompson (2012), the usage of the Blackberry for work purposes during non-work hours was directly related to work-family conflict, although not directly related to well-being showing mixed support for hypothesis 1. Different to Richardson and Thompson’s (2012) findings however the multiple mediation
models for both work-family conflict and well-being were significant, rather than only those for work-family conflict, suggesting the hypothesised mediating variables may account for a percentage of the variance in both DV’s.

The mediating variable of job control was not found to be significant when examining all models showing no support for hypothesis 2; however the findings did suggest that job control is an important factor in establishing high levels of well-being and lower levels of work-family conflict and therefore should not be ignored. The two models using well-being as the DV supported detachment from work as a significant mediator in the relationships. However the two models using work-family conflict as the DV found mixed support for detachment from work as a mediator, showing mixed support for hypothesis 3. For the frequency model detachment from work was a significant mediator in the relationship between frequency of Blackberry use for work purposes during non-work hours and work-family conflict, further supporting the findings of Richardson and Thompson (2012). For the duration model however competitive mediation was found as there was both a mediated effect and unexplained direct effect but these were in opposite directions, suggesting that detachment from work was not a significant mediator in the relationship.

The specific indirect effect of detachment from work was larger than the specific indirect effect of job control for both models using work-family conflict as the DV, supporting hypothesis 4 and the COR theory, that resource loss is more salient than resource gain (Lee, Ashforth 1996).

A thought-provoking finding: 94.2% of participants reported that at some point during their vacations within the UK they had used their Blackberry to engage in work related duties and 58.1% had done so abroad. These statistics are significantly greater than those found by Richardson and Thompson (2012), and are worrying given that time away from work provides a restorative benefit and promotes recovery from job-related strain (Eden 1990, Frankenhaeuser et al. 1989, Westman, Eden 1997).

**Practical Applications**

This research suggests that organisations need to recognise the impact that using the Blackberry for work purposes during non-work hours is having on employees, especially as work-family conflict is a major problem for both individuals and organisations, reducing productivity (Bilal et al. 2010) and employee life satisfaction (Carlson, Perrewé 1999), and increasing psychological distress (Frone et al. 1992: 197), absenteeism and turnover (Bilal et al. 2010). It is proposed that organisations can reduce the impact on employees by either focusing on the technology, reducing the amount of time needed to be connected to the devices, or by focusing on the employee’s, enhancing their skills and abilities and ensuring they are capable of handling the device and demands of the job. This can be done during recruitment by using job descriptions and psychometric tests, or by providing training and education programmes for current employees.

**Limitations and Future Research**

More research is needed to investigate further the consequences of usage, and the unexplained direct effect. This research ideally should assess causality as the current correlational design limits the ability to assess causality. Moreover it should use a longitudinal design to identify the long-term effects of usage, using more objective data rather than self report scales to avoid response bias. In addition a cross-cultural study using various organisations is required, as with Richardson and Thompson’s (2012) study the current findings may not be generalisable to other populations due to differences across countries and other organisations.

**Conclusion**

This research suggests that employees who use their Blackberry for work purposes during non-work hours experience higher levels of work-family conflict. In particular those who use the device frequently will not be psychologically detached from work, which in turn is related to work-family conflict and lower levels of well-being. Furthermore those who use the device for long periods of time will also not be psychologically detached from work, which in turn is related
to lower levels of well-being. Although this research does not support job control as a mediator, the findings suggest it may still be a benefit to employees. The findings also support that resource loss is more salient than resource gain, thus supporting the COR theory.

Key points for a 60 second opening ‘pitch’ for the proposed poster

- My name, place of study, and area of interest within Occupational Psychology.
- How the session contributes to Occupational Psychology and relates to the main conference theme/ stand chosen.
- What conference delegates can expect from the session.

Proposals to augment or enliven the basic poster display

I propose to create a basic poster using key points and double meanings in order to give more scope to augment and enliven the basic poster display using diagrams and pictures which will aid the understanding of conference delegates.

DOP24
From Paralympics to the workplace – making a difference with disability
Philip Wilson and James McShea, Civil Service Fast Stream

Theme Communities

Introduction
The anniversary of the London 2012 Paralympics in July 2013 was a reminder of how much that phase of the Games appeared to engender a step forward in terms of public perceptions of disability. Whether this will convert to a lasting legacy, in this respect, is much discussed.

But what of the workplace? How are disabled workers being supported and engaged - and what difference can occupational psychologists and other professional groups make?

This paper looks at interventions that might be put in place in terms of disability in the corporate world, especially initiatives that go beyond the more commonplace. It surveys graduate recruiters from public and private sectors as to the interventions they have established and in particular describes the set of steps undertaken by the Civil Service Fast Stream graduate programme that have had demonstrable impact.

The disability landscape
Disadvantage for disabled groups remains evident. The Office for Disability Issues (ODI) highlights concerns regarding experiences in terms of disability (August, 2012) – for example:

- “Disabled people are significantly more likely to experience unfair treatment at work than non-disabled people. In 2008, 19% of disabled people experienced unfair treatment at work compared to 13% of non-disabled people.

- Disabled people remain significantly less likely to be in employment than non-disabled people. In 2012, 46.3% of working-age disabled people are in employment compared to 76.4% of working-age non-disabled people (Labour Force Survey).”

- In terms of education ODI indicated:

  - “19.2% of working age disabled people do not hold any formal qualification, compared to 6.5% of working age non-disabled people
14.9% of working age disabled people hold degree-level qualifications compared to 28.1% of working age non-disabled people. In other words, clear disparities and disadvantages remain in the organisational world and during the educational stage that precedes it. And yet there is a good business case for organisations making disability an organisational priority. The Business Disability Forum (2013), for example, highlights that with an aging population disability will become ever more prominent, since older workers are more likely to acquire disabilities (with more than three quarters of disabled people obtaining their disability as an adult). Furthermore disabled workers tend to remain with more supportive organisations, thus helping retention, reducing recruitment costs and reinforcing skill/competency development.

Legislative background
In terms of legislation, the Equality Act 2010 enables a number of activities to be put in place, such as reasonable adjustments and positive action training. Under the Act a person has a disability ‘if they have a physical or mental impairment, and the impairment has a substantial and long-term adverse effect on his or her ability to carry out normal day-to-day activities’. A guaranteed interview ‘two ticks’ scheme is also often introduced by organisations, although is not legally required.

Broader organisational interventions
There are also a range of somewhat more wide-ranging, though related, organisational interventions, such as ensuring accessibility of recruitment approaches, making role descriptions and advertisements disability inclusive, ensuring recruitment agencies are disability supportive, providing work station support, offering bespoke career development or talent management, disability networks and individual case work (e.g. International Labour Office code of practice, 2002).

Method
Investigating Interventions in place - Association of Graduate Recruiter’s Diversity Forum Disability Survey
What is currently being undertaken in this arena in the UK? An initial exploratory survey was undertaken with a small number of graduate recruiters in 2013. Seven recruiters from across public and private sectors from the Association of Graduate Recruiter’s Diversity Forum offered details of approaches put in place. Although disability was the primary focus of investigation, comparison with other categories was felt to be valuable. The under-represented groups reviewed related to gender, minority ethnic groups, age and low socio-economic status – in addition to declared disability.

Fast Stream interventions
In addition to these recruiters, it was the activity that Civil Service Fast Stream, the graduate talent management programme, had in place for disability. Specifically Fast Stream offered:

- Reasonable adjustment interventions for disabled candidates.
- The two ticks guaranteed interview scheme to allow eligible candidates to circumvent the initial (on-line) selection stage.
- A familiarisation session for disabled candidates, including exposure to an overview of the final assessment centre stage components and discussion and advice on approaches to responding to these exercises.
- A virtual disability network managed directly by Fast Streamer members, offering: a regular information newsletter; a Facebook page and twitter feed on topical disability issues; individual case work; support for accessibility arrangements.
regarding assessment processes and other activities; engaging Senior Civil Servants in support work; diversity Q&A events; a web presence for network members to talk, debate and share experiences in an accessible way.

- A Summer Diversity Internship Programme (Wilson, 2012 and 2013) offering a six to nine weeks stretching work placement for disabled undergraduates, with the aim of raising awareness of the service and encouraging diverse applications. The internship provided students with the chance to gain real-life experience of how departments function, policy areas they are responsible for and how work impacts on the public. The internship was also supplemented by a coaching programme relating to selection skills and wider personal up-skilling.

- A ‘Positive Action Pathway’ intervention for under-represented groups, including disability, to support career progression and ultimately, potentially, Fast Steam positions.

Results

Association of Graduate Recruiter’s Diversity Forum Disability Survey

In relation to declared disability, half of the organisational respondents indicated that they specifically target those from this group in their advertising and awareness raising. Most employers also stated that they put in place reasonable adjustments during the selection process to cater for the specific needs of candidates. Half of the organisations provided a guaranteed interview scheme for candidates with a disability – all of these were public sector organisations. In practice this generally took the form of candidates with a declared disability being able to progress to the next stage (usually from the application sift to the following stage).

Other than this, there was limited evidence of activities designed to support those with a disability. Almost no graduate recruiters provided this group with specific opportunities to develop their skills in relation to the selection methods they use, provide opportunities to develop personal skills (e.g. confidence, resilience), or provide specific internship/work experience opportunities for this group.

The greatest volume of initiatives used by these employers focused on minority ethnic groups and, to a lesser extent, women. Examples of initiatives used to target underrepresented groups, but largely not in terms of disability, were:

Table 1: Diversity interventions – Association of Graduate Recruiters

<table>
<thead>
<tr>
<th>Type of initiative used to target underrepresented groups</th>
<th>Example</th>
<th>Main groups for which this is undertaken</th>
</tr>
</thead>
</table>
| Targeted Advertising | • Universities selected for visits based on those with higher levels of underrepresented groups  
• Attending specific diversity-related events for graduate employers to meet students  
• Advertising through specific representative associations (e.g. Stonewall) | • Gender (women)  
• Minority ethnic group  
• Declared disability |
### Opportunities to develop skills in relation to selection methods used (e.g. interview training, familiarity with types of test used)
- University representations with advice and guidance on the selection process
- Mock assessments with feedback
- Minority ethnic groups
- Low socio-economic status

### Opportunities to develop qualities important to the organisation (e.g. competencies)
- Skills workshops focusing on key competencies
- Gender (women)
- Minority ethnic groups
- Low socio-economic status

### Opportunities to develop personal skills (e.g. resilience and confidence in the selection environment)
- Coaching and mentoring
- Gender specific mentoring
- Gender (women)
- Minority ethnic groups

### Specific internship/work experience programmes
- Specific internships slots reserved for certain diversity groups
- Gender (women)
- Minority ethnic groups
- Low socio-economic status

### Fast Stream interventions

In terms of Fast Stream, 2011 data (the most recently published information) shows positive outcomes:

- Overall, the percentage of applicants who considered themselves disabled was 5%.
- The proportion of successful disabled candidates, however, was 13.2%. This compares to 9% in the overall graduate market.
- In the Graduate Fast Stream, the largest individual scheme, 5.4% of applicants, and 18.6% of successful candidates, were disabled.
- Overall, 5.7% of disabled applicants were successful, compared with 2% of non-disabled applicants.
- Figure 1 below demonstrates high appointment levels relative to application levels:
Summer Diversity Internship Programme

In respect to the disability internship programme, all interns reported that it had encouraged them to think in terms of a career in the Civil Service and most felt it was helpful in terms of their CVs and job applications generally. One BME disabled intern reported ‘it blew away all of my stereotypes of working for the Civil Service – it was so diverse. It made me realise that anyone can work and feel comfortable and welcome’. The internship coaching programme has recorded success levels of 35-40% for conversion to permanent Fast Stream positions. Positive disability representation for Fast Stream meant the internship programme was subsequently re-focussed towards socio-economic students.

Positive Action Pathway

In terms of the Positive Action Pathway project, 43% of the cohort selected for the pathway’s development centre and modules were disabled, with wide ranging needs. 91% of participants considered the pathway was useful/very useful in terms of the pathway development centre helping to identify areas of strength and areas for development.

The pathway will be evaluated subsequently in terms of participant progression when it has more fully rolled out.

Discussion

This paper has sought to highlight what interventions might be put in place to support candidates and job incumbents with disability. It also demonstrates that, Paralympics or not, the extent of support for those with disability may not always be as comprehensive as might be desirable. Organisations have opportunities to extend the provisions and mechanisms they have in place for this group.

References


This study examined the quality of the relationship between the customer and businesses providing a direct, customer-facing service. This research topic encompasses the interests of the 'Organisation' research strand. The study aimed to identify the psychological factors that contribute to the quality of this relationship and to consider the effect relationship quality has on the customers' evaluation of a company/brand.

The first aim of the research was to examine whether communication affects relationship quality in business-to-customer (B2C) relationships. This was done with the intention to expand on Morgan and Hunt's (1994) commitment-trust model. Secondly, the project aimed to identify whether any other factors affect the business-to-customer relationship in the chosen setting. This was done with the intention to provide evidence of whether any other factors should be considered and included when conceptualising relationship quality into a theoretical model. Finally, it considered how the perception of a whole company is affected by the customers' relationship with the 'face' of the company. The purpose of answering this research question was to improve and expand psychological understanding of the impact that business-to-customer relationship quality has upon businesses on a wider, broader scale.

The study had a mixed methods design consisting of both quantitative and qualitative data. This was considered to be a novel approach, as it led to understanding a B2C relationship from the viewpoint of both parties. Comparing these two views is also a key part of what made the findings so compelling to the wider public and organisations themselves. Five collection and delivery drivers currently employed by ParcelForce Worldwide were interviewed at a regional depot, using a semi-structured interview schedule. The data from this sample was analysed using Grounded Theory.

Having recorded and transcribed the data collection from the Collection and Delivery drivers, a visual matrix of the codes was formulated for the purpose of creating a hierarchical structure connecting quotes to codes, and codes to themes.

Data was also collected from 68 internet shoppers, who completed an online survey advertised in customer forums on the websites for Amazon UK and EBay UK. The online survey completed by online retail customers was created using the SurveyGizmo online survey software. The survey had a total of 45 complete responses. The respondents were 82.2% female and 17.8% male, with a mean age of 22.4 years (SD=7.07). The online survey yielded both qualitative and quantitative data.

The data collected from online retail customers was analysed in two stages. Text box style answers within the survey were analysed through a 'mini' thematic analysis and counting of the most common responses. The short -often single word- answers did not allow for full Analytic coding procedures to be applied, as was done to the interview data. The Likert-scale answers were analysed using SPSS 21 and carrying out a Pearson's R analysis.

Significant correlations were found between relationship quality and amount of talking, as well as with sense of trust. Further significant correlations were found between amount of talking and sense of trust, in addition to satisfaction with service and commitment. Other potential affecting factors of relationship quality were also identified and
discussed. These included the importance of conversation, the role of punctuality when assessing service quality and the effect of relationship quality on the customers' evaluation of a company/brand.

Of the ten Pearson's R tests carried out, four were significant. The first of these was relationship quality and amount of talking. The mean Relationship Quality score was 3.2 with a standard deviation of 0.66 and the mean Amount of Talk score was 2.69 with a standard deviation of .82. There was a significant positive association between the two scores (r=.453, n=45, p<0.01). As Relationship Quality increased, so did corresponding scores for Amount of Talking to drivers. The second significant correlation was between Relationship Quality and Sense of Trust. The mean Trust score was 3.56 with a standard deviation of .76. There was a significant positive association between the two scores (R=.745, N=45, p<0.01). The next correlation which tested significantly was between Amount of Talk and Sense of Trust (R=.345, N=45, p<0.05). The fourth, and final, significant correlation was found to be between Satisfaction with Service scores and Commitment. The mean Commitment score was 1.91 with a standard deviation of 1.04 and the mean Satisfaction score was 3.53 with a standard deviation of 1.04. There was a positive association between the two variables. The association was significant (R=.361, n=45, p<0.05) and as Satisfaction with Service scores increase there was a corresponding rise in Commitment scores.

In the open text box questions in the survey, participants were able to write short sections of text to give descriptive answers. To analyse and interpret these answers, a small-thematic analysis was applied to the data. A list of text answers was generated, which counted the appearance of identical answers. These were then grouped into categories according to the content of the answer. For instance, if a participant had said "punctuality" while another said "being on time", both these were put into the same category.

For responses to the question regarding first impressions, text answers were put into the two categories of positive or negative impression. Answers in the positive impression category included responses such as kind, friendly, efficient, helpful and nice. Negative impressions were considered to be responses such as grumpy, miserable, bored and intimidating. The most common response was that drivers appeared to be in a rush, which was given by 8 survey respondents.

When asked what would improve this relationship, the most common category of answer (more friendly/happy attitude) included answers such a being more enthusiastic and polite. An interesting point made by one respondent was that if they had the same driver all the time, then they would build a greater sense of trust.

The final text box answer asked respondents to describe what typically happens when a driver delivers their parcels. 12 out of the 45 respondents mentioned some form of interaction, for instance having a brief chat or exchanging conversational pleasantries. The other respondents simply described a transaction of parcels which occurs at their front door.

The findings of this study are consistent with those of previous studies, but also expand on the theoretical models it was based on. The qualitative data collected from online retail customers showed that customers considered the punctuality of a courier driver to be a factor affecting their business relationship. Punctuality is an impacting factor on the customers' evaluation of a service act (Brady and Cronin, 2001) with the speed of service becoming an increasingly important attribute (Katz, Larson and Larson, 1991).

Customer relationships are influenced by everybody they encounter as part of the service, including the person who gives the customer their first impression of the company (Gummesson, 1987). This makes the service provider largely responsible for conveying the 'personality' of the service (Suprenant and Solomon, 1987). Customers also hold different expectations for 'relationships' as opposed to 'encounters'. Customers who expect relationships with service providers
expect personalized service communication. There are clear social and time use differences which coincide with the expectation of a service relationship or encounter.

Similarly to this, courier drivers’ felt that their job attitude enabled them to maintain good customer relationships. Job satisfaction is positively correlated to customer-orientation (Hoffman and Ingram, 1992). Furthermore, job satisfaction and organizational commitment have a significant impact upon the quality of the service delivered.

Morgan and Hunt’s (1994) model argued that commitment and trust are ‘key’ variables of relationship quality. The findings of this study paint a slightly different picture. While trust did correlate significantly with relationship quality, commitment did not. Instead, satisfaction with service and commitment seemed to have their own, secondary relationship coexisting along with other factors affecting relationship quality. finding bares more resemblance to the model of Rauyruen and Miller (2007). Rauyruen and Miller’s (2007) conclusions coincide with the finding of this paper that satisfaction with service correlates significantly with commitment to a company. It also supports the current study’s finding that trust and amount of conversation effect relationship quality, but not commitment.

This project answered all of its research aims. It found that while the current amount of communication between driver and customer appeared to be low, the average customer participant felt that communication is important. They also felt that more conversation would improve the quality of their business relationship. In their qualitative answers, online retail customers described punctuality as being an important factor in the business-to-customer relationship, which is a variable not considered by previous literature. nature of the service. The online survey of customers suggested that overall, customers have had good experiences and feel that they have a good quality of relationship with the courier companies they use. According to the courier drivers there is little influence on the perception of a company as a whole based on the business-to-customer relationship itself. This is an important difference in perception and is relevant to all selling situations.

The researcher’s 60-second pitch for this work would aim to briefly summarise this project, whilst also illustrating the depth it went into by using two data sets. In order to enliven the poster display, the researcher will aim for the poster to be eye catching, informative and concise in order to attract a greater amount of foot fall. The most informative aspect of the session would be the comparisons drawn between the business (courier) and customer viewpoints. No additional materials would be necessary, but the poster would display the results in more detail.

References


Introduction

The industry of science has widely developed in the last few years when dealing with the selection process and its methods. New selection methods include situational judgement test, personality and structured interviews have been developed to help selectors to base their decisions on something. On a daily basis we get bombarded with new models and suggestions that are there to make it easier for us to decide between things and people. I particular psychometrics and structured interviews are supposedly there to make selectors more objective, rational and methodical in their decision making when selecting (Schmidt, 2012). However intuition is a massive part within this field, which has been researched over again, yet no conclusive evidence has been found to eliminate whether rational plays a role within intuition or intuition plays a part within rationality.

When reviewing the psychology literature in how decisions are made Dipboye (1982) found that recruiters were using their intuition for first impression and how this can be affected by expectations (Macan & Dipboye, 1990). This research has looked at Three of the bigger influences in intuition and rational decision-making, which are the cognitive continuum theory (McDaniel, Whetzel, Schmidt and Maurer, 1994), the system theory (Kahneman and Tversky, 1973) and quasirationality (Dhami and Thomson, 2012). We all know what ‘being rational’ means, however there seems to be confusion with the way intuition is defined. Jung(1924) described intuition as "psychological function that allows knowing to occur by means of transmitting perceptions in an unconscious way". That sounds like, that the psychological industry is just trying to justify science with what our gut is already telling us. Meaning that all these methods and models are only been established to hide the obvious?

The interesting thing is still that recruitment companies have all access to these tools, yet many choose not to use them (Sjöberg, 2003). They tend rather to stick to open questioned interviews and more generalized interview structure specific to the firms values according to market research. Are they relying more on their gut instinct after all? When we make decisions, the main point of whether to make or not make a judgment comes from our cognition (Dhami and Thomson, 2012)

Dhami and Thomson (2012) argued for--- the existence of intuition in working together with rationality to make decisions. This assumption has been gathered during the continuous research of the cognitive continuum theory (Hammond, 1996, 2000) and is known by the term “quasirationality”. A fairly new term in the selection research that seems to have quit an influence on cognition as well as on decision-making processes. Dhami and Thomson (2012) believe that different modes of cognition in the human brain are released at the same time that can be both rational as well as intuitive. This can be identified when using the cognitive continuum theory. For this particular research it has been looked at whether the cognitive mode changes from intuitive to rationality within the decision making process.

During my own interview experience I have sometimes questioned the ability of what kind of decision style the selectors use to have a successful outcome. Yet I could never identify what the style or method was, and whether it was the personality, the work experience or general skills from the CV that helped him decide. Questions and thoughts that I had about decision making made me realize that recruitment would be my target group. The recruitment industry which deals with decisions every day, would be the target group in order to identify which decision making style is a
bigger predictor of selecting a candidate through to the next stage and that could eventually influence the near future of organizations. In order to find out what decision-making style recruiters use I went out and surveyed them. I was interested in how decision-making works in the real world and whether selectors rely on their “gut” feeling or listening to the facts.

As the job market is improving, and more opportunities for people arise, recruitment agencies are making more money by expanding their candidate lists, establishing closer relationship with clients and putting candidates forward for potential positions. Recruitment agents are faced with a number of cvs every day that they need to screen through. In order to make an efficient judgment and decision, it is assumed that recruitment consultants base their decision making on some kind of construct that is provided by the organization.

Eisenkraft (2013) a social psychologist, believes that selectors can use their intuitive judgments to predict employee job performance. However organizational psychologists like Huffcutt & Arthur (1994) argue that the inconclusive results of their research only show that there is no strong relationship between intuition and predicting successful job performance. They express their warnings due to the nature of intuition that it might be a threat to predictive validity. Research is debatable whether the value of intuition based first impressions and interviews. As of research suggests that it is more likely that intuition causes more incorrect predictions and less successful selection decisions.

It is hypothesized that intuition would be a bigger predictor when selectors are looking at candidates cvs. Whereas rational decision-making would be a bigger predictor when conducting an interview with the candidate. It is thought that the research will identify significance on both predictors that are used within the industry. Most selection decisions are based on first impression and the personality of the candidate. Research showed that if the candidate does not get on well with the selector during the interview, the chances are slimmer that the candidate will be put forward to the next stage (Schmidt-Mast, Bangerter, Buliard and Aerni, 2011).

**Method**

Part one of the study involved selectors completing the first impression questionnaire; they were each asked to insert their own participant number. Up to 60 Participants were selected at random across a range of job levels and job types within the recruitment companies. Participants were asked to complete the "first impression" questionnaire by choosing a cv that they would work on for the day. Reasons for using this type of questionnaire were explored. This phase was designed to help establish what consultants base their decisions on when looking at a cv for the first time. The decision that is made will result in making a selective decision on whether the candidate is through to the next selection Stage, the interview. Part two involved selectors completing the second questionnaire, "the post interview questionnaire". Which required the selectors to have an interview prior to completing the questionnaire, and the interview had to be with the candidates who’s cv was used for part one of the study. The overall survey was completed through an online portal, which was therefore accessible for everyone.

Results: It is hoped that results will provide a clear insight on what decisions are based on and whether there is a difference in decision making style when looking at a candidates Cv and meeting the person for an interview.

It is hoped that the selectors intuition will be a bigger predictor of bringing candidates through to the next selection stage when looking at their CV, whereas it is expected that rational decision making is a bigger predictor of selecting through to the next stage, when the selector conducted an interview with the candidate.

This research is not evaluating which decision is good or bad. It is looking mainly at the decision style that is applied to different stages of the selection process.
Discussion
It is understood that intuition will be a bigger predictor when looking at a candidates CV. Whereas rational is an expected predictor when meeting the candidate for an interview. Delegates are invited to guess which decision making style hypothesis is true and predict results by using their own intuition or rational during an interactive style presentation.

The results will be discussed in light on implications for future research and for practice in selection decisions and candidate reactions.

The research is also aiming for finding a bigger predictor of selection decisions in the industry rather than evaluating whether there are good or bad decisions. This might be of value for future research.


Sjöberg, L. (2003). Intuitive vs. analytical decision making: which is preferred?. Scandinavian