

Edition 75
Spring 2016

Psyche

The newsletter of The Psychometrics Forum



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A few words from your editor

Adrian Starkey



Adrian Starkey

Dear reader

I am very pleased to finally bring you edition 75 of **Psyche**. For those of you who have been watching carefully you will have noted that there has been something of a break publication since the bumper summer 2015 edition. I would like to thank all contributors to this edition and to offer my personal apology that it has taken so long to bring them to the wider TPF audience.

In the following pages you will find a varied selection of articles chronicling TPF events over recent months, plus Dr Hugh's latest piece in his 'Heroes, Landmarks and blind alleys...' series. In my humble opinion it is his best to date and sheds some welcome light on the evolution of the assessment of what has come to be known as 'the dark side' of personality.

It is also very pleasing to be able to include a piece by Anthony Thompson, winner of TPF's first student dissertation award. The committee is committed to recognizing and encouraging emerging talent and would welcome potential candidates for the 2016 award. On the related subject of high potential, readers will hopefully find the two write-ups from our 22 September event on Talent Management to be particularly informative. You will also hear how the statistical vs. actuarial judgment debate received a welcome airing at the New Frontiers in November. As an end piece don't let 'Psychic Psychologist' Rob Bailey pull the wool over your eyes as he did (initially) to attendees at the networking event that followed...

After 6 years and 20 editions I have decided that the time has come for me to hand over the reins of **Psyche** to the next generation and will be relinquishing the Editorship after edition 76. I have found the challenge of producing *Psyche* a rewarding one and it has provided the opportunity to develop old and new relationships within the Psychometrics community in the UK and beyond. For the time being I will continue to serve as a member of the TPF committee and to manage our LinkedIn affiliate group – currently standing at over 5500 affiliates globally.

Please let me know if you would be interested in picking up the editorial baton and in the first instance forward any expressions of interest to my normal e-mail address below. My successor will be appointed following discussion of prospective candidates by the full TPF committee.

Enjoy!

Adrian@xlr8talent.com

Copy deadlines

Summer – June 30th

Autumn – September 30th

Winter – December 30th

Spring – March 31st

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Heroes, landmarks and blind alleys in personality assessment

8. Connecting normal and dysfunctional personality characteristics

Dr Hugh McCredie, TPF Vice Chair



Hugh McCredie

Our starting point is the assertion of Hans Eysenck (1952) cited in the third article of this series:

We have shown...that neither neurotics nor psychotics are something *sui generis*, qualitatively different from normal people; instead, we have been able to show that there exists a 'neuroticism' continuum linking normals with neurotics, and a 'psychoticism' continuum, linking normals with psychotics. (p.222)

This was a landmark finding because most studies and measures of psychopathology had been premised on symptoms, without any assumption of continuity with the dimensions of normal personality.

Eysenck's trait of Neuroticism (N):

1. Was concerned with dispositions towards excessive emotionality (associated with extraverted neuroticism) or chronic depression (associated with introverted neuroticism).
2. Had been found to correlate highly with the Big Five dimension of the same name (e.g. Aluja et al. 2004).

His measure of Psychoticism (P)

1. Indicated proclivities to schizophrenia or bipolar disorder.
2. Associated with low Big Five Agreeableness (A) and low Conscientiousness (C) (Goldberg & Rosalack, 1994).

Personality Disorders

In the same year that Eysenck reached his conclusion of dimensionality, the American Psychological Association published the first edition of the *Diagnosics and Statistical Manual* (DSM-I, 1952). As well as the extreme, psychotic, conditions, it introduced a list of lesser dysfunctions termed 'Personality Disorders' (PDs), and hence must be regarded as another landmark. The PDs were defined by consensus, without rigorous empirical support, and included 'inadequate personality', 'sexual deviation' and 'addiction', dropped from later editions. From the time of DSM-III (1980), the list of PDs had, more or less, coalesced to the current, as in Table 1.

Table 1: DSM-5 (2013) Personality Disorders

Disorder	Definition
Cluster A (odd)	
Paranoid	characterized by a pattern of irrational suspicion and mistrust of others, interpreting motivations as malevolent
Schizoid	lack of interest and detachment from social relationships, apathy and restricted emotional expression
Schizotypal	a pattern of extreme discomfort interacting socially, distorted cognitions and perceptions
Cluster B (dramatic, emotional or erratic)	
Antisocial	a pervasive pattern of disregard for and violation of the rights of others, lack of empathy, bloated self-image, manipulative and impulsive behaviour
Borderline	pervasive pattern of instability in relationships, self-image, identity, behaviour and affects often leading to self-harm and impulsivity
Histrionic	pervasive pattern of attention-seeking behavior and excessive emotions
Narcissistic	a pervasive pattern of grandiosity, need for admiration, and a lack of empathy
Cluster C (anxious or fearful)	
Avoidant	pervasive feelings of social inhibition and inadequacy, extreme sensitivity to negative evaluation
Dependent	pervasive psychological need to be cared for by other people.
Compulsive	characterized by rigid conformity to rules, perfectionism and control (not the same as obsessive-compulsive disorder)

Four, more tentative, PDs were appended across the different DSM editions: Passive-Aggressive, Depressive, Sadistic and Self-defeated.

Assessing personality disorders

Initially, the diagnosis of particular PDs was reached via a structured interview. However, Morey et al. (1985) developed an instrument based the items in the MMPI (see Article 3). As the developers explained:

First, clinicians searched the MMPI for items whose content they felt were representative of the relevant DSM-III [PD] criteria. These scales were then refined using iterative empirical item-analytic techniques. The resulting scales were then investigated using correlational analyses to yield further information on the nature of the scales and their interrelationships. (p.246)

Morey et al. found that many items proved common to two or more scales due to the 'considerable degree of overlap among the DSM-III criteria'. Accordingly, they devised two sets of scales:

1. The Complete Scales
2. The Non-overlapping scales created by assigning overlapping items to the one scale with the highest correlation. The average intra-correlations for the two sets was .38 and .34, respectively. This compared with .26 for mean correlations amongst the Big Five factors (Digman, 1997).

Exploring links between personality disorders and the Big Five factors

Using the MMPI-PD scales, Wiggins & Pincus (1989) explored the possibility that PDs could be located within the interpersonal circumplex (see Article 6) described by the Extravert (E) and Agreeableness (A) dimensions

of the Big Five model. They succeeded in locating six of the 11 PDs: Schizoid, Antisocial, Histrionic, Narcissistic, Avoidant and Dependent, but Neuroticism (N) and (to a lesser extent) Conscientiousness (C) were needed to account for the complete list. Costa & McCrae (1990) reported correlations between the complete version of MMPI-PD and NEO PI scales using self-report, spouse and peer ratings. Table 2 records moderate and higher effects ($r \geq .3$) using the highest obtained correlations from the three sets of ratings, usually those based on self-reports.

Table 2: Correlations of MMPI Personality Disorder Scales with NEO Personality Inventory Factors

Disorder	N	E	O	A	C
Paranoid	.36			-.31	
Schizoid		-.62			
Schizotypal	.46	-.48			
Antisocial				-.35	-.42
Borderline	.47				-.46
Histrionic		.65			-.38
Narcissistic		.56			
Avoidant	.52	-.54			
Dependent	.50	-.30			
Compulsive	.50				
Passive-Aggressive	.39				-.33

Schroeder et al. (1992) correlated an alternative measure, the Dimensional Assessment of Personality Pathology—Basic Questionnaire (DAPP-BQ) with NEO-PI. Factor analysis yielded a near-orthogonal (independent) five-factor solution accounting for 70.6% of the total variance. They concluded:

The results of this study largely confirm our expectations that these dimensions of personality disorder are closely related to the Big Five factors of normal personality... The relatively large proportion of DAPP-BQ content related to Neuroticism reflects [its] prominence...in the definition of the domain of personality pathology. In contrast, the NEO-PI dimension of Openness to

Experience appears to play a relatively minor role in explicating personality disorder.

Widiger, (1993) picked up the apparent low significance of Openness to Experience (O). Having argued for differentiating PDs on the basis of mainstream personality dimensions, he suggested that the definition of a personality disorder in *DSM-III-R* could provide a rationale for the setting of a threshold i.e.

It is only when personality traits are inflexible and maladaptive and cause either significant functional impairment or subjective distress that they constitute Personality Disorders (APA, 1987, p. 335).

He went on to suggest that O, which might signify ideal mental health in a normal creative individual, might also reflect the impulsion of a schizotypically-disordered person to 'believe in a variety of aberrant and unusual ideas' (p. 85). The studies which found negligible PD correlates for O involved non-clinical samples.

Personality Disorders and the 'Dark Side'

In the wake of DSM-IV (1994), Robert and Joyce Hogan did heroic work in popularising the PD taxonomy and bringing it to bear in the work context. They provided a useful explanation of the relationship between PDs and mainstream personality measures:

Personality disorders can be seen as a cross-section in the middle of the distribution...that has not been well-defined in psychometric terms...half-way between...measures of normal personality... and measures of abnormal personality...they occur at every level of society and have detrimental effects on interpersonal and career effectiveness... usually unrelated to neurosis or psychosis (Hogan & Hogan, 1997, p.3)

The Hogans believed that the Big Five factors derived from the evolutionary needs of a social species (alluded to in earlier articles). However, early individual inadequacy can result in the development of 'dark side' dispositions which:

Horney (1950)summarised in terms of ... (1) moving toward people...managing one's insecurities by building alliances (2) Moving away from people... managing one's feeling of inadequacy by avoiding contact...and (3) Moving against people.. managing one's own self doubts by dominating and intimidating others...Horney's

taxonomy ...is implicit in the classification of personality disorders contained in DSM-IV (Hogan & Hogan, 1997, p.2)

The Hogans translated the DSM-IV categories into more generally recognisable labels, regrouped these under Horney's clusters and developed a questionnaire, the Hogan Development Scale (HDS), per Table 3.

Moscoso & Salgado (2004, p.357) interpolated a stage between the normal and pathological:

With continuum as a basis, it could be possible to distinguish three groups of people: (a) normal, adjusted people, who show functional tendencies of thinking, feeling, and behavior; (b) normal people who present dysfunctional tendencies in one or more areas of thinking, feeling, and behavior, and consequently show problems of interpersonal relationships at work; and (c) people with maladaptive personality tendencies that are conceptualized as personality disorders in the psychiatric taxonomies.

They termed these group (b) tendencies 'dysfunctional personality styles'. Geoff Trickey, a distributor and

user of HDS, provided a useful insight on how such dysfunctional styles may become manifest:

[The] eleven dispositions that would generally be considered desirable attributes...flip into destructive mode if not managed well...typically become[ing] apparent during novel or stressful periods, or when the individual feels relaxed or invulnerable. (Trickey & Hyde, 2009, p.3)

Personality dysfunctions: categories or dimensions?

Skodol et al. (2011) proposed radical changes to the diagnosis of PDs, based on the Big Five model of personality. Subsequently, Widiger & Costa (2012) reported high levels of support for the proposition that "personality disorders are better understood as variants of normal personality than as categorical disease entities". However DSM5 (2013) retained the original 10 categories whilst including the dimensional approach for 'further study' in a separate section of the manual. The issue of whether categorical PDs are a blind alley and dimensionally-based ones a clear landmark is not yet decided.

DSM-IV Personality disorder	HDS Scales	Correlates of HDS scales	
		MMPI-PD	Hogan Personality Inventory FFM equivalents
Moving Away or Intimidation			
Borderline	Excitable	67	N76; C-66; Ea-63; A-60
Paranoid	Skeptical	62	N60; C -60; A-52; Ea-51
Avoidant	Cautious	60	Ea-70; N60; A-41; Es-37; C-34
Schizoid	Reserved	47	A-67; C-55; Ea-53; N45; Es-32
Passive-Aggressive	Leisurely	46	C-33
Moving Against or Flirtation and seduction			
Narcissistic	Bold	55	Es34
Antisocial	Mischievous	49	Es48; C-35; O31
Histrionic	Colorful	53	Es67; Ea44; O35
Schizotypal	Imaginative	49	C-37; O32; Es31
Moving Towards or Ingratiation			
Dependent	Dutiful	Negligible	C33
Compulsive	Diligent	Not significant	C36
Decimal points omitted. N=Neuroticism; Ea=Extraversion-ambition; Es=Extraversion-sociability; O=Openness; A=Agreeableness; C=Conscientiousness			

References

- Aluja, A., Garcia, O., & Garcia, L.F. (2004). Replicability of the three, four, and five Zuckerman's personality super-factor analyses of the EPQ-R, ZKPO, and NEOPI-R. *Personality and Individual Differences*, 36, 1093–1108.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed, rev.). Washington, DC:
- Costa, P. T., & McCrae, R. R. (1990). Personality disorders and the five-factor model of personality. *Journal of Personality Disorders*, 4, 362–371.
- Digman, J.M. (1997). Higher-order factors of the Big Five. *Journal of Personality and Social Psychology*, 73, 1246–1256
- Eysenck, H. J., (1952) *The scientific study of personality*, London: Routledge & Kegan Paul Ltd
- Goldberg, L. R. & Rosalack, T. K. (1994) The big-five factor structure as an integrative framework: An empirical comparison with Eysenck's P-E-N model. In C. F. Halverson, G. A. Kohnstamm & R. P. Martin (Eds). *The developing structure of temperament and personality from infancy to adulthood*, (p7–35) Hilldale, NJ: Erlbaum
- Hogan, R. & Hogan, J. (1997) Hogan Development Survey Manual, Tulsa: Hogan Assessment Systems
- Morey, L. C., Waugh, M. H., & Blashfield, R. K. (1985). MMPI scales for DSM-III personality disorders: Their derivation and correlates. *Journal of Personality Assessment*, 49, 245–251.
- Moscato, S. & Salgado, J. F. (2004). "Dark side" personality styles as predictors of task, contextual, and job performance. *International Journal of Selection of Assessment*, 12, 356–362.
- Schroeder, M. L., Wormworth, J. A. & Livesley, W. J. (1992) Dimensions of Personality Disorder and Their Relationships to the Big Five Dimensions of Personality, *Psychological Assessment*, 4, 1, 47–53
- Skodol AE., Clark LA., Bender DS., et al Proposed changes in personality and personality disorder assessment and diagnosis for DSM-5. Part I Description and Rationale. *Personal Disord.* 2011;2:4–22.
- Trickey, G. & Hyde, G. (2009) *A decade of the dark side: fighting our demons at work*: London: Psychological Consultancy Limited
- Widiger, T. A. (1993). The DSM-III-R categorical personality disorder diagnoses: A critique and an alternative. *Psychological Inquiry* 4 (2): 75–90
- Widiger, T. A. & Costa, P. T. (2012) Integrating Normal and Abnormal Personality Structure: The Five-Factor Model, *Journal of Personality* 80:6, 1471–1506
- Wiggins, J. S. & Pincus, A. L. (1989). Conceptions of personality disorders and dimensions of personality. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1, 305-316.



Dr Kate Hammond

Unconscious bias: further developments in implicitly

Dr Pete Jones at TPF, 25 June,
Working with Diversity event

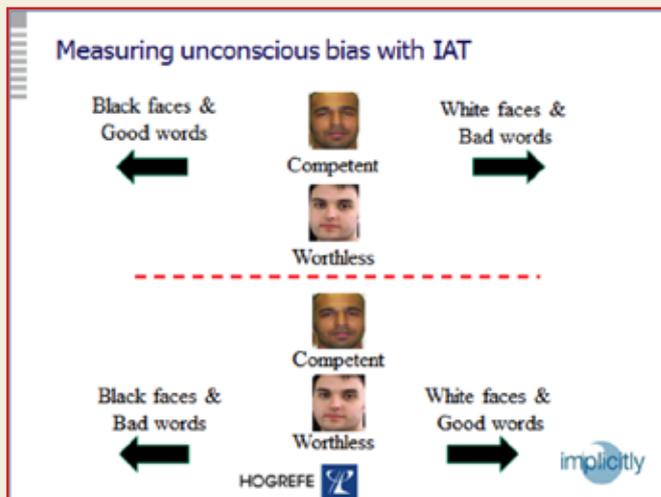
*Review by Dr Kate Hammond,
Business Psychologist & Associate Lecturer*

When someone has a twitter account named 'fatwhitebloke', you know you are not going to get the run of the mill. Dr Pete Jones' presentation certainly met all expectations of being eye opening and challenging. At the same time, it was thoroughly embedded in the literature of diversity and professional evidence. Pete has presented several times at TPF, including New Frontiers events and workshops, as well as contributing to **Psyche** (Spring 2013, Spring 2012). His June presentation gave an update on his latest developments. For newcomers to unconscious bias, it gave a full understanding of how our unconscious biases can affect our behaviours and decision making and what types of strategies we can employ to manage them.

Pete began by giving a brief over-view of the history of implicit association, and how the suggestion of measuring mental processes through the speed of processing had first arisen in the nineteenth century. It was not until the late 1990s, however, that technological advances provided the means to do just that, with Harvard University's Implicit Association Test (IAT). The basic premise of the test is that it takes a split second longer to associate positive words with images we are less positive about than images we feel more positive about, and vice versa for negative words. So, in a test for reaction to weight, the test-taker is asked to use a right arrow key for all positive words and in a concurrent task to do this for all images of overweight people. Someone with an unconscious bias against over-weight people would take slightly longer to assign an image of an overweight person to the 'positive side', or may even assign them to the negative side. On the other hand, it would be cognitively easier to assign both slim people and positive words to the same area. The direction of positive/negative is also changed during the test (see figure 1).

While some may be familiar with the Harvard Project 'Implicit' (open access at <https://implicit.harvard.edu/implicit/index.jsp>), Pete explained some of the similarities and differences to his own work with 'Implicitly'. Both use the same theoretical underpinnings, but 'Implicitly' has been linked to behaviours (criterion referenced) for example with racially motivated prisoners to assess when levels of bias are likely to actually relate

Figure 1: Assignment of words (constructs) and images (concepts) during an IAT



to behaviours. 'Implicitly' is also controlled as, ethically, full feedback should be given alongside results and a support strategy also put in place. Test-retest reliability is also high for Implicitly (.83), but unavailable for the open access Harvard test.

All attendees were given the chance to take 'Implicitly' in advance, which gave a good opportunity to discover how it felt first hand to experience the test, with full feedback provided after the presentation. This experience also gave the opportunity to find out just how hard it is to 'game' the system as responses are so fast that trying to consciously override the system is very difficult, even when employing deliberate strategies such as priming. In fact, Pete explained, the amygdala, part of the 'old brain' unconscious processing, reacts faster than our conscious perception at 32 milliseconds. The source of any bias is socially driven as we form categories that drive our biases. What categories mean to us is driven by our experiences. So for example, Pete explained how his category of 'young Afro-Caribbean male' will be influenced by his journey to work where he sees them cleaning the train, working barriers, waiting in fast-food outlets and then acting as security guards. Likewise, his gender category will be affected by those he sees as receptionists, PAs and bosses.

The typical issues that arise from biases against some groups include slower progression to leadership, lower selection rates and performance ratings, and a higher incidence of disciplinary action. Add to this the issue of cloning of existing leaders/job holders. Pete outlined some research which suggested that three out of ten line managers have an ethnicity bias at a level

affecting their behaviour, while this figure is one in five for senior managers. In a DWP study, an identical CV took nine applications to get to interview if it had a typical 'white' name compared to sixteen if it had a black or Asian name. Other research suggests that bias against disability is higher among workers than in the general population, while HR show the highest levels. Nearly 50% of HR officers also showed bias against overweight women. These are therefore key challenges for business to face

A key focus of the presentation was the motivations that people and businesses may have to do something about bias. These divide into external factors, such as people's concerns about how they are viewed by others and internal factors, such as people's concern to mitigate possible biases and feel better about themselves. These motivations can be plotted on a 2x2 matrix which is a helpful means of considering how to strategically market diversity initiatives: the findings are that approximately a third of people are highly internally motivated, with low external motivations, that is, it is the 'right' thing to do. An equal proportion, however, are motivated highly by both internal and external factors. Articulating the business case as well as the moral case is therefore key to securing business 'buy-in' with the potential to appeal to over two-thirds of the workforce.

In Pete's words recent developments in automatic interpretation and feedback, combined with relatively low costs, are making it a 'no-brainer' for companies to undertake testing. Pete sees the potential, however, to extend beyond diversity initiatives into forensic psychology, personality testing, clinical psychology, health psychology and consumer psychology. We look forward to hearing about these new developments in future presentations.



Philippa Riley

Finding future leaders in your organisation

Mark Powell at TPF, 22 September, Talent Management event

Review by Philippa Riley, Principal R&D Consultant, a&dc Ltd

What is leadership potential?

What is the relationship with between potential and performance?

How can potential be measured?

These were some of the questions that Mark Powell from CEB addressed in his session 'Finding Future Leaders in Your Organisation'. Referencing his background across the Civil Service, Consulting and Financial Service sectors, Mark's presentation primarily centred on CEB's approach to high potential assessment, within the context of some of the broader issues around the topic.

During the session, Mark presented some powerful, and at times somewhat alarming, statistics relating to the identification of potential and talent management. For example, CEB's research indicates that high potentials are typically seen as being twice as valuable as those who are not assigned this label, but that half of all of those placed on high potential development programmes drop out of them within 5 years. The research he presented also indicated that a significant proportion of organisations use current role performance as a proxy indicator of potential. However, the evidence suggested that only a small proportion (15%) of high performers are actually high potential. Mark spelled out one significant implication of this being that using high performance as the criteria for identifying high potential will result in only 1 in 7 of those identified actually being high potential. Both the drop out of high potentials from programmes designed to develop them, and the implications of misidentification, mean that there are undoubtedly significant direct and opportunity costs associated with poor high potential identification and management.

The question as to whether 'high potential' simply means 'potential for leadership' featured in the session. Discussion highlighted broader views of potential, such as in relation to technical leadership, which arguably may not fall into as neat a category and defined skill set as typical senior management roles. The question was raised as to whether a different set of skills was required for 'alternative' high potential groups.

Following the discussion of this broader context and issues around potential measurement, Mark presented CEB's model of high potential. This comprises three elements: 'Ability' (to be effective in more responsible

and senior roles), 'Aspiration' (to rise to senior roles) and 'Engagement' (to commit to the organisation and remain in challenging roles). Mark described how high potentials must have all of these three components, and characterised what different combinations of missing elements could mean, ie:

'Misaligned stars' are those with high ability and engagement, but low aspiration; they are competent and committed to the organisation but lack drive.

Engaged dreamers are those with high aspiration and engagement, but low ability; they are engaged and ambitious but without the skillset to realise their ambition.

Unengaged stars are those with high aspiration and ability but low engagement; they could be high potential if they were in a different organisation.

Mark described CEB's approach to measuring each of these three components, which included track record

(to assess ability), a variety of psychometric tests (to assess ability and aspiration) and an interview (focused on engagement). The measurement of Engagement was arguably the most challenging, with some questioning from the audience as to the approach taken to this. The output from these assessments is a 'stack rank' of candidates enabling the objective identification of potential against these criteria.

Given the discussion and debate during the session, it was clear that the issues of high potential identification and measurement were of great interest and relevance to the audience. Additionally, it was apparent from the questions and discussion that potential identification and measurement is far from being a topic around which there is clarity and consensus across practitioners operating in this space. Mark's session provided a thought-provoking and considered approach to this challenging area.

Assessing learning agility to predict high potential

Dr Gene Johnson at TPF, 22 September, Talent Management event

Review by Sarah Perrot, Cresco Consulting Ltd

Gene Johnson from Working Matters presented a pacey, lively session that addressed the issue of how to assess Learning Agility to predict high potential.

The idea of assessing learning agility has been around for twenty years, but the idea is still developing and there is an argument to be made that its time has now come. Perhaps this is because organisations are concerned to find a magic bullet to identify high potential. However, Gene's view is that a simplistic solution does not exist because we are dealing with the complexity of people and with numerous variables that can affect performance and/or assessment.

Gene stated that the established Nine Box Model of talent management remains a very useful model with the proviso that it should be used 'vigorously'. As with most models it is effective when believed in and used well. The constant challenge in the use of this model is that managers have



Sarah Perrot

to provide evidence and in doing so have a tendency to apply innate subjective biases.

The phrase 'What has got you here, won't get you there' is a recognised truism. From a survey conducted by Corporate Leadership Council (CLC 2010) 15% of high performers in organisations have high potential. Interestingly in the same survey only 15% of firms asked were happy with their measurements of high potential.

Mark Effron, a thought leader in the field, was quoted as saying that 28% of firms do not define high potential at all. It should be noted that his research was with a sample of 134 North American organisations and that there has been very little research on the subject in the UK and the rest of Europe.

We were reminded of CLC's definition of High Potential under the following headings:

- Interpersonal skills
- Drive
- Ability
- Aspirations
- Learning agility

An accepted definition of Learning Agility was proposed as: "Willingness and ability to learn the right lessons from experience and to apply those lessons in other new first time situations. Knowing what to do when one doesn't know what to do." It was commented that those who 'derail' in their careers either do not reflect or do not reflect effectively. Gene proposed that those who are truly high potential are those who are open to feedback and learning and adapt their behaviour accordingly. Successful leaders live their day-to-day experiences, reflect and subsequently adapt their behaviour.

Hence, potential is not shown through what you can already do in a job, but is best understood in terms of being able to learn something new and hence to perform well in a first time situation. Those who cannot let go of old patterns of behaviour, or who do not recognise the nuances in different situations, tend to fail in novel circumstances and the changing world.

A key question is whether learning agility can predict and identify potential? Although anecdotal evidence from observation of managers in the real world is encouraging there is little scholarly research examining

the empirical relationship between learning agility and leadership effectiveness. Gene acknowledged that this is a weakness. To better understand potential for advancement there is a need to undertake further longitudinal research examining predictors of success following promotion.

Some of the assessment options for learning agility are:

1. Learning Agility Assessment Inventory (LAAI) from Columbia University – LAAI is built around the following five elements: Innovate, Perform, Reflect, Take Risks and Defend
2. CCL's Prospector
3. DDI's Leadership Potential Inventory (LPI)
4. Hay's Growth Factor Inventory (GFI)
5. PDRI/CEB's Learning Agility Indicator (LAI)
6. Talentx7 (De Meuse)
7. Korn/Ferry's CHOICES® and viaEDGE

Gene described Korn Ferry's CHOICES diagnostic as having five elements: Mental agility, People Agility, Change Agility, Results Agility and Self-awareness. In total 27 dimensions underlie this model that resembles emotional intelligence with meta-competencies.

One big question is whether it is possible to develop Learning Agility? Gene's answer is probably yes, but it takes time and is not easy. To help in the journey Gene recommended the book 'Become an Agile Leader' by Victoria V. Swisher. Bedford (2011) is more bullish proposing that given that learning agility can be described in terms of behaviours it can definitely be learnt.

Those who attended were grateful to Gene who delivered an interesting and stimulating presentation.

Supporting References

Bedford, C. R. (2011). *The role of learning agility in workplace performance and career advancement*. A dissertation submitted to the faculty of the graduate school of the University of Minnesota.

Church, A. (October, 2014). How do top companies define & assess their HiPos? Highlights from a 2014 benchmark study. *Paper presented at the 10th Annual SIOP Leading Edge Consortium*.

Connolly, J. (2001). Assessing the construct validity of a measure of learning agility. *Dissertation Abstracts International*, 62 (10), 4-B. (UMI No. 3013189)

De Meuse, K.P., Dai, G., Eichinger, R. W., Page, R. C., Clark, L. P., & Zewdie, S. (January, 2011). *The development and validation of a self-assessment of learning agility*. Korn Ferry International Research Report.

De Meuse, K. P., Dai, G., Hallenback, G.S., and Tang, K. Y. (2009). *Using learning agility to identify high potentials around the world*. Korn Ferry Institute Research Study.

De Meuse, K. P., Dai, G., Swisher, V. V., Eichinger, R. W., & Lombardo, M. M. (2012). Leadership development: Exploring, clarifying, and expanding our understanding of learning agility. *Industrial and Organizational Psychology*, 5(3), 280-286.

De Rue, D. S., Ashford, S. J., & Myers, C. G. (2012). Learning agility: In search of conceptual clarity and theoretical grounding. *Industrial and Organizational Psychology*, 5(3), 258-279.

Dries, N., Vantilborgh, T., & Pepermans, R. (2012). The role of learning agility and career variety in the identification and development of high potential employees. *Personnel Review*, 41(3), 340-358.

Effron, M. (2015). *Potential: Who's doing what to identify their best?* NYC: New Talent Management Network.

Eichinger, R. W., & Lombardo, M. M. (2004). Learning agility as a prime indicator of potential. *Human Resource Planning*, 27, 12-16.

Hallenbeck, G. S. (no year). *Unlocking potential: Understanding and applying tools to identify and develop learning agility*. Korn Ferry International.

Lombardo, M. M., & Eichinger, R. W. (2000). High potentials as high learners. *Human Resource Management*, 39(4), 321-329.

McCall, M. W., Lombardo, M. M., Morrison, A. M. (1988). The lessons of experience: How successful executives develop on the job. Lexington, MA: Lexington Books.

McCauley, C. (2001). Leader training and development. In S. Zaccaro & R. Klimoski (eds.), *The nature of organizational leadership: Understanding the performance imperatives confronting today's leaders* (pp. 347 - 383). San Francisco, CA: Jossey-Bassey.

Mitchinson, A., & Morrison, R. (April, 2012). Learning about learning agility: A white paper. New York: Center for Creative Leadership and Teachers College.

New frontiers 2015

24 November Seminar

*Review by Dr Hugh McCredie,
TPF Vice Chair*



Hugh McCredie

This year's New Frontiers in Psychometrics event was themed 'From intuition to algorithms in selection and development'. It was inspired by the assertion of Paul Meehl (1954), reprised by the Nobel prize-winning psychologist Daniel Kahneman (2012), that predictions based on the subjective impressions of trained professionals were consistently less accurate than statistical predictions made by combining a few scores or ratings according to a rule.

It was my privilege to open the proceedings by revealing the Causal Flow Model (Spencer & Spencer, 1993), which postulated that personality traits and abilities underpinned the acquisition of competencies that, in turn, impacted on performance. I then proceeded to outline my own efforts, with 16PF Form A over several decades, to develop computerised personality predictions of managerial performance, demonstrating, en route, that I had established small to moderate correlations between the personality characteristics of general mental ability (g), stability (N-), low Agreeableness (A-) and Extraversion (E), with the competency clusters of Intellect, Interpersonal skill, Results-orientation and Adaptability, respectively. I then presented a generic personality algorithm, involving these four factors plus middle range scores for Conscientiousness (C) and Openness (O), for predicting managerial performance. The algorithm is provided in full in McCredie (2014).

Our next two presentations by leading UK psychometric suppliers, each demonstrated their tool kits for developing algorithms from competency



taxonomies associated with their staple personality measures. The implication of both presentations was that, non-specialist, line managers can relate much more readily to behavioural competencies than to personality constructs. Whilst initially designed for small business, without in-house selection specialists, both suppliers reported that their processes were, increasingly, being administered by psychometrically knowledgeable external advisers/consultants.

John Hackston of OPP presented first on ‘Closing the academic-practitioner-non-expert gap:



John Hackston of OPP Ltd

automated selection in SMEs’. This featured the ‘Sirius’ platform incorporating 18 competencies related to the 16PF measure. For any particular role, the end user assigns each of the competencies to one of five categories of impact: Critical, Large, Moderate, Small, None; with a limit to the number included in the first two categories. The competencies are then classified according to frequency of application to differentiate within those of equal impact. Candidates then complete the 16PF measure, plus a full-length ability test, where appropriate. Scores are then processed by algorithm to yield a weighted total that can be compared to a norm to reveal the degree of fit to each competency, and to the role in general as the basis of sifting for the next stage of the selection process.

Rab MacIver and Lauren Jeffery-Smith of Saville Consulting UK Ltd presented on the topic, ‘Improving report interpretation- consistent valid, bespoke?’ Rab opened the presentation with the assertion: ‘User validity, argues that validity in practice is not about the validity of a test scale, but about the validity of



Rab MacIver and Lauren Jeffery-Smith of Saville Consulting UK Ltd

interpretation from test outputs in use’. Thus, in the context of selection, it would be the extent to which performance predictions, e.g. interpretations of test scores, were matched by subsequent performance in reality (see MacIver et al. 2014).

Lauren suggested two basic approaches to selection; both had attractions and limitations. The first was to use standard predictive measures (e.g. Saville’s WAVE); the second was a role- or organisation-specific measure. She suggested that the use of a generic competency taxonomy delivered the best balance of cost-effectiveness between the two and termed this ‘The Third Approach’. The heart of the process was the mapping of the client organisation’s competency requirement for the role in question onto a generic competency taxonomy that in turn mapped onto the Great Eight competencies and the Big Five personality factors. One of the benefits of relating client-selected competencies to such a standard measure is the psychometric soundness and the psychological comprehensiveness of the latter. Lauren found similar, small but significant, correlations between WAVE scores and leadership competencies to those that I reported for 16PF Form A, above. When corrected for unreliability of the criterion ratings these achieved moderate effect sizes.

The concluding presentation was from Helen Baron, currently Convenor of the BPS Assessment Centre Standards Working Group. Her topic was ‘Creating selection algorithms: What is the evidence?’ The connection with the earlier presentations lay in the Group’s focus on AC decision making and she reported

'Research indicates that arithmetic combinations of scores (e.g. averaging) are associated with much higher validities than consensual methods of determining final scores through discussion by Centre staff.'

Helen explored the reasons for the modest criterion-validity of ACs (i.e. slightly lower than that for personality measures). Amongst the most frequently reported issues were:

Assessors being asked to work extremely long hours

The order in which candidates take part in exercises not being the same for all

Wash-ups which are rushed due to lack of time

She shared meta-analysis evidence showing 50% increase in validity with arithmetic over consensual methods and some interesting, if challenging, options for the arithmetic combining of scores.

References

McCredie, H (2014) Towards a generic algorithm for selecting managers, *Assessment & Development Matters*, 6, 1, 11–13

MacIver, R., Anderson, N., Costa, A-C., & Evers, A. (2014). Validity of Interpretation: A user validity perspective beyond the test score. *International Journal of Selection and Assessment*, 22(2), 149–164.



Helen Baron Convenor of the BPS Assessment Centre Standards Working Group

TPF student MSc dissertation award – Anthony Thompson

Introduction by Nicholas Bennett, Ledborough Associates & TPF committee member



Nicholas Bennett

In 2014, the Psychometrics Forum Committee decided that it was important to encourage, support and acknowledge good practice in the area of Psychometrics and Personality Research.

As part of that initiative, we announced the launch of the MSc Student Award to recognise and encourage the next generation of psychometric professionals. An expert panel of judges was duly set up to review the Award entries submitted.

We researched the universities that offered an Occupational Psychology Masters' degree and TPF committee members Kate Hammond, Zorica Patel and Nicholas Bennett were delegated the task of contacting and

following up each one with details of the Award and the submission requirements.

In summary, the submission requirements included that:

- The work must have taken place as part of an MSc in Occupational Psychology at a UK University
- Entries must have been based on work submitted in the three years preceding the deadline of 30 September 2015.
- Entrants had to submit a 1500 word maximum summary of their dissertation/project as a fully referenced paper targeted at a psychometrics user readership.

Thus, the aim of the Award was to celebrate excellence in the enhancement of knowledge and application in the field of Psychometrics and, in particular, to encourage those who were just embarking on a career within psychometrics.

It is very pleasing to report to the Psyche readership that after due deliberation (and much emailing) the judging panel made the award to Anthony Thompson from Coventry University's Occupational Psychology Department.

Anthony was able to come down to London on Tuesday 24 November to attend our New Frontiers event to receive the Award from TPF Chair Xanthy Kallis.

In addition to a fine scroll declaring him winner, Anthony received a cheque for £250, the entitlement to free attendance to the Forum meetings until 1 November 2016 and, the reduced rate training that we offer Forum Members providing he met



Anthony Thompson and Xanthy Kallis

any prerequisites required for that particular course. Anthony's Thompson submission is reproduced below. So what for 2016? Do you have a Masters Dissertation that could be entered for this Award?

We hope that you do!

The team role preference test: psychometric validation of a new team role inventory

Anthony Thompson



Anthony Thompson

Introduction

As work has become increasingly complex, the growth of teams has been witnessed across all organisational sectors and levels of organisational hierarchy (DeChurch & Mesmer-Magnus, 2010). Despite the transition of work tasks away from the individual and towards teams, many organisations continue to recruit and select employees based heavily upon an individual's job-specific knowledge, skills and abilities (KSAs) (Barrick *et al*, 1980). This approach can be problematic. Although an individual's KSAs may fit the requirements of the job (person-role fit), this does not automatically mean that the individual will integrate well with their colleagues (person-team fit). Unlike person-job fit, person-team fit is often measured informally and subjectively (Piasentin & Chapman, 2006) and, to date, only a handful of team role selection measures have managed to gain traction within organisations.

One reason for this may be that team roles are highly contextual and preferred team roles can differ across situations (Obagun, 2010). This can make them difficult to measure accurately. One way in which this could be addressed is via the incorporation of the Situational Judgement Test (SJT) methodology (Mumford *et al*, 2008). SJTs are psychometric tests which present candidates with job-related scenarios and ask test takers to select between several possible responses to the scenario (Lievens, Peeters & Schollaert, 2008). The scenarios in an SJT can be derived through job analysis and the use of subject matter experts within an organisation; meaning that the tests can be highly tailored to specific jobs and organisations. Furthermore, SJTs have construct validity (McDaniel & Nguyen, 2001), incremental validity beyond both cognitive ability and personality testing (McDaniel *et al*, 2007) and less adverse impact upon minority groups (Whetzel & McDaniel, 2009). However, concerns have been raised regarding the transparency and vulnerability of SJT response formats to biased responding (Lievens, Peeters & Schollaert, 2008; Ployhart & Ehrhart, 2003). Whilst there are significant advantages to the development of SJT team role inventories, alternative response formats should be considered to minimise the impact of biased responding.

Traditionally, Likert scale response options have been one of the most popular methods used in the measurement of attitudes (Dittrich *et al*, 2007).

However, Likert scales have been criticised for being too artificial and not accurately simulating natural thought processes (Nunnally & Bernstein; 1994). Laming (2004) argues that all judgements are inherently comparative and that researchers should utilise pairwise comparisons to illicit more accurate responses in surveys. Pairwise comparisons are not a new concept within Psychology. Its origins can be traced back to Thurstone's (1927) law of comparative judgement. Thurstone's law argues that it is possible to measure an individual's preference for, or understanding of, stimuli by asking them to choose between a series of related, but discrete, binary options. This approach to psychometric design has several advantages, particularly when it comes to reducing biased responding. For instance, pairwise comparisons mean that individuals cannot endorse every single item; making it difficult for candidates to offer acquiescent responses (Cheung & Chan, 2002). In addition to reducing acquiescence, the comparative judgement methodology has also been shown to reduce socially desirable responding (Bartram, 2007). Pairwise comparisons could therefore have a role to play in protecting team role inventories from biased responding.

The current study aims to develop and validate a new team role inventory, known as the Team Role Preference Test (TRPT), combining both pairwise comparison and SJT methodologies. Therefore, the TRPT should be able to retain the positive elements of the SJT methodology whilst taking steps to correct for its susceptibility to distorted responding. Given that the TRPT is a new psychometric tool combining different methodologies, the current study sought to evaluate whether this approach is both valid and reliable. Therefore, face validity, internal consistency and construct validity will be explored in addition to the TRPT's overall test-retest reliability.

Scale Development

To develop test items, a two stage process was followed. Firstly, a theoretical foundation for the TRPT was established by conducting a review of the extant team role literature. The literature review revealed a study conducted by Mumford *et al* (2006) who compared eight different team role inventories with a combined total of 120 team member roles. Through the process of Q sort analysis Mumford *et al* were able to identify ten differing team roles which individuals

can occupy. These ten team roles were selected to form the foundation of the TRPT. The second stage was to have a panel of five subject matter experts (SMEs), recruitment professionals with over 3 years' experience of hiring individuals to join teams, review the ten team roles to ensure they possessed sufficient face validity. The SMEs participated in a focus group during which they were asked to create a list of team roles, drawing upon Mumford *et al* (2006) findings and their own work experience. Through this process the SMEs produced nine team roles; Organiser, Innovator, Teacher, Completer, Evaluator, Socialiser, Mediator, Promoter and Connector. The nine team roles are functionally similar to those of the Mumford *et al* typology. However, the SMEs felt that the Mumford *et al* co-operator role was sufficiently covered by the completer team role and was therefore omitted.

Once a definitive list of team roles had been finalised, test items were developed. A second focus group session was arranged with the same panel of SMEs. Unlike the first session, the second focus group discussion was guided by Flanagan's (1954) critical incident technique. The SMEs were asked to recall salient situations where teamwork was essential in order to be successful. The situations that emerged through this process served as inspiration for the question stems of the TRPT. The SMEs were also asked to think about potential ways in which each of the nine team roles of the TRPT would respond to the situations; this information served as inspiration for the pairwise response options. In total, thirty six questions were created using this approach

To assess the face validity of the draft questionnaire, a second group of SMEs was consulted. The SMEs were asked to read through each question of the draft TRPT and to rate how strongly they agreed that each item measured the team role that it was purported to measure. Each of the nine team role subscales was rated high for face validity by the five subject matter experts.

Participants

A self-selecting sample of 32 participants responded to an internet advertisement which was posted onto a message board on LinkedIn. There were 14 males, with ages ranging from 25 to 55 years ($M=35.93$, $SD=10.90$) and 18 females with ages ranging from 24 to 54 years ($M=39.83$, $SD=11.15$). The study was conducted via the Bristol Online Survey website where the study

scales could be found. A re-testing session was offered two weeks later.

Results

Internal consistency

Cronbach's alpha was used to measure the internal consistency of each team role subscale individually. Cronbach's Alpha was conducted on both a full 36 item version of the TRPT and a shorter 18 item version.

Team Role	Alpha level (36 Item Scale)	Alpha level (18 Item Scale)
Teacher	$\alpha=.76$	$\alpha=.85$
Completer	$\alpha=.71$	$\alpha=.76$
Innovator	$\alpha=.55$	$\alpha=.73$
Mediator	$\alpha=.48$	$\alpha=.78$
Promoter	$\alpha=.44$	$\alpha=.76$
Connector	$\alpha=.29$	$\alpha=.74$
Evaluator	$\alpha=.18$	$\alpha=.73$
Socialiser	$\alpha=.06$	$\alpha=.79$
Organiser	$\alpha=.10$	$\alpha=.60$

Test-retest reliability

Test-retest reliability was measured following a two week interval. 72% (n=23) of participants took part in the re-test session. Box plots and Q-Q plots were used to screen the data for normality and outliers. It was established that the data was not normally distributed. As the data did not meet parametric assumptions test-retest reliability was assessed by using Spearman's Rho. Five of the team role subscales displayed strong test-retest reliability; the completer ($rs = .91, p < .05$), the mediator ($rs = .83, p < .05$), the teacher ($rs = .81, p < .05$), the socialiser ($rs = .71, p < .05$) and the innovator ($rs = .70, p < .05$). Three of the team role subscales displayed moderate test-retest reliability; the evaluator ($rs = .60, p < .05$), the promoter ($rs = .50, p < .05$) and the connector ($rs = .45, p < .05$). The organiser team role subscale demonstrated weak test-retest reliability ($rs = .38, p < .05$).

Construct validity

Each subscale of the TRPT was correlated against its counterpart within the Mumford *et al* Team Role Test (2006). Only one team role subscale reached a significant level; the evaluator ($rs = .37, p < .05$). Five of the team roles produced weak, non-significant correlations; the completer ($rs = .28, p > .05$), the

innovator ($rs = .27, p > .05$), the socialiser ($rs = .20, p > .05$), the teacher ($rs = .12, p > .05$) and the connector ($rs = .09, p > .05$). Three of the team role subscales produced weak, negative and non-significant correlations; the mediator ($rs = -.20, p > .05$), the organiser ($rs = -.08, p > .05$) and the promoter ($rs = -.06, p > .05$).

Discussion

The aim of the current study was to establish whether a psychometrically reliable and valid team role inventory could be created by combining SJT and pairwise comparison methodologies. To establish this, several forms of validity and reliability tests were conducted upon the newly created TRPT including; face validity, internal consistency, test re-test reliability and construct validity.

Early analysis of the measure shows that the TRPT appears to have strong face validity. However, if one looks at the internal consistency of the TRPT, prior to any questions being removed, the relatively low alpha levels suggest that not all of the test items were reliably measuring the nine proposed team roles. Given that the overall number of questions in a test can have a large impact on alpha levels (Tavakol & Dennick, 2011); the decision was made to reduce the test to the minimum amount of questions possible. The reduction of test items increased alpha levels across all nine of the team role subscales, with only the organiser team role failing to reach a strong alpha level. Whilst the organiser subscale's alpha levels will still need to be increased, the shorter version of the TRPT does indeed appear to be more internally consistent than its full thirty six question counterpart.

In addition to relatively strong alpha levels, the TRPT also has moderate to strong test-retest reliability. Five of the team role subscales possessed relatively strong levels of test-retest reliability, three of the subscales possessed moderate test-retest reliability and one subscale possessed a weak level of test-retest reliability. It may be the case that the participant's most and least preferred ways of responding to the situational stems are relatively stable, which would represent core traits, and that the team roles which fell into the middle of their preferences are much more fluid and subject to change. For instance, an individual may have a clear preference for taking on the organiser team role and a clear dislike for taking on the socialiser

team role, but may have less intense preferences for roles such as the innovator and evaluator. If this is the case the individual may simply opt to fulfil such team roles as and when it becomes necessary to do so. The proposition that team role preferences may have a hierarchical structure, that is to say that one may possess core and secondary preferences, warrants further investigation.

The TRPT appears to have low levels of construct validity when measured against the Mumford *et al* (2006) team role test. Two key explanations could be put forward to account for this. Firstly, a type II error may have occurred. The current study had a relatively low sample size and therefore the analyses may have lacked sufficient statistical power. Secondly, the nature of the questions asked may also have had an impact. The Mumford *et al* (2006) scale provides respondents with items derived from the manufacturing industry. Conversely, the items used within the TRPT are derived from a project management setting. Whilst the two tests differ in the types of situations that are presented the Mumford *et al* (2006) scale was chosen as a construct validity measure due to the similarity of its theoretical and methodological underpinning. To date, the author is unaware of another team role typology test that uses the SJT methodology. Therefore, the researcher determined it to be the most relevant scale that could be used to measure construct validity.

Overall, the TRPT shows the potential to become a viable psychometric test that could measure team role preferences. The test possesses strong face validity when assessed within a project management context and the reduced size version of the TRPT possesses relatively strong levels of internal consistency. However, the organiser subscale will need to have its alpha levels improved further. The two week test-retest reliability of the TRPT is moderate to strong and serves as a good starting point for researchers to enhance this form of reliability further.

References

- Barrick, M, Stewart, G, Neubert, M & Mount, M (1998) 'Relating member ability and personality to work-team processes and team effectiveness', *Journal of Applied Psychology*, 83, (3), pg:377–391.
- Bartram, D (2007) 'Increasing validity with forced-choice criterion measurement formats', *International Journal of Assessment and Selection*, 15, (3), pg:263–272.
- Cheung, M & Chan, W (2002) 'Reducing uniform response bias with ipsative measurement in multiple-group confirmatory factor analysis', *Structural Equation Modeling*, 9, (1), pg:55–77.
- DeChurch, L & Mesmer-Magnus, J (2010) 'The cognitive underpinnings of effective teamwork: a meta-analysis', *Journal of Applied Psychology*, 95, (1), pg:32–53.
- Dittrich, R, Francis, B, Hatzinger, R & Katzenbeisser, W (2007) 'A paired comparison approach for the analysis of sets of Likert scale responses', *Statistical Modelling*, 7, (1), pg:3–28.
- Flanagan, J (1954) 'The Critical Incident Technique', *Psychological Bulletin*, 51, (4), pg:327–258.
- Laming, D (2004) *Human judgement: The eye of the beholder*, (1st ed) London, Thomson Learning, pg:78–94.
- Lievens, F, Peeters, H & Schollaert, E (2008) 'Situational judgement tests: a review of recent research', *Personnel Review*, 37, (4), pg:426–441.
- McDaniel, M, Hartman, N, Whetzel, D & Grubb, W (2007) 'Situational judgement tests, response instructions and validity: a meta-analysis', *Personnel Psychology*, 60, (1), pg:63–91.
- McDaniel, M & Nguyen, N (2001) 'Situational judgement tests: a review of practice and constructs assessed', *International Journal of Selection and Assessment*, 9, (1), pg:103–113.
- Mumford, T, Campion, M & Morgeson, F (2006) 'Situational judgement in work teams: A team role typology', In Weekley, J & Ployhart, R (2006) *Situational Judgement Tests: Theory, Measurement and Application*, (1st ed), Lawrence Erlbaum Associates Inc, New Jersey, pg:319–343.
- Mumford, T, Van Iddekinge, C, Morgeson, F & Campion, M (2008) 'The team role test: Development and validation of a team role knowledge situational judgment test', *Journal of Applied Psychology*, 93, (2), pg:250–267.
- Obagun, O (2010) 'An evaluation of Belbin's team role self-perception inventory: to help the project office construct an optimal team', *CAR (CEPMLP Annual Review)*, 14, (1), pg:1–21.
- Piasentin, K & Chapman, D (2006) 'Subjective person-organisation fit: bridging the gap between conceptualization and measurement', *Journal of Vocational Behaviour*, 69, (2), pg:202–221.
- Ployhart, R & Ehrhart, M (2003) 'Be careful what you ask for: effects of response instructions on the construct validity and reliability of situational judgement tests', *International Journal of Selection and Assessment*, 11, (1), pg:1–16.
- Tavakol, M & Dennick, R (2011) 'Making sense of Cronbach's Alpha', *International Journal of Medical Education*, 2, pg:53–55.
- Thurstone, L (1927) 'A law of comparative judgement', *Psychological Review*, 34, pg:273–286.
- Whetzel, D & McDaniel, M (2009) 'Situational judgement tests: an overview of current research', *Human Resource Management Review*, 19, (3), pg:188–202.

The 'Psychic' Psychologist – Rob Bailey



Rob Bailey

*TPF Networking Event,
24 November 2015*

Review by Trish Guthrie, Trish Guthrie Consulting

A highlight of The Psychometric Forum's 2015 Christmas networking event was Rob Bailey's 'Magic Show'. Regular attendees at the Forum know Rob from his work as a Chartered Occupational Psychologist and presentations at TPF events. However, it might come as a surprise to know that in his spare time Rob uses his skills as both a psychologist and magician to entertain and amuse. He is a member of the Magic Circle and a veteran of the Edinburgh fringe theatre circuit.

It was impressive that amongst an audience of fellow psychologists, he was able to use his skills to baffle with psychological illusions. There were a number of mind-bending routines, but Rob followed everything he subjected us to with clear explanations, such as quirks of bias, memory and perception, all based in psychological research. For example, at one point Rob had the audience looking at two pictures, flashing one after the other to spot the difference. At first nothing was evident, with everyone coming to a realisation at different times and Rob was able to explain about change blindness and our different capacities for attention. There were brave members of the audience who volunteered (well almost) to take part and Rob directed them with ease and a natural sense of humour.

Rob has well deserved plaudits from the press:

"Ditches paranormal waffle, without compromising an air of mystique" (Big Issue)

"Informative and funny, his presentation is very engaging, the scientific training allied to his natural skills as a comic, makes for a very unusual and entertaining show" (Oxford Times).

We are very grateful to Rob for taking time out to perplex and enthrall, leaving his audience with a vision at the end of the show that certainly captured our attention!

References

Rensink, R.A., O'Regan, J.K., & Clark, J.J. (1997). *To see or not to see: The need for attention to perceive changes in scenes*. *Psychological Science*, 8, 368–373

For further references and information please see Rob's website:

<http://www.psychicpsychologist.co.uk/>