All in the Mind?: Research on Personality, Emotional Intelligence & Work Performance

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Individual Psychology and Work Performance: Key Constructs

- Cognitive Intelligence/Ability (CI)
- Emotional Intelligence/Ability (EI)
- Personality Traits
- Motivation-related attitudes/competencies

Performance
What is ‘Personality’

› Personality can be defined as a dynamic, organized and generally enduring (?) set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviours in various situations.

› The word originates from the Latin *persona*, which means mask. Significantly, in the theatre of the ancient Latin-speaking world, the mask was not used as a plot device to *disguise* the identity of a character, but rather was a convention employed to represent or *typify* that character.
The Five Factor Model (FFM) of Personality
(Goldberg, 1990; Costa & McCrae, 1992)

<table>
<thead>
<tr>
<th>Factor:</th>
<th>Characteristic Facets:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conscientiousness</strong></td>
<td>Sense of capability; good organization; sense of responsibility; drive to achieve; self-discipline; deliberation</td>
</tr>
<tr>
<td><strong>Emotional Stability/Neuroticism</strong></td>
<td>Low anxiety; low irritability; happiness; low self-consciousness; non-impulsiveness; ability to cope with stressful situations; composure.</td>
</tr>
<tr>
<td><strong>Extraversion</strong></td>
<td>Warmth; sociability; assertiveness; energy; excitement; optimism</td>
</tr>
<tr>
<td><strong>Agreeableness</strong></td>
<td>Belief that others are well-intentioned; frankness and sincerity; willingness to help others; willingness to forgive and forget; modesty; tender-mindedness</td>
</tr>
<tr>
<td><strong>Openness to Experience</strong></td>
<td>Vivid imagination; appreciation of art and beauty; mood swings; wanting to try out new activities; intellectual curiosity; openness to political, social and religious beliefs.</td>
</tr>
</tbody>
</table>
Advocates:

✓ ‘Conscientiousness appears to be the trait-oriented motivation variable that industrial-organizational psychologists have long searched for, and it should occupy a central role in theories seeking to explain job performance’
  (Barrick, Mount & Judge, 2001)

✓ Personality variables are now recognized as important in predicting and understanding individual, team, and organizational performance and effectiveness.
  (Hough and Ones, 2003)

Sceptics:

✗ ‘It is difficult ... to advocate, with a clear conscience, the use of personality measures in most situations, as the basis for making employment decisions...’
  (Guion & Gottier, 1965)

✗ ‘The observed validities of personality tests for predicting job performance criteria are low and have not changes much over time’
  (Morgeson et al, 2007)

✗ ‘efforts to predict performance from personality tests have been consistently and spectacularly unsuccessful .... personality and performance are not related’
  (Spillane & Martin, 2005)
“The dilemma is that the extent to which personality can predict behavior and overall job performance is not an easy question to answer, as not only are the constructs that we are dealing with complex, but also the very nature of the relationship between predictor and criterion measures are complex.”

(Burch and Anderson, 2008)
Method:

› Summarises results of 15 prior meta-analytic studies examining the relationship between FFM traits and job performance in work situations, covering bulk of North American and EU research over prior 100 years.

Findings:

› **Conscientiousness** a valid predictor across performance measures in all occupations studied (r = .27)

› **Emotional stability** also a generalizable predictor of overall performance (r = .13) but a less consistent relationship to specific performance criteria and occupations: strongest for teamwork (r=.22), police, skilled jobs.

› **Extraversion, openness & agreeableness** did not significantly predict overall work performance, but did predict success in specific occupations or regarding specific performance criteria:
  - **Agreeableness** predicts teamwork (r=.34)
  - **Extraversion** predicts managerial performance (r=.21) & teamwork (r=.16), but not sales.
Conscientiousness and Emotional Stability are the ‘Big Two’ performance-wise:

‘These findings make intuitive sense, as it would be expected that individuals who are not temperamental, not stress-prone, not anxious and not worrisome (emotional stability), and those who are hard-working, persistent, organized, efficient and achievement-oriented (conscientious), are most likely to perform well.’

Barrick, Mount & Judge (2001)
Implication 2: Importance of Job/Task Domain

- Extraversion, openness & agreeableness have predictive validity for:
  - some job contexts
  - some performance criteria but not others.
- Need to consider moderator effects of job type.
- Need to consider how specific facets may predict specific performance criteria.
Importance of Role Moderation - Leadership Role
(Judge et al, 2002)

<table>
<thead>
<tr>
<th>Trait</th>
<th>Correlation with ‘Leadership Effectiveness’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>r = .31</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>r = .28</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>r = .24</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>r = .24</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>r = .24</td>
</tr>
<tr>
<td>Importance of Performance Criterion: Organisational Citizenship Behaviour (Sackett et al, 2006)</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Correlation with OCB</td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td>$r = .24$</td>
</tr>
<tr>
<td>Openness to Experience</td>
<td>$r = .23$</td>
</tr>
<tr>
<td>Extraversion</td>
<td>$r = .15$</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>$r = .14$</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>n.s.</td>
</tr>
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</table>
Modelling the Link between Personality & Performance

Personality Factors & Facets:
• Conscientiousness
• Stability

Mediators:
• Motivation
• E&S Competencies

Performance:
• Criteria

Moderators:
• Role/Task
Importance of Facet-level Causality  
(Hough & Furnham, 2003)

<table>
<thead>
<tr>
<th>Factor:Facet</th>
<th>Overall Performance in Sales Jobs</th>
<th>Overall Performance in Managerial Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conscientiousness:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive to Achieve</td>
<td>$r = 0.25$</td>
<td>$r = 0.17$</td>
</tr>
<tr>
<td>Conscientiousness:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependability</td>
<td>$r = 0.18$</td>
<td>$r = 0.03$</td>
</tr>
</tbody>
</table>
Modelling Facet-level Causality

**Factor/Facet:**
- Conscientiousness: Dependability
- Conscientiousness: Drive to Achieve
- Conscientiousness: Good Organisation

**Motivation:**
- Getting Along (Social)
- Getting Ahead (Status)
- Getting Things Done (Task)

**Performance:**
- Teamwork; Citizenship Behaviour
- Promotion; Leadership
- Productivity
### The ‘Dark Side’: FFM Personality Traits and Deviant Behaviour
(Berry, Ones & Sackett, 2007)

<table>
<thead>
<tr>
<th>Personality Trait</th>
<th>Interpersonal Deviance</th>
<th>Organisational Deviance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Stability</td>
<td>$r = -0.24$</td>
<td>$r = -0.23$</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>$r = -0.23$</td>
<td>$r = -0.42$</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>$r = -0.46$</td>
<td>$r = -0.32$</td>
</tr>
</tbody>
</table>
But .... Does the ‘Dark Side’ have an Upside?

Creativity is associated with psychopathology:

› Sceptical (paranoid), bold (narcissistic), mischievous (antisocial), and imaginative (schizotypal) scores positively correlate with performance ratings for ‘creativity’ in a sample of UK financial services senior managers (Foo & Burch, in prep.)

› In a sample of CEOs and senior managers of leading UK companies, business leaders scored at the same level of narcissism as patients at Broadmoor psychiatric facility, and higher on histrionic scales (Board & Fritzon, 2005).

› ‘Dark side’ personality dimensions are distinct from rather than orthogonal to the Big Five (Benson & Campbell, 2007).
Personality and Performance - What More Do We Need to Know?

› Are self-report measures necessarily unreliable (due to faking)?
› Are personality tests non-generalizable/externally invalid (due to demographic bias)?
› How do trait-relevant situational cues operate?
› Could the link between personality & performance be non-linear/curvilinear? (e.g. excessive conscientiousness/agreeableness)
› Is the personality ‘dark-side’ a distinct construct or just the flip side?
› How does personality interact with (1) cognitive intelligence and (2) emotional intelligence? Which is more important – and where?
What is ‘Emotional Intelligence’?

Definition:
The ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in the self and others.

(Mayer, Salovey & Caruso, 2000)

Premises:
1. Emotions play an important role in life and work.
2. People vary in their ability to perceive, understand, use and manage emotions.
3. These differences affect individual adaptation in a variety of contexts, including the workplace.

Impact:
› Widely applied in selection and development.
› Commodified by management consulting.
› But concept is debated and link to performance is under-researched. (Of 900+ peer-review articles on EI in PsychINFO only 22 measured real job performance.)
Neurological Basis of EI

Emotions in the brain.flv
Disagreement over:

1. Significance:
   › Incremental validity as a performance predictor compared to personality and cognitive ability

2. Models:
   › Mixed models: emotional abilities + traits + emotional & social competencies (e.g. stress tolerance, composure, happiness, optimism)
   › Ability model: ‘pure’ emotional intelligence (i.e. perceiving, understanding & regulating emotion)

3. Measurement/Rating:
   › Performance-based
   › Self-report based (faking?)
   › Multi-source rating

But EI remains one of the most controversial concepts in contemporary applied psychology
EI Significance/Validity – For and Against

Advocates (e.g. Goleman):

✓ About 1/3 of the difference between outstanding and average performers is due to technical skill and cognitive ability while 2/3 is due to emotional competence. In top leadership positions, over 4/5 of the difference is due to emotional competence.

✓ The *sine qua non* of effective leadership. In executive roles, EI is a better predictor of success than either relevant previous experience or high IQ.

Sceptics and Critics (e.g. Locke & Landy, Antonakis & Deitz):

✗ Construct invalid: covers emotional and social competencies, moods and personality not intelligence.

✗ May be a consequence of ESC rather than a cause.

✗ Unreliable: It takes intelligence to self-report EI but 80% of people believe that they are amongst the top 50% on EI.

✗ Lacks incremental validity (i.e. adds little to effects of personality and CA)

✗ Marshmellow experiment fallacy: EI explains everything.
Mixed vs Ability Models of EI

Mixed EI:
- Performance-related Traits
- Emotional & Social Competencies

Ability EI

Personality Traits

Cognitive Ability
## Mixed Models of EI
(Favoured by practitioners)

<table>
<thead>
<tr>
<th></th>
<th>EQ-i (Bar-On)</th>
<th>ECI (McClelland; Boyatzis; Goleman)</th>
<th>TEI-Que (Petrides)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EI behaviour:</strong></td>
<td></td>
<td>Competencies:</td>
<td>‘Trait EI’:</td>
</tr>
<tr>
<td>1. Intrapersonal skills</td>
<td></td>
<td>1. Self-awareness</td>
<td>1. Wellbeing</td>
</tr>
<tr>
<td>2. Interpersonal skills</td>
<td></td>
<td>2. Self-management</td>
<td>2. Sociability</td>
</tr>
<tr>
<td>5. General mood</td>
<td></td>
<td>facility</td>
<td></td>
</tr>
<tr>
<td>(happiness; optimism)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Self-report</strong></td>
<td>Self-report</td>
<td>Multi-rater/360-degree</td>
<td>Self-report</td>
</tr>
</tbody>
</table>
Petrides’ Justification for Self-report and Trait-focus

On self-report:
“How are we to obtain competence judgements concerning a typically developed individual’s intrapersonal emotional ‘abilities’ when that individual is the only person with direct access to the information that is necessary for making a judgment?”

On traits:
“That the trait EI facets are personality traits, as opposed to competencies or mental abilities or facilitators, is … corroborated by research revealing that the genes that are implicated in the development of individual differences in the Big Five personality traits are also implicated in the development of individual differences in trait EI…”

Petrides, I&OP, 3(2) 2010
Most Academic Research Favours the MSCEIT Ability EI Model

› Ability EI is distinct from, but positively related to, other intelligences.

› Ability EI construct shows strong convergent and discriminant validity as a discrete form of intelligence (low-moderate correlation with both personality traits and cognitive ability compared to mixed models).

› Compelling evidence of the link between ability EI and transformational leadership.

› Research evidence supports a positive link with individual and group performance in sales roles, high–stress jobs and emotional labour roles.

› Performance-based measurement is more resistant to faking.

Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)

Four branches of EI:

1. **Perceiving Emotions**: The ability to perceive emotions in oneself and others as well as in objects, art, stories, music, and other stimuli.

2. **Facilitating Thought**: The ability to generate, use, and feel emotion as necessary to communicate feelings or employ them in other cognitive processes.

3. **Understanding Emotions**: The ability to understand emotional information, to understand how emotions combine and progress through relationship transitions, and to appreciate such emotional meanings.

4. **Managing Emotions**: The ability to be open to feelings, and to modulate them in oneself and others so as to promote personal understanding and growth.
Performance-based test measurement
Observer plus self rating
141 items across 8 tasks – from identifying subtle emotions in facial and landscape images to multiple choice questions about emotional vocabulary and how emotions change over time.

Understanding Emotions
Tom felt anxious, and became a bit stressed when he thought about all the work he needed to do. When his supervisor brought him an additional project, he felt _____. (Select the best choice.)
- a) Overwhelmed
- b) Depressed
- c) Ashamed
- d) Self Conscious
- e) Jittery

Managing Emotions
Debbie just came back from vacation. She was feeling peaceful and content. How well would each action preserve her mood?

Action 1: She started to make a list of things at home that she needed to do.
Very Ineffective..1.....2.....3.....4.....5..Very Effective

Action 2: She began thinking about where and when she would go on her next vacation.
Very Ineffective..1.....2.....3.....4.....5..Very Effective

Action 3: She decided it was best to ignore the feeling since it wouldn't last anyway.
Very Ineffective..1.....2.....3.....4.....5..Very Effective
Latest Thinking:
Facet-level ‘Cascading’ Model of Ability EI
(Joseph & Newman, U of Illinois U-C, JAP (2010))

- **Emotional Perception**
- **Emotional Understanding**
- **Emotional Regulation**
- **Performance**

**Emotion Labour**

- **Conscientiousness (FFM1)**
- **Cognitive Ability**
- **Emotional Stability (FFM2)**

**Motivation**
Latest Meta-analytic Research Findings on EI & Performance (1)

Method:
› Data from 21 published meta-analytic correlations plus 66 original meta-analyses, yielding total of 18 usable studies and total sample of c30,000 individual cases.
› EI tests coded: ability vs mixed; self-report vs performance-based.

Findings re cascading model:
› E-regulation is the most immediate predictor of performance; shaped by other e-facets, personality and CA.
› EI a better predictor of performance in high emotional labour.

Findings re mixed vs ability models:
› Mixed EI and ability EI models are distinct constructs (i.e. measure very different things)
› Mixed EI models are empirically stronger than ability EI models (i.e. have higher incremental validity over personality and cognitive ability in predicting performance)
› Mixed EI models conceptually weaker, with lower discriminant/divergent validity (i.e. overlaps substantially with personality, cognitive ability, motivation, etc.)
Findings re performance-base vs self-report measurement:

› Performance-based ability EI (e.g. MSCEIT) has higher incremental validity in predicting performance than self-report ability EI (because self-report is prone to faking and the paradox of intelligent self-assessment)

› Self-report mixed EI has higher incremental validity than self-report ability EI (because it covers more predictors!)

Findings re sub-group influences:

› Women score higher in performance-based EI tests (both ability and mixed), but not self-report tests. Women self derogate but have stronger E-perception and E-understanding (?)

› ‘Whites’ score higher in performance-based ability EI tests and self-report mixed EI tests, but ‘Blacks’ score higher in self-report ability EI tests. (Why?)
1. Choose the EI measure carefully - Do you want to measure ability to perform emotional tasks or a mix of everything that is not cognitive ability? The two constructs have different content, predictive validity, and subgroup differences.

2. Exercise extreme caution when using mixed EI measures. Grab-bag measures of EI (i.e., self-report mixed measures) appear to exhibit some incremental validity over cognitive ability and personality measures on average (based on nine studies), but it is not clear why. As such, the mixed model approach may be difficult to defend, without extensive local validation.

3. Know that ability EI measures may add little to the selection system. Ability-based measures of EI (performance-based and self-report) exhibit little incremental validity over cognitive ability and personality, on average.

4. Base the decision to use an EI measure on the job type (i.e., consider the emotional labour content of the job). For low emotional labour jobs, EI validities are weaker or can even be negative.

5. Be aware of subgroup differences on EI. Performance-based EI measures favour women and those of European ethnicity, which may produce adverse impact against men and non-Europeans.
Is the Ability EI-Performance Relationship Curvilinear – i.e. Is High EI a Curse in Some Job Contexts? (Singh & Seo, U of Maryland, AoM 2010)
**Personality:**

**Emotional Intelligence:**