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Estimates of Emotional and Psychometric Intelligence: Evidence for Gender-Based  
Stereotypes

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### Abstract

This paper reports on a study concerned with estimates of own and parental psychometric intelligence (IQ) and emotional intelligence (EI). Two hundred and twenty-four participants (82 men, 132 females, 4 unreported) were asked to estimate their own and their parents' IQ and EI scores on a normal distribution ranging from 55 to 145 points. It was hypothesized that males would give higher IQ, but lower EI, self-estimates than females and that participants, irrespective of gender, would rate their fathers higher on IQ, but lower on EI, than their mothers. Results confirmed the hypotheses, thus supporting the view that psychometric intelligence is perceived as a primarily masculine attribute in contrast to emotional intelligence, which is perceived as a primarily feminine attribute. It is also shown that the intensity of the stereotypical perception of EI as a feminine attribute diminishes when participants are asked to estimate their scores on a range of specific EI facets, instead of providing a direct overall self-estimate.

## Estimates of Emotional and Psychometric Intelligence: Evidence for Gender-Based Stereotypes

Over the past decade, there have been many studies on self-estimates of intelligence, sparked mainly by the research of Hogan (1978) and Beloff (1992). These studies have focused primarily on gender differences in self-estimated intelligence and, with few exceptions (e.g., Byrd & Stacey, 1993), have shown that males give higher overall IQ estimates than females (Furnham & Fong, 2000; Furnham & Rawles, 1999). It has also been shown that this gender difference can be replicated cross-culturally. Studies carried out in Africa (Uganda), America (Hawaii), East Asia (China, Japan, and Singapore), and Europe (Belgium, Britain, and Slovakia) nearly all showed male hubris and/or female humility effects (Furnham, Fong, & Martin, 1999b; Furnham, Rakow, Sarmany-Schiller, & De Fruyt, 1999c; Zhang & Gong, 2001).

Starting with the work of Bennett (1996, 1997, 2000), various studies have focused on self-estimates of multiple intelligences, as defined by Gardner (1983). These studies demonstrated that significant gender differences tend to be confined to mathematical and spatial intelligence and do not typically emerge in verbal, musical, bodily-kinesthetic, interpersonal, and intrapersonal intelligence (Furnham, 2001; Furnham, Clark, & Bailey, 1999a; Rammstedt & Rammsayer, 2000). This suggests that despite the fact that males consistently provide higher self-estimates than females on overall or general ('g') intelligence, the source of this difference is largely restricted to specific primary factors. It may be that the differences in estimated mathematical and spatial intelligence reflect actual gender differences in these two factors (Lynn, 1999). In contrast, however, studies have largely failed to register corresponding differences in factors for which there is evidence of actual female superiority (e.g., verbal intelligence; Jensen, 1998; Mackintosh, 1998).

Research has also shown that gender differences are often a function of the method of derivation of the overall score. Male-favoring differences tend to occur when participants are asked to give a direct self-estimate of overall IQ, but not when an overall score is derived through summing up (or averaging) separate estimates on constituent IQ facets (e.g., verbal, mathematical, etc.; Furnham, 2000; Furnham et al., 1999a).

This study extends the foregoing research into the area of emotional intelligence (EI). Salovey and Mayer's (1990) early definition of EI was quickly followed by several salient models (e.g., Bar-On, 1997; Goleman, 1995; Mayer & Salovey, 1997; Petrides & Furnham, 2001) as well as by an increasing number of empirical studies (e.g., Ciarrochi, Chan, & Bajgar, 2001; Ciarrochi, Deane, & Anderson, 2002; Mehrabian, 2000; Parker, Taylor, & Bagby, 2001; Petrides & Furnham, 2000a, 2003; Schutte et al., 2001; van der Zee, Schakel, & Thijs, 2002). Ciarrochi, Chan, and Caputi (2000) noted that from a conceptual point of view, the majority of EI models are complementary rather than contradictory. Thus, most EI models tend to include various affect-related facets, such as emotion awareness, empathy, and relationship skills (for a review, see Petrides & Furnham, 2001).

The conceptual nature of EI renders it a particularly interesting construct from the perspective of research on self-estimated intelligence because many of the specific facets that EI encompasses concern areas in which females are thought to outperform males (e.g., relationship skills; Argyle, 1990; Goleman, 1995; Hall, 1978; Heatherington, Stets, & Mazzarella, 1986). One would therefore expect females to provide higher EI self-estimates than males, in contrast to the male-favoring difference observed on IQ self-estimates.

The present study is intended to complement previous research on self-estimated IQ. It shares the same conceptual framework with that research, which is underpinned by the importance of the study of self-estimated traits and abilities for the understanding of self-fulfilling prophecies, aspirations and achievements, and psychological well-being (Beyer,

1990; Beyer & Bowden, 1997; Taylor & Brown, 1988). However, it looks at a different construct with different implications for everyday functioning. In this case, the standard male-favoring difference in IQ scores is expected to be reversed, since females are generally perceived as more competent in the area of EI than males. It was, therefore, hypothesized that males would have higher IQ self-estimates (hypothesis 1), but lower EI self-estimates (hypothesis 2) than females, thus providing evidence for the view that people's perceptions of IQ tend to be male-normative, in contrast to their perceptions of EI, which tend to be female-normative.

In addition to self-estimates, the study looks at parental estimates of IQ and EI. There are two reasons why the investigation of estimates of parents' abilities and traits is interesting, particularly with reference to gender differences. First, people's estimates of their parents' scores allow researchers to examine whether gender differences are specific to self-estimates or extend to ratings of parents. It is therefore possible to determine if gender differences in estimated scores are confined to one's own self or generalize to others. Research on IQ estimates suggests that the male-favoring difference extends to ratings of relatives, with fathers and sons being perceived as more intelligent than mothers and daughters, respectively (Furnham, 2001). In the area of EI, the direction of the difference should be reversed, with mothers perceived as more emotionally intelligent than fathers. It was hypothesized that participants, irrespective of gender, would rate their fathers as more intelligent than their mothers (hypothesis 3). Conversely, it was hypothesized that participants, irrespective of gender, would rate their mothers as more emotionally intelligent than their fathers (hypothesis 4).

This study also examines whether gender differences in EI estimates vary as a function of the method used to derive the overall estimated score. As noted above, research on estimated IQ scores shows that gender differences are more likely to occur when

participants are asked to give a direct overall estimate of their intelligence rather than when a total score is derived by summing up (or averaging) estimates on multiple constituent aspects of intelligence (e.g., spatial, verbal, numerical, etc.). This finding suggests that if lay people are asked to provide a direct estimate of overall intelligence, they are likely to perceive intelligence as a ‘masculine’ domain and neglect specific intelligence facets in which females tend to outperform males (e.g., verbal intelligence). In contrast, when the various facets of intelligence are explicitly presented to participants for rating, and those ratings are subsequently summed up, the gender differences are likely to diminish or disappear.

The present study seeks to examine whether a similar bias exists in estimates of EI. In other words, it attempts to establish whether female-favoring differences in direct EI estimates, the presence of which would suggest that EI skills are perceived as more feminine, disappear when participants are asked to rate various constituent aspects of EI, some of which concern areas in which males tend to outperform females (e.g., emotion control; Eysenck & Eysenck, 1985). It was hypothesized that, in contrast to directly self-estimated EI scores, there would not be a significant female-favoring difference in summated EI scores (hypothesis 5).

## Method

### Participants

In all, 224 individuals took part in the study, of whom 82 were males and 138 females (four unreported). Their mean age was 23.24 years ( $SD = 5.83$  years). All participants were undergraduate or postgraduate students in two British universities.

### Materials and procedure

Participants were asked to complete a two-page questionnaire based on previous studies of estimated IQ. The questionnaire required a total of 45 ratings. The first part contained a description of the normal distribution of IQ scores. This included a copy of a bell

curve spanning six standard deviations (-3 to +3), along with brief descriptions of the anchor scores (e.g., 55 ‘mild retardation,’ 100 ‘average,’ 145 ‘gifted’). Below this part, participants were asked to give direct estimates of their own and their parents’ overall IQ and EI scores. Subsequently, they were asked to make 12 additional estimates looking at various EI components, each presented with a relevant description in bullet-point form taken from Goleman (1998). These estimates were summed up in order to derive a second, indirect, overall EI estimate for self, mother, and father. Participants were allotted class time to complete the questionnaire. The response rate approached 100%.

### Results

The male and female means and SDs for self, father, and mother direct overall EI estimates are presented in Table 1. Those for the 12 EI facets are presented in Table 2. A total score on self-estimated EI was indirectly derived by summing up self-estimates on the 12 facets. There were no gender differences in that total score ( $M_{\text{fem}} = 1275$ ,  $SD_{\text{fem}} = 102$ ;  $M_{\text{male}} = 1270$ ,  $SD_{\text{male}} = 141$ ;  $t_{(218)} < 1$ ,  $p = \text{ns}$ ), which supports hypothesis 5. The only significant difference on the 12 facets concerned ‘emotional awareness’ ( $t_{(218)} = 2.14$ ,  $p < .05$ ) for which females ( $M = 111.3$ ,  $SD = 13.3$ ) gave higher estimates than males ( $M = 106.6$ ,  $SD = 19.4$ ).

Insert Tables 1 and 2 about here

### Analyses of variance

In order to test hypothesis 1 (males will have higher IQ self-estimates than females) and hypothesis 3 (fathers will be rated as more intelligent than mothers), a two-way split-plot ANOVA, with gender as the between-subjects factor and IQ rating target (self, father, and mother) as the repeated-measures factor, was performed. There was a significant main effect of IQ rating target ( $F_{(2, 432)} = 5.32$ ,  $p < .01$ ), but no effect of gender. Sidak post hoc tests indicated that participants rated their fathers ( $M = 109.7$ ,  $SD = 14.1$ ) as more intelligent than

their mothers ( $M = 106.3$ ,  $SD = 13.3$ ). The IQ rating target  $\times$  gender interaction was not significant ( $F_{(2,432)} = 2.44$ ,  $p = 0.09$ ). Nevertheless, a simple main effects analysis, with the degrees of freedom adjusted as per Satterthwaite (1946), indicated a significant gender difference in self-estimated IQ ( $F_{(1,571)} = 3.98$ ,  $p < .05$ ), with males giving higher estimates than females ( $M_{\text{male}} = 108.9$ ,  $SD_{\text{male}} = 13.3$  vs.  $M_{\text{fem}} = 105.4$ ,  $SD_{\text{fem}} = 9.1$ ). There were no gender differences in IQ estimates for fathers or mothers, indicating that participants, regardless of gender, tended to perceive their fathers as more intelligent than their mothers. These results support hypothesis 1 and hypothesis 3 and accord well with many previous studies in the area (Furnham, 2000, 2001).

A similar analysis was conducted with gender as the between-subjects factor and EI rating target (self, father, and mother) as the repeated-measures factor in order to test hypothesis 2 (females will have higher EI self-estimates than males) and hypothesis 4 (mothers will be rated as more emotionally intelligent than fathers). The results showed a main effect of EI rating target ( $F_{(2,432)} = 37.63$ ,  $p < .01$ ) and a significant interaction between the two factors ( $F_{(2,432)} = 3.94$ ,  $p < .05$ ), but no effect of gender. Sidak post hoc tests showed that participants estimated both their own ( $M = 109.5$ ,  $SD = 16.7$ ) and their mothers' ( $M = 111.7$ ,  $SD = 14.7$ ) EI as significantly higher than their fathers' ( $M = 99.9$ ,  $SD = 17.4$ ), thereby supporting hypothesis 4. In line with hypothesis 2, a simple main effects analysis showed that female self-estimates were significantly higher than male self-estimates ( $M_{\text{fem}} = 111.2$ ,  $SD_{\text{fem}} = 14.2$  vs.  $M_{\text{male}} = 106.6$ ,  $SD_{\text{male}} = 20.0$ ). There were no gender differences in estimates of parental EI, indicating that participants, irrespective of gender, tended to perceive their mothers as more emotionally intelligent than their fathers.

### Factor analyses

In order to investigate the structure of the 12 EI facets and to obtain a smaller number of variables to use as predictors in regressions, three factor analyses with VARIMAX rotation

were performed on self, father, and mother EI estimates. The three structure matrices, which are broadly similar, are presented in Table 3.

Insert Table 3 about here

Two factors consistently emerged in all analyses. ‘Innovation,’ ‘initiative,’ ‘achievement drive,’ and ‘self-confidence’ were the main EI facets defining the first factor (‘Social Drive’), whilst ‘emotional awareness,’ ‘trustworthiness,’ and ‘conscientiousness’ were the main definers of the second factor (‘Emotional Understanding and Dependability’). The two factors together accounted for 48.5%, 52.4%, and 51.1% of the total variance in self, father, and mother estimates, respectively.

### Regression analyses

Participants’ IQ self-estimates were regressed on total self-estimated EI (derived by summing up scores on the twelve facets) and gender. The regression was significant ( $F_{(2, 219)} = 33.34, p < .01$ ), accounting for 23% of the variance. Both gender ( $\beta = .46, t_{(219)} = 7.72, p < .01$ ) and estimated EI ( $\beta = -.17, t_{(219)} = 2.82, p < .01$ ) were significant predictors in the equation. Controlling for the latter predictor, males’ IQ self-estimates were significantly higher than females’, which provides further support for hypothesis 1.

Subsequently, direct EI estimates for self, father, and mother were regressed on the two factors that emerged from the factor analyses of the 12 facets, along with gender and age. These analyses were performed to explore in more detail the extent and nature of gender differences in estimates of EI as well as to determine whether the two EI factors obtained in the factor analysis above are differentially related to the directly estimated overall EI scores. (Note that the dependent variables in these regressions are the direct EI estimates, not the estimates derived by summing up scores on the 12 facets.) The regression for directly self-estimated EI was significant ( $F_{(4, 212)} = 28.52, p < .01; R^2_{\text{adj}} = .34$ ). Both ‘Emotion Understanding and Dependability’ ( $\beta = .57, t_{(212)} = 8.57, p < .01$ ) and gender ( $\beta = .11,$

$t_{(212)} = 2.03, p < .01$ ) were reliable predictors. Controlling for the effects of the other predictors in the regression, female EI estimates were higher than male EI estimates, which supports hypothesis 2. The two equations with direct estimates of fathers' and mothers' EI as the dependent variables were also significant ( $F_{(4, 210)} = 19.19, p < .01; R^2_{\text{adj}} = .25$ ; and  $F_{(4, 212)} = 29.63, p < .01; R^2_{\text{adj}} = .35$ , respectively). 'Emotion Understanding and Dependability' was the sole reliable predictor of both fathers' ( $\beta = .54, t_{(210)} = 7.13, p < .01$ ) and mothers' estimated EI ( $\beta = .50, t_{(212)} = 6.85, p < .01$ ).

### Discussion

In line with previous findings (Bennet, 1996; Furnham et al., 1999b, c), this study revealed gender differences in directly self-estimated overall IQ, with males giving significantly higher estimates than females. Both genders rated their fathers as more intelligent than their mothers. As regards the male-favoring difference in IQ self-estimates, it was pointed out that it frequently emerges when a direct overall IQ estimate is requested, but not when an estimate is derived via the summation of multiple IQ facets. One explanation for this finding is that perceptions of intelligence are male-normative and individuals tend to associate overall IQ more strongly with constituent facets in which males are likely to perform better, such as numerical and spatial ability. Consequently, when asked to provide a direct overall estimate, they place disproportionately high weights on these facets, which results in a significant male-favoring difference in the overall score.

In contrast, a similar difference is not observed in overall estimates obtained through summing up (or, equivalently, averaging) constituent items, since these include IQ facets in which females are of equal or superior ability. Because neutral, male-, and female-favoring items are given equal weights in the summated total score, any differences tend either to cancel out or to be obscured among a number of roughly equivalent estimates. In this context, male hubris and/or female humility effects could be operating in a dual fashion: (a)

at the overall level by biasing the estimation process towards placing disproportionately high weights on male-favoring IQ facets, thus leading to a significant gender difference in overall estimated IQ and (b) at the facet level by biasing the process such that actual female-favoring differences, where they exist, are not fully reflected in estimated scores.

A rather similar pattern of findings was observed with estimated EI. In this case, however, consistent with the notion that females are more empathic and socially skilled (Argyle, 1990; Heatherington et al., 1986), there was a female-favoring difference in directly estimated overall EI. In line with previous findings (Petrides & Furnham, 2000b), there were no gender differences when a total estimated EI score was obtained through summing up constituent facets. From the three regressions involving self, father, and mother estimates of EI it was clear that participants consistently associated the direct overall estimate with the ‘Emotion Understanding and Dependability’ factor. People therefore seem to think emotion understanding at the core of the concept of EI. Although this point may seem self-evident, it must be noted that certain EI conceptualizations (e.g., Bar-On, 1997) do not place adequate emphasis on facets like emotion identification, expression, and regulation. Perhaps more interesting, the beta coefficient for gender in the equation involving self-estimated EI was significant, an indication that gender differences could be stemming from a differential and possibly gender-biased understanding of the variables being estimated.

Just as with IQ, participants gave differential EI estimates for their parents. In this case, however, the difference was reversed, with estimates for mothers being significantly higher than those for fathers. Also, whereas the difference in IQ estimates between fathers and mothers was in the order of 3 points, that in EI exceeded 10. This finding may reflect the perceived role of mothers as the ‘emotional managers’ in the family and the fact that they spend significantly more time caring for their children (Goleman, 1995; Levant, Slattery, & Loiselle, 1987). It may also indicate that perceptions of EI are more female-normative than

perceptions of IQ are male-normative. There were no gender differences in the estimates of parental IQ or EI. Gender differences in self-estimates, therefore, do not seem to carry over to estimates of parental IQ and EI, where both genders rate one parent as more intelligent than the other.

There was a significant difference when self-estimated IQ was regressed on gender, age, and self-estimated EI (derived by summing up scores on the 12 facets). In accordance with previous findings, males' IQ self-estimates were significantly higher than females,' even after controlling for scores on the other predictors in the equation. Estimated EI was a consistent positive predictor of estimated IQ for self, father, and mother estimates. This finding suggests that people perceive some degree of overlap between cognitive and emotional abilities.

To summarize, it seems that the pattern of results on estimated EI follows closely that on estimated IQ, with the "twist" of female- rather than male-favoring gender differences. Females give significantly higher self-estimates than males and participants of both genders judge their mothers as more emotionally intelligent than their fathers. These findings are in line with the hypotheses and with lay views of 'rationality' as masculine and 'emotionality' as feminine.

The present study was based on undergraduate students, who may have different conceptions of intelligence and gender roles than older adults with different educational backgrounds and experiences. In addition, while there is empirical evidence supporting the cross-cultural robustness of the male-favoring differences in estimates of intelligence, no such evidence exists for emotional intelligence. It could be the case that the gender difference in EI estimates varies as a function of emotion display rules, which are known to be culture-dependent (Brody & Hall, 2000). Moreover, in contrast to research on IQ self-estimates, it is very difficult to examine the correspondence between estimated and actual EI

scores, given the obstacles in devising performance-based tests of EI (Petrides & Furnham, 2001; Zeidner, Matthews, & Roberts, 2001).

Future research in the area may attempt to investigate in more detail the factors influencing the estimation of one's own and other people's scores on significant traits and abilities. More importantly, future research should focus on the consequences of self-estimates of different types of intelligence by investigating both the ways in which they bear on behavior and the contexts in which these effects tend to occur (e.g., academic, occupational, interpersonal, etc.). Such research is worthwhile not least because it can contribute to our understanding of the processes that may lead to inaccurately negative self-evaluations, reduced self-confidence, and stereotypical judgments of other people's attributes and abilities.

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Table 1

Means and Standard Deviations for the Direct Overall IQ and EI Estimates

		IQ			EI		
		Self	Father	Mother	Self	Father	Mother
Males	Mean	108.9	109.1	105.8	106.6	101.6	110.1
	SD	13.3	13.9	14.6	20.0	18.1	15.4
Females	Mean	105.4	110.0	106.5	111.2	98.9	112.7
	SD	9.1	14.2	12.5	14.2	16.9	14.3
Total	Mean	106.7	109.7	106.3	109.5	99.9	111.7
	SD	10.9	14.1	13.3	16.7	17.4	14.7

Note: EI = emotional intelligence. IQ = psychometric intelligence.

Table 2

Means and Standard Deviations for Self-Estimated Scores on the 12 EI Facets

	Males			Females		
	Self	Father	Mother	Self	Father	Mother
<u>Emotional awareness</u>						
• Knowing which emotions are being felt and why, realizing links between feelings and what is thought, said and done, recognizing how feelings affect performance, guiding awareness of personal values and goals	106.6 (19.4)	102.2 (16.6)	113.4 (16.0)	111.3 (13.3)	100.1 (14.4)	111.2 (14.3)
<u>Accurate self-assessment</u>						
• Awareness of personal strengths and weaknesses, learning from experience and being reflective, openness to candid feedback, new perspectives, continuous learning	108.7 (17.4)	107.6 (17.8)	109.2 (18.7)	106.9 (14.8)	101.5 (17.2)	107.0 (13.8)
<u>Self-confidence</u>						
• Having ‘presence’ and self-assurance, voicing unpopular views and going out on a limb for what is right, being decisive, making sound decisions despite uncertainty and pressure	102.0 (18.6)	105.9 (17.8)	104.3 (20.4)	102.1 (15.4)	108.5 (16.3)	106.1 (15.8)
<u>Self-control</u>						
• Managing impulsive feelings and distressing emotions, staying composed, positive and unflappable in trying moments, thinking clearly and staying focused	104.2 (20.3)	103.4 (18.4)	104.7 (18.9)	101.8 (16.6)	103.6 (18.5)	103.4 (15.4)
<u>Trustworthiness</u>						
• Acting ethically, building trust through reliability and authenticity, admitting mistakes and taking principled stands	107.9 (17.7)	105.5 (22.2)	112.5 (16.4)	110.0 (13.3)	105.5 (18.4)	112.6 (15.3)
<u>Conscientiousness</u>						
• Meeting commitments and keeping promises, accepting accountability for meeting objectives, being organized and careful	107.9 (17.0)	108.9 (20.1)	112.0 (16.7)	109.5 (15.3)	110.3 (16.2)	112.9 (15.2)
<u>Adaptability</u>						
• Handling multiple demands, shifting priorities, adapting responses and tactics to fit fluid circumstances, flexibility in seeing events	104.9 (17.3)	104.9 (16.3)	107.3 (15.1)	105.0 (13.9)	106.0 (14.6)	109.9 (14.9)
<u>Innovation</u>						
• Seeking out fresh ideas from a variety of sources, entertaining original solutions to problems, generating new ideas, taking fresh perspectives and risks in thinking	104.1 (19.5)	103.2 (16.1)	104.0 (15.6)	104.7 (14.4)	103.4 (15.8)	103.8 (14.7)
<u>Achievement drive</u>						
• Being results orientated, setting goals, taking calculated risks, pursuing information to reduce uncertainty, learning how to improve performance	105.1 (19.5)	107.8 (18.1)	101.9 (18.1)	106.8 (15.0)	106.1 (15.3)	105.6 (15.8)
<u>Commitment</u>						
• Making sacrifices to meet larger organizational goals, using group’s core values	103.8 (16.9)	110.4 (17.9)	108.2 (17.8)	104.2 (15.0)	106.9 (16.5)	108.7 (15.8)
<u>Initiative</u>						
• Seizing opportunities, pursuing goals beyond what is expected or required, mobilizing others through unusual, enterprising efforts	107.4 (16.3)	104.7 (18.3)	108.7 (18.0)	105.7 (15.9)	105.8 (16.2)	107.0 (14.2)
<u>Optimism</u>						
• Persisting in seeking goals despite obstacles and setbacks, operating from hope of success vs. fear of failure, viewing setback as due to manageable circumstances vs. personal flaw	107.0 (17.7)	104.9 (17.5)	107.8 (18.6)	106.5 (14.6)	107.2 (15.3)	106.6 (14.6)

Table 3

Factor Structure Matrices (Self, Father, and Mother) for the Factor Analyses of EI FacetEstimates

	Self		Father		Mother	
	F1	F2	F1	F2	F1	F2
Emotional awareness		<b>.73</b>		<b>.76</b>	.31	<b>.66</b>
Accurate self-assessment		<b>.70</b>	.31	<b>.62</b>	<b>.51</b>	<b>.43</b>
Self-confidence	<b>.63</b>		<b>.50</b>	.34	<b>.80</b>	
Self-control		<b>.45</b>		<b>.72</b>	<b>.64</b>	
Trustworthiness		<b>.73</b>		<b>.54</b>		<b>.64</b>
Conscientiousness		<b>.59</b>	.33	<b>.54</b>		<b>.64</b>
Adaptability	<b>.57</b>	.35	<b>.45</b>	<b>.58</b>	<b>.47</b>	.39
Innovation	<b>.78</b>		<b>.64</b>		<b>.65</b>	.32
Achievement drive	<b>.68</b>	.32	<b>.83</b>		<b>.55</b>	<b>.53</b>
Commitment		<b>.64</b>	<b>.70</b>		<b>.45</b>	<b>.49</b>
Initiative	<b>.65</b>	.32	<b>.74</b>		<b>.70</b>	
Optimism	<b>.71</b>		<b>.69</b>		<b>.45</b>	<b>.41</b>
Eigenvalues	4.45	1.37	4.95	1.35	5.06	1.07
% variance explained	24.4%	24.1%	27.7%	24.7%	27.7%	23.4%

Note: EI = emotional intelligence. F1 = factor 1. F2 = factor 2. Loadings greater than 0.40 are in bold. Loadings less than 0.30 are suppressed.