ELSEVIER

Contents lists available at ScienceDirect

# Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid



# The relationship between emotional intelligence and occupational personality scales in senior management



Adrian Furnham<sup>a,\*</sup>, Nicola Taylor<sup>b,c</sup>

- a Norwegian Business School (BI), Nydalveien, Olso, Norway
- b JvR Psychometrics, Johannesburg, South Africa
- <sup>c</sup> Department of Industrial Psychology and People Management, University of Johannesburg, Johannesburg, South Africa

#### ABSTRACT

This study attempted to examine the Emotional Intelligence (EI) domain and facet correlates of various personality-test derived occupational Scale dimensions like service, sales and management in a developing country. In all, 431 people completed two validated questionnaires: one measuring six occupational scales (HPI: Hogan Personality Inventory) and the other a revised measure of Emotional Intelligence (EQ-i.20). There were few gender differences on the both measures. Factor analysis of the EI measure yielded three rather than six factors. Hierarchical regressions showed some EI facets that were positively related to many of the occupational scales, some that were negatively related, and others related to none. Implications for selection and limitations of the study are considered.

#### 1. Introduction

It has been argued, in both popular books and academic papers, that emotional intelligence (EI) is essential for leadership and management success (Goleman, 1998). In addition, recent meta-analyses indicate that EI remains a stable predictor of performance in the workplace (Joseph, Jin, Newman, & O'Boyle, 2015).

Since the start of the Millennium there has been a stream of empirical papers on EI (Jordan et al., 2002; Petrides & Furnham, 2000, 2006; Quebbeman & Rozell, 2002). Zeidner, Matthews and Roberts (2004) provided a useful critical overview of the role of EI in the workplace and argue that EI is an index of potential. They also asked if EI does predict job satisfaction, productivity, and effective team work, the question is what is the *process* or *mechanism* that accounts for this? They suggested that high EI people are better at communicating their ideas, intentions and goals. They noted that high EI leaders can accurately identify what followers feel and need, as well as, be more inspiring and supportive. Research looking at EI and derailers shows that higher EI tends to buffer the emergence of dysfunctional work behaviours, and is also linked to having fewer derailers overall (Taylor & de Beer, 2010).

There have been a number of papers that have examined the relationship between EI and work-place skills. Thus Di Fabio and Palazzeschi (2012) demonstrated the incremental validity of EI over personality traits in measuring four measures of organisational justice. Farnia, Nafukho and Petrides (2018) also demonstrated the incremental validity of EI over personality traits in predicting career decision

making. More recently Szczgiel and Mikolajczak (2018) showed emotional competence moderated the relationship between a workers extraversion and ratings of likeability by their peers.

Two meta-analyses (Joseph & Newman, 2010; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2010) that examined the predictive power of EI on job performance, whilst controlling for personality and cognitive ability, showed that EI accounted for unique variance in job performance. One meta-analysis found that ability measures did not add any incremental predictability above and beyond cognitive ability and personality (Joseph & Newman, 2010), while another (O'Boyle et al., 2010) showed only a small effect size for ability measures above and beyond personality and cognitive ability. Although these meta-analyses provide support for incremental predictability of EI on job performance, there is clear dissention about what work outcomes EI predicts, and how well it predicts them.

Joseph et al. (2015) found that when they combined measures of personality, self-rated performance, general self-efficacy, ability EI, and cognitive ability, then controlled for these in the prediction model, the originally meaningful correlation between self-rated EI and job performance reduced to nothing. This suggests that self-rated measures of EI tap into a wide range of constructs that are critical to job performance, including elements of personality and ability.

### 1.1. This study

One way to understand how EI relates to work success is to have multiple measures of work success and an EI measure that has domain

E-mail address: a.furnham@ucl.ac.uk (A. Furnham).

<sup>\*</sup> Corresponding author.

and facet scores. This study looks at occupational scale correlates of EI, as measured by the Emotional Quotient Inventory 2.0 (EQ-i 2.0; MHS Staff, 2011). The idea of devising criterion-focused occupational personality scales is well established (Ones & Viswesvaran, 2001). Hogan and Hogan (1997) developed six criterion-established scales that are proxy measures of success in various types of occupations such as the service industry and sales. They should be interpreted as reflecting potential for success in different occupations. These occupational scales have been used in various studies (Furnham, Trickey & Hyde, 2012, 2013, 2014; Muchinsky, 1993), and will be used in this study as an indicator of potential work success (Furnham, 2018).

Most of the studies have been run in developed countries: this was done in South Africa with a majority Black population. The question is whether the results from previous research could be replaced in a developing country. Further the study attempted to ascertain whether there were sex differences in either measure and whether they impacted on the relationship between EI and work success.

The study was exploratory in nature. It aimed primarily to determine at the domain and facet level whether EI was correlated with different measures of work success after sex and age were considered. In this sense the study was a cross-cultural replication of results mainly from the developed world using a sample from the developing world. We were also interested in sex differences in both variables (EI and occupational success) as well as age correlates in the latter. We start by an analysis of sex differences, but our major focus is on the results of regressions where we examine to what extent EI facets and domains predict occupational outcomes after sex and age have been accounted for.

#### 2. Method

## 2.1. Participants

We had data on the sex, age, education and nationality of the sample. There were 337 men and 105 women in this sample. Their ages ranged from 26 to 61 years with a median of 42 years and a mean of 41.2 years (SD = 6.62 years). They came mainly from South and West African countries and 25% were White, 54% Black and 20% Asian. In all, 74% were graduates, although all had graduated high school, often with other technical and vocational qualifications. Around 10% indicated they were junior, 28% middle, 26% senior and 15% general management level.

#### 2.2. Measures

Hogan Personality Inventory (HPI) (Hogan & Hogan, 1997). The HPI also contains six occupational scales, namely:

- 1 Service Orientation (being attentive, pleasant, and courteous to clients and customers);
- 2 Stress tolerance (being able to handle stress low scores are associated with absenteeism and health problems);

- 3 Reliability (integrity (high scores) and organisational delinquency (low scores));
- 4 Clerical potential (the ability to follow directions, pay attention to details, and communicate clearly);
- 5 Sales potential (energy, social skill, and the ability to solve problems for clients);
- 6 Managerial potential (leadership ability, planning and decision-making skills).

The HPI manual shows the validity data on all six scales (Hogan & Hogan, 1997). Perhaps the two scales that have been most explored are Service Orientation (Muchinsky, 1993) and Reliability (Stone, Kisamore, & Jawahar, 2008), because of their relevance to almost all jobs. According to the technical manual (Hogan & Hogan, 1997), there is good evidence for the reliability and validity of each of the six occupational scales. They were derived over long periods of time using criterion related studies showing that various personality test items consistently related to specific work-related outcome variables..

Emotional Quotient Inventory 2.0 (EQ-i 2.0; Multi-Health Systems Staff, 2011). The EQ-i 2.0 is a revision of the Emotional Quotient Inventory (EQ-i) developed by Bar-On in 1997. The EQ-i 2.0 gives an overall EQ score as well as scores for five composite scales and 15 subscales (Bar-On, 2004, 2006; MHS Staff, 2011). Earlier versions of the measure have been used in many studies (Butler & Chinowsky, 2006; Day, Therrin, & Carrol, 2005; Ekermans, Saklofske, Austin, & Stough, 2011). The psychometric properties of the EQ-i 2.0 are well-documented in the technical manual (MHS Staff, 2011), as well as in the South African literature (Van Zyl, 2014). For the South African standardisation sample, internal consistency reliability coefficients ranged from 0.72 (Flexibility) to 0.96 (Total EI).

### 2.3. Procedure

Participants were all employed as middle to senior managers in a multinational African telecommunications company. Participants provided permission to use the results for research during the informed consent process. All participants were given personal feedback on their scores and the company has also provided permission that the data may be used for this study.

#### 3. Results

For a full correlational table of all results please consult the first

Table 1 shows the results of a MANOVA investigating the difference between men and women on the six Occupational Scales. There was a statistically significant multivariate effect (Wilk's  $\lambda=0.960$ , p==.014), but only one significant difference between men and women on the six occupational scales. Men scored statistically significantly higher than women on the Sales Occupational Scale. The factor analysis also showed that five of the six scales loaded on one

Table 1
Gender differences and factor analytic results for Six Occupational Scales. Number in bold signify the most significant, high loading values.

	Men		Women		F		Factor anal	ysis
	Mean	SD	Mean	SD			1	2
Service orientation	11.04	2.12	10.99	2.19	0.05		.71	0.11
Stress tolerance	18.86	3.65	18.35	3.69	1.48		.84	0.08
Reliability	11.77	2.97	12.38	2.66	3.44		.70	-0.52
Clerical	18.49	2.59	18.68	2.69	0.39		.88	0.14
Sales	44.56	7.31	42.04	8.78	8.16**		.24	0.91
Manager	30.51	3.28	30.57	3.73	0.03		.85	0.12
F(7, 360) = 14.12***		***p < .00	1, **p < .01, *p < .0	5		Eigen value	3.26	1.12
						Variance%	54.68	18.65

**Table 2**Gender differences and factor analytic results for EQ-I. Number in bold signify the most significant, high loading values.

	Men		Women		F Level	Factor analy	/sis	
	Mean	SD	Mean	SD		1	2	3
Self-Regard	107.29	13.60	108.15	11.60	0.33	.80	.19	.21
Self-Actualization	110.45	11.89	111.27	12.28	0.37	.75	-0.01	.31
Emotional Self-Awareness	103.82	12.81	105.99	13.18	2.22	.72	.24	.13
Emotional expression	103.09	13.70	103.93	12.73	0.31	.69	.23	.31
Assertiveness	106.02	13.69	107.32	12.23	0.74	.52	.42	.25
Independence	103.49	12.40	105.77	11.41	2.74	.32	.75	.18
Interpersonal relationships	102.76	14.96	103.22	14.10	0.08	-0.03	.71	.43
Empathy	101.13	13.32	99.90	13.50	0.66	.32	.67	-0.19
Social responsibility	105.97	13.67	103.52	13.21	2.54	.05	.60	.04
Problem solving	108.49	11.89	108.34	11.73	0.01	.51	.53	.21
Reality testing	105.28	12.44	106.18	13.30	0.40	.24	.13	.77
Impulse control	105.25	13.17	107.52	10.99	2.51	.31	-0.12	.70
Flexibility	100.94	15.08	105.09	14.65	6.01*	.11	.24	.70
Stress tolerance	105.59	13.59	105.81	13.03	0.02	.44	.12	.59
Optimism	104.93	12.93	107.31	11.95	2.74	.41	.41	.48
F(5, 395) = 14.36******p < .0	01, **p < .01, *p <	.05		Eigen value	e	23.04	18.45	18.43
•	- · ·			Variance%		23.04	41.49	59.92

factor and just one (sales potential) on a second.

Table 2 shows that only one of the fifteen EI facets showed a difference between men and women, less than one may expect by chance. It also shows the results of the Promax-rotated factor analysis. This revealed three clear factors, rather than the five set out in the manual. Thus, the factor structure of the model was not confirmed for this sample, though the resulting structure was interpretable. The first factor contained all three self-perception and two self-expression facets and labelled Self Awareness. The second contained one self-expression, all interpersonal and one decision making facet and was labelled Social Interaction. The third was contained two decision making and all three stress management facets and was labelled Adaptability.

Table 3 shows the results of six step-wise regressions. In each first age and gender were entered, followed by the fifteen facets. It also shows the correlations between the factors and the six scores. Each regression was significant and accounted for between a fifth and a third of the variance. Very different EI facets seemed relevant for the different occupational scales, and second that some EI facets were negatively correlated, indicating that the more an individual has of that emotional intelligence facet the less well they are likely to perform in the occupational area. Some EI facets were not significant in predicting any occupational outcomes (i.e., emotional self-awareness, assertiveness, reality testing, and optimism) while Impulse Control was

significant in all the regressions.

The six EI facets with statistically significant beta coefficients in the regression equation with Service Orientation were Self-Actualisation (negative), Interpersonal relationships, Empathy, Social Responsibility, Impulse Control, and Stress Tolerance. This suggests that success in service-oriented occupations is related to the ability to relate well to others and manage relationships, as well as stay calm and in control in stressful situations. The negative correlation with Self-Actualisation suggests that individuals who focus less on self-development and more on day-to-day tasks are more likely to perform better in service oriented jobs than those who focus on setting inspiring plans for themselves and the future.

Five EI facets were related to Stress Tolerance. These were Self-Regard, Self-Actualisation (negative), Impulse Control, Stress Tolerance, and Flexibility. This suggests that individuals who are self-confident, task-focused, deliberate and composed, stay calm under pressure and adaptable are likely to cope in jobs that are stressful.

There were three significant betas for the Reliability occupational scale and overall least variance was accounted for. Self-Regard, Independence (negative) and Impulse Control all were significant predictors of Reliability in the regression equation. The results suggest that individuals who have a healthy respect for themselves, prefer to let others take the lead in making decisions, and are deliberate in their

**Table 3**Results of regressions for the six occupational scales using EQ-i subscales as predictors.

Variables	Servi	ice orienta	ation	Stress tolerance			Reliability			Clerical potential			Sales p	otential		Managerial potential		
	r	Beta	t	r	Beta	t	r	Beta	t	r	Beta	t	r	Beta	t	r	Beta	t
Age		.01	0.12		.09	1.87		.08	1.47		.11	2.10		-0.06	-1.08		.09	1.70
Gender		-0.04	-0.71		-0.05	-0.99		.07	1.29		.05	0.89		-0.16	-2.92		.04	0.78
1. Self- Regard	.28	.08	1.21	.41	.24	4.15	.24	.15	2.28	.32	.07	1.18	.27	-0.03	-0.44	.43	.14	2.37
2. Self-Actualisation	.17	-0.17	-2.60	.20	.21	-3.50	.17	.02	0.32	.24	-0.15	-2.32	.24	.02	0.29	.37	.06	0.95
3. Emotional Self Awareness	.20	.00	0.00	.17	.03	0.55	.09	-0.09	-1.26	.24	.07	1.09	.18	.06	1.01	.23	-0.01	-0.12
4. Emotional Expression	.27	.07	1.23	.24	.05	0.97	.18	.09	1.61	.24	.03	0.60	.39	.16	2.95	.30	.07	1.29
<ol><li>Assertiveness</li></ol>	.16	-0.02	-0.33	.22	-0.00	-0.02	.12	-0.03	-0.40	.23	-0.03	-0.39	.20	-0.05	-0.90	.36	.11	1.77
6. Independence	.12	-0.03	-0.55	.28	-0.01	-0.18	.04	-0.17	-2.74	.20	-0.03	-0.51	.11	.02	0.39	.28	-0.02	-0.33
7. Interpersonal Relationship	.38	.16	2.54	.20	-0.09	-1.69	.11	-0.06	-0.96	.28	-0.01	-0.11	.53	.42	7.30	.27	-0.03	-0.45
8. Empathy	.30	.13	2.09	.14	.04	0.79	.08	.01	0.09	.24	.06	0.99	.20	-0.14	-2.59	.16	.01	0.14
9. Social Responsibility	.33	.11	1.76	.23	-0.01	-0.31	.15	.03	0.50	.31	.07	1.11	.37	.09	1.75	.30	.01	0.16
<ol><li>Problem Solving</li></ol>	.27	-0.04	-0.59	.44	.04	0.65	.24	.11	1.46	.37	-0.00	-0.06	.26	.04	0.64	.48	.17	2.43
11. Reality Testing	.22	-0.01	-0.12	.24	-0.02	-0.26	.17	.06	0.79	.26	-0.03	-0.43	.17	-0.04	-0.58	.31	-0.04	-0.54
<ol><li>12. Impulse Control</li></ol>	.31	.24	4.59	37	.19	8.83	.38	.36	6.60	.27	.11	2.10	05	-0.17	-3.52	.29	.12	2.43
<ol><li>Flexibility</li></ol>	.28	.06	1.04	.46	.24	4.36	.17	-0.02	-0.33	.42	.21	3.49	.33	.14	2.50	.41	.11	1.92
<ol><li>Stress Tolerance</li></ol>	.33	.14	2.06	.46	.27	4.15	.17	-0.04	-0.48	.45	.28	4.10	.28	.06	0.99	.42	.07	0.99
15. Optimism	.30	.05	0.81	.34	.03	0.48	.21	.05	0.70	.38	.10	1.53	.31	.01	0.09	.41	.06	0.91
F(7, 360) =	7.94				12. 87			5.81			9.24			13.23			10.41	
Adj R <sup>2</sup>	.25				.36			.19			.28			.37			.31	

actions tend to work well in positions that require them to be honest, dependable and responsive to supervision.

There were four significant predictors of Clerical Potential of which again Self-Actualisation was a negative predictor. The other aspects were Impulse Control, Flexibility and Stress Tolerance. This suggests that in order to be successful in clerical positions, individuals should be able to tolerate high levels of stress, be open to change and be able to keep their impulses in check.

In the regression for Sales Potential men were more likely to score higher on this than women. In addition, low scores on Empathy and Impulse Control but high scores on Emotional Expression, Interpersonal relationships, Flexibility and Stress Tolerance would result in higher scores on the Sales Potential scale. Lower scores on Empathy and Impulse control have long been associated with sales profiles, as successful salespeople are able to make the sale in spite of what the buyer may want or need, and tend to "throw caution to the wind" in taking impulsive chances to make sales. High scores on the other scales suggest that success in sales is related to expressing one's emotions openly, building effective relationships, being adaptable and fleet-footed, and able to cope with high levels of stress.

Finally, there were three modest predictors of Management Potential namely Self-Regard, Problem Solving and Impulse Control. This suggests that success in management positions may require confidence, a calm and objective approach to solving problems, and the ability to control behaviour and delay gratification.

Table 4 shows similar regressions to Table 3 but here using the five EQ domain scores rather than the fifteen facets. All five regressions were significant, accounting for between 13% and 30% of the variance. The pattern of results was quite different for each of the dependent variables. In a few age and gender were significant: gender with Sales Potential and age with Clerical Potential. Of the five factors decision making and stress management was a significant predictor in five regressions while for self-expression it was only significant in one. Interestingly two of the significant betas were negative: thus self-perception was negatively associated with service orientation and decision making negatively associated with sales potential.

The final two regressions used the results of the factor analyses shown in Tables 2 and 3 which indicated that the six occupational scores factored into two, and the fifteen EQ facets into three scales. In both regression age and gender were entered in the first step and the three EQ factor scores in the second step as predictor variables. The first regression had the totalled occupational scores except Sales Potential which loaded on a separate factor. This was significant (F (5353) = 39.47,  $AdjR^2$  = 0.35, p < .001). Neither gender nor age were significant but all three EQ factors were: One (Beta = 20, t = 4.73, p < .001); Two (Beta = 0.48. t = 11.12, p < .001), and Three (Beta = 0.29, t = 6.73, p < .001). The second regression had Sales Potential as the criterion score. This was significant (F (5353) = 28.69,  $AdjR^2$  = 0.28, p < .001). Neither gender nor age were significant but all three EQ factors were: One (Beta = 13 t = 3.01, t < .001); Two (Beta = 0.18. t = 3.89 t < .001), and

Three (Beta = = 0.47, t = = 10.34, p < .001).

#### 4 Discussion

The main findings are to be found in Tables 4 and 5. There, four major findings observable in these tables. *First*, all the regressions were significant indicating that emotional intelligence is related to different forms of work success. These regressions tend to account for one fifth to one third of the variance. *Second*, some of the facets and domains seem related to a number of the six occupational scales. For example, *Impulse Control* was related all six occupational outcome measures. It had positive relationships with all outcomes except for Sales Potential, where it was negative.

Third, some of the facets did not have any significant relationship to any of the measures (i.e., Emotional Self Awareness, Assertiveness, Reality Testing, and Optimism) which was unexpected. It may be that while there is some correlation, the relationship is not strong enough to be able to predict specific work outcomes for this particular sample.

Fourth, and perhaps most interesting of all was the finding that some of the scales were negative predictors of occupational success. One such was Self-Actualisation, which is defined as "the pursuit of meaning and self-improvement" (MHS Staff, 2011). Low scores on this scale are related to a focus on the task at hand and setting lower personal goals. It is likely that a focus on self-improvement, own continuous learning and setting strategic personal goals may hamper working well with others. Independence, defined as "self-directed and free of emotional dependency", was negatively related to Reliability. Low scores on this scale relate to someone who is willing to be led and take direction from others, rather than following their own work agenda. This is a direct link to the aspect of Reliability that requires the individual to be responsive to supervision. Further, two facets were negatively related to Sales Potential: Empathy and Impulse Control, both of which confirm various stereotypes of sales people, as well as previous work in this area.

The regressions using the five domain scales underscored the above findings. It indicated that the two domains of Decision Making and Stress Management were most powerfully and consistently related to all the work-outcome measures. However, it may be argued that neither of these two dimensions are really part of emotional intelligence, which is typically defined by the first three domains in other measures of EI. Yet those interested in EI noted the central role of emotion management and identification which are related to interpersonal stress and effective decision-making (Petrides & Furnham, 2006)

One question here refers to the content validity of this measure and whether some dimensions, while important in the workplace, are essentially measuring aspects of the Big Five personality rather than EI per se. Van Zyl and de Bruin (2012) found a large degree of overlap between the EQ-i and trait measures of personality. While this relationship may account in part for these findings, it is also possible that aspects of personality inherently house elements of emotional control and expression related to EI.

**Table 4**Results of regressions for six occupational scales using EQ-i composite scales as predictors.

	Service orientation			Stress tolerance Relia			eliability (			Clerical potential			s potentia	1	Managerial potential			
	r	Beta	t	r	Beta	t	r	Beta	t	r	Beta	t	r	Beta	t	r	Beta	t
		0.1	0.14			1.05		0.7	1.00			0.10		0.05	1.00		00	1.60
Age		.01	0.14		.09	1.87		.07	1.38		.11	2.10		-0.05	-1.00		.09	1.68
Sex		-0.04	-0.71		-0.05	-0.99		.07	1.29		.05	0.89		-0.15	-2.92		.04	0.78
<ol> <li>Self- Perception</li> </ol>	.26	-0.16	-2.31	.32	-0.06	-0.91	.19	04	-0.59	.33	08	-1.14	.28	-0.01	-0.13	.43	.09	1.36
<ol><li>Self-Expression</li></ol>	.26	.00	-0.00	.34	.02	0.39	.17	-0.01	-0.19	.32	-0.02	-0.28	.36	.23	3.67	.44	.16	2.56
3. Interpersonal	.41	.33	5.59	.23	08	-1.35	.13	.03	0.44	.33	.12	2.03	.44	.30	5.21	.29	-0.03	-0.60
4. Decision Making	.35	.23	3.52	.46	.23	3.72	.36	.41	5.94	.39	.12	1.97	.14	21	-3.29	.46	.18	2.93
5. Stress Management	.38	.16	2.21	.53	.45	6.70	.22	-0.02	-0.29	.52	.43	6.29	.38	.21	3.09	.51	.26	3.86
F(7, 360) =	15.7	4			24.18			8.65			20.77			20.53			23.46	
Adj R <sup>2</sup>	.22				.31			.13			.28			.28			.30	

In this study we also factor analysed both scales. The factor analysis of the six occupational scales did not confirm the results of Furnham, Hyde and Trickey (2013). In this study there were two factors with all scales loading on the first scale and only Sales Potential on the second scale. Also, the factor analysis of the fifteen EQ scale did not confirm the factor structure as three rather than five factors emerged.

One particularly finding from this study was the uniqueness of the Sale Potential score which loaded on its own dimension and fairly uniquely had a number of EI facets and domains load negatively on it. Thus, Sales Potential was associated with low Empathy and Impulse Control and low on the Decision Making domain. Earlier, Vinchur, Schippmann, Switzer III and Roth (1998) published a metaanalytic review of the personality predictors of both objective (sales figures) and subjective (ratings) of sales success. For both objective and subjective criteria the two Big Five factors to be consistent significant predictors were Conscientiousness and Extraversion. Other factors that were significant predictors were Need for Achievement, Potency (impact, influence, energy), and Interest in the Job. Furnham and Fudge (2008) found, as expected, Conscientiousness did show a positive correlation, and Agreeableness a negative correlation, with measured sales success. However, they found Extraversion and Neuroticism showed no statistically significant relationship to any measure of sales success. In this study, low empathy makes sense as sales people may have to sell things to people who cannot afford products or which do not satisfy their requirements. The Impulse Control dimension however does not distinguish between functional impulsivity which could be very desirable in sales being an index of quick responses and dysfunctional impulsivity related to poor Impulse Control and poor planning.

A major limitation of the study is method invariance, which is particularly problematic with work-related studies. Having only self-report measures has two problems: first it tends to increase the reported size of relationships (correlations) and also there are problems associated with social desirability. However, the six occupational variables have been shown not to have their validity threatened by social desirability problems (Ones & Veswevaran, 2001). Yet it would always be most desirable to have observation data (multi-source data) or better still behavioural data as work success criteria. The study also collected data from only one organisation which threatens the generalizability of the results. It would also have been desirable to have other data on individuals such as their work-experience.

Also, it should be pointed out that this sample was comprised mainly of middle and senior managers. It may be that EI in part determines whether people are promoted to as well as succeed in higher level jobs.

The results of this study indicate that emotional intelligence as conceptualised by the EQ-i 2.0 does indeed play a role in the prediction of potential work success as measured by the occupational scales on the HPI. This confirms previous work in this area and provides good evidence for the inclusion of measures of emotional intelligence in workplace selection batteries. These results have educational, managerial and practical implications. It is generally accepted the EI can be taught and therefore it is clear from this study which particular skills need to be taught to those wishing success in most, or very specific, careers (i.e. decision making and stress management). It also documents which particular EI facets are most closely linked to different jobs so making assessment and selection more efficient and evidence-based. Equally the finding that some facets of EI were negatively associated with success should alert managers to study the whole EI profile rather than simply look at total scores and indeed use EI as a potentially select-out measure (Furnham et al., 2012).

#### Supplementary materials

Supplementary material associated with this article can be found, in

the online version, at doi:10.1016/j.paid.2019.109647.

#### References

- Bar-On, R. (2004). The bar-on emotional quotient inventory (EQ-i): Rationale, description and psychometric properties. In G. Geher (Ed.). Measuring emotional intelligence: Common ground and controversy. Hauppauge, NY: Nova Science.
- Bar-On, R. (2006). The bar-on model of emotional-social intelligence (ESI). Psicothema, 18, 13–25.
- Butler, C. J., & Chinowsky, P. S. (2006). Emotional intelligence and leadership behavior in construction executives. *Journal of Management in Engineering*, 22(3), 119–125.
- Day, A.L., .Therrien, D.L., .& Carroll, S.A. (.2005). Predicting psychological health: Assessing the incremental validity of emotional intelligence beyond personality.
- Di Fabio, A, & Palazzeschi, L. (2012). Organizational justice: personality traits or emotional intelligence? An empirical study in an Italian hospital context. *Journal of Employment Counseling*, 49(1), 31–42.
- Ekermans, G., Saklofske, D., Austin, E., & Stough, C. (2011). Measurement invariance and differential item functioning of the Baron EQ-i. *Personality and Individual Differences*, 50, 286–290.
- Farnia, F., Nafukho, F. M., & Petrides, K. V. (2018). Predicting career decision-making difficulties: The role of trait emotional intelligence, positive and negative emotions. *Frontiers in Psychology*, 9, 107.
- Furnham, A. (2018). Dark side correlates of job reliability and stress tolerance in two large samples. *Personality and Individual Differences*, 117, 255–259.
- Furnham, A., & Fudge, C. (2008). The five factor model of personality and sales performance. *Journal of Individual Differences*, 2, 11–16.
- Furnham, A., Trickey, G., & Hyde, G. (2012). Bright aspects to dark side traits: Personality disorders and work success. Personality and Individual Differences, 52, 908–913.
- Furnham, A., Hyde, G., & Trickey, G. (2013). The values of work success. *Personality and Individual Differences*, 55, 485–489.
- Furnham, A., Hyde, G., & Trickey, G. (2014). The dark side of career preference. *Journal of Applied Social Psychology*, 46, 114–124.
- Goleman, D. (1998). Working with emotional intelligence. Bantam.
- Hogan, R., & Hogan, J. (1997). Hogan personality inventory manual. Tulsa, OK: Hogan Assessment Systems.
- Jordan, P. J., et al. (2002). Workgroup emotional intelligence: Scale development and relationship to team process effectiveness and goal focus. *Human Resource Management Review*, 12, 195–214.
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative metaanalysis and cascading model. *Journal of Applied Psychology*, 95, 54–78.
- Joseph, D. L., Jin, J., Newman, D. A., & O'Boyle, E. H. (2015). Why does self-reported Emotional Intelligence predict job performance? A meta-analytic investigation of mixed EI. *Journal of Applied Psychology*, 100, 298–342.
- Muchinsky, P. (1993). Validation of personality constructs for the selection of insurance industry employees. *Journal of Business and Psychology*, 7, 475–482.
- Multi-Health Systems Staff. (2011). Emotional quotient inventory 2.0: Users handbook. Toronto, ON: Multi-Health Systems, Inc.
- O'Boyle, E. H., Humphrey, R. H., Pollack, J. M., Hawver, T. H., & Story, P. A. (2010). The relation between Emotional Intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior*, 32, 788–818.
- Ones, D., & Viswesvaran, C. (2001). Integrity tests and other criterion-focused occupational scales (COPS) used in personnel selection. *International Journal of Selection and Assessment*, 9, 31–39.
- Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and Individual Differences*, 29(2), 313–320.
- Petrides, K. V., & Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables1. *Journal of Applied Social Psychology*, 36(2), 552–569.
- Quebbeman, A. J., & Rozell, E. J. (2002). Emotional Intelligence and dispositional affectivity as moderators of workplace aggression: The impact on behavior choice. Human Resource Management Review, 12(1), 125–143.
- Szczygiel, D., & Mikolajczak, M. (2018). Is it enough to be an extrovert to be liked? Emotional competence moderates the relationship between extraversion and peerrated likeability. Frontiers in Psychology, 9.Stone, T., Kisamore, J., & Jawahar, I. (2008). Predicting students' perceptions of academic
- Stone, T., Kisamore, J., & Jawahar, I. (2008). Predicting students' perceptions of academic misconduct on the Hogan Personality Inventory Reliability Scale. *Psychological Reports*, 102, 495–508.
- Taylor, N., & De Beer, J. (2010). The relationship between emotional intelligence and derailment across generations. Johannesburg, South Africa: JvR Psychometrics Technical report.
- Van Zyl, C. J. J. (2014). The psychometric properties of the emotional quotient inventory 2.0 in South Africa. SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 40(1) Art. #1192, 8 pages.
- Van Zyl, C. J. J., & de Bruin, K. (2012). The relationship between mixed model emotional intelligence and personality. *South African Journal of Psychology*, 42(4), 532–542.
- Vinchur, A. J., Schippmann, J. S., Switzer III, F. S.&, & Roth, P. L. (1998). A meta-analytic review of predictors of job performance for salespeople. *Journal of Applied Psychology*, 83, 586 doi.apa.org/journals/apl/83/4/586.
- Zeidner, M., Matthews, G., & Roberts, R. D. (2004). Emotional Intelligence in the work-place: A critical review. *Applied Psychology*, 53(3), 371–399.