

On the criterion and incremental validity of trait emotional intelligence

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This paper presents a comprehensive investigation of the criterion and incremental validity of trait emotional intelligence (*trait EI* or *trait emotional self-efficacy*), which is defined as a constellation of emotion-related self-perceptions and dispositions located at the lower levels of personality hierarchies (Petrides & Furnham, 2001). In Studies 1 and 2 ($N=166$ and 354 , respectively) trait EI is shown to be related to measures of rumination, life satisfaction, depression, dysfunctional attitudes, and coping. Most relationships remained statistically significant even after controlling for Big Five variance. In Study 3 ($N=212$) trait EI is shown to be related to depression and nine distinct personality disorders. Most relationships remained significant, even after controlling for positive and negative affectivity (mood). It is concluded that trait EI has a role to play in personality, clinical, and social psychology, often with effects that are incremental over the basic dimensions of personality and mood.

The construct of trait emotional intelligence (*trait EI* or *trait emotional self-efficacy*) refers to a constellation of emotion-related self-perceptions and dispositions located at the lower levels of personality hierarchies (Petrides,

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2001; Petrides, Furnham, & Mavroveli, in press-a). Its roots lie in the distinction between two EI constructs, viz., trait EI and ability EI (Petrides & Furnham, 2000, 2001, 2003, 2006; see also Austin, 2004; Day, Therrien, & Carroll, 2005; O'Connor & Little, 2003; Tett, Fox, & Wang, 2005; Warwick & Nettelbeck, 2004). The conceptualisation of EI as a personality trait leads to a construct that lies wholly outside the taxonomy of human cognitive ability (Carroll, 1993).

Theoretical motivation

The three studies in this paper report results from the trait EI research programme, which seeks to develop a comprehensive operationalisation of emotion-related aspects of personality across the life span. The operationalisation of a new construct, when properly conducted, requires a painstaking validation process along the lines described by Cronbach and Meehl (1955). This paper seeks to make three specific contributions in relation to this process.

The first aim of the paper was to establish the criterion validity of trait EI. With this in mind, we selected 23 dependent variables to cover a broad spectrum of constructs. This was essential both for the systematic development of a nomological network and for the empirical testing of the nature of trait EI. More specifically, the conception of the construct as a constellation of emotion-related self-perceptions and dispositions suggests that it must have statistically significant effects on many different variables in many different contexts. The criteria in this paper span the domains of personality, social, and clinical psychology. All were chosen for their theoretical relevance to trait EI (hypotheses are advanced in the study introductions) and some have also been incorporated in the cross-cultural arm of our programme.

The second aim of the paper was to explore the incremental validity of trait EI. Some researchers (e.g., MacCann, Roberts, Matthews, & Zeidner, 2004; Schulte, Ree, & Carretta, 2004) feel it is essential to demonstrate what, if anything, self-report measures of EI can predict over and above the basic personality dimensions. Studies 1 and 2 were specifically designed to address this question, whereas Study 3 examined incremental validity vis-à-vis the basic dimensions of mood.

The question of incremental validity is not equally relevant to the various EI models that are operationalised through self-report. For models based on questionnaires and theorising about novel, hitherto supposedly undiscovered, abilities, competencies, and skills it would be rather problematic if these questionnaires did not consistently predict substantial amounts of variance over and above the basic personality dimensions. On the other hand, from the perspective of trait EI theory, this question is of little consequence.

Because trait EI is explicitly conceptualised as a lower-order personality construct, it is *expected* to show strong correlations with the higher-order dimensions that define its factor space (Petrides, 2001; Petrides, Pita, & Kokkinaki, in press-b; see also De Raad, 2005). Therefore, trait EI theory predicts that the construct will exhibit incremental predictive validity over the basic personality dimensions only in relation to criteria that are sufficiently affect laden.

The two established trait hierarchies are the Eysenckian (Barrett, Petrides, Eysenck, & Eysenck, 1998; Eysenck, 1990), which posits three basic personality dimensions (Psychoticism, Extraversion, and Neuroticism; Giant Three) and the five-factor (e.g., Costa & McCrae, 1992; John & Srivastava, 1999), which posits five basic personality dimensions (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness; Big Five). Studies 1 and 2 examine the incremental validity of trait EI vis-à-vis the Big Five (see Petrides, Frederickson, & Furnham, 2004, for analyses with the Giant Three).

Demonstrations of discriminant and incremental validity are considerably more difficult in a Big Five than a Giant Three context, because the former is a broader taxonomy (Draycott & Kline, 1995; Petrides & Furnham, 2001). Studies 1 and 2 are among the few in the literature to examine the incremental validity of trait EI over the NEO PI-R operationalisation of the Big Five, which comprises 240 items assessing 30 different personality facets. Saklofske, Austin, and Minski (2003) present an incremental validity study with the NEO FFI, which comprises only 60 items, while Petrides and Furnham (2003) partial out NEO PI-R variance, but focus on a comparison between participants with high versus low residualised trait EI scores. Study 3 investigates the incremental validity of trait EI in relation to mood (dispositional affect), since mood variance has also been seen as a baseline that the construct must exceed in criterion prediction.

The third aim of the paper was to highlight the generality of trait EI theory, which extends far beyond a simple, albeit necessary, offer of an accurate label for EI measured through self-report. Self-report measures of EI have proliferated to an extent that has led to requests for a moratorium (Roberts, Schulze, Zeidner, & Matthews, 2005). Although their authors invariably insist they assess abilities (Zeidner, Shani-Zinovich, Matthews, & Roberts, 2005), we view these questionnaires as measures of trait EI (e.g., Pérez, Petrides, & Furnham, 2005; Petrides & Furnham, 2000). Moreover, we maintain that trait EI theory can provide a scientific context for the meaningful interpretation of data from these measures (Petrides et al., in press-a).

Study 1 utilises a modified version of the EQ-i (Bar-On, 1997), whose author claims that it measures capabilities, competencies, and skills, while Studies 2 and 3 utilise the Trait Emotional Intelligence Questionnaire

(TEIQue; Petrides, 2001; Petrides & Furnham, 2003), which is specifically developed as the measurement vehicle for trait EI. If the tenet of the theory is correct, viz., that all self-report measures of EI (and cognate constructs) are measures of *trait EI*—irrespective of whether they were meant to operationalise abilities or competencies—then the two instruments should yield compatible findings. If the findings are incompatible, then the theory would have to be amended.

To summarise, the paper extends the current literature by presenting one of the largest investigations of the criterion and incremental validity of EI questionnaires, based on data from two different countries, and with specific emphasis on the interpretation of the findings from the perspective of trait EI theory.

STUDY 1

Study 1 examined the criterion and incremental validity of trait EI, over the Big Five personality dimensions, in relation to the following theoretically relevant criteria:

Rumination is defined as “passively and repetitively focusing on one’s symptoms of distress and the circumstances surrounding these symptoms” (Nolen-Hoeksema, McBride, & Larson, 1997, p. 855). Because high trait EI individuals believe they are aware of their feelings and able to regulate them, it was hypothesised that they would be less likely to ruminate (*H1a*).

Life satisfaction judgements involve a cognitive evaluation of one’s circumstances against a set of subjective criteria (Diener, Emmons, Larsen, & Griffin, 1985). Because emotional states have a direct impact on this evaluation, particularly in individualist Western societies (Suh, Diener, Oishi, & Triandis, 1998), it was hypothesised that trait EI would be positively correlated to life satisfaction (*H2a*; see also Palmer, Donaldson, & Stough, 2002; Saklofske et al., 2003).

Coping is the process by which people try to manage stress. Coping styles can be adaptive or maladaptive, although this depends on contextual factors too (Lazarus, 1991). Like various EI models (e.g., Goleman, 1995) trait EI theory views the construct as central to the development and implementation of successful coping mechanisms. Compared to their low trait EI counterparts, high trait EI individuals should be more likely to employ adaptive coping styles (*H3a*) and less likely to employ maladaptive coping styles (*H4a*) when dealing with stress.

The hypotheses concerning incremental validity are a reformulation of those presented above. Thus, it was hypothesised that *after all of the variance accounted for by the five dimensions of personality has been partialled out*, trait EI would be reliably associated with lower scores on rumination (*H1b*),

higher levels of satisfaction with life (*H2b*), frequent use of adaptive coping styles (*H3b*), and infrequent use of maladaptive coping styles (*H4b*).

Method

Participants

One hundred sixty-six individuals from a British university participated in the study (54 males and 110 females, two unreported). The mean age for the sample was 22.17 years ($SD = 4.27$ years). Most participants were single ($\approx 87\%$) and did not have an undergraduate degree ($\approx 77\%$).

Measures: Predictors

BarOn Emotional Quotient inventory (EQ-i; Bar-On, 1997). The EQ-i comprises 133 self-report items and has been used in many studies in the literature (e.g., Dawda & Hart, 2000; Hemmati, Mills, & Kroner, 2004; Parker, Taylor, & Bagby, 2001). Its psychometric properties were scrutinised in Petrides and Furnham (2001) and Palmer, Manocha, Gignac, and Stough (2003), who reported factor structure problems that are, however, of limited relevance to the present paper. Similar to most other EI questionnaires, and as briefly explained in the general discussion, the fundamental problem with this instrument lies not so much in its psychometric properties as in the conceptually flawed model that underpins it. As in previous studies, we incorporated an additional 15-item scale (“emotion mastery”) in an effort to cover some of the salient aspects of the trait EI domain that the EQ-i does not. The internal consistency of the global score on this sample was .90.

NEO PI-R (Costa & McCrae, 1992). This is the most widely used inventory for assessing normal adult personality on the dimensions of the five factor model. It consists of 240 items, measuring six facets for each of the five basic personality dimensions, viz., Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. Although we used the long form of the inventory, our statistical analyses, as in the case of trait EI, are based on global scores. There are three advantages in using the long form of an instrument. First, unlike short forms, it guarantees adequate coverage of the intended sampling domain (Smith, McCarthy, & Anderson, 2000). Second, long forms have more desirable internal consistency properties. Third, the use of the long form of the NEO PI-R allows data analyses at the facet level. For reasons of space, we do not report such analyses in this paper, however, we would be happy to release the relevant data to interested researchers upon request. On this sample, the internal consistencies of the five factors were .83, .80, .81, .83, and .81, respectively.

Measures: Criteria

Emotion Control Questionnaire (ECQ)—Rehearsal Scale (Roger & Najarian, 1989). The 14-item rehearsal scale from the ECQ was used to measure rumination (e.g., “I remember things that upset me or make me angry for a long time afterwards”). Participants were asked to respond on a 6-point Likert scale. On this sample, the internal consistency was .80.

Satisfaction with Life Scale (Diener et al., 1985). This questionnaire consists of five items and measures global life satisfaction (e.g., “In most ways my life is close to my ideal”). Participants were asked to respond on a 7-point Likert scale. On this sample, the internal consistency was .85.

Coping Styles Questionnaire (Roger, Jarvis, & Najarian, 1993). This questionnaire comprises 60 items assessing how one typically reacts to stress. It measures four factorially distinct coping strategies, two of which are adaptive, viz., “rational coping” (e.g., “Take action to change things”) and “detached coping” (e.g., “Just take nothing personally”) and two are maladaptive, viz., “emotional coping” (e.g., “Feel worthless and unimportant”) and “avoidance coping” (e.g., “Feel that time will sort things out”). Participants responded on a 4-point Likert scale, ranging from “*always*” to “*never*”. On this sample, the internal consistencies were .82, .79, .82, and .70 for the “rational”, “detached”, “emotional”, and “avoidance” coping styles, respectively.

Procedure

Participants were given a battery of questionnaires, which they completed in class or in their own time. Instructions were presented directly on the questionnaires and participation was voluntary. The questionnaires took approximately 90 minutes to complete.

Results

Due to the large amount of data, the results will be presented succinctly. All relevant statistical details are given in Table 1. Analyses involved two-step hierarchical regressions, entering trait EI on its own at step 1, to investigate criterion validity, and adding the Big Five personality dimensions at step 2, to investigate incremental validity. Special attention was paid to potential outliers and all cases with residuals greater than |3.5| standard deviations away from the mean were removed. This cut-off value is conservative, given the large size of the sample (Stevens, 2001).

Trait EI was a statistically significant negative predictor of “rehearsal” (rumination) at both steps of the regression equation. These results support

TABLE 1
Study 1: Hierarchical regressions with trait EI entered at step 1 and the Big Five entered at step 2

	<i>Rumination</i>		<i>Satisfaction with life</i>		<i>Rational coping (Adaptive)</i>		<i>Detached coping (Adaptive)</i>		<i>Emotional coping^a (Maladaptive)</i>		<i>Avoidance coping (Maladaptive)</i>	
Step 1	$F(1, 164) = 62.86^{**}$, $R_{adj}^2 = .273$		$F(1, 164) = 74.50^{**}$, $R_{adj}^2 = .308$		$F(1, 164) = 78.11^{**}$, $R_{adj}^2 = .318$		$F(1, 164) = 39.40^{**}$, $R_{adj}^2 = .189$		$F(1, 164) = 89.55^{**}$, $R_{adj}^2 = .349$		$F(1, 164) = 21.88^{**}$, $R_{adj}^2 = .112$	
Step 2	$F(6, 159) = 17.98^{**}$, $R_{adj}^2 = .382$		$F(6, 159) = 13.66^{**}$, $R_{adj}^2 = .315$		$F(6, 159) = 16.59^{**}$, $R_{adj}^2 = .362$		$F(6, 159) = 18.54^{**}$, $R_{adj}^2 = .389$		$F(6, 159) = 24.04^{**}$, $R_{adj}^2 = .457$		$F(6, 159) = 7.53^{**}$, $R_{adj}^2 = .192$	
	β	t	β	t	β	t	β	t	β	t	β	t
Trait EI (step 1)	-.526	7.93**	.559	8.63**	.568	8.84**	.440	6.28**	-.594	9.46**	-.343	4.68**
N	.418	4.57**	-.042	0.43	-.159	1.71	-.586	6.44**	.476	5.57**	.042	0.40
E	.123	1.61	.182	2.25*	-.120	1.53	-.057	0.74	.060	0.84	-.161	1.83
O	.110	1.68	-.017	0.24	.058	0.87	-.003	0.04	.109	1.77	.016	0.21
A	-.082	1.29	-.045	0.67	-.180	2.79**	-.218	3.45**	.096	1.59	.024	0.33
C	.141	1.88	.111	1.41	.053	0.69	-.242	3.24**	.017	0.23	-.374	4.36**
Trait EI (step 2)	-.368	3.30**	.388	3.31**	.518	4.57**	.222	2.00*	-.277	2.65**	-.042	0.33

Note: * $p < .05$; ** $p < .01$. ^aOne outlier was removed from step 2 of the regression.

hypotheses *H1a* and *H1b*. Similar results were obtained with “satisfaction with life”, thus supporting hypotheses *H2a* and *H2b*. Subsequently, a set of four hierarchical regressions was carried out with each of the coping styles (two adaptive and two maladaptive) as dependent variables. Trait EI was a statistically significant positive predictor of the two adaptive coping styles (“rational” and “detached”) at both steps of the hierarchical regressions. These results support hypotheses *H3a* and *H3b*. It was also a statistically significant negative predictor at step 1 of the two regressions with maladaptive coping styles (“emotional” and “avoidance”). However, at step 2, it reached significance only in the equation with “emotional coping” as the criterion. These results support hypotheses *H4a* and, partially, *H4b*.

Discussion

Trait EI was a reliable predictor of all criteria in the study, as hypothesised. Moreover, most relationships were incrementally valid over the Big Five personality dimensions. With respect to criterion validity, hypotheses *H1a* to *H4a* were fully supported. Trait EI was positively associated with life satisfaction and the two adaptive coping styles and negatively associated with rumination and the two maladaptive styles.

There is plenty of evidence that trait EI relates meaningfully to other variables (Austin, Saklofske, & Egan, 2005; Schutte et al., 2001; Spence, Oades, & Caputi, 2004; Tett et al., 2005; Wong & Law, 2002), but the more interesting question in this case was whether it does so incrementally over the Big Five. It is clear from the results of this study that it does. Partialling out all five personality dimensions did not nullify the construct’s associations with any criterion, except “avoidance coping”. These results support hypotheses *H1b* to *H4b*. In short, trait EI was incrementally associated with the criteria, as hypothesised.

STUDY 2

The first aim of this study was to replicate the main findings of Study 1, especially in relation to incremental validity. The second aim was to investigate the validity of a different trait EI measure that has been specifically designed to cover the sampling domain of the construct comprehensively. The third aim was to expand the nomological network of trait EI by exploring its relationship to theoretically relevant, but hitherto unexamined, variables.

For purposes of replication and comparison, we incorporated the four distinct *coping styles* from Study 1. The hypotheses were the same, i.e., trait EI was expected to be a positive predictor of the two adaptive coping styles (“rational” and “detached”); *H1a*) and a negative predictor of the two

maladaptive coping styles (“emotional” and “avoidance”; *H2a*). As in Study 1, it was hypothesised that these relationships would remain statistically significant after partialling out Big Five variance (*H1b* and *H2b*, respectively).

Study 2 also looks at constructs from the clinical, social, and personality domains. *Depression* and *dysfunctional attitudes* are two straightforward criteria to be used in the validation of trait EI. In both cases, we would expect negative associations (*H3a* and *H4a*) because high trait EI individuals believe they can regulate their emotions to stave off depressogenic cognitions that may trigger disorders when combined with stressful life events (Clark & Beck, 1999). It was further hypothesised that the negative associations would persist after partialling out Big Five variance (*H3b* and *H4b*).

The construct of *self-monitoring* was introduced by Snyder (1974) to account for individual differences in self-presentation and expressive behaviour. In this study, we examine the two distinct subcomponents of self-monitoring, viz., “ability to modify self-presentation” and “sensitivity to emotional expression,” as well as the global construct itself (Lennox & Wolfe, 1984). Because high trait EI individuals believe they can observe and control their emotional reactions, we hypothesised a positive relationship with all three self-monitoring criteria (*H5a*, *H6a*, *H7a*; see also Schutte et al., 2001). We further hypothesised that these relationships would persist after controlling for Big Five variance (*H5b*, *H6b*, *H7b*).

The last criterion in the study was *aggression*, as operationalised by Buss and Perry’s (1992) aggression questionnaire, which covers four distinct components. Because high trait EI individuals believe they can regulate emotions and their expression, we hypothesised that they would score lower on all four facets of aggression (“physical” *H8a*; “verbal” *H9a*; “anger” *H10a*; and “hostility” *H11a*). Furthermore, we expected the negative associations with “anger” and “hostility” to remain statistically significant after partialling out Big Five variance (*H10b* and *H11b*, respectively). We did not advance any incremental validity hypotheses for the instrumental components of aggression (“physical” and “verbal”) because they concern purposeful and context-specific behaviour.

Method

Participants

The study employed two samples examining different criteria. Sample 1 comprised 200 individuals (75 males and 125 females) with a mean age of 22.86 years ($SD = 6.17$ years). Most participants were single ($\approx 79\%$) and did not have an undergraduate degree ($\approx 78\%$). Sample 2 comprised 154 individuals (30 males and 124 females) with a mean age of 21.99 years ($SD = 6.03$ years). Most participants were single ($\approx 84\%$) and did not have an undergraduate degree ($\approx 87\%$).

Measures: Predictors

Trait Emotional Intelligence Questionnaire (TEIQue v. 1.00)¹. The TEIQue consists of 144 items and 15 subscales, predicated on trait EI theory and covering the sampling domain of trait EI comprehensively (Petrides, 2001; Petrides & Furnham, 2003). A detailed psychometric analysis of the inventory is presented in Mikolajczak, Luminet, Leroy, and Roy (in press). Participants responded on a 7-point Likert scale, ranging from “*completely disagree*” to “*completely agree*”. The internal consistency of the full scale was .91 and .89 on samples 1 and 2, respectively.

NEO PI-R (Costa & McCrae, 1992). As in Study 1, the NEO PI-R was used to assess five-factor personality and we focused exclusively on global scores. The internal consistencies of the five factors on samples 1 and 2, respectively, were: Neuroticism (.83 and .87), Extraversion (.84 and .79), Openness (.80 and .77), Agreeableness (.79 and .64), and Conscientiousness (.87 and .84).

Measures: Criteria—sample 1

Coping Styles Questionnaire (Roger *et al.*, 1993). This questionnaire was described in Study 1. On this sample, the internal consistencies were .82 (“rational coping”), .84 (“detached coping”), .83 (“emotional coping”), and .68 (“avoidance coping”).

Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). This is a well-established, 20-item measure of depressive symptomatology designed specifically for use in non-clinical settings. Participants were asked to indicate how frequently they experienced certain depressive symptoms during the “past week” (e.g., “I was bothered by things that usually don’t bother me”). The CES-D uses a 4-point Likert scale response format, ranging from “*Rarely or none of the time (less than 1 day)*” to “*Most or all of the time (5 to 7 days)*”. The internal consistency of the scale on this sample was .92.

Dysfunctional Attitudes Scale (DAS; Weissman & Beck, 1978). The DAS was developed from a cognitive theory perspective and consists of two 40-item parallel forms, measuring depressogenic attitudes and beliefs. For the purposes of the present study, we selected the 20 odd-numbered items from Form A. The DAS has been found to differentiate depressed patients from nondepressed psychiatric controls and nondepressed normal controls

¹ All TEIQue forms, versions, and translations are available from the first author, free of charge, for research purposes.

(Hamilton & Abramson, 1983; Hollon, Kendal, & Lumry, 1986). The internal consistency of the scale on this sample was .87.

Measures: Criteria—sample 2

Revised Self-Monitoring Scale (RSMS; Lennox & Wolfe, 1984). The RSMS is one of the most widely used measures of self-monitoring. It consists of seven items measuring “ability to modify self-presentation”, and six measuring “sensitivity to emotional expression”. Participants responded on a 6-point Likert scale. On this sample, the internal consistencies were .82, .81, and .85 for “ability to modify self-presentation”, “sensitivity to emotional expression”, and the global scale score, respectively.

Aggression Questionnaire (AQ; Buss & Perry, 1992). The AQ comprises 29 items, measuring four distinct aggression subscales, viz., “physical aggression”, “verbal”, “anger”, and “hostility”. It is responded to on a 5-point Likert scale. On this sample, the internal consistencies of the four subscales were .80, .69, .80, and .79, respectively.

Procedure

Participants at three British universities were given a battery of questionnaires, which they completed either in class or in their own time. Instructions were presented directly on the questionnaires and participation was on a voluntary basis. The questionnaires took approximately 90 minutes to complete.

Results

Due to the large amount of data, the results will be presented succinctly. All analyses involved two-step hierarchical regressions, entering trait EI on its own at step 1, to investigate criterion validity, and adding the Big Five personality dimensions at step 2, to investigate incremental validity. Outliers were treated as in Study 1.

Sample 1

All relevant statistical details are given in Table 2. Trait EI was a reliable positive predictor at both steps² of the hierarchical regressions with the two adaptive coping styles (“rational” and “detached”), thus supporting hypotheses *H1a* and *H1b*. It was also a reliable negative predictor at both steps of the hierarchical regressions with the maladaptive coping styles

² In the regression with “detached coping” as the criterion, the partial coefficient for trait EI at step 2 approached, but did not attain, statistical significance ($\beta_{TEI} = .181$, $t = 1.69$, $p = .09$).

TABLE 2
Study 2—sample 1: Hierarchical regressions with trait EI entered at step 1 and the Big Five entered at step 2

	<i>Depression</i>		<i>Dysfunctional attitudes^a</i>		<i>Rational coping (Adaptive)</i>		<i>Detached coping (Adaptive)</i>		<i>Emotional coping (Maladaptive)</i>		<i>Avoidance coping (Maladaptive)</i>	
Step 1	$F(1, 195) = 144.39^{**}$, $R_{adj}^2 = .422$		$F(1, 194) = 58.45^{**}$, $R_{adj}^2 = .228$		$F(1, 193) = 152.75^{**}$, $R_{adj}^2 = .439$		$F(1, 193) = 50.59^{**}$, $R_{adj}^2 = .204$		$F(1, 193) = 119.19^{**}$, $R_{adj}^2 = .379$		$F(1, 193) = 34.66^{**}$, $R_{adj}^2 = .148$	
Step 2	$F(6, 189) = 27.74^{**}$, $R_{adj}^2 = .451$		$F(6, 188) = 12.90^{**}$, $R_{adj}^2 = .269$		$F(6, 188) = 31.83^{**}$, $R_{adj}^2 = .488$		$F(6, 188) = 21.02^{**}$, $R_{adj}^2 = .382$		$F(6, 188) = 49.05^{**}$, $R_{adj}^2 = .598$		$F(6, 188) = 6.81^{**}$, $R_{adj}^2 = .152$	
	β	t	β	t	β	t	β	t	β	t	β	t
Trait EI (step 1)	-.652	12.02**	-.481	7.65**	.665	12.36**	.456	7.11**	-.618	10.92**	-.390	5.89**
N	.198	2.49*	.211	2.30*	-.181	2.37*	-.584	6.96**	.613	9.04**	.065	0.66
E	.010	0.12	-.009	0.09	-.090	1.21	-.199	2.42*	.039	0.58	-.010	0.10
O	.097	1.40	-.106	1.33	.015	0.23	.062	0.86	.038	0.66	-.019	0.23
A	-.119	2.16*	-.081	1.27	.012	0.23	-.032	0.56	-.032	0.68	.052	0.76
C	.024	0.38	.199	2.72**	.213	3.54**	.011	0.17	.070	1.31	-.173	2.24*
Trait EI (step 2)	-.559	5.33**	-.378	3.11**	.503	5.17**	.181	1.69 ^b	-.282	3.27**	-.260	2.07*

Note: * $p < .05$; ** $p < .01$. ^aOne outlier was removed from both steps of the regression. ^b $p = .09$.

(“emotional” and “avoidance”), thus supporting hypotheses *H2a* and *H2b*. Similar results were obtained in the hierarchical regressions with “depression” and “dysfunctional attitudes”, where trait EI was a reliable negative predictor at both steps, thus supporting hypotheses *H3a*, *H3b*, *H4a*, and *H4b*.

Sample 2

All relevant statistical details are given in Table 3. Trait EI was a statistically significant positive predictor at both steps in the hierarchical regressions with the three self-monitoring variables (“ability to modify self-presentation”, “sensitivity to emotional expression”, and “global self-monitoring”). These results provide support for hypotheses *H5a* to *H7a* and *H5b* to *H7b*. With respect to aggression, trait EI was a negative predictor of three of the four subscales at step 1 (“physical”, “anger”, and “hostility”, but not “verbal aggression”), thereby supporting *H8a*, *H10a*, and *H11a*, but not *H9a*. At step 2, with the Big Five added in the equations, trait EI was a significant negative predictor of “hostility”, but not “anger”. These results support hypothesis *H11b*, but not *H10b*. For purposes of completeness, and despite the fact that they were not tied to any hypotheses, we also report in Table 3 the second steps of the hierarchical regressions with “verbal” and “physical” aggression, where trait EI did not reach significance levels.

Discussion

The findings have three important implications for the construct validity of trait EI. First, they confirm previous research showing that the effects of trait EI span several different basic and applied domains (Petrides & Furnham, 2003; Schutte et al., 2001; Van der Zee, Schakel, & Thijs, 2002; Wong & Law, 2002). Second, they show that extant trait EI measures tend to produce convergent results (cf. coping styles findings in Studies 1 and 2). It could well be the case that some measures have more desirable psychometric properties than others, but we must reiterate that our conceptualisation (Petrides et al., in press-a) does not have to be synonymous with a particular measurement instrument. Third, in line with empirical demonstrations of discriminant validity, involving the identification of a distinct trait EI factor in personality factor space (Petrides & Furnham, 2001; Petrides et al., in press-b), these results strongly support the incremental validity of the construct over higher-order traits (see also Saklofske et al., 2003; Van der Zee & Wabeke, 2004).

Trait EI was related to the clinical variables (depression and dysfunctional attitudes) as well as to the personality and social variables (self-monitoring and aggression), as hypothesised. The only two hypotheses that were not

TABLE 3
Study 2—sample 2: Hierarchical regressions with trait EI entered at step 1 and the Big Five entered at step 2

	<i>Ability to modify self-presentation</i>		<i>Sensitivity to emotional expression</i>		<i>Physical aggression</i>		<i>Verbal aggression</i>		<i>Anger</i>		<i>Hostility^a</i>	
Step 1	$F(1, 148) = 37.27^{**}$, $R_{adj}^2 = .196$		$F(1, 148) = 5.67^*$, $R_{adj}^2 = .030$		$F(1, 149) = 12.59^{**}$, $R_{adj}^2 = .072$		$F(1, 149) = 1.06$, $R_{adj}^2 = .000$		$F(1, 149) = 25.27^{**}$, $R_{adj}^2 = .139$		$F(1, 148) = 84.69^{**}$, $R_{adj}^2 = .360$	
Step 2	$F(6, 141) = 6.61^{**}$, $R_{adj}^2 = .186$		$F(6, 141) = 5.80^{**}$, $R_{adj}^2 = .164$		$F(6, 142) = 7.54^{**}$, $R_{adj}^2 = .210$		$F(6, 142) = 10.93^{**}$, $R_{adj}^2 = .287$		$F(6, 142) = 16.58^{**}$, $R_{adj}^2 = .387$		$F(6, 141) = 26.04^{**}$, $R_{adj}^2 = .505$	
	β	t	β	t	β	t	β	t	β	t	β	t
Trait EI (step 1)	.449	6.11**	.192	2.38*	-.279	3.55**	-.084	1.03	-.381	5.03**	-.603	9.20**
N	.070	0.63	.320	2.84**	.228	2.08*	-.062	0.60	.449	4.66**	.473	5.40**
E	.104	1.05	-.132	1.32	-.004	0.04	.003	0.03	-.014	0.17	-.042	0.54
O	-.097	1.15	.230	2.69**	-.048	0.57	.109	1.39	.113	1.55	-.074	1.14
A	-.123	1.56	-.150	1.88	-.370	4.78**	-.533	7.22**	-.309	4.51**	-.216	3.51**
C	.040	0.46	.225	2.56*	-.109	1.28	-.206	2.53*	-.119	1.59	.150	2.20*
Trait EI (step 2)	.473	3.58**	.394	2.94**	.062	0.48	.081	0.65	.063	0.55	-.211	2.05*

Note: * $p < .05$; ** $p < .01$. ^aOne outlier was removed from both steps of the regression.

borne out by the data concerned step 1 of “verbal” aggression (*H11a*) and step 2 of “anger” (*H10b*). The lack of association between trait EI and the “verbal” AQ factor is likely due to the fact that the latter is conceptually confounded with assertiveness, which characterises high trait EI individuals. “Anger” was negatively related to trait EI, as expected, although the relationship was not significant after partialling out Big Five variance. Neuroticism and Agreeableness were the only significant predictors in the second step of this regression (positive and negative, respectively). The results on depression and dysfunctional attitudes suggest that very low trait EI may have psychopathological implications, a proposition we investigate in the last study of this paper.

STUDY 3

The aim of this study was to examine the criterion and incremental validity of trait EI in relation to both new variables and a new baseline, substituting the Big Five with the two basic dimensions of mood (positive and negative affectivity). Incremental validity studies have focused primarily on whether trait EI explains criterion variance over and above personality, probably because the conceptual correspondences between them have been repeatedly highlighted (Davies, Stankov, & Roberts, 1998; Matthews, Zeidner, & Roberts, 2002; McCrae, 2000; Petrides & Furnham, 2000). Given the links between personality and mood (Canli, Amin, Haas, Omura, & Constable, 2004; Watson, 2000), it is meaningful to ask how, and to what extent, the latter is related to trait EI. Studies exploring this question have revealed significant relationships (Ciarrochi, Chan, & Bajgar, 2001; Davies et al., 1998; Schutte, Malouff, Simunek, McKenley, & Hollander, 2002), which may have adaptive as well as maladaptive implications (Petrides & Furnham, 2003). The question, therefore, arises as to whether trait EI has incremental predictive validity over the basic dimensions of mood.

The criteria in this study exclusively comprise variables of clinical relevance. Although most research has focused on social and personality variables, we believe that trait EI is at least as likely to play an important role in clinical contexts (Petrides, 2001). One example is the strong negative relationship with *depression* (e.g., Ghorbani, Bing, Watson, Davison, & Mack, 2002; Saklofske et al., 2003; see also Study 2), which we sought to replicate while controlling for positive and negative affectivity. Therefore, we hypothesised that trait EI would be a reliable negative predictor of depression (*H1a*) and that it would remain such in the presence of the two dimensions of affectivity (*H1b*).

The fact that many mental disorders represent quantitative, rather than qualitative, abnormalities on personality dimensions (Bienvenu, Nestadt,

Samuels, Costa, Howard, & Eaton, 2001; Eysenck, 1970; Widiger, 1992) suggests that very low trait EI may have psychopathological consequences. Study 3 examines this possibility with reference to the *personality disorders* (PDs) incorporated in the Tenth Revision of the International Classification of Diseases (ICD-10; World Health Organization, 1992). Although high trait EI scores are not always adaptive or functional (Petrides et al., in press-a), they do indicate an overall healthy mental state in normal adults. Consequently, we hypothesised that trait EI would be negatively related to the ICD-10 PDs, including “paranoid” (*H2a*), “schizoid” (*H3a*), “schizotypal” (*H4a*), “histrionic” (*H5a*), “antisocial” (*H6a*) “borderline” (*H7a*), “obsessive-compulsive” (*H8a*), “dependent” (*H9a*), and “avoidant” (*H10a*). We further hypothesised that trait EI would remain a statistically significant predictor after controlling for positive and negative affectivity (*H2b* to *H10b*).

Method

Participants

Two hundred twelve individuals participated in the study (37 males and 175 females). The average age was 23.07 years ($SD = 3.33$ years). Participants were students in three Spanish universities.

Measures

Trait Emotional Intelligence Questionnaire (TEIQue v. 1.00). We used the Spanish adaptation of the TEIQue (see Study 2). The questionnaire was adapted into Spanish under the direction of the second author (see Pérez, 2003) in line with current test adaptation guidelines (Hambleton, 2001). Items were translated into Spanish, then back-translated into English and compared. Fifteen experts (university lecturers in education or psychology) were asked to rate each of the inventory’s 15 subscales for content validity, i.e., the degree to which they believed the subscales are relevant to the construct. Most subscales (12) were rated as either “relevant” or “essential” to the construct. Subsequently, the experts were asked to use a 5-point Likert scale to rate each of the inventory’s 144 items for “clarity and comprehensibility”. Most items (133) were rated “very clear”, with median ratings of 5. Unclear items were reviewed and translated again. Finally, three bilingual individuals (1 philologist and 2 educationists) evaluated and confirmed the linguistic equivalence of the English and Spanish versions. On this sample, the internal consistency of the global score was .90.

Positive and Negative Affect Schedule (PANAS). The Spanish version (Sandín, Chorot, Lostao, Joiner, Santed, & Valiente, 1999) of the 20-item PANAS (Watson, Clark, & Tellegen, 1989) was used to measure individual

differences in positive and negative affectivity. Participants were asked to indicate, on a 5-point Likert scale, how they feel “usually”. On this sample, the internal consistencies of positive and negative affectivity were .89 and .85, respectively.

Beck Depression Inventory (2nd ed.; BDI-II). The Spanish version (Sanz, Navarro, & Vázquez, 2001) of the second edition of the BDI (Beck, Steer, & Brown, 1996) was used to measure depression. The BDI-II consists of 21 items that are responded to on a 4-point scale. The internal consistency of the scale on this sample was .87.

International Personality Disorder Examination (IPDE). The IPDE is a semi-structured interview schedule, designed to produce diagnoses consistent with the ICD-10 and DSM-IV classifications (Loranger, Janca, & Sartorius, 1997). We employed the Spanish version (Pérez & Rubio, 1996) of the IPDE questionnaire, which is typically used as a screening instrument. It comprises 77 dichotomous (true/false) items and yields dimensional scores on 10 distinct PDs. The internal consistencies of the scales, along with a brief description of each, are given in Table 4. It is worth noting that the alphas were uniformly low on this sample, which reduces the likelihood of obtaining statistically significant effects. Due to its particularly low alpha, “narcissistic” was excluded from further analysis.

Procedure

Participants from three Spanish universities completed a battery of questionnaires in class. Instructions were shown on the questionnaires and participation was voluntary. The materials took approximately 90 minutes to complete.

Results

Due to the large amount of data, the results will be presented succinctly. Analyses involved two-step hierarchical regressions, entering trait EI on its own at step 1, to investigate criterion validity, followed by the two mood dimensions (positive and negative affectivity) at step 2, to investigate incremental validity. Outliers were treated as in the previous studies.

All relevant statistical details are presented in Tables 5 and 6. The results for “depression” were consistent with those of the British sample, thus supporting hypotheses *H1a* and *H1b*. With respect to the personality disorders, trait EI was a statistically significant negative predictor at step 1 in all nine hierarchical regressions, thus supporting hypotheses *H2a* to *H10a*. At step 2, statistically significant results were obtained with the following criteria: “paranoid”, “schizoid”, “schizotypal”, “borderline”, “dependent”,

TABLE 4
Factor pattern matrix and descriptive information for the IPDE ICD-10 scales

<i>IPDE scales</i>	<i>Factor 1</i>	<i>Factor 2</i>	<i>Alpha</i>	<i>Symptomatology</i>
Paranoid (7)	.642	.145	.53	Excessive preoccupations, recurrent suspicions, tendency to bear grudges persistently, suspiciousness of others.
Schizoid (7)	.573	-.361	.32	Indifference to praise or criticism, consistent choice of solitary activities, preoccupation with introspection.
Schizotypal (9)	.868	-.113	.60	Unusual perceptual experiences, odd behaviour, inappropriate affect, quasi-psychotic episodes.
Histrionic (8)	–	.541	.44	Self-dramatisation, exaggerated expression of emotions, shallow and labile affectivity, inappropriate seductiveness.
Antisocial (7)	.446	–	.42	Unconcern for the feelings of others, disregard for social norms, incapacity to maintain enduring relationships.
Borderline (9)	.572	.374	.63	Excessive efforts to avoid abandonment, threats or acts of self-harm, disturbances in and uncertainty about self-image.
Obsessive-compulsive (8)	.375	.114	.34	Feelings of excessive doubt and caution, rigidity and stubbornness, perfectionism, excessive pedantry.
Dependent (8)	.230	.580	.58	Fear of being left to care for oneself, inability to take decisions on one's own, undue compliance with others' wishes.
Avoidant (8)	.570	.125	.67	Persistent feelings of tension and apprehension, inferiority complex, avoidance of activities due to fear of criticism.

Note: Numbers in parentheses indicate the number of items in each scale. Loadings greater than $|\cdot30|$ are in bold. Loadings less than $|\cdot10|$ are suppressed.

and “avoidant”. In addition, the partial regression coefficients for trait EI in the equations with “antisocial” and “obsessive-compulsive” approached, but did not attain, significance ($\beta_{\text{TEI}} = -.186$, $t = 1.73$, $p = .08$ and $\beta_{\text{TEI}} = -.198$, $t = 1.91$, $p = .06$, respectively). Taken together, these results provide full support for hypotheses *H2b*, *H3b*, *H4b*, *H7b*, *H9b*, and *H10b*, partial support for hypotheses *H6b* and *H8b*, but no support for hypothesis *H5b* (“histrionic”).

Due to the low alphas of many IPDE scales, we performed a principal axis factor analysis of the nine PDs to determine whether they can be grouped into a small number of more reliable factors. The scree plot and Kaiser eigenvalue criterion converged on a two-factor solution, accounting for 53.40% of the variance. The oblimin-rotated factor pattern matrix for this solution is given in Table 4, where it can be seen that the first factor mainly concerns psychoses (“psychosis”), whereas the second, smaller, factor mainly concerns neuroses (“neurosis”). The internal consistencies of the two factors were .75 and .57, respectively. We subsequently regressed the two factors on trait EI and the affectivity dimensions using two-step hierarchical regressions as above. Trait EI was a statistically significant negative predictor of both, at step 1, “Psychosis”: $R_{\text{adj}}^2 = .409$, $F(1, 210) = 147.01$, $p < .01$; $\beta_{\text{TEI}} = -.642$, $t = 12.12$, $p < .01$; “Neurosis”: $R_{\text{adj}}^2 = .164$, $F(1, 210) = 42.50$, $p < .01$; $\beta_{\text{TEI}} = -.410$, $t = 6.51$, $p < .01$, as well as at step 2, “Psychosis”: $R_{\text{adj}}^2 = .471$, $F(3, 207) = 63.44$, $p < .01$; $\beta_{\text{TEI}} = -.453$, $t = 5.68$, $p < .01$; “Neurosis”: $R_{\text{adj}}^2 = .195$, $F(3, 207) = 17.90$, $p < .01$; $\beta_{\text{TEI}} = -.269$, $t = 2.73$, $p < .01$.

Discussion

The findings suggest that trait EI may have an important diagnostic role to play in relation to virtually all PDs included in the two major classification systems (ICD-10 and DSM-IV; see also Leible & Snell, 2004, for relevant results with other trait EI measures). As hypothesised, trait EI scores were negatively related to all PDs in the IPDE. More important, the negative associations held up after partialling out individual differences in dispositional mood, which are known to underlie psychopathology (Watson, 2000). It bears repeating that these results were obtained in spite of the low internal consistencies of the IPDE scales and were replicated when PDs were grouped into two factors with improved Cronbach alphas.

Low trait EI can be seen as a global susceptibility factor, predisposing individuals to a range of mental abnormalities. Its effects are not only stronger than those of affectivity, but also broader, contributing to the aetiology of mental disorders that are only partially related to emotional malfunctioning (e.g., antisocial personality). This should be expected because the construct extends beyond core emotional self-perceptions to

TABLE 5
Study 3—part I: Hierarchical regressions with trait EI entered at step 1 and the PANAS affectivity dimensions entered at step 2

	<i>Depression^a</i>		<i>IPDE paranoid</i>		<i>IPDE schizoid^b</i>		<i>IPDE schizotypal^c</i>		<i>IPDE histrionic^b</i>	
Step 1	$F(1, 209) = 105.43^{**}$, $R_{adj}^2 = .332$		$F(1, 210) = 47.81^{**}$, $R_{adj}^2 = .182$		$F(1, 209) = 16.94^{**}$, $R_{adj}^2 = .071$		$F(1, 209) = 66.82^{**}$, $R_{adj}^2 = .239$		$F(1, 209) = 8.18^{**}$, $R_{adj}^2 = .033$	
Step 2	$F(3, 206) = 50.88^{**}$, $R_{adj}^2 = .417$		$F(3, 207) = 20.51^{**}$, $R_{adj}^2 = .218$		$F(3, 206) = 5.96^{**}$, $R_{adj}^2 = .066$		$F(3, 207) = 35.63^{**}$, $R_{adj}^2 = .331$		$F(3, 206) = 3.80^{*}$, $R_{adj}^2 = .039$	
	β	t	β	t	β	t	β	t	β	t
Trait EI (step 1)	-.579	10.27**	-.431	6.92**	-.274	4.12**	-.492	8.17**	-.194	2.86**
PAN-N	.394	6.06**	.250	3.30**	.041	0.49	.288	4.10**	.133	1.58
PAN-P	-.202	2.85**	-.114	1.37	.038	0.42	.029	0.38	.040	0.44
Trait EI (step 2)	-.201	2.42*	-.208	2.14*	-.281	2.64**	-.384	4.28**	-.147	1.36

Note: * $p < .05$; ** $p < .01$. ^aOne outlier was removed from step 1 of the regression. ^bOne outlier was removed from both steps of the regression. PAN-N = PANAS negative affectivity. PAN-P = PANAS positive affectivity.

TABLE 6
 Study 3—part II: Hierarchical regressions with trait EI entered at step 1 and the PANAS affectivity dimensions entered at step 2

	<i>IPDE antisocial^a</i>		<i>IPDE borderline^b</i>		<i>IPDE OCD</i>		<i>IPDE dependent</i>		<i>IPDE avoidant</i>	
Step 1	$F(1, 207) = 4.11^*$, $R_{adj}^2 = .015$		$F(1, 209) = 114.40^{**}$, $R_{adj}^2 = .350$		$F(1, 210) = 16.50^{**}$, $R_{adj}^2 = .068$		$F(1, 210) = 55.69^{**}$, $R_{adj}^2 = .206$		$F(1, 210) = 105.57^{**}$, $R_{adj}^2 = .331$	
Step 2	$F(3, 204) = 4.31^{**}$, $R_{adj}^2 = .046$		$F(3, 206) = 44.78^{**}$, $R_{adj}^2 = .386$		$F(3, 207) = 9.11^{**}$, $R_{adj}^2 = .104$		$F(3, 207) = 23.72^{**}$, $R_{adj}^2 = .245$		$F(3, 207) = 35.91^{**}$, $R_{adj}^2 = .333$	
	β	t	β	t	β	t	β	t	β	t
Trait EI (step 1)	-.139	2.03*	-.594	10.69**	-.270	4.06**	-.458	7.46**	-.578	10.28**
PAN-N	.146	1.74	.228	3.36**	.230	2.84**	.244	3.27**	.102	1.45
PAN-P	.190	2.06*	-.117	1.60	.090	1.01	.080	0.98	-.051	0.66
Trait EI (step 2)	-.186	1.73 ^c	-.386	4.44**	-.198	1.91 ^c	-.370	3.88**	-.485	5.41**

Note: * $p < .05$; ** $p < .01$. ^aThree outliers were removed from both steps of the regression. ^bOne outlier was removed from both steps of the regression. ^c $p = .06$. PAN-N = PANAS negative affectivity. PAN-P = PANAS positive affectivity.

encompass a number of outcome self-evaluations, such as self-esteem (Petrides & Furnham, 2001).

Global susceptibility factors are clinically useful, not least because they can account for the co-occurrence (comorbidity) of PDs and thus contribute to the identification of common aetiologies. The downside is that such factors are insufficient to explain the wide range of disorder-specific symptomatology, which limits their applicability in treatment contexts (Matthews et al., 2002; Zinbarg & Barlow, 1996). While this issue has broader implications for trait EI, the findings of this study highlight the scope for research in clinical settings.

GENERAL DISCUSSION

As far as criterion validity is concerned, the data bore out 20 out of 21 hypotheses involving variables from the domains of personality, social, and clinical psychology. There can be little doubt that the constellation of emotion-related self-perceptions and dispositions that trait EI encompasses is implicated in numerous areas and will, therefore, be of interest to researchers and practitioners in many different fields.

In contrast to criterion validity, the investigation of the incremental validity of self-report measures of EI has led to considerable debate in the literature. A persistent criticism is that these measures add little, if any, predictive value over and above the basic personality dimensions (e.g., Matthews et al., 2002; Schulte et al., 2004). While we generally second these reservations, we do not believe they should be directed at self-report measures in general, but at the various models underpinning them. The tendency to lump self-report measures together and criticise them irrespective of their theoretical basis is problematic because it fails to differentiate between theories and measurement vehicles (Jensen, 1998).

Setting aside its psychometric advantages, the TEIQue is predicated on a theory that uniquely operationalises EI in a manner that resolves major criticisms about construct validity (Petrides et al., *in press-a*). In contrast, models operationalised through self-report questionnaires and theorising about abilities, competencies, or hitherto allegedly unknown dimensions of individual differences, are flawed in ways that have been discussed exhaustively in the scientific literature. Therefore, in what follows, we address incremental validity issues specifically from the perspective of trait EI theory.

The emphasis on questions of discriminant and incremental validity may be due to the fact that certain trait EI facets are already included in the established trait taxonomies (e.g., “assertiveness”, “adaptability”, “empathy”). As far as simple prediction is concerned, it would be interesting to

establish whether trait EI can account for statistically significant portions of criterion variance, once the variance of the facets that it shares with the basic personality dimensions has been removed. Alas, there is no generally accepted method of quantifying and removing overlapping variance due to *duplication* of facets. Overlapping variance can be removed in its entirety through statistical procedures, such as those employed in this paper. However, this drastic approach is problematic because it also removes variance due to valid associations between conceptually distinct constructs. For example, the correlation between “emotion expression” and Neuroticism is the result of a meaningful relationship between those two variables, rather than an artefact of facet duplication.

Removing overlapping variance stemming from meaningful associations, in addition to the spuriously overlapping variance stemming from duplication or common method assessment, strips trait EI of much, but not all—as this paper demonstrates—of its predictive power. Few personality and social psychology variables would retain much predictive validity following the removal of all of the variance they have in common with the Giant Three or the Big Five. Indeed, most constructs can be expressed as mixtures of the basic personality dimensions (Paunonen, 1998). However, such reconceptualisations fail to capture the essence of these constructs (Funder, 2001). It should come as no surprise that some weighted linear combination of the Giant Three or the Big Five personality factors accounts for a large amount of variance in most personality constructs (see O’Connor, 2002); it is precisely why these factors are deemed fundamental. The question critics must address is, what do we stand to gain by attempting to reconceptualise every construct at the lower levels of personality hierarchies as a mixture of the higher-order traits?

Another issue to consider is that incremental validity analyses in this and much other personality research are skewed. The crux lies in recognising that “personality” is not a unitary construct. When we ask whether trait EI, or any other variable, predicts “over and above personality” we are posing an inherently biased question. While trait EI carries only one degree of freedom, “personality” carries three (or five) and, consequently, it is far more likely to produce statistically significant associations with external criteria. Direct comparisons pitching a single trait EI variable against three (or five) personality variables are inevitably inequitable.

Bearing the foregoing in mind, we note that from a total of 17 hypotheses concerning incremental validity over the Big Five, 15 were borne out by the data. In addition, 9 out of 10 hypotheses concerning incremental validity over mood were also borne out by the data. These results were obtained with two different trait EI measures and data collected in two different countries. They complement results based on self-report (e.g., Saklofske et al., 2003), “real-life” (e.g., Petrides et al., 2004), and experimental (Petrides &

Furnham, 2003) criteria. As expected, given that a distinct trait EI factor can be isolated in Giant Three and Big Five factor space (Petrides et al., in press-b), trait EI predicts criterion variance over and above the basic dimensions of personality and mood.

In the context of so many statistically significant associations with such a broad range of criteria, questions may arise in relation to the construct's boundaries and discriminant validity. Note that, in this sense, the notion of discriminant validity concerns what the construct is *not* expected to predict, rather than whether it can be discriminated from the major personality dimensions (a question we address in Petrides et al., in press-b). As pointed out elsewhere (Petrides, Niven, & Mouskounti, 2006), and as this series of studies shows, the influence of emotions on most aspects of everyday life means that trait EI will be related to many different variables in many different contexts.

At the same time, obviously not all variables are affect-laden. We can, therefore, hypothesise that correlation strength will vary as a function of the affective load of a criterion, such that higher absolute values will be obtained with criteria that are more affectively relevant. We should witness near-zero correlations with IQ and heavily cognitive variables, like academic performance, at one end (see Petrides et al., 2004) and strong correlations with heavily affective variables, like depression and stress, at the other end (see Study 2 and Mikolajczak, Luminet, & Menil, 2006).

The paper's findings support a basic premise of trait EI theory, viz., that self-report questionnaires of EI and cognate variables operationalise a construct that is unrelated to capabilities, competencies, and skills. Rather, as we have argued elsewhere (Petrides & Furnham, 2001; Pérez et al., 2005), these questionnaires provide coverage, of variable quality and adequacy, of a constellation of emotion-related self-perceptions and dispositions that is located at the lower levels of personality hierarchies. The similarity of the results obtained through the modified EQ-i (Study 1) and the TEIQue (Studies 2 and 3) corroborates the generality of trait EI theory, which provides a platform for the interpretation of data from any EI questionnaire (see Saklofske et al., 2003, for comparable findings based on another scale). However, we must emphasise that EI-related questionnaires are measures of trait EI *only in so far as their results are interpreted through the lens of trait EI theory*. Consequently, we urge researchers and practitioners to abandon the mushrooming number of models emanating from commercial test user manuals, in clear favour of trait EI theory.

So what does this paper tell us about the "importance" of trait EI as an individual differences variable? The evidence shows that trait EI is potentially important, inasmuch as it is implicated in many different domains, with findings that are consistent across different measures, languages, and countries. Much trait EI research has been based on global

scores, as opposed to factor or subscale scores. The emphasis on global scores has been beneficial for two reasons. First, it has helped retain research focus on the development of the nomological network of the construct, instead of on introspective debates about factor structure. Second, because global scores are much less sensitive than factor scores to sampling domain variability across instruments, their use has helped develop and sustain a common research database that goes beyond specific models.

Global scores are not without drawbacks, foremost among which is a relative loss in explanatory power. This limitation can be overcome through the identification of robust and homogeneous clusters of trait EI facets. However, little is currently known about the factor structure of trait EI. Although relevant factor analytic data exist in the literature (e.g., Austin, Saklofske, Huang, & McKenney, 2004; Ciarrochi, Deane, & Anderson, 2002; Petrides & Furnham, 2000), they preceded the content analysis that gave rise to the sampling domain of trait EI (Petrides & Furnham, 2001) and hence are tied to early specific models. We expect that ongoing research with the TEIQue (Studies 2 and 3) will soon lead to substantial progress in this direction.

Trait EI theory is general and enables the meaningful interpretation of results from all EI questionnaires, which tend to be based on flawed conceptions, especially the notion that abilities can somehow be measured via self-report. As a multifactorial instrument, specifically designed to provide a measurement vehicle for trait EI theory, the TEIQue can be used for detailed analyses at the factor and subscale levels to address the aforementioned limitations of global scores. Such analyses would also go some way towards balancing the inherently biased comparisons in incremental validity studies that pitch a single degree of freedom for trait EI against multiple degrees of freedom for personality.

Much progress has been achieved in trait EI research, with the initial stage of construct operationalisation virtually complete and questions concerning measurement and validity conclusively addressed (Petrides et al., in press-a). New research questions should now be formulated such that they force a shift of emphasis from applied predictive utility to theoretical explanatory power. Ultimately, it is the latter of the two that will determine the importance of trait EI as an individual differences variable.

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