

# Psychometric Properties of the Trait Emotional Intelligence Questionnaire (TEIQue)

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**Abstract** This chapter presents an introduction to the theory and psychometric properties of the Trait Emotional Intelligence Questionnaire (TEIQue). We discuss the necessity of conceptualizing the increasing number of faux intelligences as personality traits, rather than as cognitive abilities, and give a detailed description of the TEIQue as the operationalization vehicle for trait emotional intelligence (*trait EI* or *trait emotional self-efficacy*). The inventory shows adequate reliability and temporal stability at the global, factor (4), and facet (15) levels. It has a clear and replicable factor structure comprising four distinct, but interrelated, dimensions: Emotionality, Self-control, Sociability, and Well-being. Self-other TEIQue correlations are substantial and similar to those observed for the Big Five. Preliminary data are presented for the new adolescent form of the TEIQue (TEIQue-AFF), which also shows satisfactory psychometric characteristics.

This chapter focuses predominantly on the psychometric properties of the full form of the Trait Emotional Intelligence Questionnaire (TEIQue; Petrides, 2001; Petrides & Furnham, 2003). Due to lack of space, we do not discuss the short, child, and 360° forms or any translations, although we present some descriptive data on the new adolescent form (TEIQue-AFF). More importantly, we only briefly discuss in this chapter the theory of trait emotional intelligence (trait EI or trait emotional self-efficacy), which underpins those instruments and distinguishes them from the large number of other measures currently available. Although there are concrete psychometric advantages of the TEIQue over the

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plethora of self-report EI questionnaires, the most significant is the theory that supports it. The fundamentals of trait EI theory were developed in Petrides (2001; see also Petrides & Furnham, 2001) and the latest summary is given in Petrides, Furnham, and Mavroveli (2007). Without an understanding of the underlying theory, it is difficult to appreciate the strengths and potential uses of the various TEIQue forms. We therefore invite readers to consider the theory carefully and independently of measurement instruments.

## **A Flood of Faux Intelligences**

Although emotional “intelligence” is one of the most popular faux intelligences to have penetrated scientific psychology, the tendency to class almost any type of behaviour as an “intelligence” is old and well-documented (Eysenck, 1998). In fact, the number of faux intelligences continues to increase (there are well over a dozen; Furnham, 2005). Other salient instances include social “intelligence,” personal “intelligence,” and practical “intelligence” (see Gottfredson, 2003; Jensen, 1998; Waterhouse, 2006).

A common characteristic of the faux intelligences is that they are not amenable to IQ-type measurement. In other words, while the various theorists try hard to convince us that they have discovered new and interesting intelligences that had previously been overlooked by differential psychologists, none of them has managed to develop items that can be scored according to truly objective criteria and that can cover the sampling domains of these intelligences in their entirety.

The MSCEIT, which is commercially marketed as an ability test of emotional “intelligence,” embodies many of the psychometric problems in the field. This test relies on awkward scoring procedures that had previously been used in unsuccessful social “intelligence” tests (see Legree, 1995). These procedures yield scores that are psychologically invalid, which is why it is counterproductive to subject them to factor analyses, correlate them with other variables, and enter them into regression equations. The concept of emotional “intelligence” as a new cognitive ability is succinctly criticized in Brody (2004), while more detailed expositions of the flaws of the underlying scoring methods (“consensus,” “target,” and “expert”) are given in MacCann, Roberts, Matthews, and Zeidner (2004; see also O’Sullivan & Ekman, 2005).

Readers who do not wish to consider the relevant arguments in detail need only ask themselves whether we can apply maximum-performance scoring procedures to the realm of emotions. Are there really “correct” and “incorrect” ways of feeling, in the same way there are correct and incorrect, say, verbal analogies? Are “experts” better placed to tell us how a typically developed adult feels than the adult herself? Are people who cannot guess what some musician might be feeling when delivering a piece of music emotionally dim?

## Assessing Faux Intelligences Through Self-Report

An especially baffling phenomenon is the explosion of self-report questionnaires being hawked to practitioners and researchers as measures of abilities, skills, intelligences, and competences. The prime, but by no means unique, example is the Bar-On EQ-i (Bar-On, 1997), which is based on the psychometrically invalid notion that intelligence can somehow be measured through self-report questions (e.g., “I excel at spatial rotations”). In the field of cognitive ability (which has the crucial advantage, relative to the faux intelligences, of veridical scoring procedures) the correlations between actual and self-estimated IQ scores are about +0.30 (Furnham & Rawles, 1999; Paulhus, Lysy, & Yik, 1998). Could psychological theory ever be derived from such misconceptions as pervading the EQ-i? The answer is no, which is why users of such questionnaires need recourse to trait EI theory for meaningful interpretations that go beyond the “EQ is good for you” accounts currently prevailing in the literature.

From our perspective, self-report questionnaires of emotional “intelligence” are best understood as partial measures of trait EI that share, or can be made to share, large amounts of variance with the TEIQue. In fact, this is the very reason why trait EI theory can supply a context for the interpretation of the results from these questionnaires. Indeed, it is only through the perspective of trait EI theory that these results can be linked to mainstream differential psychology research. However, relying on trait EI theory to interpret results from various EI questionnaires can be problematic because it increases the likelihood of confounding the theory with the promotional documentation accompanying these measures. Such is the infiltration of pop-psychology in academic settings that even applications of the TEIQue are sometimes interpreted as if the instrument assessed some kind of ability or competence, which defeats the purpose of employing it in the first place.

The main reason why we recommend the TEIQue for use in research and applied settings is that it provides a gateway to trait EI theory. The instrument is predicated on a sampling domain that aims to capture the affective aspects of personality, in the form of self-perceptions, which gives rise to a particular factor structure and, more important, a particular way of distributing and interpreting variance. The key benefits of trait EI theory, and of the TEIQue as its operationalization vehicle, are to be found in conceptual content and explanatory power, rather than in predictive and incremental utility (although see Freudenthaler, Neubauer, Gabler, & Scherl, 2008).

## Towards a Trait Intelligences Framework

Part of the allure of the faux intelligences is that they re-introduce important personality variables as cognitive abilities (Furnham, 2006), which results in concepts that are intuitively appealing (Waterhouse, 2006). Everyone thinks they know what social, or emotional, or creative “intelligence” is; however, one

important function of empirical research is to dispel intuitive ideas and home-spun theories. A crucial observation in this respect is that both academic and lay descriptions of the faux intelligences are replete with references to personality traits. Thorndike (1920) discusses sociability as a key to social “intelligence,” Gardner (1983) discusses emotionality as a key to the personal “intelligences,” and Salovey and Mayer (1990) and Goleman (1995) discuss predominantly personality traits (empathy, flexibility, emotion control, etc.) as the content domain of emotional “intelligence.”

The theory of trait emotional intelligence demonstrates how the various “EI” models, where they are meaningful, mainly refer to established personality traits (Petrides, Furnham et al., 2007). It can be extended to cover other faux intelligences, including, in the first instance, intrapersonal, interpersonal, and social. Focusing on personality traits relating to emotions yields emotional “intelligence.” Focusing on traits relating to social behaviour yields social “intelligence,” etc. Through this strategy, the faux intelligences can be integrated into existing personality taxonomies, which is where they belong conceptually.

In addition to linking the faux intelligences to mainstream differential psychology, the trait intelligences framework offers predictive and, especially, explanatory advantages. Carving up personality variance across specific content domains helps contextualize it, thus increasing its explanatory power. Instead of trying to explain findings based on five broad and orthogonal personality dimensions, one relies on domain-specific, content-coherent constructs (see Petrides & Furnham, 2003).

The *trait intelligences* label emphasizes the aim of integrating the faux intelligences into mainstream personality hierarchies, while the alternative, and in some respects preferable, label of *trait self-efficacies* emphasizes the aim of integrating the social-cognitive (Bandura, 2001) and self-concept literatures (Marsh, Trautwein, Ludtke, Koller, & Baumert, 2006) into the said hierarchies. Hitherto, our research has focused predominantly on the former aim, even though the integration of the latter two literatures is possibly of greater interest due to their scientific origins and wider scope (Pervin, 1999).

## **The Trait Emotional Intelligence Questionnaire (TEIQue)**

The TEIQue is predicated on trait EI theory, which conceptualises emotional intelligence as a personality trait, located at the lower levels of personality hierarchies (Petrides, Pita, & Kokkinaki, 2007).

### ***Steps in the Construction of the TEIQue***

Development of an early version of the TEIQue began towards the end of 1998 as part of the author’s doctoral dissertation (Petrides, 2001). Items were written

to cover each of the 15 facets in the sampling domain and were counterbalanced within facets. As a basic psychometric requirement, each item was assigned to a single facet only. The latest version of the long form of the TEIQue comprises 153 items, yielding scores on 15 facets, four factors, and global trait EI. Hitherto, it has been translated into over fifteen languages.

The TEIQue is based on a combination of the construct-oriented and inductive approaches to scale construction (Hough & Paullin, 1994). The instrument was designed to be factor analysed at the facet level in order to avoid the problems associated with item-level factor analysis (Bernstein & Teng, 1989). Its higher-order structure is explicitly hypothesized as oblique, in line with conceptions of multifaceted constructs. Consequently, factor overlap as well as cross-loadings are to be expected and provide the justification for aggregating factor scores into global trait EI.

According to the hierarchical structure of the TEIQue, the facets are narrower than the factors, which, in turn, are narrower than global trait EI. If a researcher is specifically interested in constructs that have been included as facets in the sampling domain of trait EI, then it is advisable to use dedicated instruments to assess them, since such instruments can provide more in-depth coverage than the TEIQue.

### *Sampling Domain*

The sampling domain of trait EI (Table 1) was derived through a content analysis of early EI models and cognate constructs, including alexithymia, affective communication, emotional expression, and empathy. The rationale

**Table 1** The adult sampling domain of trait emotional intelligence

Facets	High scorers view themselves as...
Adaptability	...flexible and willing to adapt to new conditions
Assertiveness	...forthright, frank, and willing to stand up for their rights
Emotion expression	...capable of communicating their feelings to others
Emotion management (others)	...capable of influencing other people’s feelings
Emotion perception (self and others)	...clear about their own and other people’s feelings
Emotion regulation	...capable of controlling their emotions
Impulsiveness (low)	...reflective and less likely to give in to their urges
Relationships	...capable of maintaining fulfilling personal relationships
Self-esteem	...successful and self-confident
Self-motivation	...driven and unlikely to give up in the face of adversity
Social awareness	...accomplished networkers with superior social skills
Stress management	...capable of withstanding pressure and regulating stress
Trait empathy	...capable of taking someone else’s perspective
Trait happiness	...cheerful and satisfied with their lives
Trait optimism	...confident and likely to “look on the bright side” of life

was to include core elements common to more than a single model, but exclude peripheral elements appearing in only one specific conceptualization.

This is analogous to procedures used in classical psychometric scale development, whereby the commonalities (shared core) of the various items composing a scale are carried over into a total score, with their random or unique components (noise) being cancelled out in the process. The systematic nature of this method is to be contrasted with the procedures through which other models are derived, whereby the inclusion or exclusion of facets is typically the outcome of unstated or arbitrary choices and post-hoc rationalizations.

### ***Relationship to Other Measures***

Although their authors are adamant that they assess abilities, skills, and competences (see Zeidner, Shani-Zinovich, Matthews, & Roberts, 2005), we view self-report questionnaires of emotional “intelligence” as measures of trait EI. We must emphasize, however, that EI-related questionnaires are measures of trait EI only insofar as their results are interpreted through the perspective of trait EI theory. It is not useful to employ the TEIQue or the trait EI label, if the research design and interpretation of the findings are couched in “EQ is good for you” language. Instead, findings should be evaluated in the same context as for any other personality trait, which is why familiarity with the basics of differential psychology is essential for understanding trait EI theory.

In light of the proliferation of self-report questionnaires of emotional “intelligence” (Roberts, Schulze, Zeidner, & Matthews, 2005), we should briefly address the issue of convergence. Trait EI theory predicts at least moderate convergence between the various questionnaires, irrespective of the model on which they claim to be based. Research findings have supported this position (Warwick & Nettelbeck, 2004). Nevertheless, the degree of convergence will be a function of the coverage of the construct’s sampling domain, with greater deviations from the facets in Table 1 leading to lower correlations. Many questionnaires under the “EQ” banner (particularly those that are short or based on a single model only) provide rather partial coverage of that domain and may not be relied upon for comprehensive assessment.

### ***Sample Description***

Unless otherwise stated, most of the analyses reported below are based on the current normative sample of the TEIQue, which comprises 1721 individuals (912 female, 764 male, 61 unreported). The mean age of the sample is 29.65 years ( $SD = 11.94$  years; range 15.7–77 years). Most participants are of White UK origin (58%), followed by White European (19.2%), Indian (6.6%), African and Caribbean (5.7%), and East Asian (5.1%; 5.4% “other”; foreign

language adaptations are based on separate norms that have not been included in this sample). With respect to education, 14% had junior high-school certificates (“GCSE: or “O level”), 30.8% had high-school diplomas, 29.5% had undergraduate degrees, 18.9% had postgraduate degrees (including 3.3% MBA and 1.4% PhD), and 6.8% chose the “other” option.

### Reliabilities

The internal consistencies of the 20 TEIQue variables (15 facets, 4 factors, global trait EI score) are all satisfactory for both males and females, as can be seen in Table 2. Of particular interest to many users is the robustness of the alphas, which remain strong (especially at the factor level and, without exception, at the global level) even in small sample research ( $N < 50$ ). Although a systematic quantitative study would be necessary to evaluate the effects of sample size variation on the internal consistencies of the TEIQue variables, our experience of scoring over seven dozen datasets from many countries suggests

**Table 2** TEIQue means, standard deviations, and internal consistencies broken down across gender

	Females ( $N = 907$ )			Males ( $N = 759$ )			<i>t</i>
	Mean	SD	$\alpha$	Mean	SD	$\alpha$	
Adaptability	4.56	0.84	0.74	4.73	0.85	0.73	2.10
Assertiveness	4.72	0.93	0.76	5.05	0.88	0.73	10.51**
Emotion expression	4.87	1.23	0.89	4.58	1.19	0.87	4.82**
Emotion management	4.75	0.79	0.68	4.99	0.83	0.72	6.10**
Emotion perception	4.89	0.78	0.70	4.77	0.85	0.75	3.09*
Emotion regulation	4.13	0.87	0.79	4.66	0.85	0.78	12.46**
Impulsiveness (low)	4.47	0.93	0.75	4.60	0.92	0.74	2.81
Relationships	5.60	0.75	0.68	5.32	0.82	0.69	7.15**
Stress management	4.30	1.00	0.80	4.82	0.89	0.76	11.21**
Self-esteem	4.77	0.89	0.81	5.09	0.86	0.78	7.32**
Self-motivation	4.70	0.81	0.71	4.77	0.82	0.70	1.83
Social awareness	4.93	0.87	0.80	5.08	0.91	0.83	3.55**
Trait empathy	5.22	0.74	0.67	4.99	0.80	0.70	5.94**
Trait happiness	5.57	1.01	0.87	5.50	1.03	0.85	1.26
Trait optimism	5.25	0.98	0.81	5.25	0.96	0.78	0.12
Emotionality	5.13	0.68	0.75	4.92	0.73	0.80	6.88**
Self-control	4.26	0.76	0.78	4.69	0.74	0.78	10.43**
Sociability	4.77	0.72	0.79	5.04	0.76	0.82	5.35**
Well-being	5.19	0.83	0.83	5.28	0.83	0.84	1.72
Global trait EI	4.82	0.57	0.89	4.95	0.61	0.92	2.78**

Note. \* $p < 0.05$ , \*\* $p < 0.01$ .

that users of the inventory can expect reliable measurement in a wide range of contexts.

With respect to temporal stability, we present preliminary data from 58 university students (mean age = 19.14 years; SD = 1.17 years). In this sample, the attenuated temporal stabilities were 0.59 for *Emotionality*, 0.74 for *Self-control*, 0.71 for *Sociability*, 0.86 for *Well-being*, and 0.78 for global trait EI. Whilst a more ambitious study is required in order to model both rank-order and mean-level change in the trait (Roberts, Walton, & Viechtbauer, 2006), the foregoing values accord well with the stabilities of broad personality dimensions (ranging between 0.6 and 0.8; Terracciano, McCrae, & Costa, 2006a) and support our conceptualization of emotional “intelligence” as a personality trait.

### ***Factor Structure and Interpretation***

A principal axis factor analysis was applied to the 15 TEIQue facets. Based on the Scree plot and Kaiser criterion (eigenvalues for the first six factors were 6.47, 1.59, 1.29, 1.00, 0.769, 0.634), four factors were extracted and rotated to simple structure via the Promax algorithm with the Kappa parameter set to 4. The four factors collectively explained 69% of the variance in the 15 facets. All facets were well-represented in trait EI factor space, with an average communality of 0.59. The best represented facets were “happiness,” ( $h^2 = 0.83$ ) “social awareness,” ( $h^2 = 0.77$ ), and “emotion regulation” ( $h^2 = 0.69$ ), while the least well represented facets were “self-motivation,” ( $h^2 = 0.44$ ) “adaptability,” ( $h^2 = 0.45$ ), and “impulsivity” ( $h^2 = 0.45$ ). The former three can be thought of as most characteristic of trait EI, and the latter three as least characteristic, albeit still part of its sampling domain.

Table 3 shows the resulting factor pattern matrix, which should be compared to the factor scoring key of the inventory (see Fig. 1). The scoring key was based on a series of medium-size sample studies with versions 1.00 and 1.50 of the questionnaire, and its convergence with the matrix in Table 3 serves to underscore the robustness of the factor structure of the TEIQue. Thus, all facets have high loadings only on their keyed factors, with the exception of “self-esteem,” which loads on both *Well-being* and *Sociability* and which we prefer to allocate in the former factor in order to broaden its content. “Adaptability” and “self-motivation” both have relatively low loadings on the *Self-control* factor, although in the scoring key they feed directly into the global trait EI score without going through the factors. This factor structure has been approximated or confirmed in datasets from over a dozen countries (e.g., Freudenthaler et al., 2008; Mikolajczak, Luminet, Leroy, & Roy, 2007).

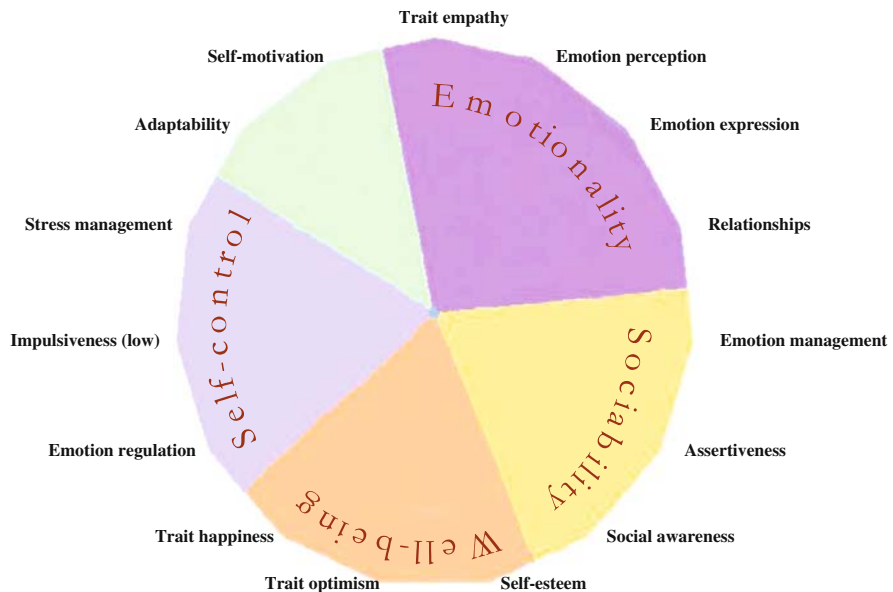
The four TEIQue factors were intercorrelated (average  $R_{ff} = 0.42$ ; see Table 4), as would be expected due to the hierarchical structure of trait EI. In line with the conceptualization of the construct, individuals who perceive



**Table 3** Factor pattern matrix for the 15 TEIQue facets

	Emotionality	Self-control	Sociability	Well-being
Emotion perception	0.680			
Trait empathy	0.638			
Emotion expression	0.597			
Relationships	0.595			
Emotion regulation		0.859		
Stress management		0.726		
Impulsiveness (low)		0.618		
Adaptability		0.418		
Self-motivation		0.380		
Assertiveness			0.724	
Emotion management			0.694	
Social awareness			0.654	
Self-esteem			0.419	0.350
Trait happiness				0.923
Trait optimism				0.741

*Note.* All factors except *Emotionality* have been reflected. Loadings below  $|0.30|$  have been suppressed.



**Fig. 1** The 15 facets of the TEIQue positioned with reference to their corresponding factor. Note that the facets “adaptability” and “self-motivation” are not keyed to any factor, but feed directly into the global trait EI score. A brief description of the facets is given in Table 1 and a more detailed description of the factors is given in the text

**Table 4** TEIQue factor intercorrelations

Factor	Emotionality	Self-control	Sociability	Well-being
Emotionality	–			
Self-control	0.356	–		
Sociability	0.395	0.345	–	
Well-being	0.449	0.495	0.447	–

themselves as emotionally capable (*Emotionality*), tend to also believe they are socially capable (*Sociability*), have more willpower (*Self-control*), and are better adapted overall (*Well-being*). Note that the self-perception paradigm underlies the facets and factors of trait EI, thus connecting seemingly unrelated concepts (e.g., “emotion perception” and “optimism”) and helping to sidestep inconsistencies in models that advocate emotional “intelligence” as a cognitive ability (e.g., the claim that emotionally “intelligent” people can be simultaneously more sensitive to and more controlling of their emotions).

In order to quantify the degree of convergence between the present factor solution and the a priori scoring key, we derived factor scores through two different methods: first, via the statistical regression method (Harman, 1976) and, second, via the a priori scoring key (Fig. 1). The zero-order correlations between these two sets of factor scores were 0.98 for *Emotionality*, 0.97 for *Self-control*, 0.98 for *Sociability*, and 0.97 for *Well-being*. These values are sufficiently high to recommend that the TEIQue be scored according to the a priori key, not least to prevent undue influence from sample-specific variation (especially in small or unrepresentative samples). Below, we present a brief description of the four TEIQue factors. In the interest of clarity, we do not constantly reiterate in these paragraphs that the descriptions concern self-perceptions, i.e., how respondents view their own selves.

*Emotionality*: Individuals with high scores on this factor are in touch with their own and other people’s feelings. They can perceive and express emotions and use these qualities to develop and sustain close relationships with important others. Individuals with low scores on this factor find it difficult to recognize their internal emotional states and to express their feelings to others, which may lead to less rewarding personal relationships.

*Self-control*: High scorers have a healthy degree of control over their urges and desires. In addition to controlling impulses, they are good at regulating external pressures and stress. They are neither repressed nor overly expressive. In contrast, low scorers are prone to impulsive behavior and may find it difficult to manage stress.

*Sociability*: This factor differs from the *Emotionality* factor above in that it emphasizes social relationships and social influence. The focus is on the individual as an agent in social contexts, rather than on personal relationships with family and close friends. Individuals with high scores on the sociability factor are better at social interaction. They are good listeners and can communicate clearly and confidently with people from diverse backgrounds. Those with low

scores believe they are unable to affect others' emotions and are less likely to be good negotiators and networkers. They are unsure what to do or say in social situations and, as a result, they often appear shy and reserved.

*Well-being:* High scores on this factor reflect a generalized sense of well-being, extending from past achievements to future expectations. Overall, individuals with high scores feel positive, happy, and fulfilled. In contrast, individuals with low scores tend to have low self-regard and to be disappointed about their life as it is at present.

## Gender Differences in Trait EI

Table 2 has the means and standard deviations for the 15 facets, 4 factors, and global trait EI score, broken down across gender. All scores have been rescaled to vary between 1 and 7, with a theoretical average of 3.5. Several points are worth mentioning in relation to gender differences. First, the popular psychology perception that “IQ is male and EQ is female” is not borne out by the data. In fact, males score higher than females on global trait EI, even though the difference may be a function of the constitution of the sample and has a relatively small effect size ( $d = 0.22$ ). Second, the proximity of male and female scores at the global level masks considerable discrepancies in the factors and, especially, the facets. For example, males score higher on “emotion regulation” ( $d = 0.61$ ) and “stress management” ( $d = 0.55$ ) and lower on “relationships” ( $d = 0.36$ ) and “empathy” ( $d = 0.30$ ), all of which accords well with existing findings (Costa, Terracciano, & McCrae, 2001). Third, the standard deviations are in all cases comparable, indicating similar dispersions in the male and female responses. On the whole, these findings provide another illustration of how trait EI differs from models basing their hypotheses on unrefined popularizations of psychological theory and concepts.

## Self-Other Ratings of Trait EI

Asking if trait EI self-perceptions are “accurate” is, strictly speaking, a red herring that overlooks a basic tenet of trait EI theory, viz., that most aspects of emotional “intelligence” are not amenable to objective scoring methods. How can we say whether someone’s “emotion perception” score is accurate or not when that person is the only one with full access to the information that is required to make this judgment? As mentioned, the faux intelligences are very different from cognitive abilities, where “insight” studies are feasible due to the existence of veridical scoring criteria.

It is, nevertheless, meaningful to ask if self-ratings of trait EI correlate with observer (other-) ratings and interpret any evidence of convergence as an

indication of accuracy. The value of this exercise is primarily theoretical, relating to the question of whether trait EI does indeed possess the properties of a personality trait. We have often emphasized that self-perceptions affect people’s behaviour and mental health irrespective of their accuracy (Gana, Alaphilippe, & Bailly, 2004; Taylor & Brown, 1988). Consequently, the conceptual validity of trait EI as a construct of self-perceptions does not depend on the presence of significant correlations between self- and other-ratings.

Trait EI theory does not view other-ratings as supplementary indicators of trait EI, but rather as measures of *rated* trait EI. In some respects, this follows Hogan’s (1983) distinction between personality as identity and as reputation. A crucial difference, however, is that we accord at least as much value to the former as to the latter. The self-other correlations in Table 5 (based on a sample of 153 Greek high-school students) are very similar to those obtained for the Big Five personality dimensions (ranging from 0.30 for Agreeableness to 0.45 for Extraversion; Connolly, Kavanagh, & Viswesvaran, 2007), which constitutes evidence of convergence between self- and other-perceptions of emotional abilities. It is vital not to lose sight of the fact that this convergence concerns perceptions, not actual abilities (or competencies or skills) as we so often read in misguided discussions in the literature.

**Table 5** Self-other correlations (zero-order and disattenuated) for facet, factor, and global trait EI scores

	Self-other <i>r</i>	Disattenuated <i>r</i>
Adaptability	0.50**	0.72**
Assertiveness	0.47**	0.69**
Emotion expression	0.45**	0.56**
Emotion management (others)	0.37**	0.56**
Emotion perception (self and others)	0.35**	0.47**
Emotion regulation	0.40**	0.51**
Impulsiveness (low)	0.52**	0.72**
Relationships	0.38**	0.60**
Self-esteem	0.46**	0.58**
Self-motivation	0.29**	0.57**
Social awareness	0.36**	0.47**
Stress management	0.37**	0.55**
Trait empathy	0.36**	0.55**
Trait happiness	0.38**	0.47**
Trait optimism	0.46**	0.58**
Emotionality	0.42**	0.62**
Self-control	0.46**	0.69**
Sociability	0.47**	0.61**
Well-being	0.52**	0.64**
Global trait EI	0.48**	0.56**

*Note.* *N* = 153. Greek high-school students, mean age = 17.5 years, *SD* = 0.81 years, \**p* < 0.05, \*\**p* < 0.01.

The mechanism underpinning convergence is currently unknown. It could involve specific, one-to-one agreement at the facet level of trait EI or general agreement at the global level, whereby a rater's overall impression of a target's emotional abilities influences their ratings on all 15 facets of the construct (halo effect). While there seem to be some discrepancies in the facet correlations in Table 5 (ranging from lows of 0.29 and 0.35 for "self-motivation" and "emotion perception" to highs of 0.52 and 0.50 for "low impulsiveness" and "adaptability"), these are not sufficiently strong to indicate that convergence is moderated by trait EI facet. Further research is required on this question both for replicating these findings and for investigating additional variables that are known to affect the convergence of self-other ratings of personality, such as context and length of acquaintance (Kurtz & Sherker, 2003).

## Other Versions and Translations

So far in this chapter, we have focused exclusively on the full form of the TEIQue, which shows desirable psychometric properties. This form is currently available in over a dozen languages, including Dutch, Croatian, French (Mikolajczak et al., 2007), German (Freudenthaler et al., 2008), Greek (Petrides, Pita et al., 2007), Polish, Portuguese, and Spanish. In addition to the full form, there are other TEIQue instruments, which we list below, along with brief descriptions.

*TEIQue-SF*: This 30-item form includes two items from each of the 15 facets of the TEIQue. Items were selected primarily on the basis of their correlations with the corresponding total facet scores, which ensured broad coverage of the sampling domain of the construct. The -SF can be used in research designs with limited experimental time or wherein trait EI is a peripheral variable. Although it is possible to derive from it scores on the four trait EI factors, in addition to the global score, these tend to have lower internal consistencies (around 0.69) than in the full form of the inventory. The -SF does not yield scores on the 15 trait EI facets.

*TEIQue 360° and 360°-SF*: These forms are used for collecting observer ratings and are available for both the full- and the short-forms of the TEIQue. They are especially useful for constructing rated trait EI profiles. For relevant data, see Table 5 and the "self-other" section in this chapter.

*TEIQue-AFF*: The -AFF is modeled on the full form of the TEIQue and is intended to yield scores on the same 15 facets and 4 factors. The main target audience is adolescents between 13 and 17 years. A series of studies are currently underway to explore the psychometric properties of this form and in Table 6 we present basic descriptive statistics from a sample of 1842 adolescents aged between 14 and 16 years. As can be seen, the internal consistencies of the adolescent sample are somewhat lower than those of the adult sample.

**Table 6** TEIQue-AFF means, standard deviations, and internal consistencies ( $N = 1842$ )

	Mean	SD	$\alpha$
Adaptability	4.17	0.75	0.56
Assertiveness	4.62	0.93	0.70
Emotion expression	4.45	1.05	0.79
Emotion management	4.67	0.84	0.66
Emotion perception	4.57	0.79	0.66
Emotion regulation	3.94	0.85	0.72
Impulsiveness (low)	3.94	0.94	0.71
Relationships	5.17	0.84	0.65
Stress management	4.17	0.96	0.74
Self-esteem	4.49	1.05	0.82
Self-motivation	4.32	0.84	0.66
Social awareness	4.66	0.83	0.74
Trait empathy	4.63	0.85	0.68
Trait happiness	5.23	1.20	0.87
Trait optimism	4.94	1.03	0.77
Emotionality	4.71	0.67	0.74
Self-control	4.01	0.75	0.76
Sociability	4.65	0.73	0.80
Well-being	4.89	0.96	0.85
Global trait EI	4.53	0.58	0.89

Nevertheless, with the possible exception of “adaptability” ( $\alpha = 0.56$ ), all alphas were satisfactory, especially at the factor and global level. The means were also generally lower in the adolescent sample, especially for “low impulsiveness,” “self-motivation,” and “empathy”. These early findings may well have important theoretical and developmental implications that should be explored in greater depth with the adult and adolescent forms of the TEIQue.

*TEIQue-ASF*: This is a simplified version, in terms of wording and syntactic complexity, of the adolescent full form of the TEIQue. The –ASF comprises 30 short statements, two for each of the 15 facets in Table 1, designed to measure global trait EI. In addition to the global score, it is possible to derive scores on the four trait EI factors, although these tend to have considerably lower internal consistencies than in the adolescent full form. The main target audience is adolescents between 13 and 17 years, however, the –ASF has been successfully used with children as young as 11 years.

*TEIQue-CF*: The main aim of the –CF is to assess the emotion-related facets of child personality. Rather than a simple adaptation of the adult form, it is based on a sampling domain that has been specifically developed for children aged between 8 and 12 years. It comprises 75 items that are responded to on a 5-point scale and measure nine distinct facets (see Mavroveli, Petrides, Shove, & Whitehead, 2008).

## Conclusion

The TEIQue has been designed to provide comprehensive coverage of the sampling domain of trait EI (i.e., of the emotion-related aspects of personality). By comprehensive, we explicitly do not mean exhaustive, but rather that all emotion-related personality traits would be expected to share a considerable amount of variance with the TEIQue (see O'Connor, 2002).

As mentioned above and discussed in more detail elsewhere (Petrides, Pita et al., 2007), a focus on domain-specific aspects of personality will be conducive to theoretically-driven research that emphasizes replication and explanation (as distinct from mere prediction; Scriven, 1959). This goal is not best served by studies that blithely regress criteria on five broad, conceptually unrelated variables (Big Five). Thinking in terms of domain-specific dimensions (trait emotional self-efficacy, trait social self-efficacy, trait metacognitive self-efficacy, etc.) can also help reduce our over-reliance on thesaurus-driven “explanations” of personality effects (e.g., conscientious employees perform better on the job because they are more reliable, meticulous, and dutiful; Mischel, 1968).

We are also keen to encourage a broadening of the dominant perspective of causal primacy in differential psychology, which views personality traits as source variables affecting behaviour, to encompass notions of traits as outcome variables. Such a shift would be consistent with theories emphasizing personality dynamics (Mischel & Shoda, 1995), with evidence of powerful individual differences in the stability of traits (Terracciano, McCrae, & Costa, 2006b), and with the need to consider cognitive and situational influences on personality (Diener, 1996). Personality questionnaires, then, should not be viewed as proxy indices of vague underlying causal influences, but as important variables in their own right.

Emotions are but a single, albeit fundamental, domain of personality, and it will be necessary to extend trait EI theory to encompass other important domains (e.g., social, personal, and metacognitive). The realization of this aim holds promise for the integration of self-concept, self-efficacy, and faux intelligence models into the mainstream taxonomies of personality.

## References

- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26.
- Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory: Technical manual*. Toronto: Multi-Health Systems Inc.
- Bernstein, I. H., & Teng, G. (1989). Factoring items and factoring scales are different: Spurious evidence for multidimensionality due to item categorization. *Psychological Bulletin*, 105, 167–177.
- Brody, N. (2004). What cognitive intelligence is and what emotional intelligence is not. *Psychological Inquiry*, 15, 234–238.

- Connolly, J. J., Kavanagh, E. J., & Viswesvaran, C. (2007). The convergent validity between self and observer ratings of personality: A meta-analytic review. *International Journal of Selection and Assessment*, *15*, 110–117.
- Costa, P. T., Jr., Terracciano, A., & McCrae, R. R. (2001). Gender differences in personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology*, *81*, 322–331.
- Diener, E. (1996). Traits can be powerful, but are not enough: Lessons from subjective well-being. *Journal of Research in Personality*, *30*, 389–399.
- Eysenck, H. J. (1998). *Intelligence: A new look*. New Brunswick, NJ: Transaction Publishers.
- Freudenthaler, H. H., Neubauer, A. C., Gabler, P., & Scherl, W. G. (2008). Testing the Trait Emotional Intelligence Questionnaire (TEIQue) in a German-speaking sample. *Personality and Individual Differences*, *45*, 673–678.
- Furnham, A. (2005, July). *Exploring no-man's land in differential psychology*. Presidential address presented at the biennial meeting of the International Society for the Study of Individual Differences, Adelaide, Australia.
- Furnham, A. (2006). Explaining the popularity of emotional intelligence. In K. R. Murphy (Ed.), *A critique of emotional intelligence*. Mahwah, NJ: LEA.
- Furnham, A., & Rawles, R. (1999). Correlations between self-estimated and psychometrically measured IQ. *Journal of Social Psychology*, *139*, 405–410.
- Gana, K., Alaphilippe, D., & Bailly, N. (2004). Positive illusions and mental and physical health in later life. *Aging and Mental Health*, *8*, 58–64.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. London: Bloomsbury.
- Gottfredson, L. S. (2003). Dissecting practical intelligence theory: Its claims and evidence. *Intelligence*, *31*, 343–397.
- Harman, H. H. (1976). *Modern factor analysis* (3rd ed.). Chicago: University of Chicago Press.
- Hogan, R. (1983). A socioanalytic theory of personality. In M. M. Page (Ed.), *1982 Nebraska symposium on motivation*. Lincoln: University of Nebraska Press.
- Hough, L. M., & Paullin, C. (1994). Construct – oriented scale construction: The rational approach. In G. S. Stokes, M. D. Mumford, & W. A. Owens (Eds.), *The biodata handbook: Theory, research, and use of biographical information in selection and performance prediction*. Palo Alto, CA: Consulting Psychologists Press, Inc.
- Jensen, A. R. (1998). *The g factor*. Westport, CT: Praeger.
- Kurtz, J. E., & Sherker, J. L. (2003). Relationship quality, trait similarity, and self-other agreement on personality ratings in college roommates. *Journal of Personality*, *71*, 21–48.
- Legree, P. J. (1995). Evidence for an oblique social intelligence factor established with a Likert-based testing procedure. *Intelligence*, *21*, 247–266.
- MacCann, C., Roberts, R. D., Matthews, G., & Zeidner, M. (2004). Consensus scoring and empirical option weighting of performance-based emotional intelligence (EI) tests. *Personality and Individual Differences*, *36*, 645–662.
- Marsh, H. W., Trautwein, U., Ludtke, O., Koller, O., & Baumert, J. (2006). Integration of multidimensional self-concept and core personality constructs: Construct validation and relations to well-being and achievement. *Journal of Personality*, *74*, 403–456.
- Mavroveli, S., Petrides, K. V., Shove, C., & Whitehead, A. (2008). Validation of the construct of trait emotional intelligence in children. *European Child and Adolescent Psychiatry*, *17*, 516–526.
- Mikolajczak, M., Luminet, O., Leroy, C., & Roy, E. (2007). Psychometric properties of the Trait Emotional Intelligence Questionnaire (TEIQue). *Journal of Personality Assessment*, *88*, 338–353.
- Mischel, W. (1968). *Personality and assessment*. New York: Wiley.



- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, *102*, 246–268.
- O'Connor, B. P. (2002). A quantitative review of the comprehensiveness of the five-factor model in relation to popular personality inventories. *Assessment*, *9*, 188–203.
- O'Sullivan, M., & Ekman, P. (2005). Facial expression recognition and emotional intelligence. In G. Geher (Ed.), *Measuring emotional intelligence: Common ground and controversy*. Hauppauge, NY: Nova Science Publishing.
- Paulhus, D. L., Lysy, D. C., & Yik, M. S. N. (1998). Self-report measures of intelligence: Are they useful as proxy IQ tests? *Journal of Personality*, *66*, 525–554.
- Pervin, L. A. (1999). Epilogue: Constancy and change in personality theory and research. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research*. New York: Guilford Press.
- Petrides, K. V. (2001). *A psychometric investigation into the construct of emotional intelligence*. Unpublished doctoral dissertation, University College London.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, *15*, 425–448.
- Petrides, K. V., & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*, *17*, 39–57.
- Petrides, K. V., Furnham, A., & Mavroveli, S. (2007). Trait emotional intelligence: Moving forward in the field of EI. In G. Matthews, M. Zeidner, & R. Roberts (Eds.), *Emotional intelligence: Knowns and unknowns*. Oxford: Oxford University Press.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, *98*, 273–289.
- Roberts, R. D., Schulze, R., Zeidner, M., & Matthews, G. (2005). Understanding, measuring, and applying emotional intelligence: What have we learned? What have we missed? In R. Schulze & R. D. Roberts (Eds.), *Emotional intelligence: An international handbook*. Cambridge, MA: Hogrefe & Huber.
- Roberts, B. W., Walton, K., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, *132*, 1–25.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, *9*, 185–211.
- Scriven, M. (1959). Explanation and prediction in evolutionary theory. *Science*, *130*, 477–482.
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, *103*, 193–210.
- Terracciano, A., McCrae, R. R., & Costa, P. T., Jr. (2006a). Personality plasticity after age 30. *Personality Social Psychology Bulletin*, *32*, 999–1099.
- Terracciano, A., McCrae, R. R., & Costa, P. T., Jr. (2006b). Longitudinal trajectories in Guilford-Zimmerman temperament survey data: Results from the Baltimore longitudinal study of aging. *Journal of Gerontology: Psychological Sciences*, *61B*, P108–P116.
- Thorndike, E. L. (1920). Intelligence and its uses. *Harper's Magazine*, *140*, 227–235.
- Warwick, J., & Nettelbeck, T. (2004). Emotional intelligence is...? *Personality and Individual Differences*, *37*, 1091–1100.
- Waterhouse, L. (2006). Inadequate evidence for multiple intelligences, Mozart effect, and emotional intelligence theories. *Educational Psychologist*, *41*, 247–255.
- Zeidner, M., Shani-Zinovich, I., Matthews, G., & Roberts, R. D. (2005). Assessing emotional intelligence in gifted and non-gifted high school students: Outcomes depend on the measure. *Intelligence*, *33*, 369–391.