

PROOFS

Chapter 3

A COMPREHENSIVE FRAMEWORK FOR EMOTIONAL INTELLIGENCE

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INTRODUCTION

Since Salovey and Mayer's (1990) seminal article on emotional intelligence (EI), a number of alternative models have been developed (e.g., Bar-On, 1997; Cooper & Sawaf, 1997; Goleman, 1995; 1998; 2001a; Mayer & Salovey, 1997; Petrides & Furnham, 2001). This work has provided different approaches to the conceptualization and measurement of EI. However, it has also caused some confusion concerning the nature and boundaries of the concept. Variables ranging from emotional abilities and competencies, to so-called 'non-cognitive' capabilities and skills have been placed under the banner of EI. Furthermore, while some theoretical models of EI have comprised four salient facets (Mayer & Salovey, 1997), others have comprised twenty or more (e.g., Cooper & Sawaf, 1997). As such, it is not surprising that reviews of the area have described EI as 'popular but elusive with fuzzy boundaries' (Pfeiffer, 2001). This confusion has been the impetus of our work which has been to establish a common definition and taxonomic model of EI that comprises the primary facets of the construct. In this chapter we present our model that is based on a large factor analytic study using several measures of EI. We conclude by questioning whether the

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common facets of EI derived from the analyses are culturally specific or universal, providing theoretical answers to stimulate further research investigation.

MODELS OF EMOTIONAL INTELLIGENCE

In their seminal article Salovey and Mayer (1990) conceptualised EI as a set of abilities to do with emotions and the processing of emotional information. These included the capacity to identify and express emotions; the capacity to effectively regulate and manage emotions; and the capacity to utilise or reason with emotions in thought (Salovey & Mayer, 1990). Within this framework Salovey and Mayer (1990) proposed that individuals differed in these abilities, and that these differences were potentially important because; (a) emotional abilities might account for variance in important life criteria such as psychological well-being, life satisfaction and the quality of interpersonal relationships; and (b) because such differences underpinned skills that could possibly be learned or taught. It was these latter notions that caught the attention of Daniel Goleman who went on to write a popular book that placed particular emphasis on the links between EI and important life criteria. Goleman's (1995) book "Emotional Intelligence: why it can matter more than IQ" generated a considerable amount of interest in EI, quickly becoming the most widely read social science book in the world (Gardner, 1999). With this influence a number of alternative models of EI were developed providing several theoretical frameworks for conceptualising and measuring the construct (e.g., Bar-On, 1997; Cooper & Sawaf, 1997; Goleman, 1995; 1998; 2001a; Mayer & Salovey, 1997).

Models of EI can be categorised into three main theoretical approaches (Caruso, 2004). These include: 1) 'ability' models, that define EI as a conceptually related set of mental abilities to do with emotions and the processing of emotional information (e.g., Mayer & Salovey, 1993; 1997); 2) 'trait' models, that define EI as an array of socio-emotional traits such as assertiveness (e.g., Bar-On, 1997); and 3) competency models that comprise a set of emotional competencies defined as learned capabilities based on EI (e.g., Goleman, 2001a). Although these categories are useful in that they help to clarify the different approaches to the conceptualisation of the construct, they also serve to suggest that approaches to EI are unrelated and more disparate than they may actually be (Goleman, 2005). As Goleman (2005) points out "...the proposed division may have the unintended effect of obscuring important connections between aspects of emotional intelligence" (Goleman, 2005, p. 1).

Competency and ability approaches to EI appear to be related as do some facets of traits models (e.g., Empathy, the ability to be aware of, to understand, and to appreciate the feelings of others, Bar-On, 1997). Indeed, some authors have noted that various models of EI tend to be complimentary rather than contradictory (Ciarrochi, Chan & Caputi, 2000). Goleman (2001b) has gone as far as suggesting that there may be a general definition and taxonomy for the construct. We feel that there is merit in examining the relationships between various models and measures of EI, and attempting to identify a common definition and taxonomic model of the construct. A taxonomic model of EI would serve to provide a common language for EI. Furthermore, a taxonomic model of EI may provide the basis for comprehensive measures that assess the primary facets of the construct much like the comprehensive taxonomy of personality traits, the widely known Five Factor Model (FFM; Digman, 1990;

Costa & McCrae, 1992). Despite the development of numerous models and measures of EI it has been argued that comprehensive measures of EI that cover the different operationalisations of the construct do not currently exist (Petrides & Furnham (2001).

DEFINING A TAXONOMY FOR EMOTIONAL INTELLIGENCE

Goleman (2001b) recently speculated that models and measures of EI share some common elements, specifically, abilities or competencies concerned with the capacity to recognise and regulate emotions in oneself and others. Goleman (2001b) has further suggested that a definitive definition of EI may involve four higher order factors including: 1) the capacity to recognise emotions in the self (Self-Awareness); 2) the capacity to regulate emotions in the self (Self-Management); 3) the capacity to recognise emotions in others (Social Awareness); and 4) the capacity to regulate emotions in others (Relationship Management). Although Goleman (2001b) highlighted that these four facets of EI can be identified as providing a taxonomy for EI, no systematic review of the EI literature was presented in support of this hypothesis. Indeed it was not the focal point of his article nor has it been the focal point of his research.

One way to hypothesize common dimensions of EI is to: (a) define a criterion for what constitutes a common dimension of the construct; (b) systematically compare the components of different models and measures that cover the breadth of variables being placed under the banner of the construct; and (c) from the comparison identify the common variables amongst them according to the predefined dimensional criterion. Comprehensive taxonomies in personality have been identified in the past via a lexical type approach (Goldberg, 1981), where factors are identified from the major themes that recur in domain adjectives. The same lexical approach has been applied in the area of emotion for the purposes of identifying a structural model of emotions (e.g., Shaver, Schwartz, Kirson, & O'connor, 1987). In the current study we proposed that a common dimension of EI could be defined as one that comprised variables that were shared by at least two of the main theoretical models of EI.

To systematically compare the components of various measures of EI and identify the common facets they share, we chose to conduct a large factor analytic study. The factor-analytic technique has been widely used to help determine taxonomies in psychology including the FFM of personality. It is a method of empirically determining the communality inherent in a large amount of multivariate data by reducing it to comprehensible clusters. Our study involved a battery of EI measures representing a good cross section of alternative approaches to conceptualising and measuring EI. These included the Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey & Caruso, 2000a); the Bar-On EQ-i (Bar-On, 1997); and other related measures including the TMMS (Salovey, Mayer, Goldman, Turvey & Palfai, 1995); the TAS-20 (Bagby, Paker & Taylor, 1994a,b); and the EI scale by Schutte, Malouff, Hall, Haggerty, Cooper, Golden & Dornheim (SEI; 1998). Collectively these measures of EI represent (although not absolutely) the breadth of variables currently being placed under the banner of EI. A more comprehensive battery of EI models and measures would have included the Emotional Competency Inventory (ECI; Boyatzis, Goleman & Rhee, 2000) and the EQMAP available from QMetrics (<http://www.qmetricseq.com>), based on the model of EI put forth by Cooper and Sawaf

(1997). However, these measures were not made available for our study. Nonetheless, these models bear considerable conceptual overlap with other broad models and measures of EI (Mayer, Salovey & Caruso, 2000b), notably the Bar-On EQ-i (Bar-On, 1997), which was included in the current battery. The measures included in the current battery comprised two measurement methodologies namely self-report (e.g., the Bar-on EQ-i) and performance-based (i.e., the MSCEIT). The inclusion of the self-other 360 ECI assessment would have provided complete coverage of the various measurement methodologies currently utilised in the area.

The measures included in the current battery are some of the most widely researched and used in the area. The number of validity studies and amount of validity data for these measures is relatively sparse in comparison to well established measures of personality and intelligence (Salovey, Bedell, Detweiler & Mayer, 2000). However, each of these measures of EI exhibit preliminary evidence of reliability and validity and as such provide a platform from which to determine the dimensional communality amongst the different approaches to EI. Table 1 lists the components of EI assessed by the MSCEIT (Mayer et al., 2000a), the Bar-On EQ-i (Bar-On, 1997), the TMMS (Salovey et al., 1995); the TAS-20 (Bagby et al., 1994a,b); and the sub-scale factors of the EI scale by Schutte et al. (1998) as determined by both Petrides and Furnham (2000) and Ciarrochi, Chan and Baigar (2001).

Table 1. Measures of Emotional Intelligence

Measure	Subscales	Definitions
<i>MSCEIT</i>	Emotional Perception (Faces & Pictures tests)	The ability to perceive emotions in oneself and others as well as in objects, art, stories and the like
	Emotional Facilitation (Facilitation & Synesthesia tests)	The ability to generate, use, and feel emotion as necessary to communicate feelings, or employ them in other mental processes.
	Understanding Emotion (Changes & Blends tests)	The ability to understand emotional information, how emotions combine and progress through relationship transitions, and to reason about such meanings
	Managing Emotion (Management & Relationships tests).	The ability to be open to feelings, to modulate them in oneself and others so as to promote personal understanding and growth
<i>EQ-I</i>	Emotional Self-Awareness	The ability to recognise one's feelings.
	Assertiveness	The ability to express feelings, beliefs, and thoughts and define one's rights in a non-destructive manner.
	Self-Regard	The ability to respect and accept oneself as basically good.
	Self-Actualisation	The ability to realise one's potential capacities
	Independence	The ability to be self-directed and self-controlled in one's thinking and actions and to be free of emotional dependency.
	Empathy	The ability to be aware of, to understand, and to appreciate the feelings of others
	Interpersonal Relationship	The ability to establish and maintain mutually

		satisfying relationships that are characterised by intimacy and by giving and receiving of affection
	Social Responsibility	The ability to demonstrate oneself as a cooperative contributing and constructive member of one's social group
	Problem Solving	The ability to identify and define problems as well as to generate and implement potentially effective solutions
	Reality Testing	The ability to assess the correspondence between what is experienced and what objectively exists
	Flexibility	The ability to adjust one's emotions, thoughts, and behaviour to changing situations and conditions.
	Stress Tolerance	The ability to withstand adverse events and stressful situations without falling apart by actively and positively coping with stress.
	Impulse Control	The ability to resist or delay an impulse, drive or temptation to act
	Happiness	The ability to feel satisfied with one's life, to enjoy oneself and others, and to have fun
	Optimism	The ability to look at the brighter side of life and to maintain a positive attitude, even in the face of adversity.
<i>TMMS</i>	Attention	Ability to attend to moods and emotions
	Clarity	Ability to discriminate clearly among subjective feelings
	Repair	Ability to regulate moods and emotions
<i>TAS-20</i>	Difficulty Identifying Feelings	Difficulty identifying subjective feelings
	Difficulty Describing Feelings	Difficulty describing feelings
	Externally Oriented Thinking	Cognitive style characterised by a preoccupation with the minute details of external events, rather than by feelings, fantasies, and other aspects of inner experience (Taylor & Bagby, 2000).
<i>SEI</i>	Emotional Perception	Ability to identify emotions within the self and others
	Emotional Management Self	Ability to effectively regulate and manage one's own emotions
	Emotional Management Others	Ability to effectively regulate and manage the emotions of others
	Utilisation	The ability to utilise or reason with emotions in thought

Based on our criterion for a common dimension of EI a comparison of the variables (and their meaning) presented in Table 1 led to the hypothesis of a five-factor model of EI, presented in Table 2. As shown in Table 2, a higher order general factor of EI was also hypothesised, congruent with other leading theories of EI (e.g., Bar-On, 1997; Mayer & Salovey, 1993; 1997; Salovey & Mayer, 1990), and existing research that has found evidence of general factors inherent with the measures assessed (e.g., Bar-On; Mayer, Salovey, Caruso

& Sitarenios, 2003). We feel that a common definition of EI should reflect the various definitions of the construct and as such have chosen to define these facets as “emotional skills”. We feel the term “emotional skills”, can be related to all the various definitions of EI that include emotional abilities, capabilities, competencies and traits. On the basis of such we propose that a common definition of EI may describe the construct as “*the skill with which one perceives, expresses, reasons with and manages their own and others emotions*”.

Table 2. The Hypothesised Five-Factor General Taxonomy for EI

General emotional intelligence					
(1) Emotional Self-Awareness & Expression	(2) Emotional Awareness of Others	(3) Emotional Reasoning	(4) Emotional Self-Management	(5) Emotional Management of Others	
Emotional Self-Awareness (EQ-i)	Empathy (EQ-i)	Sensations (MSCEIT)	Repair (TMMS)	Managing Self Emotions (SEI)	Managing Others Emotions (SEI)
Attention (TMMS)	Faces (MSCEIT)	Facilitation (MSCEIT)	Stress Tolerance (EQ-i)	Interpersonal Relationship (EQ-i)	Interpersonal Relationship (EQ-i)
Clarity (TMMS)	Pictures (MSCEIT)	Utilisation (SEI)	Impulse Control (EQ-i)	Social Responsibility (EQ-i)	Social Responsibility (EQ-i)
Emotional Perception (SEI)	Blends (MSCEIT)	Externally Oriented Thinking (TAS-20)	Happiness (EQ-i)	Management (MSCEIT)	Management (MSCEIT)
Difficulty Identifying Feelings (TAS-20)	Changes (MSCEIT)	Problem Solving (EQ-i)	Optimism (EQ-i)	Relationships (MSCEIT)	Relationships (MSCEIT)
Difficulty Describing Feelings (TAS-20)		Reality Testing (EQ-i)	Self-Regard (EQ-i)		
		Flexibility (EQ-i)	Assertiveness (EQ-i)		
			Independence (EQ-i)		

The first facet of EI presented in Table 2 “Emotional Self-Awareness and Expression”, concerns the skill with which individuals perceive, understand and express their own emotions. Salovey and Mayer (1990) and subsequent theorists (e.g., Bar-On, 1997; Cooper & Sawaf, 1997; Goleman 1995) have conceptualised the capacity to perceive inner subjective emotions as a component of EI. Indeed all the measures presented in Table 1 comprise sub-scales purported to assess the capacity to perceive emotions as shown in Table 2. Other sub-scales that may load on this factor are those concerned with the capacity to express emotions. Mayer and Salovey (1997) have argued that the ability to express inner feelings and emotions is highly related if not dependant on the capacity to perceive emotions and have operationalised these two variables of EI together (e.g., the first branch of Mayer and Salovey’s 1997 model of EI concerns the “...the ability to perceive accurately, appraise and express emotion” (p.10). As such, the Difficulty Describing Feelings sub-scale of the TAS-20 which comprises items such as “It is difficult for me to find the right words for my feelings” and “I am able to describe my feelings easily”, was also expected to load on this first factor of EI, “Emotional Self-Awareness and Expression”.

The second facet of EI presented in Table 2 “Emotional Awareness of Others” assesses the skill with which individuals perceive and understand the emotions of others. Most models and measures of EI comprise variables concerned with the capacity to perceive and understand the emotions of others (e.g., Bar-On, 1997; Cooper & Sawaf, 1997; Goleman, 1995;1998; 2001b; Mayer & Salovey, 1997; Schutte et al., 1998), although the terms used to denote this area of EI somewhat differ. For example, Goleman (2000a) terms this area of EI, ‘Social Awareness’, that is, the capacity to recognise emotions in others, while Bar-On (1997) describes Empathy as “...the ability to be aware of, to understand, and to appreciate the feelings of others” (p.18). Subscales from the alternative models and measures presented in the current study under this hypothesised dimension included: the Empathy subscale from the EQ-i; and the Emotional Perception (Faces and Pictures) and Understanding (Blends and Changes) subscales from the MSCEIT.

Other sub-scales that may load on this second facet of EI include the Blends and Changes subscales from the MSCEIT. The Blends task from the MSCEIT requires respondents to identify which emotions combine to form other emotions (e.g., that malice is a combination of envy and aggression). Similarly, the Changes task requires respondents to identify what emotion results from the intensification of another (e.g., that depression often results from the intensification of sadness and fatigue). These subscales are more explicitly concerned with emotional knowledge, that is, an understanding of emotions and the information they convey which has been conceptualised by Mayer and Salovey (1997) as a distinct component of EI. However, in comparison with other models of EI these subscales conceptually correspond with subscales such as Empathy from the EQ-i that are purported to assess the ability to be aware of and understand the feelings of others. As such, in the current study the Blends and Changes tasks from the MSCEIT have been hypothesised to load on this second common facet of EI, “Emotional Awareness of Others”.

The third facet of EI presented in Table 2, “Emotional Reasoning”, concerns the skill with which individuals’ reason with emotional information in thought. Salovey and Mayer (1990) originally proposed that emotions can direct reasoning adaptively (e.g., “Emotions prioritise thinking by directing attention to important information” and “...can be generated as aids to judgement and memory concerning feelings”, p. 11), leading to flexible planning, motivation and creative thinking (Salovey & Mayer, 1990). Moreover, Mayer and Salovey (1997) have proposed that individuals differ in their capacity to incorporate emotional information in thought and to use it to facilitate thinking. Most of the leading measures of EI have subscales concerning either the use of emotions in thought, or the adaptive outcomes of such (e.g., effective problem-solving, flexible decision-making etc), which may load together to form a common dimension of EI. Components of the MSCEIT that assess the use of emotions in thought include the Sensations and Facilitation subscales. Other subscales that assess the use of emotions in thought include the Utilization of Emotions factor of the EI scale by Schutte et al., (1998), and the Externally Oriented Thinking subscale from the TAS-20 (Bagby et al., 1994a,b). The Externally Oriented Thinking subscale from the TAS-20 involves items such as “I find the examination of my feelings useful in solving problems” (Bagby et al., 1994, p.27).

Other sub-scales that may load on this third facet of EI include the Problem Solving, Reality Testing and Flexibility sub-scales from the Bar-On EQ-i (Bar-On, 1997). As

previously discussed, Salovey and Mayer (1990; Mayer & Salovey, 1993; 1997) proposed that emotions can direct cognition adaptively and that the use of emotions in thought may lead to effective problem solving, flexible planning and creativity. Although the items that comprise the Problem Solving, Reality Testing and Flexibility subscales from the Bar-On EQ-i have little to do with the use of emotions in thought, they are purported to assess these potential correlates of such.

The next facet of EI presented in Table 2, “Emotional Self-Management”, concerns the skill with which individual can effectively regulate and manage their own emotions. Most models and subsequent measures of EI have conceptualised the capacity to effectively regulate and manage one’s own emotions as a component of EI, although various authors have chosen somewhat different terms for this aspect of EI (Bar-On, 1997; Cooper & Sawaf, 1997; Goleman, 1995; 1998; 2000a; Mayer & Salovey, 1993; 1997; Salovey & Mayer, 1990; Schutte et al., 1998). Sub-scales from the Bar-On EQ-i that conceptually correspond with the capacity to effectively regulate and manage one’s own emotions include the Stress Tolerance, Impulse Control, Happiness, Optimism, and Self-Regard subscales. Although the Assertiveness and Independence subscales from the EQ-i are not explicitly concerned with the intrapersonal management of emotions, it could be argued that Assertiveness and Independence (“the ability to be self-directed and self controlled in one’s thinking and actions and to be free of emotional dependency”, Bar-On, 1997, p.18) may be potential correlates of emotional self-management and thus load on this hypothesised dimension of EI.

The final facet of EI presented in Table 2, “Emotional Management of Others”, concerns the skill with which individuals can effectively regulate and manage the emotions of others. Many of the measures that have been designed to assess EI comprise components concerned with the capacity to regulate and manage the emotions of others. As shown in Table 2, these include the Managing Emotions (Others) factor from the Schutte et al., (1998) scale; the Interpersonal Relationship and Social Responsibility subscales from the Bar-On EQ-i (Bar-On, 1997); and the Emotional Management and Relationships subscales from the MSCEIT (Mayer et al., 2000a). The Emotional Management subscale from the MSCEIT involves vignettes describing situations where people are required to regulate their own emotions and asks respondents to rate the effectiveness of alternate regulation behaviours. Similarly, the Relationships subscale requires respondents to indicate how effective different thoughts and behaviours would be in achieving an interpersonal outcome.

SUMMARY

From a systematic review of the EI literature and a comparison of the variables currently being placed under the banner of the construct, five common facets of EI have been theoretically identified as; (1) Emotional Self-Awareness; (2) Emotional Awareness of Others; (3) Emotional Reasoning; (4) Emotional Self-Management; and (5) Emotional Management of Others as shown in Table 2. Petrides and Furnham (2001) have recently noted that a complete consensus with regards to what should and should not be a part of the EI construct is unlikely stating that such would be like “...asking what sports should be in the Olympics; neither question can be answered objectively” (p. 428). Indeed the purpose of our work has not been to determine what should and should not be included under the banner of

EI. Rather the purpose of our work has been to examine the dimensional communality amongst measures of EI, and on that basis to attempt to provide a common definition and taxonomy for the construct.

Testing the Hypothesised Five-Factor Taxonomy for Emotional Intelligence

In order to assess the extent to which the hypothesised five-factor model of EI presented in Table 2 represented the communality identified amongst the different models and measures, confirmatory factor analyses were performed. A number of alternative models were also assessed via confirmatory factor analyses to investigate whether the five-factor model best represented the communality amongst the various models and measures. Specifically, the hypothesised five-factor model along with three alternative models were assessed (both oblique and orthogonal variants): (1) a two-factor method variance model representing self-reported EI and performance-based EI; (2) a five-factor method variance model where the subscales of each measure load together to form 'test' factors; and (3) a model based on the original conceptualisation of EI by Salovey and Mayer (1990), that is, a three-factor model in which factors 1 and 2 in Table 2 were collapsed to form an Emotional Perception factor, and factors 4 and 5 were collapsed on each other to form an Emotional Management factor. Three model fit indices were chosen to assess the degree to which these models represented the dimensional communality amongst the measures assessed: the Normed fit index (NFI; Bentler & Bonett, 1980); the Comparative fit index (CFI; Bentler, 1990), and the Root-Mean-Square Error of Approximation (RMSEA; Steiger, 1990). It was hypothesised that the five-factor model we identified would provide the best degree of fit with the current data, thus best representing the dimensional communality amongst the models and measures of EI assessed. The alternative models assessed are summarised and presented in Table 3.

Table 3. Alternative Factor-Models Assessed Via SEM

Model		Three-Factor Model (Salovey & Mayer, 1990).		2-Factor Method Variance Model		5-Factor Method variance Model	
(1)	Emotional Self-Awareness & Expression	(1)	Emotional Recognition & Expression	(1)	Self-Report Measured EI	(1)	MSCEIT
(2)	Emotional Awareness of Others	(2)	Utilisation of Emotions	(2)	Ability Measured EI	(2)	Bar-On EQ-i
(3)	Emotional Reasoning	(3)	Emotional Management			(3)	TMMS
(4)	Emotional Self-Management					(4)	SEI
(5)	Emotional Management of Others					(5)	TAS-20

A large population sample comprising 330 participants, 90 males and 238 females (2 unreported), ranging in age from 18 to 78 years old ($M = 38.56$; $SD = 13.72$), completed each of the EI tests presented in Table 1. Each of the various EI tests was found to comprise

relatively good internal consistency reliability and factorial validity. Furthermore similar means, standard deviations and relationships with age and gender to those reported by the respective test authors and others were observed. Table 4 presents the intercorrelations of total scores amongst the various measures, and Table 5 lists the fits indices obtained from confirmatory factor analyses of the hypothesised models.

Table 4. Intercorrelations Amongst the Total Scores of the Various Measures

Measure	MSCEIT	Bar-On	TAS-20	TMMS	SEI
MSCEIT	1				
Bar-On	.28	1			
TAS-20	-.30	-.58	1		
TMMS	.27	.48	-.36	1	
SEI	.14	.53	-.33	.66	1

Note: All the correlations shown are significant at $p < .01$

Table 5. Fit Statistics for the Hypothesised Models Assessed

Fit Statistic	5OB ^e	5OR ^f	3OB ^g	3OR ^h	2OB ⁱ	2OR ^j	5TOB ^k	5TOR ^l
CMIN ^a	1838.56	2847.73	2206.87	2736.44	2345.03	2369.82	2026.25	2494.17
Df	453	463	454	464	494	495	486	496
NFI ^b	.649	.456	.579	.477	.580	.375	.637	.553
CFI ^c	.706	.494	.629	.517	.631	.627	.693	.602
RMSEA ^d	.096	.125	.107	.122	.107	.107	.098	.111

Note: df = Degrees of Freedom. a = Chi-square statistic; b = Normed fit index; c = Comparative fit index; d = Root Mean Square Error of Approximation; e = Five-factor higher order model (oblique); f = Five-Factor higher-order model (orthogonal); g = Three-factor higher-order model (oblique); h = Three-factor higher-order model (orthogonal); i = Two-factor method variance model (oblique); j = Two-factor method variance model (orthogonal); k = Five-factor method variance model (oblique); l = Five-factor method (orthogonal)

As shown in Table 4, there was a positive manifold of significant correlations amongst the various measures assessed (higher scores on the TAS-20 represent lower capacity, thus the notion of a positive manifold). As could be expected the intercorrelations were generally stronger in magnitude between the self-report measures in comparison to those with the performance-based MSCEIT. As shown in Table 5, none of the hypothesised models fit the present data very well according to all three model fit statistics. None of the CFI or NFI values were above 0.90 and all of the RMSEA values exceeded 0.08 (McDonald & Ringo Ho, 2002). Nonetheless, the fit indices for the hypothesised oblique five-factor higher order model were closest to these recommended values according to all three model fit statistics.

To test whether the hypothesised oblique five-factor higher-order model presented in Table 6 below (with the estimated intercorrelations), provided a statistically better fit with the present data than the next best fitting model (which was the five-factor method variance 'test' model) the difference in chi square values of these models was calculated as per the procedure outlined by Byrne (2001).

Table 6. Hypothesised Five-Factor Higher-Order Model Parameter Estimates (in Parentheses) of the Observed Tasks on the Latent Variables, and Estimated Intercorrelations.

General emotional intelligence									
(1) Emotional Self-Awareness & Expression	(2) Emotional Awareness of Others	(3) Emotional Reasoning	(4) Emotional Management	(5) Emotional Management of Others					
ES (.88)	EM (.98)	Sensations (.08)	Repair (.58)	MOE (.56)					
Attention (.34)	Faces (.11)	Facilitation (.06)	MSE (.63)	IR (.76)					
Clarity (.57)	Pictures (.05)	Utilisation (.16)	ST (.80)	RE (.70)					
EPS (.41)	Blends (.21)	EOT (-.36)	IC (.32)	Management (.32)					
DIF (-.57)	Changes (.04)	PS (.63)	HA (.73)	Relationships (.30)					
DDF (-.78)		RT (.71)	OP (.87)						
		FL (.61)	SR (.79)						
			AS (.73)						
			IN (.65)						
Estimated Intercorrelations									
1	2	3	4	5					
1.00									
.496	1.00								
.821	.486	1.00							
.695	.376	.958	1.00						
.862	.892	.764	.738	1.00					

Note: ES = Emotional Self-Awareness, EM = Empathy, PS = Problem Solving, RT = Reality Testing, FL = Flexibility, ST = Stress Tolerance, IC = Impulse Control, HA = Happiness, OP = Optimism, SR = Self-Regard AS = Assertiveness, IN = Independence, IR = Interpersonal Relationship, RE = Social Responsibility, (Bar-On EQ-i). EPS = Emotional Perception, Utilisation, MSE = Managing Self-Emotions, MOE = Managing Others Emotions (SEI). DIF = Difficulty Identifying Feelings and DDF = Difficulty Describing Feelings, EOT = Externally Oriented Thinking (TAS-20). Attention, Clarity, Repair (TMMS). Faces, Pictures, Sensations, Blends, Changes, Facilitation, Management, Relationships (MSCEIT).

According to the difference in chi square values of these models, the hypothesised oblique five-factor model was found to provide a statistically better fit with the present data than the five-factor method variance 'test' model (i.e., $\chi^2(33) = 2026.25 - 1838.56 = 187.69$, $p < .01$). As such, it was concluded that the hypothesised five-factor taxonomy model provided the best fit with the present data. Interesting, the correlation between the oblique two-factor test model representing self-reported and ability EI was $r = .39$. This finding was consistent with previous research that has examined the relationship between single self-report and performance-based EI measures (e.g., the Bar-On EQ-i and MSCEIT by Mayer et al., 2000a).

Given that none of the hypothesised models were found to fit the data very well according to the standard model fit indices (i.e., none of the CFI or NFI values were above 0.90 and all of the RMSEA values exceeded 0.08 as recommended by McDonald & Ringo Ho, 2002), an exploratory factor analysis was conducted in order to seek a more appropriate solution. A Principal Components exploratory factor analysis was conducted where scores on

the sub scales of the various measures presented in Table 1 were entered as ‘items’. A parallel analysis using the procedure provided by O’Connor (2000) was conducted to determine the correct number of factors to extract from the data. In the un-rotated solution most of the items loaded on a single factor providing evidence for a general factor of EI consistent with the hypothesised models. The parallel analysis suggested that four factors should be extracted from the data set. As such, a number of rotated factor solutions around that which the parallel analysis suggested were examined in order to find a solution that best represented the present data, specifically, three, four, and five oblique and orthogonal factor solutions.

A five-factor oblique (Direct Oblimin) rotated solution was found to best represent the data. Both oblique (Direct Oblimin) and orthogonally (Varimax) rotated factor solutions produced highly similar results. However, the oblique rotated factor solution involved a relatively good spread of item loadings across the factors and was the most meaningful to interpret theoretically (e.g., according the different theories of EI as per Bar-On, 1997, and Mayer & Salovey, 1997), and the confirmatory results where the oblique factor models typically provided better model fit statistics (i.e., closer to the recommended model fit statistic values) than the orthogonal models assessed. The five-factor solution was chosen over three and four factor solutions as a significant amount of variance was explained by the 5th factor (i.e., 4.24%) and the five-factor solution produced a clearer and more interpretable pattern of factor loadings. The pattern of factor loadings for the five-factor oblique rotated solution is presented in Table 7.

Table 7. Pattern of Factor Loadings for the Five-Factor Oblique Rotated Exploratory Solution and Factor Intercorrelations

Item (subscale)	Factors				
	1 (ESM)	2 (EAO)	3 (ESA)	4(EMO)	5EE
ST	.861				.110
OP	.827		.138		
SR	.824				
IN	.775			-.258	-.188
AS	.734	-.103			-.317
RT	.716		-.158	.171	
SA	.659		.168		-.140
PS	.625				
HA	.620			.271	
FL	.586				-.144
R	.471		.428	.164	.342
DIF	-.435	-.151	.151	-.103	.365
IC	.332	.148	-.285	.262	.144
CH		.626	.172	-.277	
F		.548	-.103	.125	.166
BL		.544	.130	-.111	-.204
P	.235	.489	-.140		.155
SE		.462		.163	
FA		.412			
ER		.369		.271	
UT			.723	-.119	.124
MOE			.656	.368	-.142
MSE	.518		.599		.219
EP	.130		.546	.278	-.129
A	-.176	.174	.526	.121	-.404
C	.306		.395	.224	
RE				.848	
EM			.165	.808	-.120
IR	.355	-.110		.522	-.266
MA		.208		.390	.131
DDF	-.367			-.217	.633
EOT	-.180	-.214			.632
ES	.381			.383	-.484
	Intercorrelations				
	1 (ESM)	2 (EAO)	3 (ESA)	4(EMO)	5EE
ESM	1				
EAO	.11	1			
ESA	.18**	.04	1		
EMO	.39**	.19**	.13*	1	
EE	-	-.14**	-.14*	-.07	1
	.154**				

Note: Factor loadings have been sorted ascending. The highest loading items on each factor are presented in bold face and item loadings <.1 have been omitted. ESM = Emotional Self-Management, EAO = Emotional Awareness of Others, ESA = Emotional Self-Awareness, EMO = Emotional Management of Others, EE = Emotional Expression; ES =

Emotional Self-Awareness, EM = Empathy, PS = Problem Solving, RT = Reality Testing, FL = Flexibility, ST = Stress Tolerance, IC = Impulse Control, HA = Happiness, OP = Optimism, SR = Self-Regard AS = Assertiveness, IN = Independence, IR = Interpersonal Relationship, RE = Social Responsibility, (Bar-On EQ-i); EP = Emotional Perception, UT = Utilisation of Emotions, MSE = Managing Self Emotions, MOE = Managing Others Emotions (SEI). DIF = Difficulty Identifying Feelings and DDF = Difficulty Describing Feelings, EOT = Externally Oriented Thinking (TAS-20). A = Attention, C = Clarity, R = Repair (TMMS). F = Faces, P = Pictures, SE = Sensations, BL = Blends, CH = Changes, FA = Facilitation, MA = Management, ER = Relationships (MSCEIT).

These five factors accounted for 53.3% of the variance (30.4%, 7.4%, 6.3%, 4.9% and 4.2% respectively), in the data set. The first factor that emerged in the exploratory analysis comprised 11 of the 15 EQ-i subscales together with the Repair subscale from the TMMS and the Difficulty Identifying Feelings subscale from the TAS-20. This factor could be interpreted as representing the Bar-On EQ-i given the preponderance of EQ-i subscales loading on this factor. However, it could also be interpreted as the Emotional Self-Management factor of the hypothesised five-factor model proposed by the current study. That is, the highest loading items on this factor were those concerned with the management of one's own emotions (i.e., Stress Tolerance, Optimism, Self-Regard from the Bar-On EQ-i). Moreover, the other subscales that loaded on this factor were also concerned with the management of one's own emotions (i.e., the Repair subscale from the TMMS).

The second factor that emerged in the analysis comprised the Changes, Faces, Blends, Pictures, Sensations, Facilitation and Relationships subscales from the MSCEIT, and as such could be interpreted as representing this scale. Another interpretation however, could be that this factor represents Emotional Awareness of Others (the second factor of the hypothesised five-factor model). These MSCEIT subscales may assess the ability to perceive and understand emotions external as apposed to the ability to perceive and understand inner subjective feelings. More research evidence is needed in order to substantiate this notion, however, the current findings are consistent with this assertion. That is, the two highest loading items on this factor were the Changes subscale (that is purported to index individuals understanding of emotions), and the Faces subscale that assess the ability to perceive emotions inherent in pictures of facial expressions.

The third factor that emerged in the exploratory factor analysis comprised all of the subscales from the SEI (Schutte et al., 1998) together with the Attention and Clarity subscales from the TMMS. As such this factor could be interpreted as representing the SEI. Alternatively, it could also be interpreted as representing Emotional Perception, that is, the skill of perceiving one's own emotions. Almost one third of the 33 SEI items (9) are concerned with the ability to recognise one's own emotions. Moreover, the other subscales loading on this factor were the Attention and Clarity subscales from the TMMS, which are also concerned with the capacity to recognise one's own emotions, specifically, how much attention individuals pay to their own emotions and how clearly they tend to experience them.

The fourth factor that emerged in the exploratory factor analysis comprised the Social Responsibility, Empathy and Interpersonal Relationship subscales from the Bar-On EQ-i together with the Management subscale from the MSCEIT. As argued in the introduction of this chapter, all these subscales are concerned with the capacity to regulate or manage the

emotions of others. As such, this factor could be interpreted as the Emotional Management of Others factor of the hypothesised five-factor model described in the current study. The highest loading items on the fifth factor that emerged from the analysis were the Difficulty Describing Feelings and Externally Oriented Thinking subscales from the TAS-20 together with the Emotional Self-Awareness subscale from the Bar-on EQ-i. This factor could be interpreted as representing the TAS-20, given that it is predominantly defined by the TAS-20 subscales. However, another interpretation may be that this factor could represent the skill of expressing emotions. The highest loading item on this factor was the Difficulty Describing Feelings subscale from the TAS-20. Moreover the Emotional Self-Awareness subscale from the Bar-On EQ-i, which also loaded on this factor, comprises four items concerned with the expression of emotions such as “It’s fairly easy for me to express feelings” (Bar-On, 1997, p.181).

In summary, neither the hypothesised five-factor model nor the five-factor method variance model emerged clearly in the exploratory analyses. While some factors were predominantly defined by one test in the battery, in general the subscales of the various tests did spread over the factors that emerged in the analyses. On that basis, a second interpretation of the exploratory results is that the dimensional communality amongst the different models and measures of EI may best be described by a general factor and five second order factors that represent (1) Emotional Self-Management; (2) Emotional Awareness of Others; (3) Emotional Self-Awareness; (4) Emotional Management of Others; and (5) Emotional Expression.

An Interpretation of the Results

The model fit statistics for the oblique factor models were generally better than those for the orthogonal factor models that were tested. This finding suggests that EI may best be conceptualised as a set of related yet distinct variables (be they abilities, competencies, emotion-related personality traits or otherwise), a finding consistent with Salovey and Mayer’s (1990) original conception of the construct, and later theories (e.g., Bar-On, 1997). Indeed there was a positive manifold of correlations (with the exception of the TAS-20 tasks) amongst the various measures assessed, and most of the items loaded on a single factor in the un-rotated exploratory factor analysis providing evidence for a general EI factor. It could be concluded that EI may best be conceptualised as a unifactorial construct.

Secondly, the hypothesised five-factor model proposed in this Chapter was found to provide a statistically better fit with the present data than the five-factor and two-factor method variance models assessed. This finding suggests that there is some common variance shared between the various models and measures of EI, and that the hypothesised five-factor model may better represent the different approaches to EI (as a definition of the construct), than the theoretical distinctions that have been made between them (e.g., trait and ability EI, Petrides & Furnham, 2001). The correlation between self-reported and ability measured EI ($r = .39$ as found with the two-factor method variance model), suggests that these approaches share approximately 15% of the reliable common variance. Categories that various models and measures of EI have recently been placed into are conducive to conceptually understanding the large literature on EI (Petrides & Furnham, 2001). However, the findings of

the current study suggest that it may be premature to describe different approaches as fundamentally distinct constructs, as recently noted by Goleman (2005). Indeed Ciarrochi et al's. (2000) conclusion that the different approaches to the conceptualisation and measurement of EI "...tend to be complementary rather than contradictory..." (p.540), better reflects the confirmatory findings of the current study pertaining to this issue.

The results of the exploratory factor analysis provided further insight into the confirmatory findings. Neither the hypothesised five-factor model nor the five-factor method variance model was clearly supported in the exploratory analyses, although partial support for each was evident. An interpretation of the exploratory results, based on the spread of the subscales over the five-factors, was that the first factor represented Emotional Self-Management, that is, the skill of effectively regulating and managing one's own emotions; the second factor represented Emotional Perception, that is, the skill of perceiving and understanding one's own emotions; the third factor represented Emotional Management of Others, that is, the skill of effectively regulating and managing the emotions of others; the fourth factor represented Emotional Expression, that is, the skill of expressing emotions; and finally, that the fifth factor represented Emotional Awareness of Others, that is, the skill of perceiving and understanding the emotions of others. This interpretation is somewhat consistent with the hypothesised taxonomy proposed in the current study. However, in the taxonomic model, variables to do with the perception and expression of one's own emotions were expected to form a single Emotional Self-Awareness and Expression factor; and a factor to do with the use of emotions in thought, (Emotional Reasoning), that did not emerge in the exploratory results) was expected. The exploratory results also highlight some of the potential reasons why the hypothesised taxonomic model may not have provided a statistically acceptable fit with the present data.

One of the hypothesised factors that did not emerge in the exploratory factor analysis was the Emotional Reasoning factor. This factor was expected to load subscales from the various measures concerned with the capacity to utilise or reason with emotions in thought. A possible reason why this factor did not emerge may concern the reliability of the various subscales that measure this aspect of EI. Most of the subscales hypothesised to define this common factor have been found to exhibit relatively low internal consistency coefficients in comparison to the other variables assessed. The subscales from the MSCEIT, the SEI and the TAS-20 were all found to exhibit reliability coefficients below the criterion of $\alpha = .70$ (Tibachnick & Fidell, 1996). It could be argued that this area of EI is not reliably assessed by existing measures. As a result, while Emotional Reasoning was theoretically identified as a common facet of EI amongst various models and measures of the construct, it may not yet manifest empirically in factor analyses. Future research (following advances in the measurement of this area of EI) is needed in order to substantiate whether it empirically represents a common dimension of the EI construct.

Another factor that was interpreted from the exploratory results of the current study concerned the skill of expressing emotions. In their original conception of EI Salovey and Mayer (1990) proposed that individuals might differ in the capacity to express feelings. They also proposed however, that the ability to express inner feelings and emotions would be highly related if not dependent on the capacity to perceive feelings conceptualising the ability to appraise and express emotions as a single component of the construct. The findings of the current study however, suggest that these two elements may be conceptually related yet

sufficiently distinct components of the construct, a finding consistent with the three-factor model of alexithymia that involves separate factors concerned with difficulty in identifying and describing feelings (Bagby et al., 1994a). A hierarchical model involving the ability to perceive emotions followed by a separate factor concerned with the ability to express emotions would allow for the theorising of Salovey and Mayer (1990). However, such a model would also take into account the findings of the current study (i.e., a distinct expression factor).

As with the Emotional Reasoning factor, further advances in the measurement of expressing emotions is also needed. While most models of EI comprise a variable concerned with expressing emotions, this area has been somewhat neglected by those who have designed measures of the construct (Petrides & Furnham, 2001). Neither the MSCEIT, the Bar-On EQ-i, or the EI scale by Schutte et al. (1998) have sub-scales solely concerned with the expression of emotions. For example, the EI scale by Schutte et al. (1998) has only two items that assess the capacity to express emotions that are subsumed by the Emotion Perception subscale. Furthermore, the Bar-On EQ-i comprises only four items concerned with the expression of emotions (e.g., "It's fairly easy for me to express feelings"; Bar-On, 1997, p.181), which are subsumed by the Emotional Self-Awareness subscale. While a distinct Emotional Expression factor was interpreted from the exploratory results of the current study, this factor may not emerge in other analyses because it is not adequately represented by existing measures of EI. Further research (following the development of better measures of emotional expression) is needed in order to substantiate whether Emotional Expression represents a separate definitive dimension in a common taxonomy of EI.

CONCLUSION

A five-factor taxonomic model for EI was theoretically derived from a systematic comparison of the variables assessed by different models and measures of EI. Although this model was not found to provide a statistically acceptable fit with the present data according to standard model fit criteria, it was found to be the best fitting model in comparison to a number of others assessed. As discussed by McDonald and Ringo Ho (2002), conclusions drawn on the basis of SEM results should not be purely data-driven. While model misfit can be taken to imply that the hypothesised model is not supported by the data, there are a number of unresolved problems (as outlined by McDonald & Ringo Ho, 2002) with criterion indices of model fit. McDonald and Ringo Ho (2002) recommend that competing models should be specified a priori (as done by the current study), and the relative goodness of fit reported. Accordingly, it was stated early on in this chapter that the model that provided the best degree of fit with the present data would be taken to best represent the dimensional communality amongst the models and measures of EI assessed. Given the theoretical justification for the hypothesised five-factor model, and the fact that it was the best fitting model in comparison to the others assessed, it is concluded that the five-factor model best represents the communality amongst the various measures of EI assessed and therefore provides a taxonomy for EI.

The taxonomy may not have provided a statistically significant fit with the present data for a number of reasons including; (1) the reliability (or lack thereof) of subscales measuring the use of emotions in thought; (2) the considerable amount of specific and error variance

associated with each measure as evidenced by the exploratory findings where each measure roughly defined distinct ‘test factors’; and (3) the possibility that the first factor of the hypothesised model Emotional Self-Awareness and Expression, should be split into two factors representing the skill of perceiving emotions, and the skill of expressing emotions as interpreted from the exploratory findings. Future research may find that a taxonomy for EI may best be represented by a six-factor model that involves the skills of: 1) perceiving one’s own emotions (Emotional Self-Awareness); 2) expressing emotions (Emotional Expression); 3) perceiving and understanding others’ emotions (Emotional Awareness of Others); 4) using emotions in reasoning and decision-making (Emotional Reasoning); 5) managing one’s own emotions (Emotional Self-Management); and managing others’ emotions (Emotional Management of Others). Support for this six-factor taxonomic model of EI may only be found following further advancements in the measurement of particular facets of the construct. As with any set of multivariate data there will almost always be more than one plausible structural model (McDonald & Ringo Ho, 2002). This six-factor model of EI should be assessed by future research along with other theoretically justified taxonomies for EI, and the relative goodness of fit should similarly be examined in order to substantiate whether the taxonomic model identified by the current study best describes the communality amongst different models and measures of the construct.

The findings of the current study suggest that a taxonomy for EI will most likely comprise a general factor represented by a number of related facets. Based on our findings EI can be commonly defined as “*the skill with which one perceives, expresses, reasons with and manages their own and others emotions*”. Definitions of the more specific facets of this model include: Emotional Self-Awareness & Expression, *the skill with which individual’s perceive and express their own emotions*; Emotional Awareness of Others, *the skill with which individual’s perceive and understand the emotions of others*; Emotional Reasoning, *the skill with which individual’s utilise emotions in reasoning and decision-making*; Emotional Self-Management, *the skill with which individual’s manage their own emotions*; and Emotional Management of Others, *the skill with which individual’s help others manage emotions*. If this taxonomic model for EI is further established by future research an important next step would be to devise valid and reliable measures that assess these common dimensions of EI. Here it could be argued that it may be useful to devise both self-report and performance-based measures of the model. It has been argued that it may be difficult to tap inner process to do with emotions with performance-based measures (Mayer Caruso & Salovey 2000). Indeed, it is questionable whether insight is gained to an individual’s ability to manage inner subjective moods and emotions from their scores on scales that assess their ability to decipher more and less correct emotional management strategies in vignettes. As such, it could be argued that these different approaches to the measurement of EI (self-report and performance-based) should both be further researched and developed.

Cultural Implications

It is with some reticence that we now discuss the cultural aspects of our model. Research on cross-cultural differences is best undertaken with models that have received a great deal of consensus, testing and in some instances adoption. Clearly models of EI are undergoing

development and enhancement for many reasons, some of which are outlined in this book. This notwithstanding, it is possible to discuss some of our early thoughts regarding the cultural implications of the EI taxonomy discussed previously in this chapter. It should also be noted that we are in an active phase of cross-cultural research on the proposed taxonomy for EI, and over the next few years the data collected will allow us to better test hypotheses that are very broadly outlined here.

Perhaps the broadest hypothesis that needs testing is whether we have identified a culturally universal taxonomy for EI, or whether it is only relevant to the Western cultures from which it has been derived? It is our opinion that the five skills of our taxonomy are culturally universal and have comparable functions across cultures. However, the processes underlying the five facets and their manifestation may differ across cultures, as a consequence of the role culture plays in the development, display and interpretation of emotions. Furthermore, the relationships among the various facets of the model may also differ according to culture and show differential relationships with variables such as psychological well-being, life satisfaction, interpersonal effectiveness and workplace success. To place these hypotheses in context we draw upon research findings associated with cultural differences in emotion.

Cultural differences in emotion have been identified in a number of different domains. First, emotion display rules differ across cultures, that is, the norms pertaining to how certain emotions should be expressed within social contexts (Ekman & Friesen, 1969). For example, Americans have been found to express their disgust and sadness more freely to intimate friends and family than Japanese (Matsumoto, Takeuchi, Andayani, Kouznetsova & Krupp, 1998). Second, research has shown that the intensity of emotional expressions differ across cultures. For example, men in countries such as Greece have been found to more intensely verbalise emotions and display non-verbal expressions (specifically of anger), than men in countries such as the United Kingdom (Edelmann, Asendorph, Contarello, Zammuner, Georgas & Villanueva, 1989; Scherer & Wallbott, 1994). Finally, research has also shown that emotional recognition accuracies differ across cultures. Matsumoto (1991) found that emotional recognition accuracies of negative emotions such as fear, anger and disgust were higher among Americans than Japanese.

Collectively, these research findings highlight cultural differences in the underlying processes and manifestations of just two facets of the model, (i.e., perceiving and expressing emotions). They also highlight the possibility of cultural variability in levels of EI skills and the need to establish cultural norms for assessments of EI, as has been done by Bar-On (Bar-On, 1997). Cross cultural research on emotions also suggests that the relationships among the five facets of the taxonomy and the relationships between facets of the taxonomy and other variables (such as psychological well-being) may differ according to culture. These variations can be linked to Hofstede's work on the universal dimensions of values (Hofstede, 1980, 2001), such as Uncertainty Avoidance (UA; a cultural tendency to be anxious in the face of uncertainty and unknown risks, and to try to reduce them) and to Individualism-Collectivism (a cultural tendency to emphasize an in-group – out-group distinction).

Cultures that exhibit high UA tend to be more expressive cultures where it is more socially acceptable to raise one's voice and to show one's emotions. In such cultures anxiety levels amongst the population tend to be high and anxiety is said to be released through the

showing of emotions (Hofstede, 2001). Within such cultures a moderate positive relationship between the facets of expressing and managing emotions (within oneself) could be hypothesized. Conversely, cultures that exhibit low UA tend to be less expressive cultures where there can be social disapproval of overly emotional displays of behaviour (Hofstede, 2001). Within low UA cultures the relationship between the facets of expressing and managing emotions (within oneself) may be lower than that found in high UA cultures. Furthermore, this research suggests that expressing emotions in one culture may correlate more strongly with variables such as psychological well-being than it may in others. Specifically, expressing emotions may be more strongly related to psychological health in high UA cultures than in low UA cultures. This latter notion supports the contention that the facets of the five-factor taxonomy for EI may show differential relationships with variables such as psychological well-being, life satisfaction, interpersonal effectiveness and workplace success across cultures.

There are many questions pertaining to the cross cultural utility (or lack thereof) of an EI taxonomy and we have attempted to raise a few toward the conclusion of this chapter. No doubt other chapters of this book will raise and address these questions to a greater extent than we have here. Obviously assessment measures designed to test the taxonomic model of EI are needed before any cross cultural research can be carried out. We have built our own assessment of the model and, as mentioned, are in the process of carrying out large scale cross cultural research studies. One issue we are in the midst of exploring is whether the assessment format we have chosen (self-informant rated with anchored rating scales), is cross culturally applicable and simply requires language translation (as has been done by Bar-On, 1997), or whether different assessment items are necessary.

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