Concepts and Measures of Emotional Intelligence – A Research Perspective

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Abstract

Einstein's superior intellectual ability may have been related to the region of his brain that supports psychological functions – This is a belief now held by scientists, based on emerging evidence in the field of Emotional Intelligence. Emotional Intelligence (EI) is a form of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action (Salovey & Mayer, 1990). The field of Emotional Intelligence had its roots in Psychobiology and neuroscience. It is a nebulous concept and is studied by those in Education, Human Resources, and Psychiatry, among others. EI emerged in 1990 as a concept and since then researchers have put in numerous efforts to conceptualize, measure, understand, and develop EI. This article presents an overview of the numerous research efforts that lead to the conceptualization and measurement of EI and concludes by identifying the most appropriate measure of EI.

Introduction

Emotional Intelligence is not a new concept. It had its origins in the twentieth century, when Edward Thorndike's work on Social Intelligence focused on socially competent behavior. In 1935, Edgar Doll designed the first instrument to measure socially intelligent behavior in young children. The works of Thorndike and Doll inspired David Wechsler to include two subscales namely "Comprehension" and "Picture Arrangement" in his test of Cognitive Intelligence. Followed by his test, Wechsler argued that our intelligence model would not be complete until we adequately describe the non-intellective factors. These early definitions and arguments on social intelligence formed a strong foundation for the emergence and development of El. Emotional Intelligence has received a lot of attention since its inception. Research on El has proliferated since 1990, which has lead to different models and measures of El. Critics of El point to serious conceptualization and measurement problems and the advocates of El have put in numerous efforts to answer the critics and build a strong framework for El. The impact of El in

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various aspects of our life has been proved empirically by numerous research efforts and hence EI has become an essential mantra for present-day organizations. This article is an effort to consolidate the Evolution, Conceptualization and Measurement of EI and to identify its most appropriate measure.

Objectives

Today, EI has grown into a nebulous concept, and is being studied by people in human resources, education and many other fields. The proliferation of research in EI has resulted in various conceptualizations and models, with diverse frameworks. Anyone new to this field will be surprised by the volumous theories and ideas behind this single term. The objectives of this article are

- To consolidate the Evolution, Conceptualization and Measurement of El
- To analyze the studies comparing the measures of EI and identify it's most appropriate measure.

Methodology

The EBSCO, Blackwell, Emerald databases and the El consortium yielded 160 articles on Emotional Intelligence. These articles were published in the time frame of 1990 to 2007. Some articles explained the theory of El, its models and its conceptualization. Out of the 160 articles, 35 papers had data pertaining to conceptualization and measurement of El. A few empirical studies compared the various measures of El. This article gives a glimpse of the work done on the concepts and measurement of El.

Evolution of El

The relation between thoughts and emotions was considered in Western culture two thousand years back. However, when we take the evolution of EI, it is apt to start from the year 1920, in which the seeds of EI were sown in the field of Social Intelligence. A chronological order of events is given below, to explain the evolution and development of EI.

- 1. 1920: Edward Thorndike started working on Social Intelligence and many of the early studies were focused on describing, defining and assessing Socially Competent Behavior.
- 2. 1935: Edgar Doll designed the first instrument to measure socially intelligent behavior in young children.
- 3. 1939: David Wechsler was influenced by Thorndike and Doll and included two aspects namely "Comprehension" and "Picture Arrangement" in his test of cognitive intelligence, which appeared to measure aspects of social intelligence.
- 4. 1940: David Wechsler described the influence of non-intellective factors on intelligence.
- 5. 1943: In many of the publications following his description of the influence of non-intellective factors, Wechsler argued that our intelligence model would not be complete unless we account for the non-intellective factors.

- 6. 1949: In the late 1940s, MacLean andRuesch observed people suffering from classical psychosomatic diseases andfound that many of the patients showed an apparent inability to verbalize feelings. MacLean wrote his important paper on the central control of emotions, based on his support to Papez (1937) who associated the temporal lobes, including the hippocampus with emotional functioning.
- 1973: The work of MacLean and 7. Ruesch led to further research in this area and Peter Sifneos coined the term "Alexithymia" to describe a state of deficiency in understanding, processing, or describing emotions. Two new directions emerged from the discovery of Alexithymia and they were "Psychological Mindedness" and "Emotional Awareness". (The focus on Alexithymia and the two new directions inspired the Bar-On Model of EI). Research continued in these lines to establish the anatomical foundations of emotional awareness.
- 8. 1983: Howard Gardner talked about personal intelligence, which was based on intrapersonal (emotional) and interpersonal (social) intelligence.
- 9. 1990: John Mayor and Peter Salovey coined the term "Emotional Intelligence".
- 1995: Daniel Goleman wrote a book on EI, which popularized this concept and the attention of corporate America was drawn towards this concept. He developed his own model of EI.

- 11. 1997: Reuven Bar-On developed h i s Bar-On model of El. In the late 1990's El became a buzzword and was declared as the most useful phrase.
- 2004: The Encyclopedia of Applied Psychology suggested that there are three conceptual models of El namely a. Ability model of Mayerand Salovey, b. Daniel Goleman's model, and c. Baron Model.

Conceptualization of EI

The proliferation of research in the field of EI has resulted in a number of theories going into this buzzword. This will overwhelm anyone new to this field. The research work in neuroscience, social intelligence and psychology formed a base for the birth of EI. In order to conceptualize EI, we need to understand two paths of psychological research.

- Research on interactions between Emotions and Cognition in the personality subsystem and the neurological basis for the same.
- Broadening of the concept of intelligence, to include an array of mental abilities like social, practical, and personal intelligence.

Emotions and Cognition in the personality subsystem

Mayer, Salovey, and Caruso have clarified that EI is part of human personality and operates in the context of personality. Personality is the entire mental organization of a human being at any stage of his development (Warren and Carmichael). A structural approach to personality divides it into broad areas namely Motivation, Emotion, Cognition or the id, the Ego, and the Superego.

- Motivations arise in response to internal body states. (e.g., Hunger, Thirst etc). These motivations direct the organism to undertake ways and means to satisfy the survival needs. (e.g., Thirst motivates a person to drink water and once water is drunk, that urge is satisfied).
- Emotions have evolved to signal and respond to changes in relationships between the individual and the environment. Emotions do not follow a rigid time course and they organize

behavioral responses to the relationship. (e.g., Fear arises in response to danger and it is organized by fighting or fleeing). Emotions are more flexible than motivations but less flexible than cognition.

Cognition allows the organism to learn from the environment and to solve problems in novel situations. This is often related to satisfying motives or keeping emotions positive.

The position of the above three components and their interaction in the personality subsystem is shown below.

High Level of Personality Subsystem (Learned Qualities)	Interpersonal and Intrapersonal qualities			
Middle Level of Personality Subsystem (Interactions between low levels of personality system.)	Interaction between Motivation and Emotion When urge to eat i not satisfied we become angry.		Cog Emotional int anger and	ween Emotion and gnition. celligence controls helps to react sitively.
Low Level of Personality Subsystem (Biologically related mechanisms)	Motivation Ex: Urge to eat		Emotions Ex: Anger	Cognition Ex: Negative Thoughts

Figure 1 : EI in the context of personality subsystem

El involves the interaction between Motivation and Emotion and Emotion and Cognition. Ex: When our urge to eat is not satisfied (Motive); we will be angry (Emotion). Due to our anger (Emotion), we will have negative thoughts (Cognition) and respond negatively. El deals with controlling this anger (Emotion) and reacting positively (Cognition). The interaction of Emotion and Cognition leads to EI. A compact way to put this is that Emotional Intelligence implies something that has to do with Emotion and Cognition and so we can conclude that it operates in the context of the personality subsystem (Mayer, Salovey, and Caruso).

Neurological basis for EI

Papez, (1937) who associated the temporal lobes, including the hippocampus with emotional functioning, brought the neurological basis for Emotional Intelligence to light. Further research in this direction lead to the coining of the term "Alexithymia" by Peter Sifneos (1973) to describe a state of deficiency in understanding, processing, or describing emotions. Different areas of the brain influence cognition and Emotion, as detailed below.

 Intellectual abilities like verbal fluency, spatial logic and abstract reasoning, in other words the components of IQ are based in Neocortex. The amygdala takes care of decoding emotions and many of our body's alarm circuits are located in amygdala.
 Amygdala is located close to the hippocampus in the frontal portion of the temporal lobe and we have a pair of amygdalae. Davidson et al (2000) have featured the prefrontal cortex (PFC) and amygdala as the two main territories of brain that are associated with emotions in their article.

The response of human system to emotional stimuli is explained by the figure 2.When the brain receives a sensory stimulus; it is routed to the thalamus, from where it takes two parallel pathways.

- 1. Long route: The stimulus, which takes a long route is processed in the cortex (the thinking brain) and then directed to amygdala. The thinking brain gives the real situation, and the emotional response is given to the stimulus. This response is a controlled and guided one, as it involves the thinking brain.
- 2. Short route: In this route, the stimulus is sent from the thalamus to the amygdala in a short route, without any cognition involved and activates it. The amygdala, in turn activates a flood of peptides and hormones to create emotion and action. Daniel Goleman (1995) referred to this short route as Amygdala Hijack. When the stimulus loose For example, in some situations, we cross the threshold of anger and do some ill acts. When we think about it after a while, we will realize that we have done a wrong act, carried away by this amygdala hijack.

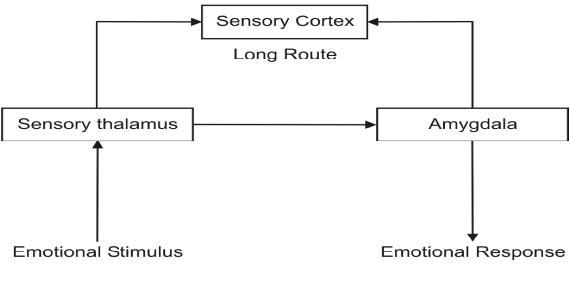


Figure 2 : Response to Emotional Stimuli

(Source: http://thebrain.mcgill.ca/flash/i/i_04/i_04_cr/i_04_cr_peu/i_04_cr_peu.html)

Broadening of Intelligence concept and IQ Vs EI

The idea of EI grew out of the concept of Social Intelligence. The seeds of EI were sown in1920, when Edward Thorndike started working on Social Intelligence. In 1943, David Wechsler argued that our intelligence model would not be complete unless we incorporate the non-intellective factors into that model. Thus, the attention of researchers was drawn towards this aspect and Howard Gardner talked about multiple intelligences (1983), which comprised of Intrapersonal and Interpersonal Intelligences. This broadening of the concept of intelligence, inspired the way EI was conceptualized and Mayor and Salovey developed the first model of EI (1990) in the field of psychology. After the inception of EI in 1990, the founders of EI made efforts to prove that EI meets traditional standards of intelligence (1999). The first hallmark of intelligence is abstract reasoning, which is the capacity to see differences and similarities between objects and being able to analyze parts and appreciate their relation to each other and as a whole. Abstract reasoning cannot happen without an input, a wellorganized related body of knowledge, and strategies for operating within intelligence. Mayer et al (2001) give a comparison of verbal intelligence and emotional intelligence, in the context of abstract reasoning to prove that EI can be treated as an intelligence and can be measured as an ability. The comparison is given below.

Aspect of Intelligence	Example from Verbal Intelligence	Example from Emotional Intelligence
Meta-Processing (Adjunct)	Knowing that writing down can can help one remember it.	Knowing that helping someone may make oneself feel better
Abstract Understanding and Reasoning (Core)	Being able to identify the protagonist of a story and compare the individual with other people	Being able to analyze an emotion and identify its parts and how they combine
Knowledgebase Processing (Adjunct)	Having knowledge (and rememberinganalyses) of prior instances of stories	Having knowledge (and remembering analyses) of prior instances of feelings
Input Processing (Adjunct)	Being able to keep long sentences in memory	Being able to perceive emotions in faces

Table-1 EI meets the standards for intelligence

EI was established as an intelligence and all the definitions of EI have a combination of cognitive and emotional abilities. Critics of El voiced their concern over undermining the importance of IQ by proclaiming that EQ accounts for 80% of success of star performers. The supporters of EI argue that IQ is necessary but not a sufficient quality for top performers or star performers. IQ will predict which jobs or professions people will enter. For example, getting admission in a Medical College demands high IQ. However, once you graduate out of the medical college, who among a bunch of MBBS graduates will become a famous and much sought after Doctor will be decided by Emotional Intelligence.

Based on the two pathways in psychological research cited above, El can be seen as a construct with a dual nature and is associated on the one hand with cognitive abilities (Social intelligence and intelligence arm) and on the other with personality traits (neuroscience basis for emotion and cognition; interaction between Emotion and cognition in personality subsystem). Recently, Lyusin (2006) proposed a model of El based on these two arms. In lines of the above conceptualization, El is defined as

- An ability to recognize the meanings of emotion and their relationships, and to reason and problem-solve based onthem. Emotional Intelligence is involved in the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them by Mayer and Salovey.
- An array of non-cognitive capabilities, competencies and skills that influence one's ability to succeed in coping up with environmental demands and pressures by Reuven Bar-On

The commonly used definition of EI is that Emotional Intelligence is a form of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action (Salovey & Mayer, 1990).

Models and Measures of EI

The idea of EI had its roots in social intelligence, which was developed by researchers including Thorndike. Howard Gardner came very close to the concept of EI in 1983, when he described intrapersonal and interpersonal intelligences, within his multiple intelligence frameworks. Following closely in these lines, John D.Mayor and Peter Salovey coined the term "Emotional Intelligence" in 1990.

Development of EI models

- Mayer and Salovey formed the first and best-known model of El in 1990. Their initial conception presented El as a complex construct consisting of three abilities namely (1) Thei dentification and expression of emotions; (2) the regulation of emotions; (3) Application of emotional information to thinking and action. It included only cognitive abilities associated with the processing of emotional information.
- Daniel Goleman popularized this concept in 1995, through his book and the attention of Corporate America was turned towards EI. Goleman based his model on the ideas of Mayor and

Salovey, but he incorporated various personality traits like zeal, persistence etc into his definition of El.

- Reuven Bar-On was influenced by Darwin's early work on the importance of emotional expression for survival and adaptation and was motivated by the works of Thorndike (1920), Wechsler (1943), Sifneos (Alexithymia, 1973), and Appelbaum (Psychological mindedness, 1973). Based on these concepts, he coined a new term Emotional Social Intelligence (ESI) and formed the Bar-On model (1997), which is defined as an array of noncognitive capabilities, competencies and skills that influence one's ability to succeed in coping up with environmental demands and pressures.
- Lyusin (2006) proposed a model of EI, based on commonly accepted interpretations and called EI as the ability to understand one's own and others' emotions and to manage them.

It can be seen that the models of EI are based on different conceptualizations and hence lead to an interesting mixture of confusions and controversies regarding the best model, which represents EI. This has brought in the need to classify the models.

Classification and Description of El models

The EI models are based on different conceptual frameworks and two attempts were made to classify them.

- John Mayer, David Caruso, and Peter Salovey (1990) classify the models into Ability models and Mixed Models. Models viewing EI as a cognitive ability are Ability Models (Ex: Model of Mayor and Salovey) and Models viewing EI as a combination of cognitive abilities and personality traits are Mixed models (Ex: Bar-On and Goleman's Models)
- K.V.Petrides and Adrian Furnham (2000) classify the models as Ability El and Trait El, based on the methods used to measure El. Ability El is similar to traditional intelligence and is best measured through problems similar to the one used in intelligence testing. Trait El is associated with evaluating persistence of behavior in different situations and is aptly measured by questionnaires.

To narrow down the choices of models for researchers who enter newly into the field of EI, The Encyclopedia of Applied Psychology (Spielberger, 2004) suggested that there are currently three major conceptual models of EI namely

- a. The Salovey-Mayer Model (1997)
- b. The Goleman Model (1998)
- c. The Bar-On Model (1997b, 2000)

The models are described below.

Four Branch Ability Model by Mayer, Salovey and Caruso

The ability model views EI as a traditional intelligence, made up of a set of specific, interrelated abilities. This model states that emotions are evolved signal systems and each emotion conveys a specific meaning. For example, fear conveys the meaning that one is under attack and will need to escape. The ability model also states that El can be learned and it develops with age. According to Ability model, El can be divided into four branches, which are explained below.

Branch 1: Ability to Perceive emotions

It involves non-verbal perception and expression of emotions through face, voice, and other communication channels, and the capacity to recognize emotions in others' faces and postural expressions.

Branch 2: Ability to Use emotion to facilitate thought

This branch deals with the capacity of emotions to assist thinking. Part of intelligence involves ability to build a knowledge base of previous emotional experiences, from which we can draw information for thinking.

Branch 3: Understanding emotions

It involves the capacity to analyze emotions, appreciate their probable trends overtime and understand their outcomes.

Branch 4: Managing emotions

This branch deals with managing emotions, according to an individual's environment, self-awareness and social awareness. For example to control anger, we ask someone to count from 1 to 10, before reacting. The four branch model uses The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) to measure El

The MSCEIT

The MSCEIT is the most recent version and measures the four branches in eight tasks (two for each branch). An overview of MSCEIT is given below.

Branch of	Tests in MSCEIT	Description of Tasks in MSCEIT
Ability Model		
Perceiving Emotions	Faces	Identifying emotions in faces
	Pictures	Identifying emotions conveyed
		by landscapes and designs
Using Emotions	Sensations	Comparing emotions to other
to facilitate thought		tactile nd sensory stimuli
	Facilitation	Identifying emotions that would
		best facilitate a type of thinking.
Understanding	Changes	Tests a person's ability to know
Emotions		under what circumstances
		emotional intensity lessens and
		increases and how one emotional
		state changes to other.
	Blends	Identifying emotions involved in
		more complex affective tasks.
Managing	Emotion Management	Presenting participants
Emotions		with hypothetical scenarios and
		asking them how they would
		maintain or change their feelings.
	Emotion Relationships	Asking participants how to manage
		others' feelings so that a desired
		outcome is achieved.

Table 2 : Overview of MSCEIT (Courtesy: Mayor, Salovey, and Caruso)

MSCEIT uses both expert and consensus scoring methods and is available commercially with Multi Health Systems, Canada.

Daniel Goleman's Model

Goleman has conceptualized EI as a list of personal and social characteristics. According to Goleman, Emotional Intelligence is a broad description of an individual's functioning or character that includes abilities such as being able: (i) to motivate oneself, (ii) to persist in the face of frustrations, (iii) to control impulses, (iv) to delay gratifications, (v) to regulate moods, (vi) to keep distress from swamping the ability to think, (vii) to empathize, and (viii) to hope. After a detailed study of internal research carried out in hundreds of organizations, Goleman formulated a term called "Emotional Competence" which is "a learned capability based on emotional intelligence that results in outstanding performance at work" Emotional Competencies are job skills that are a must for an individual and can be learned. Goleman has proposed a framework for EI, based on the Emotional Competencies. The framework is given in Table 3. (Daniel Goleman)

	Self Personal Competence	Other Social Competence	
Self-Awareness		Social-Awareness	
Recognition	 Emotional Self-awareness Accurate Self-assessment Self-confidence 	EmpathyService orientationOrganizational awareness	
	Self-Management	Relationship Management	
Regulation	 Self-control Trustworthiness Conscientiousness Adaptability Achievement drive Initiative 	 Developing others Influence Communication Conflict Management Leadership Change catalyst Building Bonds Team work and Collaboration 	

Table 3 : Framework of Emotional Competencies

Goleman's concept of El is measured by the Emotional Competence Inventory, which is a questionnaire developed by Hay group. It is a 360-degree tool designed to assess the emotional competencies of individuals and organizations. It is based on

- Emotional competencies identified by Daniel Goleman (1998)
- Competencies from Hay/McBer's Generic Competency Dictionary (1996)
- Dr. Richard Boyatzis's Self-Assess ment Questionnaire (SAQ).

Bar-On Model by Reuven Bar-On

According to Reuven Bar-On, EI is a set of abilities that are non-cognitive and he prefers to call it Emotional-Social Intelligence (ESI) rather than EI. His model is based on the Emotional Quotient Inventory (EQ-i), which is a self-report measure of emotionally and socially intelligent behavior. The EQ-I was the first measure of its kind to be published by a psychological test publisher and the first to be peer-reviewed in the *Buros Mental Measurement Year Book*. The EQ-i contains 133 items, whose response is got on a 5point scale. It measures a number of abilities including emotional selfawareness, assertiveness, self-regard, selfactualization, independence, empathy, interpersonal relationship, social responsibility, problem solving, reality testing, flexibility, stress tolerance, impulse control, happiness, and optimism. It is suitable for individuals 17 years of age and older and takes approximately 40 minutes to complete (Bar-On, 2006).

Even though we have narrowed down to three models and three measures, there exists enough confusion regarding which instrument is best suited to measure EI.

Comparing Measures of EI

Over the past decade, a number of instruments have been developed to measure EI. The Consortium for Research

on Emotional Intelligence in Organizations (CREIO) has listed few instruments, which are backed by a subsequent body of research. The listed measures are

- 1. Bar-On Emotional Intelligence Quotient (EQ-i)
- 2. Emotional Competency Inventory 360 (ECI 360)
- 3. Genos El Assessment Scale
- 4. Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT)
- 5. Schutte Self-Report Inventory (SSRI)
- 6. Trait Emotional Intelligence Questionnaire (TEIQue)
- 7. Wong's Emotional Intelligence Scale

Although MSCEIT dominates the literature, there are many other abilitybased El instruments namely

- Levels of Emotional Awareness Scale (LEAS), (Lane et al, 1990): In this, respondents are presented with scenarios to elicit four kinds of emotions namely fear, anger, sadness, and happiness and asked to report how they will feel in such scenarios and how other persons will feel. The rating is done based on their perceptions of the scenarios and the perceptions about other persons in those scenarios.
- Emotional Accuracy Research Scale (EARS), (Mayer and Gehr, 1996), which gives the benefits of both laboratory and self-report measures of EI. However, it is a very short scale with eight items and is not widely used like MSCEIT.

 Wong and Law Emotional Intelligence Scale (WLEIS) (Wong and Law, 2002), which is a 16-item instrument based on Mayor and Salovey's model.

The mixed models also have measures apart from Goleman's ECI and Bar-On's EQ-i and they are

- Emotional Control Questionnaire Roger and Najaran, 1989; Developed in North American Context
- Style in the perception of Affect Bernet 1996; Developed in North American Context
- EQ map Cooper and Sawaf, 1997; Developed in North American Context
- Emotional Intelligence Question EIQ, (Dulewicz and Higgs, 1999); Developed in UK context
- Swinburne University Emotional Intelligence Test – (SUEIT) – Palmer and Stough, 2001; Developed in Australian context

These instruments differ in two ways as below

- They are based on different conceptual frameworks. For example, MSCEIT is based on Ability model and measures EI as an ability, whereas EQ-i is basedon mixed models and measures EI as an array of non-cognitive abilities.
- 2. They use different measurement approaches like Self-report measures, criterion-based measures, observer ratings etc.

Considerable amount of work has gone into comparing these measures empirically. Goldenberg et al (2006) have listed a few points with respect to Performance measures and self-report measures. They are

- Performance measures directly assess an individual's performance level on a task, whereas self-report measures are vulnerable to social desirability motives.
- 2. Performance measures tend to reflect actual levels of emotionally intelligent functioning whereas self-report measures reflect perceived El levels. The individual who is assessing his own El will give answers based on his perception. This will not reflect his actual El as an ability.
- 3. Performance measures do not overlap with measures of personality and temperament whereas some researchers have proven that selfreport measures overlap with personality factors.
- 4. Performance measures are lengthy and costly to use for research purposes, whereas self-report measures are easy to administer and are cheap.

Empirical studies comparing measures of EI

The EI construct has seen the evolution of many instruments to measure it. The attention of researchers was drawn to the comparison of measures of EI, in search of the best and well-suited instrument. A consolidation of such studies is given below.

 Dulewicz et al (2003) compared EIQ and Bar-On and found a high correlation between the two. EIQ was designed to measure core EI construct for managers in the work world and Bar-On EQ-i was designed to measure social and emotional constructs in all positions. Though these instruments were designed for different purposes and were based on different concepts, they appear to measure very similar constructs.

- MacCann et al (2003) suggest in their article that Performance-based measures are more promising than self-report measures in the sense that they do not overlap with personality and Intelligence and measure something new. However, they recommend expert scoring instead of consensus scoring in MSCEIT.
- Van Rooy et al (2005) found that measures of mixed-models overlap extensively and that mixed and ability models are relatively distinct. Mixed model measures overlap more with personality, when compared to ability measures. Ability measures correlate highly with cognitive ability than mixed model measures.
- Livingstone et al, (2005) worked with MSCEIT and EQ-i and found that both are not assessing the same construct. According to them, EI was initially conceptualized as an ability. The later developments brought in some personality traits into EI concepts and so debate still remains on which is the best method to assess EI.
- Brackett et al, (2006) used Mayer Salovey Caruso Emotional Intelligence Test and Self-Rated Emotional Intelligence Scale (SREIS) to measure EI and compared the results with social functioning. They concluded that Self-rated and

performance measures were not strongly related, suggesting that perception of one's EI may not be an accurate indicator of the actual level of EI. SREIS was moderately correlated with personality whereas MSCEIT was mostly uncorrelated with personality, well-being, and verbal intelligence. When personality was statistically controlled, MSCEIT was associated with interpersonal competence for men, and SREIS unrelated to social competence.

Bradberry et al (2006) compared MSCEIT and Emotional Intelligence Appraisal (EIA). The scores of EIA were positively correlated with job performance but the scores of MSCEIT were not significantly associated with job performance. EIA took only onefifth the time of completion of MSCEIT. They conclude that the best way to measure EI is often debated upon and may depend on the purpose for which EI is being measured.

Conclusion

The field of EI is still evolving and since its inception, numerous instruments have come into being to measure EI. It is evident from the literature review that the question of which measure of EI is best is still an issue to be debated upon. Researchers opine that the type of measurement determines the nature of the model, rather than the theory behind it (Petrides et al, 2000). They claim that when EI is looked upon as a trait, which is embedded in the personality framework, then it is aptly measured by self-report measures. However, when EI is conceptualized as an ability, it is called Information-processing EI and ability measures are best-suited for measure ment. The purpose of measuring EI also has a bearing on the selection of the best measure. Numerous empirical studies have proved the impact of EI on the personal and social life of individuals. The supporters of EI claim that it is an ability, it is comparable to standard intelligence, and that it can be developed. Having said all these, if we want to understand EI as an ability and have a feel for its impact on social life, then Ability models are best suited. The MSCEIT has been cited as a good instrument and research with this scale has provided promising evidence that El might be embodied in the overall psychometric intelligence structure. MSCEIT measures something new and hence is the most appropriate tool for measuring EL.

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