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A Literature Review of Emotional Intelligence

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ABSTRACT: *This paper traces the evolution of emotional intelligence as a theory and goes on to give a literature review of the same. It discusses the different concepts and beliefs pertaining to emotion and cognition and how it culminated in the theory of emotional intelligence. It also discusses the three major models of emotional intelligence, their contribution to the theory and finally closes with a brief discussion on future improvement of the theory.*

Keywords: *Emotional Intelligence; Literature Review*

I. INTRODUCTION

Let's not forget that the little emotions are the great captains of our lives and we obey them without realizing it. ~Vincent Van Gogh, 1889.

Emotions are those that define a person. Emotions shape a man's destiny and define the way he perceives life. As the famous Sanskrit saying goes –

Mano Matram Jagat; Mano Kalpitam Jagat - (“the world is as the mind sees and feels it; the world is as the mind thinks of it” (as qtd. by T.N.Sethumadhavan, 2010).

A definition of emotion in a dictionary will describe it as a state of feeling involving thoughts, physiological changes, and an outward expression or behavior but, theologians, psychologists, philosophers, scientists and researchers have developed and are still bringing in various theories which attempt to fathom its bottomless expanse of intrigue and fascination. While theologians study emotions or rather control of emotions as means of realizing the Supreme Being, the psychologists and sociologists have discussed emotions against their significance to the individual and society. On the other hand, the natural scientists like physiologists are interested in the origin, evolution and functions of emotions.

Human beings are a complex species of emotion and reason. While reasoning enables them to judge things with mathematical precision, emotions help them to understand and empathize which make them ‘human’. Traditionally it was believed and accepted that people with high reasoning skills and a sound logical bend of mind were more intelligent. The IQ tests that were designed to ascertain a person's intelligence and competency tested only the reasoning and the logical aptitude of the person. As Woodworth (1940) suggested, IQ tests were considered effective when they tested a person being ‘not’ afraid or angry or inquisitive over things that aroused emotions. Emotions were regarded as being disruptive in nature that hindered a person's thought process. Erasmus of Rotterdam, a sixteenth century humanist proclaimed:

“Jupiter has bestowed far more passion than reason – you could calculate the ratio as 24 to one. He set up two raging tyrants in opposition to Reason's solitary power: anger and lust. How far can reason prevail against the combined forces of these two, the common life of man makes quite clear.” (as cited by Goleman, 1995)

Young (1943) defined emotions as “acute disturbances of the individual ...” and believed that emotions made people ‘lose control’. But, not all felt or accepted emotions as ‘disorganized interruptions’ (Salovey and Mayer, 1990). Mowrer (1960) opined that

“... emotions are of quite extraordinary importance in the total economy of living organisms and do not deserve being put into opposition with ‘intelligence’. The emotions are, it seems, themselves a higher order of intelligence.”

There was a shift of focus from emotions being considered as disruptive to where it was considered as assisting cognition. The positive relationship between emotions and cognition was established by the ‘cognitive theorists’ who supposed that emotions depended on personal interpretation or appraisal of a particular event. Any event or an occurrence has a personal meaning for every person and the person reacts depending on this personal meaning and his evaluation of the event based on his personal well-being. Others like Stanley, Schachter and Jerome Singer proposed that emotion involved both physiological arousal and the cognitive appraisal of this arousal. Even when people experienced a state of ‘nonspecific physiological arousal’ like anger,

happiness or others, they tried to evaluate and reason it to figure out what those arousals meant for them (Dursun et. al., 2010). As the author further surmises, some theorists explained the process of emotion as first identifying the objects or events, second appraisal, third physiological changes, fourth action or expression and finally regulation. First comes the appraisal and then the emotion and thus there is no question of emotion disrupting cognition. Researchers had moved from the phase where they believed that emotions are disruptive, to a phase where they saw that emotion and reason are interconnected and that most of the times, cognition or reasoning precedes emotions. Intelligence and emotion which were considered as separate fields now integrated in the new field 'Cognition and affect' (Mayer, 2001). The perspectives about emotions keep varying. The subjective nature of emotions makes it difficult to bring in a single accepted definition or theory. To scientifically conceptualize something that can only be felt and experienced becomes an almost impossible task. Different theories on emotions have attempted to understand the nature of emotions and how they are experienced by people. While the James-Lange theory believes that a particular event or an occurrence causes a physiological change and then this change is interpreted into a corresponding emotion, the Cannon-Bard theory believes that we perceive the physiological change and the emotion at the same time. The Schachter-Singer Theory brings in the angle of reasoning which intervenes the physiological change and the labeling of the emotion. Lazarus theory speaks of thought coming first before perceiving the emotion and the Facial Feedback theory speaks about emotions as an experience of facial expressions (when someone smiles, he experiences happiness – the expression preceding the cognition). Sapir – Whorf hypothesised that language influenced thinking and Chomsky believed language and cognition to be separate abilities of the mind (Perlovsky, 2009). The theories and concepts are innumerable. Emotion maybe "... a complex, diffuse concept that can be expressed differently at different levels of abstraction" (Mathews et. al., 2004), nevertheless, the beauty and appeal lays in the fact that each of these concepts hold a place of significance for themselves and have also revolutionized the way people perceived emotions. No longer seen as only troublesome, it was being realized that emotions played a pivotal role in cognition and motivation. As Caruso (2008) observes, "emotions direct our attention and motivate us to engage in certain behaviors." Emotions according to him "do not interfere with good decision making, they are, in fact, necessary and critical for all effective decisions." How effective they are will be discussed in detail, later, but for now it would suffice to note that emotions are not necessarily opposed to reason as it was believed earlier rather, they also help in effectual reasoning and decision making. But before proceeding, it would be worthwhile to distinguish between what the words 'emotion' and 'feeling' stand for, and why it is preferred to use 'emotion' rather than 'feeling'. The two words are quite commonly used and interchanged freely, but it is worthwhile to be precise in the selection and usage of words especially when the entire research is based on emotions and the intelligent management of emotions.

II. EMOTION OR FEELING

The biologist Charles Birch (1995) said that "Feelings are what matter the most in life". Whether it matters the 'most' is contentious, but it certainly is essential. The terms 'feelings' and 'emotions' are generally used interchangeably, and as Wierzbicka (1999) observes certain languages (French, German, Russian) do not have an equivalent term for the English word 'emotion'. But, there are certain crucial differences between 'feelings' and 'emotions'. A 'feeling' can be a physical sensation which is experienced, 'like a flushed face, or a knot in our stomach or a general feeling of unease' that could be due to an emotion. (Caruso, 2008). One can speak about a 'feeling of hunger' and not an 'emotion of hunger'. When asked to list a few emotions, one would say – happiness, sadness, guilt etc. So, are 'feelings' more appropriate to bodily or physical responses and 'emotions' to thought? In that case what does the individual mean when he/she expresses a 'feeling of loneliness'? Is that related to thought or a physical experience? It seems more appropriate to accept that 'The English word 'emotion' combines in its meaning a reference to 'feeling', a reference to 'thinking' and a reference to 'human body' (Wierzbicka, 1999). Thus, when we use the word 'emotions', we combine the qualities of all the three – feeling, thinking and physical experience. Many psychologists also prefer the word 'emotion' over 'feeling' because somehow 'emotion' appears more objective than 'feeling' (Wierzbicka, 1999), and it is easier to scientifically, logically analyze something that is objective than that which is subjective. If 'intelligence' is thinking and rationalizing, and emotions combine the quality of thinking along with feeling, then can it be surmised that emotions too can be analyzed and assessed like any other intelligence? This is the premise of the theory of emotional intelligence which emphasizes on the importance of emotional regulation and emotional management in an individual's life. The following segment traces the evolution of the theory.

III. THE EVOLUTION OF THE THEORY OF EMOTIONAL INTELLIGENCE

Intelligence per se was always connected with only intellect and cognition. It was believed that there was only one 'intelligence' called *g* for general intelligence. A person was born with a certain intelligence which could be assessed by using short answer tests (IQ tests). Psychologists also believed that this intelligence was difficult to change. But, can intelligence be only reasoning and cognitive abilities? Gardner (1998) makes a

compelling point when he questions – were the IQ tests in this world to disappear, will it be impossible to identify a person as intelligent or otherwise? Such questions have led us to a new world of understanding which has agreed that apart from the intellectual prowess, there are other inherent abilities in an individual which should also be taken into consideration before assessing his/her intelligence. While tracing the evolution of the emotional intelligence theory, one finds that attention to ‘non-intellective’ elements being equally important was brought in as early as 1920 by Thorndike. This was followed by David Wechsler in 1940, who opined that, “The main question is whether non-intellective, that is affective and conative abilities, are admissible as factors of general intelligence. (My contention) has been that such factors are not only admissible but necessary. I have tried to show that in addition to intellective there are also definite non-intellective factors that determine intelligent behavior. If the foregoing observations are correct, it follows that we cannot expect to measure total intelligence until our tests also include some measures of the non-intellective factors.” (Wechsler, 1943 as cited in Cherniss, 2000)

Though unfortunately it was not given serious thought and research, interest in these areas (non-intellective factors) was revived with Howard Gardner’s theory of ‘Multiple Intelligence’ in 1983. A strong critic of IQ tests, his conviction was that “Human beings are better thought of as possessing a number of relatively independent faculties, rather than as having a certain amount of intellectual horsepower (or IQ) that can be simply channeled in one or another direction.” (Gardner, 1998). As Gardner further discusses in the same paper, a person’s intellect or non-intellect cannot be sealed by a single intelligence test as every human being in his/ her own way has multiple latent abilities. These abilities were not acknowledged by the conventional methods of testing. Based on this belief, he defined intelligence as “a psychobiological potential to process information so as to solve problems or to fashion products that are valued in at least one cultural context”. By 1983, armed with a thorough research in psychology, anthropology, cultural studies and the biological sciences, he proposed in his book “Frames of mind: The theory of multiple intelligences”, seven intelligences – linguistic, logical, musical, spatial, kinesthetic, interpersonal and intrapersonal – which every human being possessed, maybe in varying degrees. In 1995, an eighth intelligence – ‘naturalist’ – was added. The Multiple Intelligence (MI) theory makes two major claims

- all human beings have all these intelligences
- no two individuals have exactly the same combination of these intelligences

Presumably, not many were comfortable with these claims and some even dubbed it as a ‘radical theory’. But, as Gardner (2005) himself claims, he is not worried whether these intelligences can be tested and validated, but to make a case that humans have multiple intelligences which have to be considered before dubbing a person intelligent or not.

Even before Gardner or Wechsler, the traditional belief that intelligence pertains to cognitive abilities such as memory and problem solving (Cherniss, 2000) was challenged upon as early as the 1920’s when Thorndike spoke about ‘Social Intelligence’ – “an ability to understand men and women, boys and girls – to act wisely in human relations” (as cited by Salovey and Mayer, 1990). Thorndike moved away from the traditional concepts of intelligence in believing that it is not only a person’s reasoning and logical prowess but also his ability to recognize his own and others’ intentions and motives and act accordingly that is important. He classified intelligence into three facets based on a person’s ability to understand and manage

- ideas (abstract intelligence),
- concrete objects (mechanical intelligence), and
- people (social intelligence) (Kihlstrom and Cantor, 2000).

Though the concept of social intelligence paved way to theories which insisted on recognizing other latent skills in a person, in itself it was not successful or convincing. It definitely changed the way people perceived intelligence, but failed to distinguish itself as a distinct form of intelligence. As Cronbach (1960) declared, “fifty years of intermittent investigation ... social intelligence remains undefined and unmeasured.” Thorndike himself acknowledged the fact “whether there is any unitary trait corresponding to social intelligence remains to be demonstrated.” (as cited by Salovey and Mayer, 1990). This inability to distinguish social intelligence as a distinct intellectual entity, led to a declining interest in this theory but, fortunately research was revived with Guilford’s ‘Structure of Intellect model’ in 1967. The general public also acknowledged the significance of social intelligence. When asked by Sternberg and his colleagues (1981) to list the qualities which they (the laymen) considered essential in an intelligent person, traits like making fair judgments, sensitive to others’ needs, displaying interest in the world at large, admitting mistakes, etc. were listed out (Kihlstrom and Cantor, 2000). Fascinated and intrigued by these findings, Peter Salovey a professor of psychology from Yale University and John Mayer also a professor of psychology from the University of Hampshire, took the research further and introduced the concept of ‘Emotional Intelligence’ (EI). They presented it as a subset of social intelligence (Salovey and Mayer, 1990) and defined EI as an – “ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and use this information to guide one’s thinking and action”.

They went ahead distinguishing EI from other types of intelligences and presented a framework, a set of skills they believed that helped people in regulating emotions – in one’s own self and others. They also believed that emotions can be intellectually analyzed and realized which eventually led to the development of what is now known as the ‘ability model’ – the only one to date. The other models are the mixed ability models that were conceptualized later by Bar-On, Goleman, et al. which included certain personality traits as well.

Though the field of emotional intelligence is a fairly new one – the word ‘emotional intelligence’ itself was coined first and used in literary writing by Peter Salovey and John Mayer in 1990 (Cherniss, 2000), the concept has become immensely popular as it explains and provides evidence on how people with a good IQ sometimes fail and those who were school dropouts and considered stupid go on to become the most successful ones in their fields (Goleman, 1995). Some of the forerunners in the research on emotional intelligence – John Mayer, Peter Salovey, David Caruso, David Goleman, Reuven Bar-On – list out various characteristics which decide a person’s emotional intelligence. While Mayer and Salovey (1990) take EI as a purely cognitive ability, Goleman and Reuven Bar-On view it as a personality trait. Mayer and Salovey’s four branch model of EI lays emphasis on emotional perception, emotional assimilation, understanding and management (Mayer, Salovey, & Caruso, 2004), whereas Reuven Bar-On (2002) agrees on the qualities of emotional self awareness, self-actualization, interpersonal relationship, reality testing, stress tolerance, optimism, happiness, etc. as those that decide the emotional intelligence of a person. Goleman (1998) on the other hand points out to emotional self awareness, self control, empathy, problem solving, conflict management, leadership, etc. as the characteristics of an emotionally intelligent person. The mixed ability model proposed by Reuven Bar-On emphasizes on how the personality traits influence a person’s general well being and Goleman’s model focuses on workplace success (Stys & Brown, 2004).

Mayer and Salovey’s four branch model understands emotional intelligence as a cognitive ability and presents the four levels through which a person becomes emotionally intelligent.

- Emotional Perception
- Emotional Assimilation
- Emotional Understanding and
- Emotional Management

The first step emotional perception is an ability to be self-aware of emotions and to express them accurately. When a person is aware of the emotions he is experiencing, he moves on to the next level – emotional assimilation, which is to distinguish between the different emotions he is undergoing and also identify those emotions that affect his thought process. This ability leads him to – emotional understanding – an ability to understand complex emotions and also to recognize the transition from one emotion to another. By then he becomes adept in dealing with his emotions and thus is able to manage his emotions by connecting to or disconnecting from any emotion at any given situation. This gives him complete control over his impulses and is thus able to think, analyze and behave rationally in any situation. The entire process is purely an intellectual procedure. Emotions are understood and controlled through intellectual prowess. In contrast, Reuven Bar-On and Goleman propose the mixed ability models which include certain personality traits as well. Bar-On’s (2002) model of emotional intelligence relates to the potential for performance and success, rather than performance or success itself, and is considered process-oriented rather than outcome-oriented. It strives to identify in a person the latent capability of being emotionally intelligent. His model outlines the following five components –

- Intrapersonal
- Interpersonal
- Adaptability
- Stress management and
- General mood components (Bar-On, 2002)

They are similar to Mayer and Salovey’s model on emotional self awareness, self control, self expression, and empathy, but along with these aspects, Bar-On includes reality testing, - the ability to assess the relation between the emotionally experienced and the actual nature of an object, stress tolerance, and the strength to stay happy and optimistic in the face of adversity. Goleman’s model deviates slightly as he includes organizational awareness, leadership, teamwork and collaboration along with self awareness, self control and empathy, as his focus is on workplace success.

The latter half of the twentieth century saw the pendulum swing towards recognizing the positive role of emotions in a person’s life. This was in response to the extravagant credit accrued on intellect which had led to a “lack of self understanding and impoverished shallow social relationships” (Mathews et. al. 2004). A person who had academic acclaim was envied, but at the same time was looked upon with derision. He was becoming the butt of ridicule with even television programs caricaturing him as a ‘nerd’ who lacked even the basic social skills and was never in tune with reality (Zeidner and Mathews, 2000). A growing number of people were

looking at prospects of discounting the excessive importance attached to intellect and gain a platform for other skills which were equally important but hitherto sidelined. 'Emotional Intelligence' comes at this juncture and the immense success of the theory is in part because of the novelty of the concept but, the popularity of the theory is also an off spring of an antipathy towards the undue importance attached to IQ tests. More importantly, the instant popularity of this concept is also a testimony to the fact that people are looking out for ways of strengthening and regulating their emotional life.

IV. THE LITERATURE REVIEW

The theory of 'Emotional Intelligence' (EI) could not have come at a more opportune time when the society is heading towards abysmal depths of intolerance and violence over slightest provocation. In 1997, John Gottman in his book, 'Raising an Emotionally Intelligent Child', spoke about the marked difference in the psyche and approach of children to various issues. He observed that children from the mid 1970's to late 1980's had become more sulky, irritable, nervous, depressed and lonely. With both the parents working to meet the economic demands, families becoming smaller, children were facing a lack of social life. They were turning to television and computers for entertainment and interaction and time spent with relatives and friends were on the downhill. Fifteen years later, we can see that the situation has only regressed further. Thus, the concept of harnessing and driving the crest of emotions towards a better life holds promise to the future.

Any theory, to sustain interest and to withstand the rigorous demands of academic research needs to establish itself as distinct from and at the same time have some correlation to the already proven existing theories of the same field. A distinct research paradigm emerges when scientists deal with data in a systematic fashion (Kuhn, 1970). The theory or the model is then subject to severe discussion, debates and questioning which takes the concept to its maturity. Unless the theory holds itself good against the Karl Popper's Test – that "the theory has the potential to explain things that other theories cannot, or if it has the potential to explain things better than other competing theories." (Emmerling and Goleman, 2003), it cannot be accepted. Does the theory of EI meet these standards? As a concept which holds promise for a better society that is tolerant and empathetic towards the flaws and shortcomings of their fellow humans, the theory of EI has the added responsibility of proving itself beyond doubt not only to academicians but also to the non academic people.

As an emerging field, diverse definitions are proposed to define the concept and it becomes imperative which EI are we going to discuss. Although the phrase emotional intelligence has been in literature for a while even before Payne, (Leuner, 1966, as cited in Petrides, 2011) the concept in its present form has its roots in Salovey and Mayer's construct of 1990. The concept was welcomed as new and if proven, a path breaking find. But, the current popularity of the theory owes itself to Daniel Goleman's book 'Emotional Intelligence – Why it can matter more than IQ' (1995). Following the popularity, innumerable constructs have been proposed (many not based on empirical data – Goleman's book itself was not strictly based on researched and tested data). Active research and interest in this field has led it to its current position where the theory has forked into two different approaches – Mayer and Salovey's 'ability' model and Goleman and Bar-On's 'mixed' models. Currently, Goleman's model is referred to as a competency model and Bar-On's as a trait model.

Goleman's Competency Model

As observed earlier, Goleman's contribution to the field of EI is phenomenal in the sense that he took the theory to a wider section of audience and popularized it to such an extent that it made to the cover page of 'Times' instantaneously. He sensationalized the topic with his book 'Emotional Intelligence: Why it can matter more than IQ' in 1995 with tall claims bordering on hyperbolic sometimes, making sweeping statements like EI was the reason for "nearly 90% of the difference" between star performers and average ones (Goleman, 1998). Inspired by the findings of Salovey and Mayer, Goleman pursued research in emotional intelligence and proposed a four branch model which was further classified into twenty emotional competencies. He differed from Salovey and Mayer's model of EI in that he added a few personality traits like trustworthiness, innovation, team player, etc. which has also earned the criticism that it was 'preposterously all encompassing' (Locke, 2005). He believes that these emotional competencies are not innate talents but those that can be learnt and developed. In turn, the potential to develop these emotional competencies depended on a person's emotional intelligence which he believes is a latent, inborn talent. Emotional intelligence and emotional competencies are like apples and apple sauces (Goleman, 2003). While EI is natural, emotional competencies are the offshoot of EI. His four branch model (2001) included:

- a) Self-Awareness: Emotional Self-awareness, Accurate Self-Assessment and Self-Confidence.
- b) Self-Management: Self-Control, Trustworthiness, Conscientiousness, Adaptability, Achievement Drive and Initiative.
- c) Social Awareness: Empathy, Social Orientation and Organizational Awareness.
- d) Relationship Management: Developing Others, Influence, Communication, Conflict Management, Leadership, Change Catalyst, Building Bonds, Teamwork and Collaboration.

Goleman (1998) was the first to apply the concept of EI to business through his article in Harvard Business Review. He drew attention to the fact that effective leaders had high degree of emotional intelligence. A sound technical knowledge and a good IQ were ‘threshold capabilities’ (Goleman 1998) which were ‘entry level requirements’. On the other hand, good interpersonal, social and team building skills, help a person develop a good rapport with his colleagues, higher officials and subordinates which is vital for a person’s success. If IQ got a person a good job, it was EI which would help him retain it and be successful in his workplace (Emmerling and Goleman, 2003; Cherniss et. al. 1998; Boyatzis and Oosten, 2002).

Based on the emotional intelligence competencies and a measure of competencies of managers, executives, and leaders – a Self-Assessment Questionnaire (SAQ) – already developed by Richard Boyatzis (1994), Goleman developed his Emotional Competency Inventory (ECI) – a multi rater instrument that provides self, manager, direct report, and peer ratings on a series of behavioral indicators of emotional intelligence (Stys and Brown, 2004). Forty percent of the new instrument was from the earlier questionnaire SAQ which was validated against the performance of hundreds of managers, executives and leaders in North America (Boyatzis et. al., 2000). Aiming to develop an instrument that can be applied across all occupations and life settings, the ECI improved upon the SAQ. Competencies which were not addressed by the SRQ were added and focused on with new test items. Based on the samples collected from 596 people who were managers and sales persons, reliability and intercorrelation of the items were analyzed and the ECI was revised and rewritten in 1999. The revised version asks the respondents to describe themselves and others on each item on a scale of 1 to 6 with each step progressively labeled beginning with “... the behavior is only slightly characteristic of the individual...” to the highest response “... the behavior is highly characteristic if this individual...” (Boyatzis et. al. 2000). A study conducted on 358 managers across the Johnson and Johnson Consumer & Personal Care Group assessed if there were any specific leadership skills that distinguished between high and average performers and came out with significant results that found a strong relationship between superior performing and emotional competence (Cavallo & Brienza, 2004).

The ECI is complete and effective in the sense, it incorporates a person’s self assessment and others’ assessment of him/her giving a 360° perspective, but, it also raises a serious question of reliability. How far can a person’s assessment of himself be accepted is debatable, given the condition that he might be giving an answer based on his presumptions regarding his emotional competencies. An overconfident person might think that he is emotionally competent whereas a person with low self esteem might under estimate his competencies. As Grubb and McDaniel (2007) observe, the mixed models are vulnerable to faking as they include ‘non cognitive dimensions’ and use self-report measures. Also, it is opined that the content of ECI overlap with at least four of the Big Five personality dimensions and other psychological concepts in motivation and leadership (Matthews et. al., 2002; Van Rooy & Viswesvaran, 2004, as cited in Conte, 2005). As very few ‘peer reviewed assessments of the reliability and validity of ECI have been undertaken and published’ (Conte, 2005), it is best to leave the validity of the construct to future research and study.

Bar-On’s Trait model

Bar-On’s model of emotional intelligence focuses on the ‘potential’ for success rather than success itself and is more process-oriented than outcome-oriented (Bar-On 2002). He posits that emotional intelligence can be learned and developed over a period of time through training, programming and therapy (Stys and Brown, 2004). The Bar-On model differs from Goleman’s model in that it includes stress management and general mood components like optimism and happiness. Apart from these, he incorporates reality testing which asserts how far a person is aware of the gap between the actual meaning and his construed meaning of a given situation, and also impulse control which is an ability to control oneself from reacting to a situation in a reckless manner. Bar-On’s (2006) model outlines five components which are further classified into fifteen subcomponents.

Intrapersonal: Self Regard, Emotional Self-Awareness, Assertiveness, Independence, and Self-Actualization.

Interpersonal: Empathy, Social Responsibility and Interpersonal Relationship

Adaptability: Reality Testing, Flexibility and Problem Solving

Stress Management: Stress Tolerance and Impulse Control

General Mood Components: Optimism and Happiness

As the construct incorporates both emotional and social competencies, Bar-On refers to it as the ‘Emotional Social Intelligence’ (ESI) rather than emotional intelligence or social intelligence (2006). He defines his ESI as “emotional-social intelligence is a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands.” Bar-On’s model associates emotional intelligence to positive psychology which contributes significantly to a person’s happiness and psychological well being in life (Bar-On, 2010; Bar-On, 2006). He believes that individuals with higher emotional quotient (EQ) are more competent in coping with demands, challenges and pressures of everyday life. Thus, the Emotional Quotient Inventory

(EQ-i) – a self report measure – used to measure the ESI, focuses on measuring one’s ability to cope with environmental demands and pressures (Bar-On, 2002), rather than personality traits or his cognitive capabilities. ESI is operationalised by the Emotional Quotient Inventory (EQ-i) which was originally constructed to examine a theory of emotional and social functioning on which Bar-On was working for his dissertation. Bar-On (2006) claims that his model is a ‘better predictor of human performance’ in workplace and in academics. The US Air Force (USAF) explored the potential application of EQ-i to predict the performance of pilots, pararescue jumpers and air traffic controllers in their training programs and found that the accuracy level of this model was 75%. By being able to identify the trainees who would successfully complete the training, the USAF estimates that it will be able to save approximately \$ 190, 000, 000 by selecting the right people for the course. The results also confirmed the predictive validity of Bar-On’s construct (Bar-On, 2010). Nevertheless, questions are raised regarding the content and predictive validity of EQ-i. Newsome et. al (2000) point out to a study undertaken on 160 Canadian college students, where the total EQ-i score had a correlation of just 0.01 with their GPA (Grade Point Average) and conclude that the data is inadequate to use the EQ-i as a selection device. It has also been noted that Bar-on’s model, similar to that of Goleman’s ECI is vulnerable to being faked, as the respondents can deliberately doctor their answers for positive scoring (Grubb III & McDaniel, 2007). Thus, the field is still open for the construct to be scientifically proved and validated.

V. THE ABILITY MODEL

When Mayer and Salovey introduced the concept of EI in 1990, they defined it as “an 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 actions.” They believed that any task is loaded with information, ‘affective information’ and understanding and regulating it would help individuals ‘to solve problems and regulate behavior’ (Salovey and Mayer, 1990). They conceptualized a set of skills which they believed would assist a person in regulating his emotions. They identified three broad skills – ‘appraisal and expression of emotion, regulation of emotion and utilization of emotion- which were further classified as:

a) appraisal and regulation of emotion: in self (verbal and non-verbal perception) and others (non-verbal perception and empathy) – a person who is able to accurately perceive his emotions will also be able to respond to his emotions accurately, and in turn will be better in expressing them to others. At the same time, he should be able to understand the emotions in others as well. This allows him to adapt to the situation and have better social skills. These skills are a part of emotional intelligence as it requires the processing of emotional information in oneself and in others.

b) regulation of emotion: in self and others – emotions can be triggered and regulated according to a person’s will, when he is adept at consciously perceiving those factors which have a feel good effect and those which do not. This ability also sharpens his senses towards perceiving the emotions of others and effectively adapting himself or influencing others as the situation demands. As the authors themselves acknowledge, this can sometimes have a negative bearing as people may try to manipulate others to meet their own demands – good or bad.

c) utilization of emotions: flexible planning, creative thinking, redirected attention and motivation – this ability is included in the construct because, people with emotional intelligence should be at an advantage in solving problems adaptively (Salovey and Mayer, 1990). An awareness of his emotional state helps him plan his actions, think creatively, redirect his focus and motivate himself to get the best out of any situation.

The initial conceptualization focused on perceiving and regulating emotions. As the authors felt that this was incomplete without ‘thinking’ about emotions, they redefined the theory as “Emotional Intelligence is the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth” (Mayer and Salovey, 1997). Based on this definition, a four branch model was proposed – the four branches moving from basic psychological processes to more complex ones. They also believe that an emotionally intelligent person had the ability to progress through these four levels and master most of them faster than others with lower EI. The four branches each were further subdivided into four sets of skills.

a) Perception, Appraisal and Expression of Emotion: This is an ability to identify emotions in oneself, in others, express them accurately and further discriminate between honest and dishonest expressions of feelings.

b) Emotional Facilitation of Thinking: This sharpens the thought process as emotions direct attention towards important information and the emotions can be used to classify the information for better judgment and memory. Emotionality helps people to have multiple perspectives. A happy mood leads to optimistic views and a bad mood to pessimistic thoughts. An awareness of these mood swings assists a person in approaching a problem in specific ways with better reasoning and creativity.

c) Understanding and Analysing emotions: It is based on employing emotional knowledge: to identify the subtle relationships and differences between similar emotions – eg. Loving and liking, and also interpret the

meanings of those emotions. The person also has the ability to identify complex emotions occurring simultaneously (love and hate, fear and surprise, etc.) and also perceive the transition from one emotion to another (when anger turns to satisfaction or anger leading to shame).

d) Reflective Regulation of Emotions to Promote Emotional and Intellectual Growth: It is an ability to be open to emotions good or bad and thus having the power to voluntarily attach or detach from an emotion. The person also has the competence to reflect on his own and others' emotions and thus be able to manage emotions in himself and others.

To test whether emotional intelligence meets the standard criteria to be accepted as scientifically legitimate, Mayer et. al. (1999) proposed the Multifactor Emotional Intelligence Scale (MEIS) and proved that there exists good evidence and possibility that emotional intelligence is a distinct form of intelligence. The MEIS used a 12 subscale ability test to assess the emotional intelligence of the participants (503 adults and 229 adolescents). Twelve tasks measured the different abilities classified under the four branches:

- emotional perception – identify emotions in faces, music, designs and stories
- emotional facilitation of thinking – describe emotional sensations and asked to simulate situations where any specific emotion is predominant
- emotional understanding – recognize when two emotions blend (surprise and joy, etc.) and when one emotion progresses into another (anger becoming hatred, etc.)
- emotional management – given imaginary situations and asked how they would act.

The answers were analysed based on the consensus (the group), the expert and the target scoring. The results showed that emotional intelligence could be operationalised as a set of abilities; was distinct from the existing theories of intelligence, and still showed a correlation to verbal intelligence (part of general intelligence) and was also proved that emotional intelligence develops with age. The most important question raised against MEIS was pertaining to the validity of the correct answers. Robert et. al., (2001), Perez et. al. (2005) questioned on how accurate would be the 'correctness' of the right answers. Mayer and his colleagues (Mayer et. al., 2001; Mayer, Salovey & Caruso, 2004) accepting the legitimacy of the doubt raised, argued that MEIS was but a maiden attempt to operationalise EI, and the model was in the process of striving for a test that would successfully evaluate the EI of a person. The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) proposed in 2003, further addressed and successfully resolved the issue whether there are correct answers to the tasks given. It improved on the MEIS by bringing in twenty one 'emotions experts' as per Legree (1995) who stated that 'aggregation of experts beyond two is necessary to achieve a reliable identification of answers'. The reliability of the test was seen to be good, and the correlation and factorial structure showed that all the tasks given were positively intercorrelated (Mayer et. al., 2003). As Emmerling and Goleman (2003) point out, (quoting Van Rooy and Visweswaran in press) MEIS and its successor MSCEIT show correlation with traditional measures of intelligence which is a prerogative in identifying any new construct as an 'intelligence'. Discussing further on the legitimacy of the 'ability model' over other models of EI, Mayer et. al. (2004; 2008) posit that much of the concern stems from the exaggerated claims of certain mixed models and also the inclusion of personality and non-intellective elements as a part of emotional intelligence construct. Compared to the mixed ability model, the ability model proposes a 'purer' approach to the theory strictly adhering to a 'cooperative combination' (Robert et. al., 2001) of emotions and intelligence. An analysis by Van Rooy, Visweswaran and Pluta (2005) also support the claim that the ability model over the mixed ability models helps in distinguishing EI as distinct from IQ and other personality models. Their study found that while self-report measures showed high correlation to personality measures, the MSCEIT 'did not correlate highly with either personality or cognitive ability'. Nevertheless, doubts regarding the validity and reliability of operationalising the ability model remains. Although the ability model appears to be the most promising one of all EI measures (Conte, 2005), as Mayer and Salovey (2003) themselves propose, 'the applied use of EI tests must proceed with great caution'. With a history of just twenty years, though much is unknown of emotional intelligence, EI remains a promising area of study but with 'significant gaps in knowledge' (Mayer et. al. 2008).

VI. CONCLUSION

The theory of emotional intelligence promises to predict and improve the life skills of individuals. The proponents of the theory believe that in understanding, analyzing and managing emotions in themselves and others, lies the key to an improved quality of life. As the operationalisation of the theory is the crucial factor which validates their claim, the first and foremost challenge that faces the theorists is to design an instrument or improve upon existing measures which will accurately evaluate and assess the emotional skills of an individual. This will also set to rest the other fundamental question whether emotional intelligence is a distinct form of intelligence or simply old wine in new bottle.

Another challenge that faces the theory is that there are too many definitions and approaches which is though vital and a healthy sign for any new theory, many a time it leads to confusion among researchers as to

which definition or approach has to be taken. This has also lead people to accuse the concept as mere hype and ignoring and trashing the theory as non-existent. But, as Cherniss et al. (2006) point out, even after hundred years of research, ‘there is still not a consensus about what IQ is or the best way to measure it’. To judge or criticize EI to a different standard definitely needs rethinking.

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