



Emotional Intelligence: A literature review

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ABSTRACT

Emotional intelligence is a different way of being smart. It includes knowing what your feelings are and using your feelings to make good decisions in life. It's being able to manage distressing moods well and control impulses. It's being motivated and remaining hopeful and optimistic when you have setbacks in working toward goals. It's empathy; knowing what the people around you are feeling. And it's social skill—getting along well with other people, managing emotions in relationships, being able to persuade or lead others. Emotional intelligence was popularized in 1995 when psychologist Daniel Goleman wrote his book, *Emotional Intelligence: Why It Can Matter More Than IQ*. Emotional, or social intelligence, involves at least five types of skills: Self-awareness is a person's ability to understand and be aware of their feelings and moods. Self-awareness helps a person keep an eye on their thoughts and emotions so they can better understand why they feel a particular way. Managing emotions This skill helps people display their emotions in socially appropriate ways. It helps one control anger, sadness, and fear. Motivation helps a person use their emotions to reach their goals. It helps them hold back their impulses and delay gratification to reach these goals. Empathy is the ability to understand how a person feels. It is different from feeling sorry for someone. It is feeling like "walking in their shoes." Social skills are dealing with others in social situations. It is the ability to carry on a conversation and deal with other's emotions. It is being socially competent.

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Introduction

Interest in emotional intelligence has bloomed over the last few years. That it has become a standard concept in general and applied psychology, as well as in applied business settings, is indubitable. New research in the 90s confirmed that there is an emotional brain: a place called the limbic system where our emotions originate. It is separated from the rational brain (the neocortex) but the two are connected and develop together. This means that our power to reason and our feelings are intended to be used together. Because of the brain's design, all information goes into our emotional center first and then to our thinking center. Emotions come before thought and behavior. What scientists discovered is that we need our emotions; our feelings fire up the motor in us that drives energy and creativity. If we block or ignore emotions in the workplace, we stifle motivation.

As a result of these findings, it's become important to understand what we're feeling, what others are feeling, how to manage our own feelings and how to manage relationships with others. This is the core of Emotional Intelligence: a term used to describe the complex ability to regulate our impulses, empathize with others and be resilient in the face of difficulties. Therefore, emotional intelligence is a product of the amount of communication between the rational and emotional centers of the brain. This article will examine the history, data and components of Emotional Intelligence.

The History of EQ

Charles Darwin was the first to recognize the value of emotions. He noted that the emotional system energizes behavior needed to stay alive. Emotions cannot be stopped, they happen instinctually and immediately in response to situations and people. In the 1920s E.I. Thorndike identified "social

intelligence" as the ability to act wisely in human relations. In 1988, Reuven Bar-On coined the term emotional intelligence in his doctoral dissertation. In 1990, John Mayer and Peter Salovey did groundbreaking research on emotional intelligence, pointing to the importance of knowing yourself as well as understanding others. In 1995, Daniel Goleman introduced the importance of EQ in the workplace, noting that IQ is a less powerful predictor of outstanding leadership than EQ. The highest estimate of how much difference IQ (intellectual quotient) accounts for in how well people perform in their careers. Is no higher than 10% and perhaps as low as 4% (Stenberg, 1997). IQ is considered a threshold competence, a minimum capability that all must have. Once you're in a group of similar IQs, IQ will no longer distinguish you in the group. EQ (emotional intelligence) data suggests that older groups score significantly higher than younger groups in most EQ scales. Respondents in their late 40s obtained the highest mean scores. On the North American sample, females appear to have stronger interpersonal skills.

Than males, but males have higher intrapersonal capacity, are better at managing emotions, and are more adaptable. Women are more aware of emotions, demonstrate more empathy towards others, and are more socially responsible. Men have better self-regard, are more self-reliant, cope better with stress, and are more optimistic than women in the studies conducted. No significant differences in emotional intelligence were found between various ethnic groups in North America. Higher-level employees are more likely to have inflated views of their emotional intelligence and less congruence with the perceptions of others than lower-level employees.

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Data shows that when there is no easy right or wrong answer to a problem or decision, people usually decide one direction or another based on emotions.

There is a moderate yet significant relationship between EQ and physical health and significant differences in psychological health and a moderate, yet statistically significant relationship between EQ and performance at school. However, EQ is not something we have been taught to improve since childhood. So, it makes sense that most people have an average EQ score.

Emotional intelligence: A literature

The concept of emotional intelligence is not a new topic and concept. May be Arastou, be the first one who attend of the importance of feeling in human interactions. Arastoustates : getting excited is easy , everyone can get excited but getting excited in front of certain person , to the certain extent of , in certain time for certain reason and to the certain way is not easy (Gelman ,1998:15).Here our purpose of emotional intelligence history is academic studies and researches that has been accomplished about emotion and emotional intelligence in 20 century. Based on the standard that Tomas Kohen in his outstanding work by the name of "scientific revolutions constructions" presents about paradigm. Puberty signs can be observed in emotional intelligence paradigm. Emotional intelligence as a concept entered psychological literature from 1990s that has taken from Thorndike and Gardner and is the result of meaning of two emotional and intellectual mind and mutual relationship of intellect and feeling. Emotional intelligence in regard to study is a new component that many researchers interest in its application different matters. The emotional intelligence theory provide a new view about predicting of success factors in life including work activities and efficient coping against stressful factors as the source of psychical disorders, because many personality characteristics such as sympathy, self –tendency. Optimism, Self motivating, controlling of stress, self-consciousness and emotion management pave the way for success in different grounds of life. Emotional intelligence is indicator of social and personality emotional dimensions that often in daily activities is to be considered .

One of the most important mechanisms of human is intelligence that involves the ability to adapt to the environment. one part of intelligence appears in interpersonal and social relationships. According to Thorndike social intelligence is the ability of internal states, motivations, your and others behavior and best function based on acquired information. Gardner in his eight intelligence theory , has presented individual intelligence(Intrapersonal and interpersonal) and has considered one of intelligence aspects in individual ability in awareness of emotions, distinguishing between them and using information for presenting effective answer against environment (Plamer& Donaldson ,2001).

So much is certain that from the beginning of intelligence study, has been emphasized on cognitive aspects such as memory and problem solving, while non-cognitive aspects namely behavioral and emotional abilities not only are agreeable but also are necessary. gradually views based on intelligence Quotient changed their place to the study of other effective abilities in human function for example Thorndike (1920) considered intelligent behavior including objective intelligence (skills of constructing and applying tools and instruments), abstract intelligence (the ability to use words, numbers and scientific principles) and social intelligence (recognizing people and creatively action ability in human relationship). And Kesler

(1943) suggests that non cognitive aspects of intelligence such as affection – emotional abilities are important in predicting their ability for success and adaption in life. (Chiva& Alegre,2008:680-701).

Essentially emotional phenomenon provide a unique source of information for individuals about surrounding environment and searching it. This information form it's following thoughts , acts , and feelings . there is the hypothesis that individuals in perception rate , understanding and applying this emotional information enjoy from different skills and an emotional intelligence level of a person has a basic role in his/her emotional and intellectual growth and health and guarantees success in life. Emotional intelligence theory provide a new view about predicting of effective factors on success and also primary prevention of psychical disorders that is complementary of cognitive sciences , nerve sciences and emotional intelligence capabilities for emotional autonomy and skill fully plans of relationships are very important (Kling & Gardner ,2006, pp 186 -203).

Resort to general intelligence to explain the success is not enough. And researches show that in best conditions general intelligence only explain 25 percent of success and the rest depends on social, emotional intelligence, and chance(Golman 1998: 21).

The emotional intelligence level inherently is not consistent and doesn't take form unlike to general intelligence that has a little change after youth ages. Emotional intelligence is learned to some extent and during life takes form from experience. Researches that investigate emotional intelligence during life show that human in their capabilities get better and better, and find more skills in management of their emotions.

Frame work of Emotional intelligence, its formal definition and suggestion about its measurement for the first time was appearing in 1990 that was printed in two essays by Mayer and Salovey. their primary definition was based on a two parts methods that the first part involves general processing of general information and the second part , dedicating the adaptive emotions is so that result in improvement of life. Emotional intelligence that is defined as a kind of ability, is perception capacity to express, recognizing, function, and management of self and others emotions. (KhaefElahi , Dostar , 2003:52-62).

Gelman considers emotional intelligence similar to that individual can maintain his or her motivation and endure against disagreeable, control his own nervousness, adjust his physical behavior and doesn't allow distresses, hurts his thought, sympathize with others and be hopeful. According to Gelman, emotional intelligence includes cognition, control of self-emotions, sympathize with others and maintain of satisfactory relationships. In the other words a person who has high emotional intelligence, combines three components (cognitive physiological and behavioral component), successfully (Golman, 1998:24).

Since fundamental components of emotional intelligence means the ability to understand other emotional and the abilities to adjust and control self and others in an adaptive manner. it is expected that individuals who have high emotional intelligence , show better social adaptability and social skills , so social skills means facilitator of social life that help individuals to have a useful and mutual interaction with others . In addition these social skills has two –way and individuals who show good social skills, they are behaved well, and others loves them (Palmer &Donaldson, 2001) .Bar- On and Parker consider emotional intelligence in a form of intelligence that results from emotions

and thought, and means achieving to general construction of emotional, personal, social abilities that effect on the ability to overcome on environmental pressures and requests (Chiva & Algere, 2008:680-701).

In a research that accomplished between 19 organizations in the United Arab Emirates showed that there is a negative relationship between contrast and emotional intelligence. In this research when selected sample of emotional intelligence was measured, correlation coefficient was $-.52$ and when an emotional intelligence was measured by employees, correlation coefficient was $-.22$, that the employees and administers idea about emotional intelligence rate of employees is different (Suliman & Sheikh, 2007: 208-220).

In a research that was accomplished in productive big organizations of England, the relationship between emotional intelligence and leadership effectiveness was investigated. For investigation of leadership effectiveness, inferiors view was used. The selected sample included 38 administers and 1258 employees. Pearson correlation coefficient between emotional intelligence and leadership effectiveness was $.39$ that shows there is a positive relationship in $.99$ confidence level. Emotional intelligence components in this research are: understanding oneself emotions, use of emotions understanding others feelings and emotions management that there is a positive relationship between two the first components with leadership effectiveness and there isn't a meaningful relationship between two other components (Kerr & Boyle, 2006:265-279).

A research in 2008 among 186 executive managers in two selected organizations of Canada was accomplished. The results from T-Test showed that emotional intelligence rate of leader (selected sample) is more than emotional intelligence of the public. Also the results of this research showed that in organizations that their leaders has high emotional intelligence, their profitability is higher (Stein & Sitarenio, 2009:87-101).

Wolff and Koman in a study that accomplished among 81 team in army organizations investigated the relationship of emotional intelligence between the leaders of the group, and organizational intelligence rate in group level. also in this research the effect of group emotional intelligence on group function was investigated. In fact, in this research group emotional intelligence was considered as interventionist variable. The results of this study showed that, the emotional intelligence of the group severely has a positive relationship with emotional intelligence of the leader. And also there is a positive relationship between emotional intelligence of the group and the function of the group (Koman & Wolff, 2008: 55-75). Grant in a study investigated the effect of long term and short term instruction on emotional intelligence rate. His research results showed that long term instructional plan (in this study 13 week was considered) can improve emotional intelligence meaningfully (Grant, 2007:257-266). A study was accomplished among 92 managers of public relations and 129 managers of Australia Banks branches about the relationship between emotional intelligence and financial function. The results showed that there is a positive meaningful relationship between emotional intelligence and banks financial function (correlation coefficient in this research was $.1292$) and showed that in a meaningful level, there is a $.90$ positive relationship between these two variables (Heffernan T & Droulers M, 2008:183-199).

In a research that was accomplished in 8 companies of Ceramic industries of Spain, results showed that organizational learning capacity is a modulator variable that effect the relationship between emotional intelligence and job satisfactory.

The results of this study showed that, there is a positive relationship between emotional intelligence and learning capacity of organization, also results of the study showed that there is not a meaningful relationship between emotional intelligence and job satisfactory, unless learning capacity of organization as a modulator variable effect the relationship between these two variables (Chiva & Alegre, 2008:680-710).

A study that was accomplished on 156 professional employees in Newzeland, showed that there is a positive relationship between understanding others feeling and social support (King & Gardener, 2006:186-203). Adults in emotional intelligence skills were better than others, Mayer researches showed that emotional intelligence along with increasing age and experiences extend from childhood to adulthood (Golman, 1999:23).

Researches have shown that individuals who have lower emotional intelligence in face with life stressful situations, would have lower adaptation, and consequently affected more by depression, disappointment, and other negative consequents. On the contrary, individuals who have high emotional intelligence, arrange their life style in such a way that to experience less negative consequents and Also have expertise in creating and maintaining the qualitative relationships. Generally, emotional intelligence is related to life events and consequents, and help individuals to understand and predict daily different aspects (Chiva .R & Alegre, 2008:680-701). Siarouchi and et all state that emotional intelligence, modulate the relationship between stress and psychological adaptation. Psychological adaptations are characteristics that are related to depression, disappointment and suicide ideas. They conclude in another study, that individuals who skills in emotion regulation, enjoy from high social support, and the same social support keep them from affected by depression and suicide ideas. Some believe that nowadays emotional intelligence have a considerable role on job and life success. Studies show that courage, sympathy, happiness, and emotional self-consciousness, as different aspects of emotional intelligence, have the most effect on new employments. Also test function of emotional intelligence in choosing new employments, has shown that, most of the successful, new employees took meaningful high scores in courage, sympathy, happiness, emotional self-consciousness components (Khaefi Elahi, Dostar, 2003:52-62). Investigations of about two hundred companies and world organizations has shown that, one third of differences is related to emotional tensions (Golman, 1998:4).

In a research that was accomplished among 105 employees of the United states treatment center, showed that, emotional intelligence play the role of modulator variable in investigation of the relationship between organizational commitment and emotional adaptation ability. This research showed that, those employees who have high adaptation ability, when their emotional intelligence is high, so have more commitment. It means if in an organization, the score of organizational intelligence be high, so we can conclude that employees that have high emotional adaptation, so have more organizational commitment (Humphreys, Brunsen & Davis, 2005:120-129).

(in another research that accomplished on 200 Nigerian Police officers, showed that work experience, self-efficacy, emotional intelligence and motivation effect on commitment rate (for analyzing of information in this research, regression method was used, the statistic of Fisher was $5/856$ (Aremu, 2005:609-618).

Poon in a study that was accomplished on graduated students of business from 3 universities of Malaysia, conclude that For employees with moderate to high emotional intelligence, job commitment effect on success in the improvement of job course. Also the results of this study showed that there is a positive relation between organizational commitment and job satisfactory (Poon,2004,pp374-390).

Gender Differences in Emotional Intelligence

Competing evidence exists surrounding whether or not males and females differ significantly in eneral levels of emotional intelligence. Daniel Goleman (1998) asserts that no gender differences in E.I. exist, admitting that while men and women may have different profiles of strengths and weaknesses in different areas of emotional intelligence, their overall levels of E.I. are equivalent. However, studies by Mayer and Geher (1996), Mayer, Caruso, and Salovey (1999), and more recently Mandell and Pherwani (2003) have found that women are more likely to score higher on measures of emotional intelligence than men, both in professional and personal settings. The discrepancy may be due to measurement choice. Brackett and Mayer (2003) found that females scored higher than males on E.I. when measured by a performance measure (the Mayer-Salovey-Caruso Emotional Intelligence Test). However, when using self-report measures such as the Bar-On Emotion Quotient Inventory (EQ-i) and the Self-Report Emotional Intelligence Test (SREIT), they found no evidence for gender differences. Perhaps gender differences exist in emotional intelligence only when one defines E.I. in a purely cognitive manner rather than through a mixed perspective. It could also be the case that gender differences do exist but measurement artifacts such as over-estimation of ability on the part of males are more likely to occur with self-report measures. More research is required to determine whether or not gender differences do exist in emotional intelligence.

Measures of Mayer and Salovey's Model

Mayer and Salovey began testing the validity of their four-branch model of emotional intelligence with the Multibranch Emotional Intelligence Scale (MEIS). Composed of 12 subscale measures of emotional intelligence, evaluations with the Multibranch Emotional Intelligence Scale indicate that emotional intelligence is a distinct intelligence with 3 separate sub factors: emotional perception, emotional understanding, and emotional management. The Multibranch Emotional Intelligence Scale found only limited evidence for the branch of emotional intelligence related to integrating emotions. Additionally, examination of the Multibranch Emotional Intelligence Scale found evidence for discriminant validity in that emotional intelligence was independent of general intelligence and self-reported empathy, indicating its ability to measure unique qualities of an individual not encompassed by earlier tests. There were, however, certain limitations to the Multibranch Emotional Intelligence Scale. Not only was it a lengthy test (402 items) but it also failed to provide satisfactory evidence for the integration branch of the Four Branch Model (Mayer, Salovey, & Caruso, 2002). For these and other reasons, Mayer and Salovey decided to design a new ability measure of emotional intelligence.

The current measure of Mayer and Salovey's model of emotional intelligence, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) was normed on a sample of 5,000 men and women. The MSCEIT is designed for individuals 17 years of age or older and aims to measure the four abilities outlined in Salovey and Mayer's model of emotional intelligence. Each ability (perception, facilitation of thought,

understanding, and regulation) is measured using specific tasks. Perception of emotion is measured by rating the extent and type of emotion expressed on different types of pictures. Facilitation of thought is measured by asking people to draw parallels between emotions and physical sensations (e.g., light, colour, temperature) as well as emotions and thoughts. Understanding is measured by asking the subject to explain how emotions can blend from other emotions (e.g., how emotions can change from one to another such as anger to rage). Regulation (or management) of emotions is measured by having people choose effective self and other management techniques (Brackett & Mayer, 2003). With less than a third of the items of the original Multibranch Emotional Intelligence Scale, the Mayer-Salovey-Caruso Emotional Intelligence Test is comprised of 141 items. The scale yields six scores: an overall emotional intelligence score (expressed as an emotional intelligence quotient, or EIQ), two area scores (Experiential Emotional Intelligence, or EEIQ and Strategic Emotional Intelligence, or SEIQ) and four branch scores corresponding to the four branches of emotional intelligence. Each score is expressed in terms of a standard intelligence with a mean score of 100 (average score obtained in the general population) and a standard deviation of 15. Additionally, the manual provides qualitative ratings that correspond to each numeric score. For example, an individual who receives an overall EIQ of 69 or less would be rated 'considerable development' whereas someone scoring 130 or more would be rated 'significant strength' (Mayer, Salovey, & Caruso, 2002).

Conclusion

Several studies have found that emotional intelligence can have a significant impact on various elements of everyday living. Palmer, Donaldson, and Stough (2002) found that higher emotional intelligence was a predictor of life satisfaction. Additionally, Pellitteri (2002) reported that people higher in emotional intelligence were also more likely to use an adaptive defense style and thus exhibited healthier psychological adaptation. Performance measures of emotional intelligence have illustrated that higher levels of E.I. are associated with an increased likelihood of attending to health and appearance, positive interactions with friends and family, and owning objects that are reminders of their loved ones (Brackett, Mayer, & Warner, in press).

Studies that "established" that IQ remains intact when individuals sustain damage to the prefrontal cortex (includes the ventromedial area) are very limited because they may not have adequately measured fluid intelligence. Also, testing patients in laboratory setting with simplified and structured tasks does not sufficiently tax executive functions (Duncan, Emslie, & Williams, 1996, p. 296). The reason why many patients with prefrontal lesions lost friends and family, became financially ruined, or could not hold a job was not because their EI was damaged, but probably because they lost the real stuff, IQ (in addition to a lack of somatic signals). Fluid ability (gf) reflects ability to learn, mental speed and flexibility. It is not knowledge dependent and does not reflect previously-acquired knowledge. Thus, gf should be used to measure potential changes in intelligence after brain damage (Duncan et al., 1996).

Wood & Lioffi (2007) found that both fluid and crystallized ability were low (i.e., mean was 88.76) in 118 patients with damage to the frontal lobes, as was their performance on tests of executive functioning. Note, IQ predicted performance on these tests, just as it does for normal individuals (see Obonsawin et al., 2002). Similarly, Duncan et al. (1996) (see experiment 4)

showed that patients with brain injury in the frontal lobes had gf scores that were significantly lower (between 9 and 14 points) compared to a control group and another brain damaged group. Because these two studies had small samples and included patients with damage in rather broad areas, take look at current studies that used precise brain-scanning methods (e.g., fMRI or Voxel-based morphometry etc.) showing that brain regions included in the ventromedial area consistently correlate with IQ (Brodman areas 10,11, 47 in particular, Jung & Haier, 2007; see also Colom, Jung, & Haier, 2006; Frangou, Chitins, & Williams, 2004; Narr et al., 2007). So much for the “Elliott area” reflecting EI! Judgment of causality or deductive logic also resides in the orbitofrontal cortex (Fonlupt, 2003; Houdé, Zago, Crivello, Moutier, Pineau, Mazoyer, and Tzourio-Mazoyer, 2001). Important to note is that although IQ areas are distributed across the whole brain, interactions exist between regions (e.g., prefrontal and parietal areas, Jung & Haier, 2007), suggesting a unified “g theory” of intelligence.

Mayer, Caruso, and Salovey (1999) found that higher emotional intelligence correlated significantly with higher parental warmth and attachment style, while others found that those scoring high in E.I. also reported increased positive interpersonal relationships among children, adolescents, and adults (Rice, 1999; Rubin, 1999). emotional intelligence can be beneficial in many areas of life. However, the application of its usefulness has been most frequently documented in the professional workplace. Also as you acknowledge, empirical evidence on emotional intelligence is building. It's not perfect — as you have so forcefully pointed out — but a great many dedicated, educated, and intelligent scholars are working in this field with a view to increasing our understanding of social phenomena such as leadership. It would be such a shame if this work were to be prematurely aborted just because some early findings have been open to criticism or alternative explanation. We are sure you would be the last to disagree with this position.

Finally, and similar to Mayer et al. (2008), we conclude that, although there are problems with the measurement of EI (and some conceptualizations of it), the emerging field of EI research has served to highlight the important role of emotions in social relationships. In particular, the contribution we focus on is the role of emotions in leadership, and the need for leaders to be aware of, and to attempt to manage emotions in themselves and in their followers. We are open to the possibility that one day EI may go the way of the dodo bird; but we are confident that this will not be the case for some time. Considering that the EI construct has made its way into the latest Annual Reviews of Psychology (Mayer et al., 2008) as a viable and important construct, it appears, despite the best efforts of its detractors, EI research is going to be with us into the foreseeable future.

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