
Concepts and Measures of Emotional Intelligence – A Conceptual Study

Anupama Asthana

Senior Research Fellow

Institute of Management Studies

Banaras Hindu University, Varanasi

&

Dr. R. K. Lodhwal

Professor

Institute of Management Studies

Banaras Hindu University, Varanasi

Abstract

Emotional intelligence is the ability of individuals to recognize one's own, and others' emotions to differentiate between different feelings and recognize them appropriately, to use that information to govern the behavior, and to regulate those emotions to achieve one's goals. Many studies have shown that people with high EI have greater mental health, job performance, and leadership skills although no causal relationships have been shown and such findings are likely to be attributable to general intelligence and specific personality traits rather than emotional intelligence as a construct. The concept of Emotional Intelligence in 1990 and since then researchers have put in numerous efforts to conceptualize, measure, understand, and develop EI. This paper presents an overview of the various 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 EI. Emotional Intelligence has received a lot of attention since its inception. Research on EI has proliferated since 1990, which has led to different models and measures of EI. Critics of EI point to serious conceptualization and measurement problems and the advocates of EI have put in numerous efforts to answer the critics and build a strong framework for EI. The impact of EI in 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.

Evolution of emotional intelligence:

Our mind operates in three ways: cognition, affect and motivation (Hilgard, 1980). The sphere of cognition includes functions such as human memory, reasoning, judgment, and abstract thought. The sphere of affect includes emotions, moods, evaluations, and other feeling states. Lastly, the sphere of motivation (or conation)

is the sphere of personality, which includes biological urge or learned goal-seeking behavior. The first two spheres, that of cognition and affect, together make up EI.

Cognitive abilities are determined by the neocortex, the outer layer of the brain. However, with EI, additional brain areas, mainly the emotional centers and in particular the amygdala, come into play. These emotional centers are in the more primitive sub cortex, the deeper layer of the brain. As the root from which the newer neocortical region grows, these emotional centers can immensely influence the functioning of the neocortex, thus impacting our logical and rational thought processes. When impulsive feeling overrides rational thinking, the role of the amygdala as the storehouse of emotional memory emerges. The workings of the amygdala and its interplay with the neocortex are at the heart of EI.

Howard Gardner, a Harvard psychologist, who in 1983 proposed his famed model of “multiple intelligences,” was one of the most influential theorists of intelligence to point out the distinction between intellectual and emotional capacities (Gardner, 1983). His list of seven intelligences includes cognitive abilities such as mathematical reasoning and verbal fluency as well as spatial, kinesthetic, and musical intelligences. He argues that the intelligences exist on the basis of their cultural significance and their correspondence to human brain structures. In addition, he proposes “personal intelligences” for managing oneself and relationships. In 1990, Mayer and Salovey (1990) proposed a comprehensive theory of EI. They define EI in terms of being able to identify, understand, use, and regulate one’s emotions. In this study, the framework of Salovey and Mayer is used in the test. Goleman (1995), a psychologist and former New York Times reporter, adapted the work of Salovey and Mayer and published an international best seller, “Emotional Intelligence: Why It Can Matter More Than IQ,” which brought EI to the attention of the world. The book was so successful that he subsequently published “Working with Emotional Intelligence” (1998), in which data from studies of more than 500 corporations were analyzed to prove that emotional competencies could create more successful employees and companies.

Models of emotional intelligence:

According to Encyclopedia of Applied Psychology there are three major models of emotional intelligence:

- 1) Ability model (John Mayor and Peter salovey)
- 2) Mixed model (Daniel Goleman)
- 3) Trait model by K V Petrides

Ability model:

Mayer and Salovey (1997) define emotional intelligence as 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. Their framework has four branches:

- i. Perception, appraisal, and expression of emotion.
 - ii. Emotion’s facilitation of thinking.
 - iii. Understanding and analyzing emotions; employing emotional Knowledge.
 - iv. Reflective regulation of emotions to promote emotional and intellectual growth
- i. Perception, appraisal, and expression of emotion:*

This involves the ability of individuals to correctly identify emotions and emotional content. A mature individual will be able to monitor internal feelings and recognize not only his own feelings but also that of others. He will also be able to evaluate emotions as expressed in artworks and architecture. He will be able to express his own feelings accurately and express any needs felt surrounding these feelings. Lastly, he is also sensitive to false or manipulative expressions of feelings.

In a study done by DiPaolo et al. (1990), there is evidence supporting the idea that a basic skill is involved in recognizing emotions not only in faces, but also in abstract designs and colours. This accounts for individual

differences as it was found that individuals higher in these skills also obtained higher scores on a scale of self-reported empathy, a skill considered part of EI. These findings provide evidence for the existence of EI as described in the first branch (perception, appraisal, and expression of emotion) of the framework.

ii. *Emotion's facilitation of thinking:*

This involves the understanding of emotions, and how well emotional events can aid in intellectual processing. Emotions act as an alerting system from birth, signaling important changes in the person and environment. Emotions also contribute to thinking in that they can be generated in demand so that they can be better understood. In venturing into new territories, the ability to anticipate how one will feel can help one make better decisions. Emotionality may also help a person to develop multiple perspectives, which is advantageous to a person in conditions of uncertainty as he can then consider more possibilities. Lastly, a person will be able to recognize that different kinds of moods will lead to different kinds of work and forms of reasoning.

iii. *Understanding and analyzing emotions; employing emotional knowledge:*

This involves the ability to understand emotions and use emotional knowledge. As many emotions form sets along a continua of intensity, a person will be able to recognize the differences in the intensity of emotions felt. He will also be able to recognize the existence of complex contradictory emotions in certain circumstances and acknowledge their combinations. As emotions usually occur in patterned chains, a person tends to reason about the sequences of emotion. Reasoning about the progression of feelings in interpersonal relationships is central to EI.

iv. *Reflective regulation of emotions to promote emotional and intellectual growth:*

This involves the conscious regulation of emotions to enhance emotional and intellectual growth. A person is open to both pleasant and unpleasant feelings so that something can be learned about them. He will be able to engage and disengage from emotions at appropriate times. He is able to consciously reflect on his emotional responses. This involves evaluation and regulation of one's moods. A person will also be able to manage his emotions in such away as to enhance the pleasant emotions and avoid exaggerating negative ones.

Mixed model:

Mayer and Salovey (1997) define emotional intelligence in terms of being able to monitor and regulate one's own feelings and that of others, and to use feelings to guide thought and action. As they considered motivation secondary in EI, they excluded this from their framework. Goleman (1998), however, adapted Mayer and Salovey's model into a somewhat similar form, which he finds most useful for understanding how each skill matters at work. Emotional intelligence, as defined by Goleman, is the capacity for recognising our own feelings and those of others, for motivating ourselves, and for managing emotions well in our relationships. His framework has five branches: self-awareness, self-regulation, motivation, empathy, and social skills.

i. *Self-awareness*

Self-awareness is knowing what one is feeling at the moment, and using those feelings in decision making, which is generally known as intuition or gut feelings that allows one to make decisions congruent with his or her deepest values. Self-awareness also involves having a realistic assessment of one's abilities. People who have this strength are aware of their strengths and weaknesses, open to candid feedback from others, and willing to learn from past experiences. Self-confidence is the courage that comes from certainty, through self-awareness, about our capabilities, values and goals.

ii. *Self-regulation*

Handling our emotions such that they facilitate rather than interfere with tasks requires self-regulation. This manifests itself largely through the absence of disruptive emotional outbursts. Being conscientious and delaying gratification to pursue goals is another form of self-regulation. In a study by Mischel, et al. (1990), four-year-olds were given the choice of having a marshmallow now, or waiting a while later before getting two marshmallows instead. Fourteen years later, those who had resisted temptation and waited were more

socially competent (being more self-assertive and better able to handle stress) than those who did not wait. In addition, those who waited had SAT scores 210 points higher than those who did not wait.

iii. Motivation

Motivation is the emotional tendency that guides or facilitates reaching goals. It helps one to take initiative and strive for improvement and perseverance in the face of setbacks and frustrations. The need to achieve is the single strongest competence that distinguishes outstanding from average executives (Spencer and Spencer, 2008). Individuals with a high level of motivation readily make a realistic assessment of a setback and admit how they contributed to it rather than adopt a defeatist attitude.

iv. Empathy

This is the ability to be aware of the feelings of others and to consider their perspective. People rarely tell us verbally what they feel. More often than not, we deduce what others are feeling about us through their subtle nonverbal signals such as tone of voice and facial expression. The ability to sense these signals builds on one's basic competencies, especially self-awareness and self-regulation. Moreover, empathy involves being able to cultivate a sense of rapport and attunement with people from diverse walks of life. People of different groups, regardless of gender, race or nationality, have their own norms of expressing emotions. To the extent that we are unfamiliar with these norms, empathizing becomes more difficult (Hall and Rosenthal, 1979).

v. Social Skills

This involves handling emotions well in relationships and accurately reading social situations and networks, which are best demonstrated by diplomacy and tact. A person with good social skills will also be able to interact comfortably with others and persuade, lead, negotiate, and settle disputes for cooperation and teamwork. It is this adeptness at inducing desirable responses in others that makes them good leaders.

Trait model:

Trait emotional intelligence concerns a constellation of emotional self - perceptions located at the lower levels of personality hierarchies (Petrides, Pita et al., 2007). An alternative label to describe the construct is trait emotional self - efficacy. Simply put, trait EI concerns people's perceptions of their own emotional abilities. Trait EI theory provides an operationalization that recognizes the inherent subjectivity of emotional experience. Most research in the field is conducted within the broader domain of trait EI. We hasten to add that not all of this research is interpreted accordingly. Indeed, it remains common for researchers to use self - report questionnaires and then to go on to interpret their findings with reference to concepts of ability, competencies, and skills from the pop - psychology perspective of " EQ is good for you. "Useful as documents of such research may be from an empirical point of view, the only way in which they can be connected to mainstream science in differential psychology is if they are interpreted with full reference to trait EI theory. The trait EI label reflects the fact that the various notions that have been discussed in the literature under the descriptions " emotional intelligence "or " EQ "(Bar - On, 1997 ; Goleman, 1995 ; Payne, 1985 ; Salovey &Mayer, 1990) invariably describe permutations of personality traits, such as empathy, emotional expression, adaptability, and self - control, which are psychometrically orthogonal (unrelated) to mental ability. It should be clear by now that, in the case of models that are operationalized via pseudo maximum - performance tests, this claim is invalid, while in the case of models that are operationalized via self - report questionnaires the claim is absurd. Trait EI theory offers a way to redefine the latter models in order to link them, and the measures based on them, to scientific theories of psychology.

Emotional Intelligence and Competencies:

In reviewing the nature and definition of emotional intelligence, it is evident that the construct addresses individual traits, values and behaviors. This would to a large extent, align with the concept of a competency as defined by Boyatzis (1982): a job competency is an underlying characteristic of a person in that it may be a motive, trait, skill, aspects of one-self's image or social role, or a body of knowledge which he or she uses. Indeed there are clear parallels between the drivers of interest in competencies and of emotional intelligence. Whilst Goleman sees competencies as an alternative to the personality-based paradigm, the classic view of

competencies (Boyatzis, 1982) sees the construct as being an inclusive one which sets personality traits in a broader context. Indeed there is, within the literature in emotional intelligence, frequent reference to the nature of the construct being linked to competencies (e.g. Goleman, 1996; Gardner 1993; Steiner, 1997; Cooper and Sawaf, 1997).

The proposition underlying much of the focus of emotional intelligence, in relation to its organizational application, appears to be derived from a desire to explain differential achievement of success in an organizational setting which cannot be adequately accounted for by traditional measures such as IQ tests. Whilst this is an area of extensive debate and research, there have been a limited number of long-term studies of individual achievement within an organization which serve to illuminate the issue. One such study by Dulewicz and Herbert (1996, 1999) tracked the career progress of general managers over a seven year period. The main aim was to identify those competencies and personality characteristics assessed seven years previously which are associated with current success and rate of advancement. This study demonstrated a clear linkage between competencies and elements of advancement within an organizational context. This relationship between individual attributes differentiation between “averages” and “outstanding” performance (in terms of personal achievement) is at the heart of the case for considering emotional intelligence (Goleman, 1996).

The view that emotional intelligence relates to a set of competencies is reinforced by prominent authors in the field. Goleman (1997), in a paper at the Second International Competency Conference, explored the development of emotional intelligence in an organizational context, and made a direct reference to using an understanding of the concept to assisting in the improvement of workplace competency. In relation to the process of management learning in particular, Fineman (1997) develops the idea of a clear link between emotion and competencies.

A number of specific competency frameworks include high performing competencies, includes a number which touch on emotions (e.g. creating a positive climate). Dulewicz (1994), in exploring and describing the “supra-competencies”, includes a grouping labeled interpersonal competencies, embracing managing staff, persuasiveness, assertiveness and decisiveness, sensitivity and oral communication. Overall the constructs of emotional intelligence does appear to be captured, at least in part, within the thinking on managerial competencies. However, this relationship has not surfaced as yet as a specific proposition, nor been the subject of structured research.

- (1) **Self-awareness** is the ability to recognize a feeling as it happens, to accurately perform self-assessments and have self-confidence. It is the keystone of emotional intelligence (Goleman, 1995).
- (2) **Self-management or self-regulation** is the ability to keep disruptive emotions and impulses in check (self-control), maintain standards of honesty and integrity (trustworthiness), take responsibility for one’s performance (conscientiousness), handle change (adaptability), and be comfortable with novel ideas and approaches (innovation).
- (3) **Motivation** is the emotional tendency guiding or facilitating the attainment of goals. It consists of achievement drive (meeting a standard of excellence), commitment (alignment of goals with the group or organization), initiative (acting on opportunities), and optimism (persistence reaching goals despite setbacks).
- (4) **Empathy** is the understanding of others by being aware of their needs, perspectives, feelings, concerns, sensing the developmental needs of others.
- (5) **Social skills** are fundamental to emotional intelligence. They include the ability to induce desirable responses in others by using effective diplomacy to persuade (influence); listen openly and send convincing messages (communicate); inspire and guide groups and individuals (leadership); nurture instrumental relationships (building bonds); work with others toward a shared goal (collaboration, cooperation); and create group synergy in pursuing collective goals.

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

-
- Bar-On Emotional Intelligence Quotient (EQ-i)
 - Emotional Competency Inventory 360 (ECI 360)
 - Genos EI Assessment Scale
 - Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT)
 - Schutte Self-Report Inventory (SSRI)
 - Trait Emotional Intelligence Questionnaire (TEIQue)
 - Wong's Emotional Intelligence Scale

Although MSCEIT dominates the literature, there are many other ability based EI 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 Geher, 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

1. 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 based on 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

1. 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 EI levels. The individual who is assessing his own EI will give answers based on his perception. This will not reflect his actual EI as an ability.

3. Performance measures do not overlap with measures of personality and temperament whereas some researchers have proven that self-report 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.

Literature Review

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 BarOn 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 one-fifth 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:

It is evident from the literature review that the question of which measure of EI is best is still an issue to talk over. Researchers propounded that the type of measurement determines the nature of the model, rather than the theory behind it (Petrides et al, 2000). They avow that when EI is looked upon as a trait, which is inserted in the personality framework, then it is suitably 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 measurement. The purpose of measuring EI also has a bearing on the selection of the best measure. Various 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 evidence that EI might be integrated in the overall psychometric intelligence structure. MSCEIT measures something new and hence is the most appropriate tool for measuring EI.

References:

- J Bar - On , R. (1997). *Bar - On Emotional Quotient Inventory: Technical manual* . Toronto : Multi-Health Systems Inc.
- J Brackett, M. A., Rivers, S. E., Shiffman, S., Lerner, N., & Salovey, P. (2006). Relating emotional abilities to social functioning: a comparison of self-report and performance measures of emotional intelligence. *Journal of personality and social psychology*, 91(4), 780.
- J Bradberry, T. R., & Su, L. D. (2006). Ability-versus skill-based assessment of emotional intelligence. *Psicothema*, 18(Suplemento), 59-66.
- J Boyatzis E.E. (1982), *The Competent Manager: A Model for Effective Performance*, John Willey & Sons, New York, NY.

- J Cooper, R.K. and Sawaf, A. (1997), executive EQ: Emotional Intelligence in Leadership and Organizations, Gosset, Putnam, New York, NY.
- J DiPaolo, M.T., J.D. Mayer and P. Salovey (1990) "Perceiving affective content in ambiguous visual stimuli: a component of emotional intelligence", *Journal of Personality Assessment*, Vol. 54, pp.772-781.
- J Dulewicz, S. V.(1994). *Personal competencies, personality and responsibilities of middle managers. Competency Journal*, 1(3), 20-29.
- J Dulewicz, V., & Higgs, M. (1999). Can emotional intelligence be measured and developed?. *Leadership & Organization Development Journal*, 20(5), 242-253.
- J Dulewicz, S V., Higgs, M., & Slaski, M. (2003). Measuring emotional intelligence: Content, construct and criterion-related validity. *Journal of Managerial Psychology*, 18(5), 405-420.
- J Fineman, S. (1997). *Emotion and management learning. Management Learning*,28(1), 13-25.
- J Gardner, H. (1983) *Frames of Mind: The Theory of Multiple Intelligences*, Basic Books, NY.
- J Gardner, H. (1993). *Multiple intelligences: the theory in practice*. NY: Basic Books.
- J Goldenberg, I., Matheson, K., & Mantler, J. (2006). The assessment of emotional intelligence: A comparison of performance-based and self-report methodologies. *Journal of personality assessment*, 86(1), 33-45.
- J Goleman, D. (1995) *Emotional Intelligence: Why It Can Matter More Than IQ*, Bantam Books, NY.
- J Goleman, D. (1996). *Emotional Intelligence. Why It Can Matter More than IQ. Learning*, 24(6), 49-50.
- J Goleman, D. (1998) *Working with Emotional Intelligence*, Bantam Books, NY, pp.35-54.
- J Hilgard, E.R. (1980) "The trilogy of mind: cognition, affection and conation," *Journal of the History of the Behavioural Sciences*, Vol. 16, pp.107-117.
- J Livingstone, H. A., & Day, A. L. (2005). Comparing the construct and criterion-related validity of ability-based and mixed-model measures of emotional intelligence. *Educational and Psychological Measurement*, 65(5), 757-779.
- J MacCann, C., Matthews, G., Zeidner, M., & Roberts, R. D. (2003). Psychological assessment of emotional intelligence: A review of self-report and performance-based testing. *The International Journal of Organizational Analysis*, 11(3), 247-274.
- J Mayer, J.D. and P. Salovey (1990) "Emotional intelligence," *Imagination, Cognition and Personality*, Vol. 9, pp.185-211.
- J Mayer, J. D., & Geher, G. (1996). Emotional intelligence and the identification of emotion. *Intelligence*, 22(2), 89-113.
- J Mayer, J.D. and P. Salovey (1997) *Educational Development and Emotional Intelligence*, Basic Books, NY, pp. 185-211.
- J Mischel, W., P.K. Peake and Y. Shoda (1990) "Predicting adolescent cognitive and self regulatory competencies from preschool delay of gratification," *Development Psychology*, Vol. 26, pp.978-986.
- J Palmer, B., Walls, M., Burgess, Z., & Stough, C. (2001). Emotional intelligence and effective leadership. *Leadership & Organization Development Journal*, 22(1), 5-10.
- J Payne , W. L. (1985). A study of emotion: Developing emotional intelligence, self - integration, relating to fear, pain, and desire . *Dissertation Abstracts International* , 47 , 203 .
- J Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and individual differences*, 29(2), 313-320.
- J Petrides , K. V. , Pita , R. , & Kokkinaki , F. (2007). The location of trait emotional intelligence in personality factor space . *British Journal of Psychology* , 98 , 273 – 289 .
- J Roger, D., & Najarian, B. (1989). The construction and validation of a new scale for measuring emotion control. *Personality and individual differences*, 10(8), 845-853.
- J Romero, G. A., Cannon, M. B., Bartlett, J. C., Potts, B. T., & Barchard, K. A. (2008). The relationship between verbal ability and levels of emotional awareness. In *Western Psychological Association Annual Convention, Irvine, CA*.
- J Rosenthal, R. (1979). *Sensitivity to nonverbal communication: The PONS test*. Johns Hopkins Univ Pr.
- J Spencer, L. M., & Spencer, P. S. M. (2008). *Competence at Work models for superior performance*. John Wiley & Sons.
- J Steiner, C. (1997), *Achieving Emotional Literacy*, Bloomsbury Publication, London.
- J Van Rooy, D. L., Viswesvaran, C., & Pluta, P. (2005). An evaluation of construct validity: what is this thing called emotional intelligence?. *Human Performance*, 18(4), 445-462.
- J Wong, C. S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The leadership quarterly*, 13(3), 243-274.