

Review Article

Emotional Intelligence: Exploring the Road beyond Personality and Cognitive Intelligence

Ragini Gupta and Badri Bajaj*

Jaypee Institute of Information Technology, Noida, India

ABSTRACT

Emotional intelligence research holds a popular status in current academic and business community. However, emotional intelligence as an independent construct has been debatable with regard to its theoretical and empirical significance ever since it was introduced. Furthermore, conceptual and operational definitions, measuring instruments and questionable validity and subsequent results are highly diverse and even contradictory. In an attempt to bring coherence to the diffuse body of literature on emotional intelligence, we argue how emotional intelligence is different from personality and cognitive intelligence. In light of this, the current paper has discussed previous research findings to gain more insights about emotional intelligence accounting for variance in outcomes not explained by personality and cognitive intelligence. The extant literature review has guided us to conclude that emotional intelligence is a unique construct, distinct from personality and cognitive intelligence. Scope for future research in the emotional intelligence field is also suggested.

Keywords: Cognitive intelligence, controversies, emotional intelligence, personality

ARTICLE INFO

Article history:

Received: 24 January 2017

Accepted: 19 January 2018

Published: 28 September 2018

E-mail addresses:

raginigupta09@gmail.com (Ragini Gupta)

badri.bajaj@jiit.ac.in (Badri Bajaj)

* Corresponding author

INTRODUCTION

With the popularization, the construct of Emotional Intelligence (EI) has garnered considerable attention from both researchers and practitioners (O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011). The roots of emotional intelligence can be found in the concept of social intelligence put forwarded by Thorndike (1920) and defined it as "the

ability to understand men, women, boys and girls to act wisely in human relations” (p. 228). Another early researcher who contributed to the progression of emotional intelligence was Wechsler (1940) who defined intelligence as the “the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment” (p. 7). Wechsler (1940) posited that personality traits, intellective and other non-intellective components influenced intelligence. This non-intellective intelligence also carries the notion similar to emotional intelligence which is essential to achieve success in life. Gardner (1983) propounded a theory of multiple intelligences, wherein Gardner proposed the concept of interpersonal and intrapersonal intelligence that became the basis of the initial EI constructs. Salovey and Mayer (1990) formally coined the term Emotional Intelligence and defined it as “the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (p.189). But the term became popular after the publication of Goleman’s book “Emotional Intelligence-Why it matters more than IQ” in 1995. Since then literature in the field has come a long way. However, the field has also drawn criticism with regard to its conceptual overlap with personality and cognitive intelligence (Landy, 2005). Much criticism surrounds EI on whether it makes a unique contribution in explaining

outcomes beyond personality and cognitive intelligence (Antonakis, Ashkanasy, & Dasborough, 2009). Therefore, the quest of the researchers is to find out how EI is different from earlier similar constructs.

Problem Statement

Prior studies have empirically shown that EI is a unique construct and explains outcomes over and above personality and cognitive intelligence (Di Fabio, Palazzeschi, & Bar-On, 2012; O’Boyle et al., 2011). However, there are findings suggesting debatable evidence for incremental validity of emotional intelligence (Amelang, & Steinmayr, 2006; Bastian, Burns, & Nettelbeck, 2005). These mixed findings have generated a research gap in the literature which requires further investigation (Amelang & Steinmayr, 2006; Harms & Crede, 2010). This gap needs to be filled to bring more clarity as to what EI is and how EI is conceptually and empirically distinct from personality and cognitive intelligence. Therefore, the aim of this paper is to fill the identified gap by reviewing different approaches, models of EI and previous studies that were conducted to analyze the incremental validity of emotional intelligence in predicting outcomes above and beyond personality and cognitive intelligence. This review will contribute in determining whether EI is a unique construct or it is redundant. Figure 1 illustrates a conceptual framework that incorporates EI, cognitive intelligence, and personality and their relationships with outcomes. Here,

the incremental validity of EI in predicting outcomes above and beyond cognitive intelligence and personality is represented by a dark solid line.

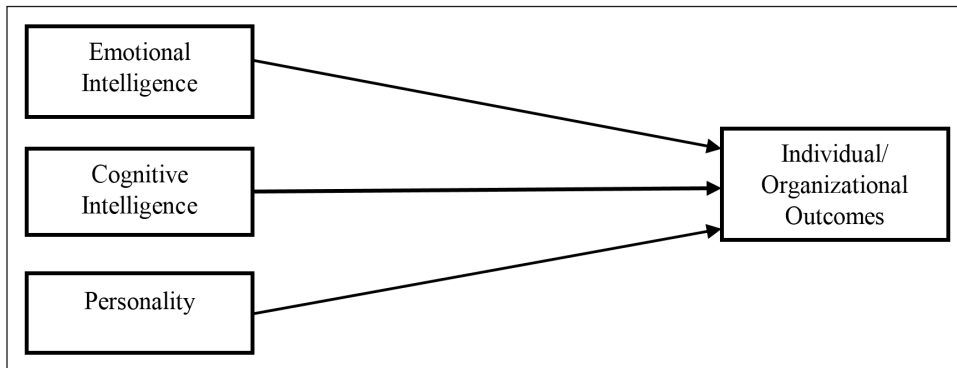


Figure 1. Conceptual framework linking emotional intelligence, cognitive intelligence and personality to individual/organizational outcomes

LITERATURE REVIEW

The construct of EI has been found to predict outcomes such as job performance, leadership effectiveness, well-being, engagement and job satisfaction (Akhtar, Boustani, Tsivrikos, & Chamorro-Premuzic, 2015; Higgs & Dulewicz, 2014; O’Boyle et al., 2011; Rosete & Ciarrochi, 2005; Singh & Woods, 2008). The substantial research in the field of EI has progressed through different approaches and models which are described here in this paper.

Different Approaches of EI

The Ability Approach. This approach includes ability model of EI. The ability model describes EI as a person’s ability in recognizing and understanding emotional information (Mayer & Salovey, 1997). As an ability, it has maximum overlapping with cognitive intelligence (Mayer & Salovey, 1997).

The mixed approach. The Mixed approach incorporates both non-cognitive models (Bar-On, 2006) and competency-based models (Goleman, 1995). Non-cognitive models center around non-cognitive abilities while competency based models focus on competencies. These mixed models coincide with established models of personality in some way or another (Cherniss, 2010).

The Trait Approach. This perspective includes trait model of EI. This model assumes trait EI facets as personality traits, rather competencies or mental abilities or facilitators. Petrides and Furnham (2001) found a significant relationship between EI & the Big Five personality factors.

Theoretical Models and Measurements of EI

The literature on emotional intelligence has spawned different theoretical models and consequently the measuring instruments

that are being used to operationalize the construct of EI (Neubauer & Freudenthaler, 2005). There exist four distinct models of EI (Chernis, 2010): (1) Four-Branch model (Mayer & Salovey, 1997); (2) Emotional Social Intelligence (ESI) model (Bar-On, 2006); (3) The competency model (Boyatzis & Sala, 2004); and (4) Trait EI model (Petrides & Furnham, 2003).

Four-branch Model

The ability model of emotional intelligence is based on the fact that EI is a person's ability to recognize & use information about emotions to carry out abstract reasoning (Mayer & Salovey, 1997). Mayer and Salovey (1997) divided EI abilities into four branches, and these four branches formed the model known as four branch model. The four branches are:

1. **Perceiving emotions:** This branch involves the ability to recognize emotions of self and those of others accurately. This includes identifying emotions in faces, pictures, and voices.
2. **Facilitating thought:** The second branch of the model describes assimilation of emotions to facilitate thought. This branch involves one's ability to harness recognized emotions to guide thinking and problem solving which helps to make judgments.
3. **Understanding emotions:** This branch reflects the ability to comprehend and analyze emotions

such that one can understand the cause and consequence of emotions and relations among emotions

4. **Managing emotions:** This involves the ability of a person to regulate emotions of self and others. This branch enables the individual to monitor and regulate emotions to workout strategy that will be used to enhance or suppress the emotion.

Perception and facilitation branches (the first two branches) of the model are called as 'experiential EI,' because these correspond to feelings. The third and fourth branches together are called as 'strategic EI' because these are responsible for planning and executing emotional information.

This model is most often operationalized by The Mayer, Salovey and Caruso Emotional Intelligence Test (MSCEIT) consisting of 141 items. The MSCEIT result comes out with 15 scores that consist of total emotional intelligence, area scores for strategic and experiential, four scores in each of the branches, and eight task scores (two for each branch) (MSCEIT: Mayer, Salovey, & Caruso, 2002).

Competency Model. This model of emotional intelligence focuses on competencies and skills (Boyatzis, 2009). This model is the combined work of Goleman and Boyatzis (as cited in Boyatzis & Sala, 2004). This framework includes both social competencies and personal competencies. Further social competencies comprised two dimensions: empathy and social skills whereas personal

competencies included three dimensions: self-awareness, self-regulation, and motivation. Later, Boyatzis and Goleman revised their model with four clusters (self-awareness, self-management, social awareness, and relationship management) and 18 competencies (Boyatzis & Sala, 2004). Further, Boyatzis (2007) refined the model, and now model includes 12 competencies contained within four clusters.

1. **Self-Awareness:** It is concerned with recognizing and understanding emotions of self. This cluster has only one competency: Emotional self-awareness
2. **Self-Management:** This is all about regulating our own emotions. It includes four competencies: Emotional self-control, Achievement orientation, Positive outlook and Adaptability
3. **Social Awareness:** It deals with recognizing and understanding the emotions of others. It includes two competencies: Empathy and Organizational awareness
4. **Relationship Management:** This refers to harnessing our emotional understanding to build rapport and promote relationship with others. This cluster has five competencies: Influence, Coach and mentor, Conflict management, Inspirational leadership and Teamwork

This model is examined through the instrument known as Emotional Social Competence Inventory (ESCI) instrument

which is a 360° method of assessment comprising 68 items. It provides ratings on a series of behavioral indicators of EI (ESCI: Hay Group, 2011).

Emotional Social Intelligence Model.

Bar-On's model which is commonly known as ESI model is divided into five primary scales and fifteen subscales. The primary scales are Intrapersonal skills, Interpersonal skills, Stress management, Adaptability and General mood (Bar-On, 2006). Recently Multi-Health Systems Inc. (MHS) team has revised the model with sixteen subscales (Stein & Deonarine, 2015). The five scales and their subscales are:

1. **Self-perception** refers to person's awareness of self and the ability to recognize and manage oneself. It encompasses emotional self-awareness, self-regard, and self-actualization.
2. **Self-expression** is concerned with the ability to express oneself to the outside world verbally and non-verbally. It includes Emotional expression, Independence and assertiveness
3. **Interpersonal** pertains to human skills which involve the ability of an individual to deal with other people and building relationships. It has three subscales: empathy, social responsibility, and interpersonal relationships.
4. **Decision-making** relates to utilizing the emotional information in the

best possible manner so that best decisions can be made to solve problems. Its three subscales are impulse control, reality testing, and problem-solving.

5. Stress management is the person's ability to remain calm, focused and being able to survive with a positive attitude in adverse conditions. Its three subscales are flexibility, stress tolerance and optimism.

The most common instrument used to examine this model is Emotional Quotient Inventory (EQ-i^{2.0}: MHS, 2011). EQ-i^{2.0} is a self-report measure having 133 short statements, which works on updated model and measures the individual construct.

Trait Model. The Trait EI model proposed by Petrides and Furnham is the result of content analysis of the previous major EI models (Petrides & Furnham, 2001, 2003). This model consists of all personality facets that are particularly associated with emotion. Petrides's model encompasses four factors with 15 facets of the personality domain (Petrides, 2009): The four factors are:

1. **Emotionality:** It corresponds to the individuals who are aware of emotions of self and others. The facets consists of empathy, emotion perception, emotion expression, and relationships
2. **Self-control:** It pertains to individuals who have control over their needs and fantasies. The facets include emotion

regulation, impulsiveness, and stress management.

3. **Sociability:** This trait makes individual socially active. The facets are emotion management, assertiveness, and social awareness.
4. **Well-being:** This relates to individuals who are hopeful, cheerful, and fulfilled on the basis of their actions and expectations. The facets involve trait optimism, trait happiness, and self-esteem, and auxiliary facets (self-motivation and adaptability)

The construct of trait EI is measured with Trait Emotional Intelligence Questionnaire (TEIQue) (Petrides, 2009). The TEIQue comprises 153 items, producing scores on 15 subscales, four factors, and global trait EI.

Distinguishing Emotional Intelligence from Similar Constructs

EI has often been criticized for whether EI instruments measure emotional intelligence or some aspect of Intelligent Quotient (IQ) or personality? EI is different from personality traits because traits are considered essentially stable over a period, and it is a unique pattern of how an individual behaves in different situations (Costa & McCrae, 1992), while EI as an ability can be developed over a period of time (Boyatzis, 2009). Previous studies have also demonstrated that personality is more conceptually and empirically distinct from emotional intelligence (Caruso, Mayer, & Salovey, 2002; Petides, Pita, & Kokkinaki, 2007).

According to Sternberg (1997), “Intelligence comprises the mental abilities necessary for adaptation to, as well as shaping and selection of, any environmental context” (p. 1030). In a theory of multiple intelligences, Gardner (1983, 1993, 2006) proposed eight different types of intelligences. These intelligences are “linguistic, logical-mathematical, spatial, musical, bodily- kinesthetic, interpersonal, intrapersonal, and naturalist.” Simply put, intelligence is abstract reasoning and ability to learn (Sternberg, 1997). However, abstract reasoning works with an input function. Different intelligences are often conceptualized on the basis of what is being processed, i.e., the input. The input may be verbal, spatial, cognitive or emotional. Irrespective of the type of intelligence, each functions through a set of processes which remains universal (Sternberg, 1999, 2004). Gardner’s interpersonal and intrapersonal intelligence subsequently became the basis of the initial EI constructs. Sternberg (1997) suggested that EI also represents mental ability, a kind of intelligence, such that how

an individual use this ability in different environment determines his emotional intelligence. However, intelligences such as musical and bodily- kinesthetic do not meet the criteria to be considered as intelligence as these abilities are not required universally to adapt to the environment (Sternberg, 1997). The basic distinction between emotional and cognitive intelligence is that EI pertains to how human beings interact with their immediate environment and interpret and compare feelings (Mayer & Salovey, 1997). These emotional abilities are essential to adapt to the environment. While cognitive intelligence is the ability to perceive relationships among objects and problem-solving in novel situations on the basis of learning, memory (Mayer & Salovey, 1997). Moreover, cognitive ability measures evaluate the problem-solving ability in different cognitive domains (Brody, 2004). Table 1 shows review of previous studies arranged chronologically beginning with 2002 that guide to understand whether EI predicts outcomes above and beyond personality and cognitive intelligence.

Table 1
Summary of EI, personality and cognitive intelligence research findings

Author (s)	Purpose	Sample	Key Findings
Van der Zee, Thijs, & Schakel (2002)	To evaluate the incremental validity of EI in predicting academic and social success beyond academic intelligence and personality.	116 students	Results showed that EI predicted both academic and social success above academic intelligence and personality.
Lopes, Salovey, & Straus (2003)	To investigate whether EI predicted the quality of one’s social relationships when controlling for the Big Five and verbal intelligence.	103 students	Results had shown that EI explained variance in quality of one’s social relationships when controlling for the Big Five and verbal intelligence.

Table 1 (continue)

Author (s)	Purpose	Sample	Key Findings
Vakola, Tsaousis, & Nikolaou (2004)	To examine the role of EI and personality variables on attitudes toward organizational change.	137 professionals	Results showed that EI explained variance beyond personality dimensions, in predicting employees' attitudes toward change.
Rosete & Ciarrochi (2005)	To investigate the relationship between EI, personality, cognitive intelligence and leadership effectiveness	41 executives	The results showed that higher EI was associated with higher leadership effectiveness, and EI also explained variance not explained by either personality or IQ.
Co'te' & Miners (2006)	To determine how EI and cognitive intelligence is associated with task performance	175 employees	The results revealed that EI accounted for job performance over and above personality and cognitive ability even when personality and intelligence were controlled.
Furnham & Christoforou (2007)	To examine the effects of personality traits and trait EI on happiness.	120 participants	Trait EI predicted happiness even after controlling for personality.
Singh & Woods (2008)	To examine the joint predictive effects of trait EI, extraversion, conscientiousness, and neuroticism on well- being and job satisfaction.	123 individuals	Trait EI was found to be strongly correlated with job satisfaction. Results also confirmed that trait EI accounted for additional variance in well- being above personality.
Guillén, Saris, & Boyatzis (2009)	To determine the predictive and incremental validity of EI in predicting performance effectiveness over personality traits.	223 executives	The results of the analysis found that competencies were more powerful predictors of performance than global personality traits.
Joseph & Newman (2010)	To investigate whether EI accounted for incremental variance in job performance over and above the Big Five personality and cognitive ability.	Meta-analysis	Results revealed that all three types of EI measures (performance based, self-report ability measures, and self-report mixed models) demonstrated incremental validity over and above the Big Five personality traits and cognitive ability.
O'Boyle et al. (2011)	To compare how different conceptualizations of EI predicts job performance and to investigate whether EI incrementally predict job performance over and above the Big Five personality and cognitive ability.	Meta-analysis	Results had concluded that self- report mixed models of EI show highest incremental predictive value in predicting job performance over and above cognitive intelligence and personality.

Table 1 (continue)

Author (s)	Purpose	Sample	Key Findings
Boyatzis, Good, & Massa (2012)	To investigate how emotional & social competencies, cognitive intelligence (g), and personality affect leader performance.	60 executives	The results revealed that leader performance was significantly predicted by emotional and social competencies and not by intelligence and personality.
Føllesdal & Hagtvet (2013)	To assess whether ability measure of EI can predict transformational leadership when controlling for the Five Factor Model (FFM) and General Mental Ability (GMA).	104 executives	The results found that EI was not related to transformational leadership after controlling for the FFM and GMA.
Higgs & Dulewicz (2014)	To examine the relationship between EI, personality, and well-being, and evaluate whether EI explains variance in well-being beyond personality.	156 managers	Results showed that EI explained variance in well-being beyond personality dimensions.
Akhtar, Boustani, Tsvirikos, & Chamorro-Premuzic (2015)	To examine the effects of the Big Five personality traits, work-specific personality, and trait EI, on work engagement.	1050 professionals	Results of the analysis showed that Trait EI predicted work engagement over and above personality.

CONCLUSION

Despite the fact that the research in the field of emotional intelligence has garnered immense interest among scholars and practitioners, confusion has developed with regard to its actual conceptualization and operationalization (Mayer, 2006). EI was originally understood as a blend of abilities which are related to one another (Salovey & Mayer, 1990) whereas it had been conceptualized as “eclectic mix of traits” by different investigators (Bar-On, 2004; Petrides & Furnham, 2001). Moreover, the construct has been associated with controversy due to lack of conclusive findings regarding discriminant and incremental validity of EI above and beyond personality and cognitive intelligence.

Knowing the fact that EI is surrounded by criticism, it was of paramount importance to substantiate the literature by scrutinizing the scope for discriminant and incremental predictive utility of the construct. The current paper sought to review EI with personality and cognitive intelligence in their associations with different individual outcomes.

In view of the criticisms associated with the discriminant validity of EI, there has been a constant flux of studies trying to establish EI as a unique construct. In line of this, majority of the studies reviewed, have been found to conclude EI as a unique construct and demonstrating its incremental validity over personality traits or IQ in predicting various outcomes. On the other

hand, only a few studies claimed that EI did not account for unique variance beyond personality and cognitive intelligence. In addition, review of different studies incorporating EI, personality and cognitive intelligence also found different correlates of EI above and beyond personality and cognitive intelligence. This also establishes the construct of EI as a robust predictor of important outcomes. Moreover, the weight of the major evidence supports the claim that EI is conceptually distinct from personality and cognitive intelligence. In order to expand a more inclusive perspective on the uniqueness of EI, an opportunity for further research exists for the future researchers to make efforts on validation and consolidation of the construct and its measurement. It is expected that more exhaustive criteria will yield additional interesting predictions. It would be interesting to further investigate studies that incorporate EI, personality and cognitive intelligence all together so that independent contribution of each could be assessed with other outcomes. Considering the controversies associated with incremental validity of EI, that it does not measure anything new that could not be assessed by personality or IQ measures, it was found that there is a wide scope to integrate empirical evidence to highlight the role of EI at workplace which is beyond what is explained by personality or IQ. In light of this, current paper reviewed different conceptualizations of EI and summarized existing research evidence to demonstrate the usefulness of EI as an independent

construct. Overall, this review concludes that EI not only demonstrates just predictive validity but also shows discriminant and incremental validity when compared with traditional constructs such as personality or IQ. Thus, current paper contributes to bring clarity to EI literature by shading light on what actually EI is and how EI explains additional variance in range of outcomes not explained by personality and cognitive intelligence which further enhances comprehensive understanding of EI. This also helps to distinguish and strengthen the utility of EI as an independent construct. Thus, current paper contributes in highlighting bigger picture of EI-outcome relationships. Additionally, review of previous findings helps in understanding relevance of EI, personality and cognitive intelligence at workplace.

REFERENCES

- Akhtar, R., Boustani, L., Tsvirikos, D., & Chamorro-Premuzic, T. (2015). The engageable personality: Personality and trait EI as predictors of work engagement. *Personality and Individual Differences*, 73, 44-49.
- Amelang, M., & Steinmayr, R. (2006). Is there a validity increment for tests of emotional intelligence in explaining the variance of performance criteria? *Intelligence*, 34, 459-468.
- Antonakis, J., Ashkanasy, N. M., & Dasborough, M. T. (2009). Does leadership need emotional intelligence? *The Leadership Quarterly*, 20(2), 247-261.
- Bar-On, R. (2004). The Bar-On Emotional Quotient Inventory (EQ-i): Rationale, description and summary of psychometric properties. In G.

- Geher (Ed.), *Measuring Emotional Intelligence: Common Ground and Controversy* (pp. 115–145). New York: Nova Science.
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI) 1. *Psicothema*, 18(Suplemento), 13-25.
- Bastian, V. A., Burns, N. R., & Nettelbeck, T. (2005). Emotional intelligence predicts life skills, but not as well as personality and cognitive abilities. *Personality and Individual Differences*, 39, 1135–1145.
- Boyatzis, R. (2007). *The Creation of the Emotional and Social Competency Inventory (ESCI)* [Hay Group research report]. Hay Group: Boston.
- Boyatzis, R. E. (2009). Competencies as a behavioral approach to emotional intelligence. *Journal of Management Development*, 28(9), 749-770.
- Boyatzis, R. E., & Sala, F. (2004). Assessing emotional intelligence competencies. In G. Geher (Ed.), *Measuring Emotional Intelligence: Common Ground and Controversy* (pp. 147–180). Hauppauge, New York: Nova Science.
- Boyatzis, R. E., Good, D., & Massa, R. (2012). Emotional, social, and cognitive intelligence and personality as predictors of sales leadership performance. *Journal of Leadership & Organizational Studies*, 19(2), 191-201.
- Brody, N. (2004). What cognitive intelligence is and what emotional intelligence is not. *Psychological Inquiry*, 15(3), 234-238.
- Caruso, D. R., Mayer, J. D., & Salovey, P. (2002). Relation of an ability measure of emotional intelligence to personality. *Journal of Personality Assessment*, 79(2), 306-320.
- Cherniss, C. (2010). Emotional intelligence: Toward clarification of a concept. *Industrial and Organizational Psychology*, 3(2), 110-126.
- Costa, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, 13(6), 653-665.
- Cote, S., & Miners, C. T. (2006). Emotional intelligence, cognitive intelligence, and job performance. *Administrative Science Quarterly*, 51(1), 1-28.
- Di Fabio, A., Palazzeschi, L., & Bar-On, R. (2012). The role of personality traits, core self-evaluation, and emotional intelligence in career decision-making difficulties. *Journal of Employment Counseling*, 49(3), 118-129.
- Føllesdal, H., & Hagtvet, K. (2013). Does emotional intelligence as ability predict transformational leadership? A multilevel approach. *The Leadership Quarterly*, 24(5), 747-762.
- Furnham, A., & Christoforou, I. (2007). Personality traits, emotional intelligence, and multiple happiness. *North American Journal of Psychology*, 9(3), 1-25.
- Gardner, H. (1983). *Frames of Mind*. New York, NY: Basic Books.
- Gardner, H. (1993). *Multiple Intelligences: The Theory in Practice*. New York: Basic.
- Gardner, H. (2006). *Multiple Intelligences: New Horizons in Theory and Practice*. New York: Basic.
- Goleman, D. (1995). *Emotional intelligence: Why It Can Matter More Than IQ*. New York, NY: Bantam Books.
- GuillénRamo, L., Saris, W. E., & Boyatzis, R. E. (2009). The impact of social and emotional competencies on effectiveness of Spanish executives. *Journal of Management Development*, 28(9), 771-793.
- Harms, P. D. & Credé, M. (2010). Remaining issues in emotional intelligence research: construct overlap, method artifacts, and lack of incremental validity. *Industrial and Organizational Psychology*, 3(2), 154-158.
- Hay group. (2011) *Emotional & Social Competence Inventory (ESCI): A User Guide for Accredited Practitioners*. Boston: McClelland Center for Research and Innovation, Hay Group.

- Higgs, M., & Dulewicz, V. (2014). Antecedents of well-being: A study to examine the extent to which personality and emotional intelligence contribute to well-being. *The International Journal of Human Resource Management*, 25(5), 718-735.
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *Journal of Applied Psychology*, 95(1), 54-78.
- Landy, F. J. (2005). Some historical and scientific issues related to research on emotional intelligence. *Journal of Organizational Behavior*, 26(4), 411-424.
- Lopes, P. N., Salovey, P., & Straus, R. (2003). Emotional intelligence, personality, and the perceived quality of social relationships. *Personality and Individual Differences*, 35(3), 641-658.
- Mayer, J. D. (2006). A new field guide to emotional intelligence. In J. Ciarrochi, J. P. Forgas, & J. D. Mayer (Eds.), *Emotional Intelligence in Everyday Life* (pp. 3-26). New York: Psychology Press.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) User's Manual*. Toronto, Ontario, Canada: Multi-Health Systems.
- Mayer, J. D. & Salovey, P. (1997). "What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Educational Implications* (pp. 3-31). New York: Basic Books.
- Multi-Health Systems Inc. (2011). *Emotional Quotient Inventory 2.0: User's Handbook*. Toronto: Multi-Health System In.
- Neubauer, A. C., & Freudenthaler, H. H. (2005). Models of emotional intelligence. In R. Schulze & R. D. Roberts (Eds.), *Emotional Intelligence: An International Handbook* (pp. 31-50). Ashland, OH: Hogrefe & Huber Publishers.
- O'Boyle, E. H., Humphrey, R. H., Pollack, J. M., Hawver, T. H., & Story, P. A. (2011). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior*, 32(5), 788-818.
- Petrides, K. V. (2009). *Technical manual for the Trait Emotional Intelligence Questionnaires (TEIQue)*. London, England: London Psychometric Laboratory.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, 15(6), 425-448.
- Petrides, K. V., & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*, 17(1), 39-57.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98(2), 273-289.
- Rosete, D., & Ciarrochi, J. (2005). Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership & Organization Development Journal*, 26(5), 388-399.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211.
- Singh, M., & Woods, S. A. (2008). Predicting general well-being from emotional intelligence and three broad personality traits. *Journal of Applied Social Psychology*, 38(3), 635-646.
- Stein, S. J., & Deonarine, J. M. (2015). Current Concepts in the Assessment of Emotional

- Intelligence. In S. Goldstein, D. Princiotta, & J. A. Naglieri (Eds.). *Handbook of Intelligence* (pp. 381-402). New York: Springer Heidelberg Dordrecht.
- Sternberg, R. J. (1997). The concept of intelligence and its role in lifelong learning and success. *American Psychologist, 52*(10), 1030-1037.
- Sternberg, R. J. (1999). Intelligence as developing expertise. *Contemporary Educational Psychology, 24*, 359-375.
- Sternberg, R. J. (2004). Culture and intelligence. *American Psychologist, 59*(5), 325-338.
- Thorndike, E. L. (1920). Intelligence and Its Uses, *Harper's Magazine, 140*, 227-235.
- Vakola, M., Tsaousis, I., & Nikolaou, I. (2004). The role of emotional intelligence and personality variables on attitudes toward organizational change. *Journal of Managerial Psychology, 19*(2), 88-110.
- Van der Zee, K., Thijs, M., & Schakel, L. (2002). The relationship of emotional intelligence with academic intelligence and the Big Five. *European Journal of Personality, 16*(2), 103-125.
- Wechsler, D. (1943). Non-intellective factors in general intelligence. *The Journal of Abnormal and Social Psychology, 1*, 101-103.

