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Emotional Intelligence

A Brief Overview

Highlights

EMOTIONAL INTELLIGENCE

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To my wife Teresa and children for their love and support

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Introduction - Emotional Intelligence

The concept of Emotional Intelligence is not a novel idea. A review of the literature reveals evidence of the construct in the writings of Edward Thorndike, (Thorndike, 1920), David Wechsler, (Fancher, 1985), Reuven Bar-On (Bar-on & Parker, 2000); Howard Gardner (Gardner, 2006); Peter Salovey, John Mayer (Salovey & Mayer, 1990), Daniel Goleman (Goleman, 1995) and others. A Google search of "emotional intelligence" renders 37 million hits. In the last two decades, the idea of emotional intelligence has become so popular that the construct is now highly sought out by business executives and managers of fortune 500 companies, bankers, educators, administrators, counselors, attorneys, engineers, mental health professionals, physicians, nurses, policemen, firefighters, athletes, dental hygienists, prison wardens, civil servants, clergy, and politicians to name a few.

Not only has emotional intelligence been popular to multiple professions and fields of knowledge, its influence has also been linked to the **improvement of** leadership effectiveness, general success in life, self-efficacy, mental efficiency, health, well-being, attitude towards life, social competence, college readiness, academic achievement, school and organizational climate, personal and work relationships, team cohesiveness, financial performance, challenging social situations, job satisfaction, sales performance, marital satisfaction, and relational trust among other things. High levels of Emotional Intelligence have promised an **increase of** sales, resilience, grade point average, deep learning and has also vowed to **reduce** violent behavior, fear, anxiety, smoking, drinking, gambling, drug abuse, self-destruction, delinquency, school and work absenteeism, burn out and mental health problems. In this review, I will provide a brief history of the concept of emotional intelligence, introduce various models in use and show how they are related to each other.

BRIEF HISTORY OF EMOTIONAL INTELLIGENCE (EI)

Alfred Binet and the Intelligence Quotient

The story of emotional intelligence would not be complete without a brief discussion of the intelligence quotient (IQ). It was in La Belle Epoque, Paris, in 1900 that the psychologist Alfred Binet was first approached by a group of parents who expressed a need to develop a test that would determine which children would require special attention in the primary schools of Paris. Binet devised a test called the "intelligence test." The measure was called the IQ, for intelligence quotient. It measured intelligence by taking the mental age of the child and dividing it by chronological age and then multiplying it by 100 (Fancher, 1985). The IQ test received much attention in Britain and Germany before it made its way to the United States. It was used during World War I in order to test recruits (Gardner, 1987).   The IQ test was advertised as a scientific tool that could quantify intelligence, but was considered only one-dimensional.   IQ came to be known as the intellectual raw material for success (Elias, 2003). Binet, as well as most of his contemporaries, took the position that intelligence was a singular construct strongly influenced by heredity and was susceptible to measurement by a brief intervention. (Gardner, 2006). There was however, a minority of researchers that believed that human beings possessed multiple intelligences that are independent of each other and merit separate assessments. Among those researchers who embraced the pluralization of intelligence were Charles Spearman (1904), L.L. Thurston (1938) and J.P. Guilford (1967) (Carroll, 1993).

Edward and Robert Thorndike

Another researcher who was also believed to share the sentiment of the minority and viewed intelligence as a plural construct was Edward Thorndike.   During the 1920s, social intelligence was considered a component of IQ. However, Edward Thorndike suggested that social and cognitive intelligence be treated as separate competencies (Goleman, 1995). This marked the beginnings of emotional intelligence as a science (Bar-on & Parker, 2000). Thorndike believed that social intelligence was both distinct from academic abilities and a key part of what makes people do well in the practicalities of life (Thorndike, 1913). He divided intelligent activity into three types:

1.   Social Intelligence

2.   Concrete Intelligence

3.   Abstract Intelligence

Thorndike did not use the term Emotional Intelligence, nevertheless, he discussed the construct within the context of social intelligence. He defined social intelligence as "the ability to perceive one's own and other's internal states, motives, and behaviors, and to respond to them optimally on the basis of that information (McCarthy, 2001).   He concluded from his findings that individuals differ in their ability to understand other people and act wisely in human relations. He defined this specific and different form of intelligence as 'the ability to understand and manage people', which could also be directed inward to form the ability to understand and manage oneself (Thorndike and Stein, 1937).

Although, Thorndike is credited for laying a foundation for Emotional Intelligence, there are also critics that disagree and suggest that Thorndike does not develop his ideas sufficiently to promote the concept (Landy & Conte, 2004). Thorndike's full biography counts up to over 500

titles of which over 50 are books (Woodworth, 1952). Landy (2005) points out that Thorndike's

500 titles only touch on the idea of emotional intelligence once (Harper's Magazine). Landy

states that Thorndike never did any serious research on the construct after making mention of it

only once. Landy claims that there are only 10 published studies related to the emotional

intelligence construct written between the years 1920 and 1937 (Landy, 2005). However, in the

late 1930's, Robert Thorndike, Edward Thorndike's son, also wrote about "social intelligence."

He also used the construct of emotional intelligence within the context of social intelligence

which he defined as "the ability to understand and manage men and women, boys and girls - to

act wisely in human relations." Robert Thorndike also argued that social and cognitive

intelligence should be treated as separate competencies (Thorndike, R., 1936).

David Weschsler and Non-intellective Factors

During the decade of the 1940's, David Weschsler recognized non-cognitive features of

intelligence as necessary for adaptation and achievement. He suggested that intelligence could

be defined as "the aggregate or global capacity of the individual to act purposefully, to think

rationally, and to deal effectively with his environment." He presented the idea of "non-

intellective" and "intellective" factors and proposed that the "non-intellective" factors, such as

effective, personal, and social factors, are necessary for predicting a person's aptitude for

accomplishment (Kaufhold, 2005). Weschsler's contribution to emotional intelligence comes

when he recommends that affective components of intelligence may be essential to success in

life. Previous to Weschsler's recommendation, IQ was viewed as the sole predictor of success in

life. Again, Weschsler detached intelligence from its traditional view.

Howard Gardner and His View of Multiple Intelligences

In his book Frames of Mind (1983), Gardner also disputed the idea of one all-encompassing intelligence quotient. He suggested that many types of intelligence are essential for success in life and that intelligence is broader than the academic verbal and mathematical traditional view (Goleman, 1995). Gardner pointed out that as much new knowledge about the nervous system has been accumulated in the last 25 years as in the preceding 500 years. This was due to the contribution made by technologies that now make possible not only the exponential growth of neuroscience, but the ability to study the brain in vivo (Gardner, 2006). According to Gardner, there has been an explosion of knowledge which must be considered when dealing with intelligence. Gardner proposed a multifaceted view of intelligence. He begins with a discussion concerning what constitutes intelligence. The traditional view of intelligence had been defined operationally as the ability to answer items on tests of intelligence. Referring to IQ, Gardner states, "The inference from the test scores to some underlying ability is supported by statistical techniques. These techniques compare responses of subjects at different ages; the apparent correlation of these tests scores across ages and across different tests corroborates the notion that the general faculty of intelligence, called g in short, does not change much with age, training, or experience. It is an inborn attribute or faculty of the individual" (Gardner, 2004).

Gardner's view differs from the traditional view in that he pluralizes the concept. Gardner argued that intelligence is multifaceted and expresses itself in varied forms. Intelligence, according to Gardner, entails the ability to solve problems or fashion products that are of consequence in a particular cultural setting or community. Gardner proposed the following intelligences:

1) Musical Intelligence

2) Bodily-Kinesthetic Intelligence

3) Logical-Mathematical Intelligence

4) Linguistic Intelligence

5) Spatial Intelligence

6) Interpersonal Intelligence

7) Intrapersonal Intelligence

8) Naturalist Intelligence

9) Existential Intelligence

He added an eighth intelligence, namely the naturalist intelligence and suggested the possibility

of a ninth one – existential intelligence (Gardner, 2003).

The two forms of intelligence relevant to emotional intelligence are Gardner's

interpersonal and intrapersonal intelligence.   (See Table 1) Gardner points out that

interpersonal intelligence builds on a core capacity to notice distinctions among others. This

includes contrasts in moods, temperaments, motivations and intentions. This intelligence allows

one to read the intention and desires of others. **Intrapersonal intelligence**, on the other hand,

allows one to gain knowledge of the internal aspects of oneself: access to one's own feeling,

one's range of emotions, the capacity to make discriminations among these emotions and

eventually to label them and to draw on them as a means of understanding and guiding one's

own behavior. **In sum, these two intelligences allow one to understand and work with**

others and oneself (Gardner, 2006). Although Gardner does not specifically use the term

emotional intelligence, his views concerning interpersonal and intrapersonal intelligence describe

many of the basic components associated with emotional intelligence (Robertson, 2007).

TABLE 1

INTERPERSONAL INTELLIGENCE

(People-Smart)

ABILITY TO:

Understand and interact effectively with others

Communicate effectively verbally and nonverbally

To note distinctions among others

Be sensitive to the moods and temperaments of others

To entertain multiple perspectives

INTRA-PERSONAL INTELLIGENCE

(Self-Smart)

ABILITY TO:

Understand oneself, one's thoughts and feelings

Understand how to use self-knowledge in planning and directing one's life

Appreciate one's self and the human condition

Reuven Bar-On: A Trait-Based Model of Emotional Intelligence

In 1988, the psychologist, Reuven Bar-on, introduced his five-dimensional trait-based scale model of non-cognitive intelligences. The model included intrapersonal skills, interpersonal skills, adaptability, stress management and general mood (McCarthy, 2001). He defined emotional intelligence as "a multifactorial array of interrelated emotional, personal, and social abilities that help people cope with daily demands" (Bar-on, 1997). Bar-on's concept of emotional intelligence was based upon his research as a clinical psychologist. His studies sought to identify those factors that contribute to social success and positive emotional health. Bar-on (2000) focused on emotional related abilities and competencies that determine one's potential for learning practical skills, as well as for self-realization (Matthews, 2007). Emotional intelligence is viewed as a multidimensional concept that represents a set of core abilities for identifying, processing, and managing emotions. It enables individuals to deal with daily demands and be more effective in their personal and social lives (Bar-On, 2000; Kristjansson, 2006).

Bar-on's Model of emotional intelligence includes 5 areas and 15 factors.

The **first area** is **INTRA-PERSONAL** and deals with the ability to know and manage oneself. It includes the following five scales:

1. **Self-Awareness** is defined as the ability to recognize personal feelings, their source and how it impacts others.

2. **Assertiveness** is defined as the ability to express thoughts and feelings, stand ones ground and defend a position.

3. **Independence** is defined as the ability to be self-directed and self-controlled and to stand on one's own feet.

4. **Self-Regard** is defined as the ability to recognize strengths and weakness and feel good about oneself despite weaknesses.

5. **Self-Actualization** is defined as the ability to realize personal potential and feel comfortable with achievements at work or one's personal life.

The **second area** is **INTER-PERSONAL** and deals with the ability to get along with others. It includes the following three scales:

1. **Empathy** is defined as the ability to understand what others might be feeling and thinking. It includes the ability to view the world through another person's eyes.

2. **Social Responsibility** is defined as the ability to be a cooperative and contributing member of your social group.

3. **Interpersonal Relationships** is defined as the ability to forge and maintain relationships that are mutually beneficial and marked by give-and-take and a sense of emotional closeness.

The **third area** is **ADAPTABILITY** and deals with the ability to be flexible and realistic, and to solve a range of problems as they arise. It includes the following three scales:

1. **Reality Testing** is defined as the ability to see things as they are, rather than the way one wishes or fears they might be.

2. **Flexibility** is defined as the ability to adjust ones feelings, thoughts, and actions to changing conditions.

3. **Problem-Solving** is defined as the ability to define problems and then move to generate and implement effective, appropriate solutions.

The **fourth area** is **STRESS MANAGEMENT** and deals with the ability to tolerate stress and control impulses. It includes two scales:

1. **Stress Tolerance** is defined as the ability to remain calm and focused, to constructively withstand adverse events and conflicting emotions without falling apart.

2. **Impulse Control** is defined as the ability to resist or delay a temptation to act.

The **fifth area** is **GENERAL MOOD** and deals with the ability to be positive. It includes two scales:

1.   **Optimism** is defined as the ability to maintain a realistically positive attitude, particularly in the face of adversity.

2.   **Happiness** is defined as the ability to feel satisfied with life, to enjoy yourself and others, and to experience zest and enthusiasm in a range of activities (Bar- On, 2004). See Table two (2) for a chart of Reuven Baron's Model of Emotional Intelligence.

Reuven Baron's Model of Emotional Intelligence - TABLE 2

Intrapersonal	Interpersonal	Stress Management	Adaptability	General Mood Scale
Self-Regard	Empathy	Stress Tolerance	Reality Testing	Optimism
Emotional Self-awareness	Social Responsibility	Impulse Control	Flexibility	Happiness
Assertiveness	Interpersonal Relationships		Problem Solving	
Independence				
Self-Actualization				

Bar-On, 2004

Assessement: Bar-On Model: Emotional Quotient Inventory (EQ-i)

There are several instruments used by Bar-On to measure emotional intelligence. His most popular instrument is the Emotional Quotient Inventory. (EQ-I) It measures emotional intelligence by using a self-report questionnaire. The questionnaire is comprised of 133 items that are related to a five-point scale. The test takes about 40-45 minutes to complete. The overall score is tallied based upon five composite scales. The instrument scales are divided into 12 subscales and three facilitator scales (Bar-On, 1997). According to Cartwright & Pappas, the scales have high internal consistency reliabilities ranging from 0.69 to 0.86 and test-retest reliabilities ranging from 0.75 to 0.85 (Cartwright & Pappas, 2008). Even though Bar-On wrote about emotional intelligence and developed an instrument to measure it, he did not coin the phrase. That distinction belongs to Salovey and Mayer who revived the idea (Bryant, 2000).

Peter Salovey and John Mayer: An Ability Model of Emotional Intelligence

In 1990, psychologists Peter Salovey and John Mayer coined the term emotional intelligence (Moore, 2007) and initially proposed a definition of Emotional Intelligence as "a mental ability involving the relationship between emotion and cognition."   Salovey and Mayer did not view IQ and Emotional Intelligence as opposing competencies, but rather as separate ones. They emphasized the cooperative combination of intelligence and emotion (Ciarrochi, Chan, & Caputi, 2000). In 1997, their initial model of the Emotional Intelligence included five domains (Richburg & Fletcher, 2002).

The **first** domain focuses on knowing one's emotions. This entails the ability to recognize a feeling as it happens. The **second** domain focuses on managing ones emotions. This entails the ability to handle feelings appropriately. The **third** domain focuses on motivating oneself. This entails the ability to control the emotional self, delay gratification and stifle impulses. The **fourth**

domain focuses on recognizing emotions in others. This entails the ability to show empathy. The **fifth** domain focuses on handling emotions. This entails the ability to manage emotions in others.

In 2000, Mayer and Salovey reconfigured and refined their model and introduced a four-branch model. In the new configuration, the abilities and skills of emotional intelligence were divided into the following branches.

1. Branch One: The ability to perceive emotions
2. Branch Two: The ability to use emotions to facilitate thought
3. Branch Three: The ability to understand emotions
4. Branch Four: The ability to manage emotions

Assessement: The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)

Salovey, Mayer and Caruso also developed an assessment that included eight tasks: two tasks measure each of four branches of emotional intelligence. The intelligence test measures performance based upon a number of correct answers. It assesses how well emotional-laden problems are solved across four branches and includes the perception, use, understanding and management of emotions. It consists of 141 items and is scored with both consensus and expert scoring methods (Brackett, 2006). The four branches of the measure are described below.

Branch one reflects on the perception of emotions and the ability to recognize emotions in facial and postural expressions. It deals with nonverbal perceptions and expressions in the face, voice and other channels (Norwicki & Mitchell, 1998; Scherer, 2001). This branch is measured by having participants identify the emotions in pictures of faces, landscapes and designs (Mayer, Salovey & Caruso, 2004).

Branch two entails the ability of the emotions to assist thinking. It is measured by having participants compare emotions to other tactile and sensory stimuli. Participants are also asked to identify the emotions that would best facilitate a particular type of thinking.

Branch three reflects on the ability to evaluate emotions, value their possible trends over time and understand their outcomes (Lane, 1990). It is measured by exposing a participant with changes that test the ability to know under what circumstances emotional intensity lessens or increase and how one emotional state changes into another. An example of this might be how frustration changes into aggression. This branch is also measured by asking the participant to identify emotions that are involved in more complex affective states (Mayer, Salovey & Caruso, 2004).

Branch four focuses on the management of emotions. Emotions are directed within the context of goals, self-knowledge, and social awareness. This branch is measured by presenting a participant with hypothetical scenarios and then asking how they would maintain their feelings or how they would change. Participants are also asked how they would manage another person's emotions in order to acquire a desired outcome (Parrott, 2002; Gross, 1998). (See Table 3 for Model)

Table 3

PERCEPTION, APPRAISAL, AND EXPESSION OF EMOTIONS

ABILITY TO

Identify emotion in one's physical and psychological states

Identify emotions in others

Express emotions accurately and express needs related to those feelings

Discriminate between accurate and inaccurate, or honest and dishonest, expression of feelings

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EMOTIONAL FACILITATION OF THINKING

ABILITY TO

Redirect and prioritize one's thinking based on feelings associated with objects, events and other people

Generate or emulate vivid emotions to facilitate judgments and memories concerning points of view

Captialize on mood swings to take multiple points of view
Integrate these mood-induced perspectives

Use emotional states to facilitate problem solving and creativity

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UNDERSTANDING AND ANALYZING EMOTIONAL INFORMATION, EMPLOYING EMOTIONAL KNOWLEDGE

ABILITY TO

Understand how different emotions are related

Perceiving the causes and consequences of feelings

Interpret complex feelings, such as emotional blends and contradictory feeling states

Understanding and predict likely transitions between emotions

REGULATION OF EMOTIONS

ABILITY TO

Be open to feelings, both pleasant and unpleasant

Monitor and reflect on feelings

Engage, prolong or detach from an emotional state

Manage emotions in oneself and others

Daniel Goleman: A Mixed Model of Emotional Intelligence

In 1995, Daniel Goleman published his best-selling book entitled "Emotional Intelligence." If Salovey and Mayer coined the term emotional intelligence, it was Goleman that made the construct popular. Goleman introduced Emotional Intelligence as a socio-emotional approach that included abilities as well as a series of personality traits. He recommended a type of social intelligence that was based on neuroscience and psychological theories, which included both rational and emotional intelligence (Bryant, 2000). Goleman sought to integrate the head and the heart. (Cobb & Mayer, 2000) His model of emotional intelligence consisted of the following four clusters:

1.   Self-awareness and self-control

2.   Motivation and persistence

3.   Empathy

4.   The ability to form mutually satisfying relationships

Goleman's version of Emotional Intelligence differed from that proposed by both Bar-On and Salovey. Bar-On emphasized Emotional Intelligence as a trait and focused on emotion related abilities and competencies that determine ones potential for learning practical skills and attaining self-actualization. Bar-On used his model to determine individual health and well-being (Bar-On, 2000; Matthews, 2007). Salovey & Mayer promoted the construct as an ability and argued that Emotional Intelligence involved perceiving and reasoning abstractly with information that emerged from feelings (Mayer, Caruso, & Salovey, 1999). They drew their findings from nonverbal perception, artificial intelligence and brain research. They have used their model primarily in the field of psychology and research. Goleman, however, introduced a mixed model by suggesting that Emotional Intelligence is an ability that includes social

competencies, traits and behaviors (Cobbs & Mayer, 2000). Goleman's model has been used

primarily in a business setting. (See Table 4 for Comparison of Emotional Intelligence Models)

Table 4

Emotional Intelligence: Three Models		
Bar-On	Salovey & Mayer	Goleman
Definition	Definition	Definition
The capacity to process information and reason with emotions	A multifactorial array of interrelated emotional, personal, and social abilities that help people cope with daily demands	A cluster of personal and social competencies
5 Traits	4 Branches	5 Clusters
Intrapersonal EQ	Ability to Percieve	Knowing One's Emotions
Interpersonal EQ	Ability to use/facilitate emotions	Managing Emotions
Stress Management EQ	Ability to understand emotions	Motivating Oneself
Adaptability EQ	Ability to Manage Emotions	Recognizing Emotions is Others
General Mood Scale EQ		Handling Relationships
Model: Trait-based	Model: Ability-based	Model: Mixed

Assessment: The Emotional Competence Inventory (ECI-2)

Goleman, Boyatzis, and McKee have also developed a test to measure emotional

intelligence. The measure is called Emotional Competency Inventory (ECI) and included 18

competencies displayed in four clusters (Golemen, 2002). The inventory is a 360-degree self-

report trait-based measure which includes 72 items. The test takes approximately 30 minutes to

complete. The reliability coefficients range from 0.61 to 0.86 for the self-report version and

from 0.79 to 0.94 for the other raters' form. The clusters measures self-awareness, self-

management, social-awareness and social skills.

Conclusion

The historical path of emotional intelligence outlined in this brief review is by no means

comprehensive, but it does provide the reader with an overview regarding the roots of the

concept. The journey began with Alfred Binet and the creation of his IQ test which measured

intelligence. Binet viewed intelligence as a single construct. Edward Thorndike initiated a

movement away from intelligence as a single construct and introduced three types of intelligent

activity. David Weschler followed suit by stating that intelligence includes intellective and non-

intellective factors. Howard Gardner expanded the idea of intelligence by pluralizing the

construct and introducing multiple intelligences. Reuven Bar-On built on Gardner's constructs of

Interpersonal and Intrapersonal intelligence and developed a trait-based model of Emotional

Intelligence. Salovey and Mayer coined the phrase Emotional Intelligence and introduce their

ability-based model. Daniel Goleman made the construct wildly popular and introduced a mixed

trait-ability-based model of Emotional Intelligence (See Table 5). Even though the Emotional

Intelligence construct takes many twists and turns, the various models share some common

features. Every model discussed in this review agrees that Emotional Intelligence is a separate

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intelligence. Every model includes a personal and a social component. The personal component
deals with self-awareness and self-management. The social component deals with social
awareness and social (relationship) management (Bradberry & Greaves, 2009). For a chart
regarding the evolution of Emotional Intelligence see Table 5 below.

The Evolution of Emotional Intelligence
BINET Intelligence is a single construct
THORNDIKE There are three types of intelligent activity Social Concrete Abstract
WESCHLER Intelligence includes two factors Intellective Non-Intellective
GARDNER Intelligence is defined by multiple constructs Laid a Foundation for Emotional Intelligence Intrapersonal Intelligence Interpersonal Intelligence
BAR-ON Recommended that Emotional Intelligence is Trait-based Emotional Intelligence Includes 5 Dimensions
SALOVEY & MAYER Recommended that Emotional Intelligence is Ability-based Emotional Intelligence Includes 4 Clusters

GOLEMAN Emotional Intelligence is both Trait and Ability-based
COMMON FEATURES OF ALL MODELS Emotional Intelligence is a separate Intelligence Emotional Intelligence includes two components: **Personal Component** (Self-Awareness & Self-Management) **Social Component** (Social-Awareness & Social Management)
TABLE 5

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OTHER BOOKS AND QUICK READS

BOOKS

The Narratives of Christ (Gospel)
Is God Speaking? (Minor Prophets)
God's Life-Changing Curriculum (An Agent of Change)
Worship (In the New Testament)

QUICK-READS

The Authority of the Believer
Transforming Power
Redeemed from the Curse (Entitled to the Blessing)
Emotional Intelligence (Models: A Brief Review)
Why He Came
The Kingdom (13 Parables)
Divine Transition
Divine Expectation
Unclaimed Wealth
Times of Refreshing
Unlocking God's Diary
The House of James
The Will of God (In James)
The Pure Gospel (Galatians)
Paul's Vision of God (Ephesians)
The Journey

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