Emotional Intelligence: A Literature Review

J. Fuller Blair
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Emotional Intelligence: A Literature Review

Abstract
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Emotional Intelligence
A Literature Review

J. Fuller Blair

St. John Fisher College
Human Resource Development Program

May 5, 2008
Dedication

To all the physicians, pharmacists, social workers, case managers, and the passengers on the “Lunatic Express” of the Strong Ties Community Support Program, I express to you my unyielding gratitude.

If it were not for Leslie Tomek, M.D., Alison Deem, M.D., Ian Crosby, MSW, Suzanne Bader, MS, LMHC, Renee Goselin, MSW, and Lisa Velte, SCM, I would not be here today. Each one, in their own way, helped me to overcome personal demons that I never thought would go away.

It is my sincere hope that I make them proud and worthy of all the hard work, time, effort, patience, and, yes, even love they have shown me. I never felt like I was “just a case number” to them, and for that they have my heartfelt thanks.
Acknowledgements

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To the assorted members of the various Cohorts to whom I have belonged... words cannot express my gratitude. You have all, in your own way, encouraged, poked, prodded and supported me on this wonderfully crazy journey.

Lastly, but not least of all, I could not have written this without the love and devotion of my partner, Dominic, our son Keirick, his family, their friends, parishioners of St. Helen’s Church in Gates, New York and all those who have given of their time and effort to support me obtain my Master’s degree.

Sometimes families linked by blood do not enrich our lives as much as families who have our hearts... Dominic, I love you.
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Abstract

To complete a literature review using Emotional Intelligence (EI) concepts, this researcher reviewed a broad selection of research and writings on Emotional Intelligence (EI) and Intelligence Quotient (IQ) in the workplace. Literature was explored that might support the application of EI and related concepts to the improvement of workers' emotional/personality, cognitive/academic, moral/ethical, and social/civic development. A variety of activities using EI concepts to promote workplace goals have been proposed.
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Emotional Intelligence: A Literature Review

Chapter One

Overview

As modern workplaces continue the search for factors that lead to increased competitiveness and success, “EQ” has emerged as a concept worthy of consideration. It is viewed by some as the “magic bullet” leading average managers to superb results; and some highly intelligent managers to career disaster. In both cases, “people skills,” “social intelligence,” or what has come to be known as EQ or EI may be at play. Hence, study in this area may be useful.

Problem Statement

The topic of Emotional Intelligence has been well documented; however, very few literature reviews exist on the subject. Since EI and Intelligence Quotients have long been the subjects of psychological study, they have only recently emerged as topics of HR/HRD study. There have been speculative articles in various popular magazines, but not much empirical research has been conducted. Hence, there is a need for this literature review.

Purpose of Study

The purpose of this study is to review the origins and development of the concept of EI; how it has been measured; and finally, how it affects managerial and organization effectiveness. In essence, this study briefly summarizes what is known about EI, and what today’s workplaces can gain from both understanding, and applying EI.
Research Questions

This literature review seeks to answer the following research questions:

1.) What is the history of Emotional Intelligence in the workplace?
2.) How has Emotional Intelligence been effectively measured?
3.) Emotional Intelligence vs. Intelligence Quotient – what are the differences? How does Emotional Quotient differ from Intelligence Quotient in affecting workplace performance?
4.) What does this mean for today’s HRD practitioners, managers, and organizations?

** Please Note: Questions 1-3 are covered in Chapter Two of this thesis and Question 4 is addressed in Chapter Three.**

Significance of Study

Organizations will benefit from this study because they will have a better understanding of the importance of EQ and EI, and how these factors affect leadership success, customer/client relations, and ultimately organizational performance.

Managers will benefit from this study as they gain greater insight into how to be effective with their teams, peers, and how to manage challenges more successfully. They may also gain some understanding as to the key factors involved in becoming more promotable and more effective influencers of people.

HRD Professionals can benefit from this study as this review provides a succinct summary of the history and impact of EQ/EI and will help them to know better how to apply these concepts for organizational success.
**Definition of Key Terms**

The following terms are defined for the reader:

**Emotional Intelligence (EI):** Often measured as an Emotional Intelligence Quotient (EQ), describes an ability, capacity, or skill to perceive, assess, and manage the emotions of one’s self, of others, and of groups (Wikipedia, 2008).

**Intelligence Quotient (IQ):** A score derived from one of several different standardized tests attempting to measure intelligence (Wikipedia, 2008).

**Intelligence:** An umbrella term used to describe a property of the mind that encompasses many related abilities, such as the capacities to reason, to plan, to solve problems, to think abstractly, to comprehend ideas, to use language, and to learn (Wikipedia, 2008).

**Organization of the Thesis**

This project is organized in the form of a literature review. In Chapter One, the project overview, problem statement, purpose and significance of the study, and key research questions are outlined. In Chapter Two, an extensive literature review on the topic of Emotional Intelligence, Emotional Quotient, Intelligence, and Intelligence Quotient is provided. Finally, in Chapter Three, discussion, recommendations, and conclusions for HRD practice and future research are addressed.
Chapter Two

What is the History of Emotional Intelligence

It makes sense that in order to measure a construct, you would have to clearly define what you are measuring first. Defining psychological constructs in a meaningful, succinct way, however, is difficult due to several issues. First, a construct by definition is a theoretical, intangible quality or trait in which individuals differ (Gregory, 2007). A construct, then, exists only in theory and one cannot observe the construct itself, but only its effects. This ambiguous quality leaves it open to multiple interpretations and definitions. The construct of Love illustrates the point. Individuals may mean very different things when using the word love, but if their meanings differ significantly, their communication on the matter as well as their ability to measure its presence is significantly hampered. So it is with other constructs; if a consensus definition cannot be developed, communication about and measurement of the construct is significantly limited. Second, because the theoretical and intangible construct cannot be measured directly, observable behaviors that are theoretically associated with the construct must be used to measure the construct. To continue the illustration of the construct of love, there is no direct measure of love, but we can measure the actions associated with it, the individual’s tone of voice, facial expressions, and actions toward another, as well as their own self-report of their love. In this respect it is understandable that researchers may differ in which observable related qualities they may think are the best ways of measuring the construct.

Within the area of Emotional Intelligence, we find much of this disagreement and continued work on refining the definition and even the name of the construct. Regarding varying definitions of EI, Matthews, Roberts, and Zeidner (2004) opined that the “range and scope of definitions that currently exist within the literature make inevitable comparisons between the
science of EI and the allegory underlying the Tower of Babel” (p. 180). Definitions vary from the ability to adapt to challenging situations, to the personality characteristics of integrity and character, to a cognitive ability for processing and effectively using emotional information. Bar-On, author of the EQ-i has defined EI as “An array of non-cognitive capabilities, competencies, and skills that influence one’s ability to succeed in coping with environmental demands and pressures” (Bar-On, 1997, p. 14). Goleman, one of the authors of the Emotional Competency Inventory (ECI), a 360 feedback tool, has defined EI even more broadly as basically all positive qualities that are not IQ, and further stated “There is an old-fashioned word for the body of skills that Emotional Intelligence represents: character” (Goleman, 1995, p. 34). As a result of the differing definitions, it is best to interpret the measures separately as they most likely measure different constructs. This view is especially supported by the fact that several of the EI measures do not correlate significantly with each other, as would be expected of measures of the same construct. The specific definitions, as best as can be gathered from the research on each measure will be presented within the section on each measure.

Use of the term intelligence to name the construct appears to have led to a significant amount of the confusion on the topic. This confusion has, in many cases, led the research away from the appropriate question, “Is EI a viable construct?” and focused it more on the question, “Is EI truly a type of intelligence?” Intelligence, by definition, is an ability or skill that can be traditionally measured by performance on tasks that require the specified skills. It is also important that a correct and incorrect response to each performance task exist, such that performance can be measured objectively. It is questionable whether any of the measures define EI in this way, though the Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT) is the only one of the major measures that even attempts to measure it in a manner consistent with
traditional intelligence testing (Matthews et al., 2004). Several authors have begun to use the term emotional competence, a phrase that has been common in the general literature for several decades, especially in the child development literature. Given the distraction and backlash that has resulted from the use of the phrase intelligence, it may be more appropriate to use the term Emotional Competence, especially for those measures that use self and other report methods rather than a performance based test.

It is recommended that measures of personality be included in these studies. It is well established that personality measures predict many of the same outcomes as EI is thought to predict. Studies including measures of EI and personality, as well as SAT/ACT scores (as measures of IQ and achievement), would serve to find the best predictors of the variables of interest.

Some abilities are purely cognitive, like IQ or technical expertise. Other abilities integrate thought and feeling and fall within the domain of emotional intelligence, a term that highlights the crucial role of emotion in their performance. All emotional intelligence abilities involve some degree of skill in the affective domain, along with skill in whatever cognitive elements are also at play in each area of ability. This stands in sharp contrast to purely cognitive aspects of intelligence, which, to a large degree, computers can be programmed to execute about as well as a person can. Peter Salovey and John Mayer first proposed their theory of emotional intelligence (EI) in 1990. Over the intervening decade, theorists have generated several distinctive EI models, including the elaborations by Salovey and Mayer on their own theory. The theory as formulated by Salovey and Mayer (1990; Mayer, Salovey, & Caruso, 2000) framed EI within a model of intelligence. Reuven Bar-On (1988) has placed EI in the context of personality theory, specifically a model of well-being.
All these EI models, however, share a common core of basic concepts. Emotional intelligence, at the most general level, refers to the abilities to recognize and regulate emotions in ourselves and in others. This most economical definition suggests four major EI domains: Self-Awareness, Self-Management, Social Awareness, and Relationship Management. (As theories develop, the terms they use develop too. These four domains are shared by all the main variations of EI theory, though the terms used to refer to them differ.) The domains of Self-Awareness and Self-Management, for example, fall within what Gardner (1983) calls intrapersonal intelligence, and Social Awareness and Relationship Management fit within his definition of interpersonal intelligence. Some make a distinction between emotional intelligence and social intelligence, seeing EI as personal self-management capabilities like impulse control and social intelligence as relationship skills (Bar-On, 2000). The movement in education that seeks to implement curricula that teach EI skills uses the general term social and emotional learning, or SEL (Salovey & Sluyter, 1997).

The EI model seems to be emerging as an influential framework in psychology. The span of psychological fields that are now informed by (and that inform) the EI model ranges from neuroscience to health psychology. Among the areas with the strongest connections to EI are as follows: developmental, educational, clinical and counseling, social, and industrial and organizational psychology. Indeed, instructional segments on EI are now routinely included in many college-level and graduate courses in these subjects.

One main reason for this dissemination seems to be that the concept of emotional intelligence offers a language and framework capable of integrating a wide range of research findings in psychology. Beyond that, EI offers a positive model for psychology. Like other positive models, it has implications for the ways we might tackle many problems of our day – for
prevention activities in physical and mental health care and for effective interventions in schools and communities, businesses, and organizations (Seligman & Csikszentmihalyi, 2000). Our increasing understanding of EI also suggests a promising scientific agenda, one that goes beyond the borders of personality, IQ, and academic achievement to study a broader spectrum of the psychological mechanisms that allow individuals to flourish in their lives, their jobs, and their families and as citizens in their communities.

The EI Model Evolves

A paradigm, wrote Thomas Kuhn, in his landmark work The Structure of Scientific Revolutions (1970), “is an object for further articulation and specification under new or more stringent conditions” (p. 23). He adds that once a model or paradigm has been articulated, the signs of scientific vigor include “the proliferation of competing articulations, the willingness to try anything, the expression of explicit discontent, the recourse to philosophy and to debate over fundamentals” (p. 91). By Kuhn’s criteria, the emotional intelligence paradigm shows signs of having reached a state of scientific maturity.

It has taken decades to reach this point. In the field of psychology the roots of EI theory go back at least to the beginnings of the intelligence testing movement. E. L. Thorndike (1920), professor of educational psychology at Columbia University Teachers College, was one of the first to identify the aspect of EI he called social intelligence. In 1920 he included it in the broad spectrum of capacities that individuals possess in their “varying amounts of different intelligences.” Social intelligence, wrote Thorndike, is “the ability to understand and manage men and women, boys and girls – to act wisely in human relations” (p. 228). It is an ability that “shows itself abundantly in the nursery, on the playground, in barracks and factories and salesrooms, but it eludes the formal standardized conditions of the testing laboratory” (p. 231).
Although Thorndike did once propose a means of evaluating social intelligence in the laboratory – a simple process of matching pictures of emotive faces with descriptions of emotions – he also maintained that because social intelligence manifests in social interaction, “genuine situations with real persons” would be necessary to accurately measure it.

In 1937, Robert Thorndike and Saul Stern reviewed the attempts to measure the social intelligence E. L. Thorndike had discussed, identifying three different areas “adjacent to social intelligence, perhaps related to it, and often confused with it” (p. 275). The first area encompassed primarily an individual’s attitude toward society and its various components: politics, economics, and values such as honesty. The second involved social knowledge: being well versed in sports, contemporary issues, and general “information about society.” This area seemed often fused with the first. The third form of social intelligence was an individual’s degree of social adjustment: introversion and extroversion were measured by individuals’ responses to questionnaires (p. 276). One widely known questionnaire of the time that Thorndike and Stern reviewed was the “George Washington Social Intelligence Test,” developed in 1926. It measured, for example, an individual’s judgment in social situations and in relationship problems; recognition of the “mental state” of a speaker (measured through ability to match the person’s words with the names of emotions), and ability to identify emotional expression (measured through ability to match pictures of faces with the corresponding emotions).

But Thorndike and Stern concluded that the attempts to measure the “ability to deal with people” had more or less failed: “It may be that social intelligence is a complex of several different abilities, or a complex of an enormous number of specific social habits and attitudes,” and they added, “We hope that further investigation, via situation tests, movies, etc., getting
closer to the actual social reaction and further from words, may throw more light on the nature of ability to manage and understand people” (p. 284). The next half century of psychology, dominated as it was by the behaviorist paradigm on one hand, and the IQ testing movement on the other, turned its back on the EI idea. Still, even David Wechsler (1952), as he continued to develop his widely used IQ test, nodded to “affective capacities” as part of the human repertoire of capabilities.

Howard Gardner (1983) had a major hand in resurrecting EI theory in psychology. His influential model of multiple intelligence includes two varieties of personal intelligence, the interpersonal and intrapersonal intelligences. EI, as mentioned earlier, can be seen as elaborating on the role of emotion in these domains. Reuven Bar-On (1988) developed perhaps the first attempt to assess EI in terms of a measure of well-being. In his doctoral dissertation he used the term emotional quotient (“EQ”), long before it gained widespread popularity as a name for emotional intelligence and before Salovey and Mayer had published their first model of emotional intelligence. Bar-On (2000) now defines EI in terms of an array of emotional and social knowledge and abilities that influence our overall ability to effectively cope with environmental demands. This array includes (1) the ability to be aware of, to understand, and to express oneself; (2) the ability to be aware of, to understand, and to relate to others; (3) the ability to deal with strong emotions and control one’s impulses; and (4) the ability to adapt to change and to solve problems of a personal or a social nature. The five main domains in his model are intrapersonal skills, interpersonal skills, adaptability, stress management, and general mood (Bar-On, 1997).

Finally, in 1990, Peter Salovey at Yale and his colleague John Mayer, now at the University of New Hampshire, published the seminal article “Emotional Intelligence,” the most
influential statement of EI theory in its current form. Salovey and Mayer’s original model (1990) identified emotional intelligence as the “ability to monitor one’s own and other’s feelings and emotions, to discriminate among them, and to use this information to guide one’s thinking and action” (p. 189). Citing a need to distinguish emotional intelligence abilities from social traits or talents, Salovey and Mayer evolved a model with a cognitive emphasis. It focused on specific mental aptitudes for recognizing and marshalling emotions (for example, knowing how someone is feeling is a mental aptitude, whereas being outgoing and warm is a behavior). A comprehensive EI model, they argued, must include some measure of “thinking about feeling,” an aptitude lacked by models that focus on simply perceiving and regulating feelings.

Their current model is decidedly cognitive in focus (Mayer & Salovey, 1997). In this model, emotional intelligence comprises four tiers of abilities that range from basic psychological processes to more complex processes integrating emotion and cognition. In the first tier of this “mental ability model” is the complex of skills that allow an individual to perceive, appraise, and express emotions. Abilities here include identifying one’s own and other’s emotions, expressing one’s own emotions, and discriminating the expressions of emotion in others. The second tier abilities involve using emotions to facilitate and prioritize thinking: employing the emotions to aid in judgment, recognizing that mood swings can lead to a consideration of alternative viewpoints, and understanding that a shift in emotional state and perspective can encourage different kinds of problem solving. In the third tier are skills such as labeling and distinguishing between emotions (differentiating liking and loving, for instance), understanding complex mixtures of feelings (such as love and hate), and formulating rules about feelings: for example, that anger often gives way to shame and that loss is usually accompanied by sadness. The fourth tier of the model is the general ability to marshal the emotions in support
of some social goal. In this more complex level of emotional intelligence are the skills that allow individuals to selectively engage in or detach from emotions and to monitor and manage emotions in themselves and in others. Salovey and Mayer's 1997 model is developmental: the complexity of emotional skill grows from the first tier to the fourth; however, all the mental aptitudes they describe fit within the general matrix of self-other recognition or regulation.

**The Increasing Interest in EI**

The EI concept has found remarkably receptive audiences throughout the world. For instance, Amazon.com now lists more than seventy titles on emotional intelligence. Although this wave of interest has, perhaps inevitably, given rise to many questionable claims for EI – particularly in the business realm – that should not detract from the solid science that supports EI or from its implications for psychology. As a theoretical construct, the EI model is very new. Yet in the last few years psychologists have begun the process of establishing validity for measurement tools (Davies, Stankov, & Roberts, 1998).

Despite some detours and dead ends, the EI construct has now passed several validation benchmarks. In terms of formal theory, EI meets traditional criteria for a type of intelligence (Mayer, Caruso, & Salovey, 2000). In the influential framework of multiple intelligences formulated by Howard Gardner (1999), EI fits squarely within the spectrum of personal intelligence, elaborating on the role of emotions in the intrapersonal and interpersonal intelligences. There is now an array of validated instruments for assessing aspects of EI (Bar-On, 2000; Mayer, Salovey, & Caruso, 2000; Boyatzis, Goleman, & Rhee, 2000).

In addition, the EI model is already influential in the business community, unusually so for such a recently proposed theory. Organizations are applying an array of EI-based instruments for predicting on-the-job performance. A strong interest in the professional
applications of the EI concept is apparent in the field of industrial and organizational psychology. The American Society for Training and Development (ASTD), for example, has published a volume describing “best practice” guidelines for helping people in organizations cultivate the EI-based competencies that distinguish outstanding performers from average ones (Cherniss & Adler, 2000). This response also suggests high levels of interest in EI in the business community. Also, there are other signs of considerable interest, for example, the first annual conference on EI and the workplace, sponsored by conference promoter Linkage, Inc., in 1999, was the most heavily enrolled of Linkage’s many professional conferences that year.

The model of EI as a variety of intelligence has a wide range of implications. But this researcher believes that when it comes to applications in the workplace and organizational life, the EI-based theory of performance has more direct implications – and applications – particularly in predicting and developing the hallmarks of outstanding performers in jobs of every kind and at every level. This researcher has noticed in his ongoing job search that many employers are now utilizing personality assessment tools in order to determine a person’s EI during the interviewing process. This is done, presumably, to see whether or not the candidate is a “good fit” for the position they desire. Oftentimes, the candidate is not allowed to know the results of their testing, which, one could argue, is a biased “litmus test” because the testing is done by HR staff and not professional psychologists. Therefore, a candidate may be eliminated because their EI score was misinterpreted or misread.

**Issues in EI Theory**

Arguing from their framework of EI as a theory of intelligence, Mayer, Salovey, and Caruso (2000) make a distinction between EI models that are mixed and those that are pure models, or ability models, focusing exclusively on cognitive aptitudes. Mixed models, they
argue, contain a concoction of abilities, behaviors, and general disposition and fuse personality attributes – such as optimism and persistence – with mental ability. They believe EQ is competency based, comprising a discrete set of abilities that integrate affective and cognitive skills but are distinct from abilities measured by traditional IQ tests. For example, this researcher agrees with Mayer, Salovey, and Caruso’s critique that a “warm and outgoing nature” is not an EI competence. It may be seen as a personality trait; however, it may also be a reflection of a specific set of EI competencies, chiefly those involving the ability to relate positively to others.

Mayer, Salovey, & Caruso’s (2000) model draws upon a psychometric tradition that an intelligence must meet three criteria to be defined as such. The proposed intelligence must be conceptual (that is, it must reflect mental aptitudes rather than behaviors), it must be correlational (that is, it must share similarities with yet remain distinct from other established intelligences), and it must be developmental (that is, the aptitudes that characterize it must increase with an individual’s experience and age). Mayer et al. demonstrate that emotional intelligence meets these criteria.

Arguing from a different perspective, Howard Gardner (1983, 1999) has proposed broadening our notion of intelligence so that it incorporates many significant faculties that have traditionally been beyond its scope. The psychometric tradition invoked by Mayer, Salovey, and Caruso (2000), Gardner argues, is too narrow. The psychometric tradition focuses on intellectual aptitudes that can be measured by standardized tests, but performance on such tests does not necessarily translate into success in school or in life. In expanding the range of significant aptitudes for such success, Gardner (1999) defines an intelligence as “the bio-psychological
potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture” (p. 33–34).

Gardner (1999) thus adds several new items to the standard list of criteria for an intelligence. His criteria suggest further arguments for considering EI a distinct variety of intelligence. For example:

- **Potential for isolation by brain damage, making it separable from other abilities in the functioning of the brain.** Studies, such as Gardner’s, have indicated that trauma to the brain’s emotional circuitry and that circuitry’s connections to the prefrontal areas can have significant consequences for the performance of competencies associated with EI, such as Empathy or Collaboration, yet can leave abilities associated with pure intellect entirely intact.

- **An evolutionary history and evolutionary plausibility.** The limbic structures in the brain that govern emotion integrate with neocortical structures, particularly the prefrontal areas, in producing the instinctual emotional responses that have been essential for our survival throughout human evolution. These prefrontal limbic structures appear to be the underlying circuits for the bulk of the EI competencies.

- **Susceptibility to encoding in a symbol system.** We are able to articulate our feelings and the operations of the core EI abilities.

- **A distinct developmental history, along with a definable set of expert, or end state, performances.** Emotional skills range from the simple (recognizing that you’re upset) to the complex (artfully calming down an upset colleague). Emotional skills tend to develop in children at specific and recognizable stages: for example, there is a point at which young children become able to label emotions and talk about their feelings, and this ability precedes the ability to recognize feelings in others and to soothe them (Saarni, 1997). Experts, such as high
performers in the workplace, exhibit this developmental dimension in their set of learned EI competencies.

**How is Emotional Intelligence Measured?**

There is good reason to expect that EI and IQ make separate and discrete contributions to performance. For one thing, early studies (Mayer 2000; Bar-On 2000) of the correlation between IQ and EI show a range from 0 to .36, depending on the measures used. John Mayer (Mayer 2000), using his own EI measure, reports a zero correlation with fluid intelligence and a .36 correlation with verbal IQ. Reuven Bar-On, using his own measure, finds correlations ranging from .06 to .12 – positive but not significant (Bar-On, 2000). However, the EI concept has been articulated relatively recently, and there has not yet been time to conduct a longitudinal study designed to assess the predictive power of EI relative to IQ in distinguishing workplace performance over the course of a career. If such a study were done, this researcher hypothesizes, IQ would be a much stronger predictor than EI of which jobs or professions people can enter. Because IQ stands as a proxy for the cognitive complexity a person can process, it should predict what technical expertise that person can master. Technical expertise, in turn, represents the major set of threshold competencies that determine whether a person can get and keep a job in a given field. IQ then plays a sorting function in determining what jobs people can hold. However, having enough cognitive intelligence to hold a given job does not by itself predict whether one will be a star performer or rise to management or leadership positions in one’s field.

**IQ Versus EI: The Data**

With regard to work performance, as this researcher has just explained, a prediction is that in distinguishing successful people within a job category or profession, EI will also emerge as a stronger predictor than IQ of who, for instance, will become a star salesperson, team head,
or top-rank leader. The resolution of this issue awaits the appropriate research. The existing data that speak to the relative contribution of EI and IQ to career success are sparse and largely indirect. For example, among the measures taken of eighty graduate students at the University of California-Berkeley in 1950, Feist and Barron (1996) identified measures that in retrospect seemed to reflect EI – for example, measures of emotional balance and interpersonal effectiveness. Feist and Barron report these surrogate measures of EI accounted for 13 percent of variance over and above IQ scores in predicting the students’ career success forty years later, whereas IQ added no variance over and above the EI measures. Although these surrogate measures do appear to fall within the EI domain, they reflect only a slim portion of the EI spectrum.

One of the few longitudinal studies to directly compare the contribution to work performance (as gauged by promotions) of cognitive competencies and EI competencies was done by Dulewicz and Higgs (1998). They reanalyzed data from a seven-year study of the career progress of fifty-eight general managers in the United Kingdom and Ireland, assessing three domains of ability – emotional skill (which they call EQ), intellectual aptitude (IQ), and managerial competency (MQ) that contributes to on-the-job performance. The emotional skill category included abilities like Resilience, Influence, Assertiveness, Integrity, and Leadership. The IQ domain was not assessed by intelligence test scores but by competencies used as surrogate measures, such as Analysis, Judgment, Planning, Creativity, and Risk-Taking. MQ included Supervision, Oral Communication, Business Sense, Self-Management, and Initiative and Independence.

Dulewicz and Higgs (1998) found that their measure of emotional intelligence accounted for 36 percent of the variance in organizational advancement whereas IQ accounted for 27
percent and MQ 16 percent. This suggests that EI contributes slightly more to career advancement than does IQ. However, there are several limitations to this study. One is that the measure of IQ involves surrogates – such as Judgment, Creativity, and Risk-Taking – that have questionable or uncertain relationships to standard measures of intelligence. Another limitation is that some competencies classified in the IQ and MQ domains – such as Self-Management, Initiative, and Risk-Taking – arguably belong in the EQ category. In addition, compared to the generic EI model described in their study, the EQ model fails to reflect the full spectrum of EI, omitting several key competencies, including any measure of Self-Awareness, a cluster of competencies that some research suggests is the cornerstone of emotional intelligence (Boyatzis, Goleman, & Rhee, 2000). For all these reasons, this study seems to underestimate the effect of emotional intelligence on success.

The relative significance of emotional competencies compared to cognitive abilities has also been borne out by several converging analyses using different data sets. In Boyatzis’s 1982 study of more than two thousand supervisors, middle managers, and executives at twelve organizations, all but two of the sixteen abilities setting the star apart from the average performers were emotional competencies. Also, an analysis of job competencies at 286 organizations worldwide by Spencer and Spencer (1993) indicated that eighteen of the twenty-one competencies in their generic model for distinguishing superior from average performers were EI based. However, a more definitive analysis – particularly a multiple regression using such a data set – remains to be done. This researcher believes that when such a study is done, EI-based competencies will have greater power than IQ-based measures in predicting which individuals in a given job pool will be outstanding.
EI versus IQ as a Predictor of Workplace Performance

Does EI predict success more strongly than IQ? In one sense, this question is purely academic: in life, cognitive abilities and emotional intelligence always interplay. But in another sense, it has practical implications for significant workplace decisions. For example, basing the selection of high-level executives solely on their academic intelligence and business expertise and ignoring their emotional intelligence often leads to poor choices that can be disastrous for an organization. Data establishing the relative contribution of EI and IQ to effective performance would be of both theoretical and practical importance – for instance, providing a scientific rationale for making more balanced decisions in hiring and promotions.

The competencies in these models generally fall into one of three domains: technical skills (for example, software programming), purely cognitive abilities (for example, analytical reasoning), and abilities in the EI range (such as customer service or conflict management abilities). These EI-based competencies combine both cognitive and emotional skills, and so are distinguished from purely cognitive abilities like IQ and from technical skills, which have no such emotional component. These competency models reflect the perceived value of EI competencies relative to technical and cognitive abilities and so are highly consequential. They already guide decisions about who is hired, who is put on a fast track for promotion, and where to focus development efforts – particularly for leadership – in many of the largest organizations throughout the world (Spencer & Spencer, 1993).

EI may so strongly outstrip intellect alone in this context because those in the pools that were evaluated had to clear relatively high entry hurdles for IQ and technical competence. For most positions, particularly those at the higher levels of an organization, competencies in technical and cognitive realms are threshold skills, essential requirements for entry into fields
like engineering, law, or the executive management of an organization. Because everyone in a given field has its threshold skills, these basic abilities lose their power as distinguishing competencies, the capabilities that set outstanding performers apart from average.

IQ then mainly predicts what profession an individual can hold a job in – for instance, it takes a certain mental acumen to pass the bar exam or the MCATs. Estimates are that in order to pass the requisite cognitive hurdles such as exams or required coursework or mastery of technical subjects and enter a profession like law, engineering, or senior management, individuals need an IQ in the 110 to 120 range (Spencer & Spencer, 1993). That means that once one is in the pool of people in a profession, one competes with people who are also at the high end of the bell curve for IQ. This is why, even though IQ is a strong predictor of success among the general population, its predictive power for outstanding performance weakens greatly once the individuals being compared narrow to a pool of people in a given job in an organization, particularly at its higher levels.

In contrast, there is less systematic selection pressure for emotional intelligence along the way to entering the ranks of such professions. Of course some minimal level of EI is needed to be successful in school and to enter a profession, but because there is no specific EI hurdle one must clear to enter a profession, there is a much wider range of EI abilities among those one competes with in one’s field. For that reason, once people are in a given job, role, or profession, EI emerges as a more powerful predictor of who succeeds and who does not – for instance, who is promoted to the upper echelons of management and who is passed over.

In short, this researcher’s position is that IQ will be a more powerful predictor than EI of individuals’ career success in studies of large populations over the career course because it sorts people before they embark on a career, strongly influencing which fields or professions they can
enter. But when studies look within a job or profession to learn which individuals rise to the top and which plateau or fail, EI should prove a more powerful predictor of success than IQ.

**Conclusion**

The study of EI is an organic process by which we, as human beings, are able to respond better to our surroundings. Whatever social context we might find ourselves in, one must be able to have the right amount of EI to “fit in.” This is especially true in our daily routines, which, for most of us, involves the workplace. As stated previously, it is this researcher’s strong belief that IQ can help determine whether or not you get a job; however, EI determines how long you keep the job and if you move up the corporate ladder. While Organizational Psychologists still do not have a standard measure of EI, there is little doubt amongst them that EI is a tangible measure of how a person will “fit in” their respective social circles. Our increasing understanding of EI – one that goes beyond the borders of personality, IQ, and academic achievement to study a broader spectrum of the psychological mechanisms that allow individuals to flourish in their lives, their jobs, and their families and as citizens in their communities – will become increasingly paramount as employers seek to find employees with the right mix of IQ/EI to fill positions within corporations.
Chapter Three

Discussion, Recommendations, & Conclusions

Overall Recommendations

Finally, what are the implications and recommendations for managers, organizations, and HR/HRD professionals? What should they take away from this literature review? In conclusion, the EI literature review suggests the following:

1.) EI and IQ constantly interplay with one another, creating a holistic view of human behavior.
2.) People skills will always be important within organizations and, therefore, for managers and HR/HRD professionals.
3.) HRD professionals should “do their homework” about EI and EQ in the workplace and make sure they are capable of understanding and measuring various psychometrics in the workplace.

Organizations, managers, and HR/HRD professionals should also be knowledgeable about a central difficulty with EI research that revolves around definitions and measures of the concept. There are at least two rather different conceptions of EI (trait EI and ability EI). Those trying to study or apply EI in any given area must therefore first identify the EI concept most relevant to their goals. They should then find the best possible EI measure for their goals, noting that expensive EI measures may not necessarily be best for all purposes.

Manager’s claims that EI is a better predictor of life success (e.g., academic performance, leadership) than IQ or personality traits are derived from popular science writing and are not well supported by empirical research. EI measures should therefore be used in conjunction with appropriate measures of cognitive ability and/or personality until EI measures are empirically
demonstrated to contribute additional information over that provided by better validated measures.

Whether HR/HRD professionals should attempt the implementation of EI coursework or programs to improve social and personal functioning, academic success, moral/ethical behavior, or leadership is premature until we know how EI is related to success in these areas. Non-EI interventions which have some empirical support exist in many of these areas, and should be used in combination with EI concepts in designing programs. HR/HRD professionals should also note there is relatively little evidence that EI traits or competencies can be taught, or that teaching it will improve other areas of functioning. Boyatzis’ (1982) work in management education suggests promise in this regard.

Research suggests that currently used measures of EI are culturally biased, given that it is difficult to understand the results of an EI measure outside of its Western cultural context. In a multicultural setting, such as a college campus or a global organization, this obviously poses difficulties. Use of EI measures as admissions criteria or for other evaluative/predictive purposes will not be appropriate until reliable measures which are not culturally biased and have demonstrated predictive validity are devised. Therefore, each group (managers, organizations, and HRD professionals) should be very cautious in regards to EQ/EI. While the various psychometrics devised by Bar-On, Mayer and Salovey, and Goleman are valid and reliable, they could be misinterpreted in the workplace by managers, organizations, and HRD professionals, because, in short, these groups are not psychologists. As a result, the various psychometrics should not be utilized for hiring, firing, promotion, demotion, etc. decisions within the workplace without proper review of the material by a certified test giver (as these tests do provide classes on each measuring tool) and/or a psychologist versed in these workplace performance tools.
Many studies of EI, like other areas, use inadequate research designs, and/or have too few participants to draw accurate conclusions. While some promising results regarding EI were found in this literature review, many problems were raised as well. To best achieve these goals, managers and HR/HRD professionals should use practices adapted to their particular work environment which have the best evidence of success from both EI and related concepts.
References


Appendix I – Letter of Intent for GHRD 590 Capstone Project

October 29, 2007

RE: Letter of Intent for GHRD 590 Capstone Project

Tim Franz, Ph.D.
St. John Fisher College
3690 East Avenue
Rochester, New York 14618

Dear Dr. Franz,

I would like to complete my 590 project on the topic of emotional intelligence in the workplace. I will do this by conducting a literature review of the topic and reporting my findings in the Capstone Project. The Capstone Project will be an offshoot of my findings in GHRD 507 (Research Methods). I plan on reading and reviewing Bar-On as well as Myers’ findings in this project. Mr. Ryan Witte’s previous 590 Capstone Project will also be reviewed for further information on the topic of “EQ and IQ in the Workplace.”

Background

The topic of emotional intelligence as compared with cognitive intelligence is a relatively new area of exploration for Human Resource professionals. It entails looking at a candidate for hire or an employee more critically and holistically to see if they are indeed a “good fit” for the company in question. This is done by taking measurements of their cognitive intelligence and emotional intelligence via interviews, surveys, and questionnaires. This information, when collected, is then used, in theory, by Human Resource professionals to make better choices in terms of hiring, termination, promotion, demotion, and transfer decisions within a company.

Statement of Goals

I would like, by the end of this literature review, to be more well-versed in the topic of EQ and IQ within the workplace. As an offshoot of my GHRD 507 (Research Methods) topic, this Capstone Project will complete my Master of Science degree in Human Resource Development at St. John Fisher College. While I cannot utilize my GHRD 507 projects as reference sources, I can use many of the resources I found while completing the qualitative and quantitative research papers I wrote while in that class. This will better enable me to write a thoughtful and critical literature review on the topic.
Significance

This Capstone Project will better enable me, as a Human Resource professional, to be better prepared to make critical decisions within my workplace. This topic is of particular interest to me because I feel that oftentimes we, as HR professionals, overlook the critical interaction between cognitive skills and personal, or emotional, skills within the workplace. This can lead to a high level of “churn” or turnover within a workplace. This makes the workplace a more difficult environment to labor in because of the constant training which must take place for new employees. I would like to learn more about this subject in order to alleviate some of this turnover within my workplace. I feel that the principles of EQ and IQ and increasingly critical components to the overall stability of a work environment.

Method

For this project, I will utilize qualitative analysis. As I read more on the topic, I will turn a critical eye to the topic of EQ and IQ in the workplace. I will endeavor to cover the topic as thoroughly as possible within the confines of the time allotted.

Thank you for your time and attention to my Capstone Project.

Sincerely,

J. Fuller Blair
Graduate Student
Human Resource Development
Class of 2008
Appendix II – Current Curriculum Vitae

J. FULLER BLAIR
230 LeChase Drive, Apt. A
Rochester, New York 14606
585-415-0987 • FullerBlair@hotmail.com

OBJECTIVE
Human Resources position utilizing project management, communication and administrative skills.

SUMMARY
A hard working, highly motivated professional with diverse experience in technical, medical, manufacturing and sales environments. Recognized for attention to detail and efficient project management skills.

EDUCATION

St. John Fisher College, Rochester, New York
Master of Science, Human Resource Development, GPA 3.92/4.0
Anticipated May 2008

The University of Alabama, Tuscaloosa, Alabama
Bachelor of Arts, Anthropology, Cum Laude, GPA 3.72/4.0;
Phi Beta Kappa and Dean’s List every semester

Monroe Community College, Rochester, New York;
Psychology Coursework Cumulative GPA: 3.95/4.0;
Phi Theta Kappa, Peer Advisor for the Counseling and Advisement Center

COMPUTER SKILLS
- Proficient in Photoshop 7.0, PowerPoint, Adobe Illustrator and Acrobat, Corel Draw 5.0
- Proficient in hardware management, including troubleshooting
- Extensive database utilization, including MasterMind, CPT, BDM, CIS and Pyxis proprietary software

LABORATORY EQUIPMENT PROFICIENCIES
- Protein digesters, including Kd jewel
- BRIX analyzers (field and spectral)
- Graphite furnace methods for low level metals detection
- ICP with mass spectroscopy and gas chromatograph
- Museum-quality electrolysis conservation instrumentation
- Museum-quality chemical preservation of organic tissue
- Familiar with laboratory protocols, “clean room” situations and OSHA laboratory standards
EMPLOYMENT

Human Resource Representative 2006-2007
Center for Disability Rights, Inc., Rochester, New York
- Specialized in recruitment, training, retention, hiring and terminations of employees; reported to the Director of Human Resources
- Utilized ADP proprietary software to assist in processing payroll, as well as, DBman software to track applicants

Paychex, Inc., Recovery Specialist (Contract Position) 2006
- Worked within several Oracle and DOS database systems in order to recollect funds that were returned to the company as “insufficient”
- Finished all assigned tasks in a timely fashion with regard for attention to detail, speed and efficiency

Operations Manager (Contract Position) 2006
Energy Solutions USA, Inc., Lima, New York
- Assisted the President and all Sales Representatives complete energy brokerage contracts in a timely manner with a heavy emphasis on MS Excel, Access and PowerPoint
- Interviewed candidates for Sales Representative positions, as well as IT and office assistant positions within the firm
- Completed all assigned tasks in a timely fashion with regard for attention to detail and profit margin

Assistant Branch Manager 2005
DialAmerica Marketing, Inc., Rochester, New York
- Assisted the Branch Manager, Director, Shift and Team Leaders meet and exceed sales projections for clients such as MBNA and Bank of America
- Produced daily/weekly monitoring sheets of Telesales Representatives in order to review their training and work progress
- Managed a team of 10-15 Telesales Representatives and assist them in reaching sales goals
- Worked closely with internal recruitment specialists to interview and hire new Telesales Representatives

Pharmacy Technician I (Contract Position) 2004
Strong Memorial Hospital, Rochester, New York
- Operated the McKesson automated medication machine, processing Pyxis requests and manufacturing/prepackaging of medications
- Proficient in the use of the pharmacy’s proprietary BDM and CIS laboratory information management systems, generating reports and processing ADT errors
- Trained with registered pharmacists in the use of sterile technique for IV medication preparation
Appendix III – EI/EQ Measurement Examples

Psychologist Bar-On uses EQ (Emotional Quotient) to describe"… an array of non-cognitive … SKILLS...""n

Researchers Mayer and Salovey see Emotional Intelligence as an ability analogous to the ABILITY to read a map.

For popular writer Goleman, Emotional Intelligence is defined by COMPETENCIES, which may be developed through training.

Reuven Bar-On & the EQ-i

Psychologist Bar-On uses EQ (Emotional Quotient) to describe"… an array of non-cognitive … skills...""

Based on 19 years of research by Dr. Reuven Bar-On and tested on over 48,000 individuals worldwide, the Bar-On Emotional Quotient Inventory is designed to measure a number of constructs related to emotional intelligence. Bar-On uses EQ (Emotional Quotient) to describe his view of emotional intelligence as "... an array of non-cognitive ... skills..." that are useful in predicting success in specific areas of life.

The EQ-i is a self-report, where you score is a reflection of your own answers to the test questions.

What the Bar-On EQ-i Measures

The Bar-On EQ-i consists of 133 items. It gives an overall EQ score as well as scores for the following 5 composite scales and 15 sub-scales:

Intrapersonal Scales are Self-Regard Emotional Self Awareness, Assertiveness, Independence, Self-Actualization.

Interpersonal Scales are Empathy, Social Responsibility, Interpersonal Relationship.

Adaptability Scales are Reality Testing, Flexibility, Problem Solving.

Stress Management Scales are Stress Tolerance, Impulse Control.

General Mood Scales are Optimism, Happiness.
Mayer, Salovey, Caruso & the MSCEIT

Mayer et al, the researchers who originated the term Emotional Intelligence, view EI as an array of abilities that can be measured by your ability to "read" emotions in faces, or in group interactions. They measure EI by the Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT) The MSCEIT is a test, and your score depends on answering each question with the best answer. "Emotional intelligence is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth." (Mayer & Salovey, 1997).

What the MSCEIT Measures

Perceiving Emotions - The ability to perceive emotions in oneself and others, as well as in objects, art, stories, music, and other stimuli.

Facilitating Thought - The ability to generate, use, and feel emotion as necessary to communicate feelings, or employ them in cognitive processes.

Understanding Emotions - The ability to understand emotional information, how emotions combine and progress through emotional transitions, and to appreciate such emotional meanings.

Managing Emotions - The ability to be open to feelings, and to modulate them in oneself and others so as to promote personal understanding and growth.

Daniel Goleman & the ECI

Goleman views EI as a set of competencies that can be measured by his Emotional Competency Inventory (ECI). The ECI is a 360 feedback tool. Your score is a reflection of feedback from your boss, your peers, and those who report to you at work. The instrument is designed for use only as a development tool, not for hiring or compensation decisions.

The ECI model has changes from the original model published in Daniel Goleman's book "Working with Emotional Intelligence." The following changes were made:

- Five clusters reduced to four clusters

- “Self Regulation and Motivation” were combined to form “Self Management”

- 25 Competencies were reduced to 20

  - “Managing Diversity” was removed as it was highly correlated with “Empathy.”
  - “Commitment” was removed as it was highly correlated with “Leadership Competency.”
• “Optimism” was removed. It clustered with “Achievement Orientation” and “Initiative.” It was felt by Goleman there were better instruments in the field dedicated to measuring this one factor.
• “Team Capabilities” was removed. It clustered heavily with “Teamwork and Collaboration.”
• “Innovation” was removed as it was highly correlated with “Achievement Orientation.”

**What the ECI Measures**

Developed by Richard Boyatzis and Daniel Goleman, this measure is designed to assess competencies from four quadrants.

Quadrant #1.) “Self-Awareness” includes emotional self-awareness, Accurate self-assessment, Self-confidence.

Quadrant #2.) “Self-Management” includes Self-control, Adaptability, Conscientiousness, Trustworthiness, Initiative, and Achievement Orientation.

Quadrant #3.) “Social Awareness” includes Empathy, Service orientation, and Organizational awareness.

Quadrant #4.) “Social Skills” includes Leadership, Influence, Developing others, Change catalyst, Communication, Conflict management, Building bonds, Teamwork & Collaboration

**Matching the Tool to the Need**

The EQ-i is well regarded for selection purposes, and career development.

The MEIS (now MSCEIT) is useful in understanding your ability, or lack of ability, in recognizing emotions in others.

The ECI is a unique 360-feedback tool, well suited to individual and organizational development.
Appendix IV – Researcher’s Reflections

I chose the topic of “Emotional Intelligence” in order to more fully understand this complex subject matter and its relevance in today’s workplace. EI and EQ have been in the forefront of my mind during my most recent job search, as I have come to understand that IQ, in and of itself, is not the sole predictor of workplace performance. There has to be a certain “finesse” that is extruded by the applicant in order to “win over” the hiring manager in order to obtain the coveted job position.

As a person with severe mental illness, gaining a fuller understanding of what my peers in HR/HRD “look” for in applicants is no small feat. This is because having a mental illness does not allow for one to see life through the same lens as our “better brained” peers. In several instances throughout my working life, I have been exposed to various prejudices regarding mental health/illness. It is my hope that this thesis will help others in a similar position to work with their physicians, therapists, and case workers to overcome the stigma attached to mental illness within our society today.