

Emotional intelligence and career success among the highly intelligent

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Abstract

The purpose of this study was to identify relationships between emotional intelligence (EI) and career success in a population with an intelligence quotient (IQ) in the ninety-fifth percentile. This study used an online survey to measure career success and an online test to measure emotional intelligence among a sample with IQs in the ninety-fifth percentile. Career success was measured with both objective and subjective questions. The subjective measure used was a five question five-point scale developed by Greenhaus, Parasuraman, and Wormley (1990). To measure emotional intelligence this study used the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), a performance based emotional intelligence test. This study asked: what is the distribution of emotional intelligence scores for a population with high intelligence quotients and what is the relationship between emotional intelligence and career success? It was found that the high IQ participants had lower emotional intelligence scores than the norm but were able to feel and be successful in their careers. This study demonstrates the need for further research into the relationship between IQ and emotional intelligence, particularly in regard to career success. In lieu of further research human resource development professionals must use caution when making decisions when emotional intelligence is a consideration.

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CHAPTER 1: Introduction

Overview

Ever since there has been a need to hire someone to do a job, employers have been trying to figure out how to hire the right person. This is not a simple task and with our increasingly complex society it becomes more difficult. Hiring the wrong employees can be costly to organizations. Even hiring employees that just perform at the status quo becomes costly to organizations in today's competitive business climate. Organizations need people with the abilities to move the company forward and keep the company's competitive edge. The difficulties in finding the uniquely gifted persons who can do so is reflected in the old Chinese proverb, "An army of a thousand is easy to find, but, ah, how difficult to find a general." Many tools have been used to find just the right employee. Most prominently is perhaps the Intelligence quotient (IQ) test. This paper will discuss intelligence testing and also a relatively new concept called Emotional Intelligence (EI).

Intelligence quotient measurement has long been a tool used to measure cognitive abilities and predict career success. Stephen Jay Gould (1981) notes that Terman, an investigator of IQ early in the last century believed that, "Society may need masses of the 'merely inferior' to run its machines... but its ultimate health depends on the leadership of

rare geniuses with elevated IQ's" (Gould, p. 183). Since Daniel Goleman's (1996) popular book on the subject of Emotional Intelligence, the idea that IQ is the best predictor is being questioned (Dulewicz, & Higgs, 2000). Dr. Harvey Silver, a leading management consultant in Canada, has said that, "Around one-third of a leader's success is based on IQ and expertise, the other two-thirds on EQ (EI)" (Tomlinson, 2002, p. 7). This does closely parallel research into the importance of EI in career success (Dulewicz, & Higgs, 2000).

Even with a prima fascia look at the situation, one can realize that intelligent decisions of executives must be followed up with effective dissemination. Effective dissemination is accomplished by inspiring and gaining trust on an emotional level.

Problem Statement

Understanding what makes the most effective leaders in an organization is very important in today's complex business environment. Organizations must identify and develop persons that have high leadership potential to stay viable. The importance of emotional intelligence has only recently become widely salient in the quest to identify high potential leaders. The recent realization of the usability of EI to identify leaders has left a gap between research and practice. With a

limited amount of research into the subject there is a need for a study that evaluates the effect of EI on career success.

Research Questions

There are two research questions being investigated in this study.

Research question one (R1) is:

What is the distribution of emotional intelligence scores for a population with high intelligence quotients?

Research question two (R2) is:

What is the relationship between emotional intelligence and career success?

Significance

This study is important because it will be the first research to examine emotional intelligence and its effect on career achievement among those specifically chosen for high intelligence. This research will build upon the growing understanding of the role EI plays in career success. Understanding the role EI plays in career success will benefit organizations and individuals interested in identifying high potential employees. Knowing the impact EI has on success will assist Human

Resource Development practitioners in its best utilization. Because IQ is already a selection factor in identifying high potential employees, insight on EI in the high IQ population is especially important. In this situation is the role of EI the same? In the presence of high IQ, is EI and its effect enhanced, depressed or even reversed from what is seen in the general population? If this study is successful it will open the door on that question and lead the way to other studies to fully answer it.

Definition of Key Terms

Career Success: Is the ability of one to achieve their career goals and or gain social status through their work.

Emotional Intelligence: The ability to understand and reason about emotions (Mayer, Salovey, & Caruso 1999).

High Intelligence: A superior ability to think abstractly, apply knowledge and/or manipulate ones environment as measured by objective tests. This study defines it as those persons scoring in the ninety-fifth percentile on intelligence tests as having high intelligence.

Intelligence Quotient: Is a number used to express the apparent relative intelligence of a person that is the ratio multiplied by 100 of the mental age as reported on a standardized test to the chronological age.

Pearson Correlation: The Pearson Correlation Coefficient, r , is a dimensionless index that ranges from -1.0 to 1.0 inclusive and reflects the extent of a linear relationship between two corresponding data sets. When the index is 1.0, the data are precisely and fully described by a positive linear relationship. When it is -1.0, the relationship is negative. The index, p , associated with a Pearson Correlation is the probability that the apparent linear relationship appearing in the data could have occurred by chance, if in fact there was none.

CHAPTER 2: Literature Review

Chapter two is a review of IQ and EI. It discusses the development of IQ and EI and how they have been used to identify a persons' potential. Since EI is a relatively new concept this chapter will also explore it's validity as a form of intelligence. This includes a discussion of how the brain processes cognitive and emotional information. In addition, there is a brief discussion about our changing society as a driver for the development of new ideas about intelligence.

A Brief History of IQ Testing

In 1904, a French researcher, Alfred Binet started to study the measurement of intelligence from a psychological perspective (Gould, 1981). Before Binet made this change in approach, scientists had been unsuccessfully trying to study the measurement of intelligence through physical means like craniometry. Using his new approach, Binet's first challenge was to design a test that would identify children that needed special education in schools. Binet addressed this problem by creating a test of many short every day tasks such as counting coins. The tasks were to measure the basic reasoning processes of ordering, comprehension, and correction while omitting learned skills (Gould, 1981). Of course, Binet's test was not perfect in achieving this. From today's perspective we recognize that even counting coins is a learned skill.

Binet's new way of measuring intelligence was relatively successful and became the base model for intelligence testing thereafter.

Binet never intended his tests to measure an innate fixed intellectual ability, but when they were brought to the United States they quickly evolved into just that (Gould, 1981). H. H. Goddard first translated Binet's work and defined its scores to measure a fixed characteristic of intelligence. Goddard went so far as to propose that intelligence testing be used for eugenic purposes. The use of intelligence tests as a selection tool was also promoted by others.

In 1916 Lewis M. Terman, a professor at Stanford University, created his first version of Binet's scale and marketed it as a measure of innate intelligence (Gould, 1981). Terman named his test the Stanford-Binet and promoted its use in industry for the identification of good workers. Terman believed that substantial success required an IQ of 115 or more. Terman's studies were not always consistent with his beliefs according to Gould (1981). Gould writes, "Terman suppressed this embarrassment by ordering his table in a curious way. The hobo mean IQ was distressingly high, but hobos also varied more than any other group, and included a substantial number of rather low scores. So Terman arranged his list by scores of the lowest 25 percent in each group" (Gould, 1981, p. 183).

Despite questionable results, intelligence testing continued to gain in popularity.

On the verge of World War I, Robert M. Yerkes brought together Terman and Goddard to create an intelligence test to be administered to the army by the Army (Gould, 1981). Under Yerkes direction, the intelligence test the three had created was administered to 1.75 million men. This was the first mass-produced written test that was meant to measure innate intelligence. Once the data was compiled, businesses and schools made constant requests of Yerkes to help them use the Army's testing methods for their needs. Regarding this Gould writes, "Tests could now rank and stream everybody; the era of mass testing had begun" (Gould, 1981, p. 195).

The Construct of Emotional Intelligence

The use of IQ tests to identify the potential of a person has continued until this day, but new ideas of what it takes to be successful are taking hold. The construct of emotional intelligence was first introduced by Salovey and Mayer (1990). The surge in the scientific investigation of emotional intelligence began thereafter and has increasingly gained momentum. It gained its most momentum after becoming popularized by Daniel Golemans's book, *Emotional Intelligence: Why it can matter more than IQ*,

published in 1995. Goleman's book was widely popular, and when introduced became a number one best seller on the New York Times list of best selling books. In his writing, Goleman stresses the importance of EI in people's general work success and achievement in life. Other researchers since Goleman have claimed that EI does predict important occupational and educational variables (Fisher, & Ashkanasy, 2000; Fox, & Spector, 2000; Saarni, 1999).

The work and writings of Daniel Goleman since the 1990's has popularized the use of emotional intelligence to identify workers who can perform best. Goleman (2002) explains why those who score high on IQ tests are not always successful. Emotional intelligence is the ability to handle oneself and relationships. Unlike the way IQ has traditionally been seen as a fixed innate characteristic, Goleman has not defined EI as an innate characteristic.

Though Goleman (2002) does not ground EI in fixed biological terms, he does attribute underlying causes to biology. Goleman (2002) explains that we rely on those around us for our own emotional stability. This is because the human brain is designed with an open-loop, limbic system. The limbic system controls our emotions and the "open-loop" refers to how it is inevitably influenced by the external environment. This external environment is made up of people, and all persons have emotions that are

continually affecting each other. It is leaders that can use emotional intelligence to drive other people's emotions in a positive and beneficial manner. Leaders of high emotional intelligence can enter the "open-loop" limbic system controls and effectively drive other people's emotions in a positive and beneficial manner.

In an effort to understand the role of EI versus IQ in career success, through his company Emotional Intelligence Services, Goleman (2002) has analyzed close to five hundred competency models from various businesses. His conclusion was that IQ does play a role in a person's professional success though EI also does. The relative influence on performance of EI and IQ, Goleman says, varies depending on the job. Goleman (2002) goes on to explain that for the most successful people at least eighty to ninety percent of their success can be attributed to EI.

Emotional Intelligence as Intelligence

Despite its gaining popularity, there is still debate about whether emotional intelligence is a "true intelligence" (Roberts, Matthews, & Zeidner, 2001). This is in part due to popularized style of Goleman (Mayer, Salovey, & Caruso, 2002). Goleman was a journalist in addition to a psychologist and his book was written for the general reader. In writing for the general public, Goleman stretched the definition of

emotional intelligence so that it appeared to equate to good social behavior.

The general concept of intelligence refers to one's overall ability to adapt through effective cognition and information processing (Roberts, Matthews, & Zeidner, 2000). This involves the use of higher order mental abilities to perceive patterns and logically reason to solve problems. Abstract reasoning is said to be the main distinctive characteristic of intelligence (Mayer, Caruso, Salovey, & Sitarenios, 2001).

Abstract reasoning may be the primary aspect of general intelligence but there are also other factors which affect the measurement of general intelligence. In a testing situation, the intelligence manifested by a person is dependent on the input a person is receiving and the general knowledge base from which that person operates. (Mayer, Caruso, Salovey, & Sitarenios, 2001). According to Mayer, Caruso, Salovey, and Sitarenios (2001) general intelligence is often broken down into different intelligences based on what inputs are being processed. It is common to see intelligence tests that specifically test for verbal intelligence and or spatial intelligence. So, emotional intelligence may be yet another intelligence, one that is referenced to emotional input.

A relevant, organized, knowledge base assists in abstract reasoning. For instance, a person's linguistic knowledge will assist them with solving

problems on a verbal intelligence test. This becomes clear when non-native speakers take a verbal intelligence test and score lower than native speakers. Similarly, there is emotional memory. This emotional memory is the knowledge base that comes from emotional experience and, as with linguistic knowledge, can help to guide abstract reasoning.

Massy (2002) illustrates emotional memory by relating a study done by Ledoux, Wilson, and Gazzaniga (1977). In this study, Massy writes, “Ledoux, Wilson, and Gazzaniga showed disturbing images of people being thrown into flames to subjects wearing light refractive lenses, which channeled the information to the emotional brain but not to the rational brain. Afterward, the subjects had no declarative memory of what they had seen (p. 19).” Declarative memory is the memory for facts (Tulving, & Schacter, 1990). Massy continues, “They could only describe a vague awareness of light and flashing. Yet, they felt quite upset and disturbed. Although they could not say why, they no longer liked the experimenter or felt comfortable in his presence (p. 19).”

Emotional memories give insight into or expectations of situations we may not have otherwise achieved. The memories then play a role in determining how we will respond to situations that we have experienced in the past. The terrorist attacks of September 11, 2001 give us a clear example of emotional memory influencing actions. Although the odds

remained small that a similar life ending event would occur if a person were to travel on an airplane many persons refused to fly. This is because of the fearful memories that were produced from watching the events of September 11, 2001 unfold. The rational understanding that flying was no more dangerous after the event was overshadowed by the emotional association in the decision to travel by airplane.

Brain Structure and Function

Understanding the structure of the brain is important to gain further insight into how emotional intelligence works. The part of the brain that receives and stores emotional content is distinct from the part that allows for reasoning. The evolution of the brain however, has led to intimate connections between the two.

Approximately 2.5 million years ago the evolution from *Australopithecus afarensis* split into two additional paths (Haviland, 2000). This gave rise to the *Homo* and *Boisei-robustus* evolutionary patterns. While the *Boisei-robustus* pattern developed larger jaws for grinding food, the *Homo* pattern was developing a larger brain and tool use. The evolving genus *Homo* was increasingly dependent on improved mental abilities. It was only 200,000 years ago that the modern human brain had come to approximate its current state.

The modern human brain is made of three distinct layers that reflect its evolutionary history (Massey, 2001). These interwoven layers of neural networks have built upon each other over millions of years. The oldest controls the most basic bodily processes and the newest give the cognitive abilities that make us human.

The oldest part of the brain consists of the brain stem and cerebellum. This part of the brain is called the hindbrain due to its position, or reptilian brain because its structure and function resemble that of reptiles today (Massey, 2001). The reptilian brain controls autonomic functions such as breathing and heartbeat. Additionally, it controls instincts such as suckling. Although it comprises about half the brain's neurons, the reptilian brain is only ten percent of the brain's total weight and is not responsible for emotions or abstract thinking (*The Columbia Electronic Encyclopedia*, 2003).

Atop the reptilian brain is the mammalian brain. The mammalian brain consists of several neural structures. These structures work to unconsciously process external stimuli and create memories. This includes stimuli that produce subjective states including emotions. The structure primarily responsible for the generation of emotion is the amygdala. The amygdala, along with the pituitary gland, thalamus, hypothalamus, and hippocampus complete the composition of the

mammalian brain. Taken together these structures in the mammalian brain are known as the limbic system.

The neomammalian brain is common in all mammals and it is positioned as the top layer. It consists of four lobes that are mirrored across the brain's two hemispheres. Visual processing occurs at the back in the occipital lobes. The parietal lobes work to focus on movement, calculation and orientation. Sound and speech are processed in the temporal lobes. The frontal lobes are devoted to smell, taste and abstract thinking.

The functions in the frontal lobes are divided between the top and bottom. The lower part is devoted to the smell and taste functions while the top part, known as the prefrontal cortex, is responsible for abstract thinking. Since our earliest hominid ancestors, the relative size of the prefrontal cortex has increased dramatically by forty percent (Carter, 1998). The result of this growth is an increased intellect that distinguishes humans from other animals.

Complex problems are solved in the prefrontal cortex. Evidence that complex problem solving occurs in the prefrontal cortex is shown in Christoff, Prabhakaran, Dorfman, Zhao, Kroger, Holyoak, and Gabrieli's (2001) study that shows increasing task difficulty causes the prefrontal cortex to become more and more active. Christoff et al. (2001) also

remind us that the prefrontal cortex is responsible for the relational processing involved in planning and organizing.

The problem solving processes that occur in the prefrontal cortex involve information input from other parts of the brain including the limbic system. There are extensive connections for emotional information to flow from the limbic system to the prefrontal cortex (Goleman, Boyatzis, & McKee, 2002). There are also connections that carry information from the prefrontal cortex to the limbic system, but those connections are far fewer (Massey, 2001). The result of this lopsided flow of information results in a far heavier influence of emotions on our rational brain than vice versa (Goleman, 2002). In order to have that influence, the emotional perceptions resulting from external stimuli occur a quarter of a second faster than rational perceptions (Massey, 2002).

During intense emotional reactions response to stimuli can occur without being moderated by the prefrontal cortex. Without rational thought applied to emotional input, the most effective response is less likely to occur in social situations. Goleman, Boyatzis, McKee (2002) call this an “emotional hijack.” Despite emotional hijacking leading to poor actions in certain situations, it is perhaps a useful evolutionary development. It is specifically the amygdala, responsible for fear, that causes hijacks. The hijacking in response to fear allows for quick actions

that lead to safety (Massey, 2002). An example of this would occur if you were to find yourself caught in the path of an oncoming train. The emotional response would cause you to jump from its path, even before thinking about the situation. People that have experienced these intensely threatening situations often say that events occurred so fast that they reacted without thinking. The thought has occurred, but unconsciously within the limbic system.

Understanding the brain in the context of its evolutionary development and understanding brain function through ongoing neurological studies has provided much insight into how and why persons behave in certain ways. However, understanding the full extent of interplay between the limbic system and prefrontal cortex in behavioral outcomes is still far from achieved. The door is still open as to whether or not emotional intelligence is a true intelligence seated in the pre-frontal cortex.

Our Evolving Society

What people do and how organizations function is affected by technology, and changes as technology changes. The 19th century brought industrialization and transportation improvements to the manufacture and distribution of goods. The 20th century brought

automation, communications and mobility to the masses. There was change, and an increasing rate of change.

In 1901 Guglielmo Marconi sent the first transatlantic-Atlantic radio message. In 1903 the Wright brothers' made the first powered flight and Henry Ford founded his automobile company to mass produce the means of mobility. As the middle half of the 20th century approached the first computer, known as ENIAC, became operational. The patent for the ENIAC gives evidence to our changing society and the need to generate information at an increasing rate. The patent application reads, "...With the advent of everyday use of elaborate calculations, speed has become paramount to such a high degree that there is no machine on the market today capable of satisfying the full demand of modern computational methods. The most advanced machines have greatly reduced the time required for arriving at solutions to problems which might have required months or days by older procedures. This advance, however, is not adequate for many problems encountered in modern scientific work and the present invention is intended to reduce to seconds such lengthy computations...(ENIAC patent (No. 3,120,606), filed 26 June 1947, as cited by Weik, 1961)." As information is generated at an increasing rate, so is our understanding about the world we live in. Thus the way we go about our work changes. For almost the next fifty years

after ENIAC's introduction computers served a primary purpose of storing information and making calculations. This changed again with the advent of the Internet.

As early as 1962 MIT researcher J. C. R. Licklider was envisioning a network of globally connected computers that would enable users to quickly access information worldwide (Leiner, B. M., Cerf, V. G., Clark, D. D., Kahn, R. E., Kleinrock, L., Lynch, D. C., Postel, J., Roberts, L., & Wolff, S., 2002). In the 1980's commercialization of networking applications began and by the early 1990's the advent new technologies made networking accessible to a wide audience. It was the World Wide Web and rapid evolution of tools for its use along with the growth of high bandwidth communications technology that gave individuals and organizations easy and instantaneous access to masses of information. Work and society are now driven by knowledge and its production based on massive amounts of information. In today's world, even the brightest must be able to succeed with comprehension of only a small fraction of the information shared across the rest of the population. The successful person may need to rely on more than just tradition intelligence represented by IQ.

Career Success: EI & IQ

Changes in technology have brought about transformations in the way jobs are conducted and in turn have brought about changes in who succeeds or fails. Along with objective realities, perceived organizational needs often drive the success of persons in their careers. As tasks became more complex in organizations, a person's "intelligence" gained more and more acceptance as a measure of potential. Organizations thought that those with the greatest intellectual abilities would be the most successful at work.

The mindset that intellectual abilities determined one's success or failure in life went hand and hand with the development of IQ testing. It was after Lewis Terman's administration of his new IQ test to 1.75 million men for the army during WWI that IQ testing gained popularity. The proponents of IQ testing thought that it was a very decisive and fixed way to sort through persons. Debate still occurs regarding the nature of IQ, but there does seem to be a fixed genetic component that has great influence. SAT and ACT tests, like IQ tests, are to measure one's aptitude and are still used today as criteria for college admission.

It is not always those who have the greatest success in their careers that have the highest IQs (Barth, 2003). Sometimes persons with low to average IQs come to be very successful and go far beyond the norm in

their careers. This may be even truer in our current state of fast paced change than it was during the first half of the 20th century. The ability to adapt and work within a complex environment of information which overwhelms traditional intelligence, requires skill and traits that lie outside definitions of traditional intelligence. Emotional intelligence is but one of a number of intelligences theories that expand the concept of intelligence to better address the complexities of humans' interaction with their environment.

In 1983 Howard Gardner introduced his theory of Multiple Intelligences in his influential publication, *Frames of Mind*. Gardner's theory has not been as directly influential upon the business world as it has been in educational spheres, but has played a role in reshaping how we think about intelligence. It was the predecessor to the popularization of Emotional Intelligence theory, and certainly played some role in helping open the doors to its acceptance. With Multiple Intelligence (MI) theory Gardner wanted to show that intelligence existed in many different dimensions unlike Binet's single dimension. MI Theory took into account that persons worked within multiple different contexts that demanded different types and combinations of intelligences. The original seven intelligences Gardner (1983) identified are:

1. Linguistic: sensitivity to sound, meaning of words, and the function of language.
2. Logical/mathematical: ability to discern logical patterns, numerical patterns, symbols and complex chains of reasoning.
3. Bodily/kinesthetic: ability to control body movements and manipulate objects skillfully.
4. Spatial/visual: ability to accurately perceive the visual-spatial world and make transformations based on those perceptions.
5. Musical: ability to produce and appreciate rhythm, pitch, and musical expression.
6. Interpersonal: ability to sense and respond to the moods, temperaments, motivations, and desires of others.
7. Intrapersonal: ability to understand personal feelings that guide behavior, knowledge of personal strengths, weaknesses and desires.

One reason that MI Theory has not gained popularity in the business world is suggested by Weller (1999), "The reason for this is that there is an expectation that adults should possess the innate ability to learn and behave 'intelligently' according to the demands of the work environment they find themselves in."

Nonetheless, MI Theory can play an important role in career success. Persons tend to choose occupations that are aligned with their strengths. For instance, a sculptor would have strong spatial/visual intelligence and an accountant would likely have strong logical mathematical intelligence.

Despite the lack of uptake of MI Theory by business organizations as a whole, the interpersonal and intrapersonal intelligences can be related to the concept of Emotional Intelligence which has been engaged by business (Weller, 1999). Interpersonal, intrapersonal and emotional intelligences all deal with how persons understand and react to various types of emotional input. This has become important for businesses because work has become more collaborative.

Business organizations have been reshaped from once hierarchical entities relying on physical capital to organizations where people work on teams and rely on intellectual capital. People working in teams face many challenges beyond the simple creation of an outcome. Those involved in teams must work closely with one another and manage the social relationships as well as the duties they must perform. For work teams to be highly effective they must develop “emotionally intelligent” behaviors that do not hinder their work. Jarrett and Kellner (1996) point to what makes teams effective, “openness and mutual trust; free expression of feelings; common objectives; high commitment to shared task; conflict

is surfaced and worked through; decisions are by consensus; and group process issues are an important part of work (p. 54).”

The reality is that teams usually do not exhibit the behaviors that would make them most effective (Jarrett, & Kellner, 1996). Members of work teams are often afraid they will hurt someone’s feelings and do not exhibit needed openness regarding team behavior. One may also be worried about the political impact of their views if expressed. The things that hold back teams are often not a lack of intellectual abilities, but lack of intrapersonal and interpersonal abilities. Those who are best at addressing and dealing with emotional content within a team will often have greater career success.

CHAPTER 3: Methodology

This study seeks to examine emotional intelligence and career success in a population with high intelligence. This chapter details information regarding the study, the instrument used to collect data, data collection procedures, the sample, and limitations of the study.

Instruments

There are two separate instruments that were used to collect data. Together they addressed the two research questions: what is the relationship between emotional intelligence and career success, and what is the distribution of emotional intelligence scores for a population with high intelligence quotients? The first is a survey that was constructed for online administration at [surveymonkey.com](https://www.surveymonkey.com) to gain insight into participant's career success and collect some additional demographic data. The second is the web based test that measures emotional intelligence called the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).

Measures of Career Success

The primary scale for measuring career success was taken from Greenhaus, Parasuraman & Wormley (1990). They refer to the scale as measuring "career progress." In this research the terms "career progress"

and “career success” are used interchangeably. The scale has an anchor 1 to 5, where 1=strongly dissatisfied, 3=neutral, 5=very satisfied.

The question asked is: How satisfied are you with the following aspects of your career? Participants used the aforementioned scale and question to rate themselves on the following aspects of their career success:

1. The progress I have made toward meeting my goals for advancement
2. The progress I have made toward development of new skills
3. The success I have achieved in my career
4. The progress I have made toward meeting my goals for income
5. The progress I have made toward meeting my overall career goals

This is clearly a subjective measure as respondents are asked to rate career success in their own terms.

In addition to the subjective measure of career success, additional questions were asked to obtain a more objective look at career success. These questions inquired about the participant’s salary and promotion rate.. All salary information obtained was transformed to U.S. dollars and adjusted for cost of living by using “The Salary Calculator,” a service of homefair.com provided by The Center for Mobility Resources (National Association of Realtors, & Homestore.com, Inc., 2003). The formulas used by this calculator are based on five major categories: housing costs (33%), utilities (8%), consumables (16%), transportation (10%), and other

services (33%). A promotion was defined for the participants as, “any significant increases in job level, job responsibility, salary, or job scope. Included are those job changes occurring within organizations, and any job changes between organizations which resulted in an increase in salary, job responsibility, or job scope” (Seibert, Kraimer, & Crant, 2001).

The MSCEIT

The MSCEIT was chosen to measure emotional intelligence because it is composed of tasks that must be performed (Mayer, Salovey & Caruso, 2003). This is similar to the composition of intelligence quotient tests. With task-based questioning this test avoids having participants choose what they perceive as the best answer over what they actually do, as often occurs in measures that rely solely on self reporting.

The MSCEIT adheres to Mayer and Salovey’s (1997) Four-Branch model of emotional intelligence. Each of the four Branches represents a different skill set within EI. The four branches in their model are: Perceiving Emotions, Facilitating Thought, Understanding Emotions and Managing Emotions (Mayer, Salovey, & Caruso, 2002).

- Perceiving Emotions relates to a person’s ability to recognize emotional stimuli. Emotional stimuli can include, but are not limited to, facial expressions, tone of voice, art objects, music, and stories told in movies or literature.

- Facilitating Thought is the ability to reason with generated emotions and to use them to communicate. This branch is unique from the other three because it deals with using emotions to enhance reasoning instead of the ability to reason about emotions (Mayer, Salovey, Caruso, & Sitarenios, 2001).
- Branch three of the Four-Branch model of emotional intelligence is Understanding Emotions refers to the ability to find the meaning in complex relationships among emotions in specific contexts.
- Managing Emotions is the ability to take an awareness of emotions in oneself and others and manipulate them to promote personal growth.

In addition to the four Branches the MSCEIT also produces an overall emotional intelligence score, two Area scores and eight Task scores. The Branches can be grouped into two Area scores and one overall emotional intelligence or broken down into eight Task scores.

The two area scores represent Experiential emotional intelligence and Strategic emotional intelligence. The Experiential emotional intelligence score is calculated using the perceiving emotions and Facilitating thought branch scores. Strategic emotional intelligence is a combination of the two other branches: Understanding Emotions and Managing Emotions.

The eight Tasks scores on the test are: Faces, Pictures, Sensations, Facilitation, Blends, Changes, Emotional Management, and Emotional

Relations. In each case two Task scores make up a branch score: Faces and Pictures combine to form the Perceiving Emotions score, Sensations and Facilitation combine to form the Facilitating Thought score. Blends and Changes combine to make the Understanding Emotions score, and Emotional Management and Emotional Relations combine to form the Managing emotions score. Figure 1 shows the hierarchical structure of the MSCEIT.

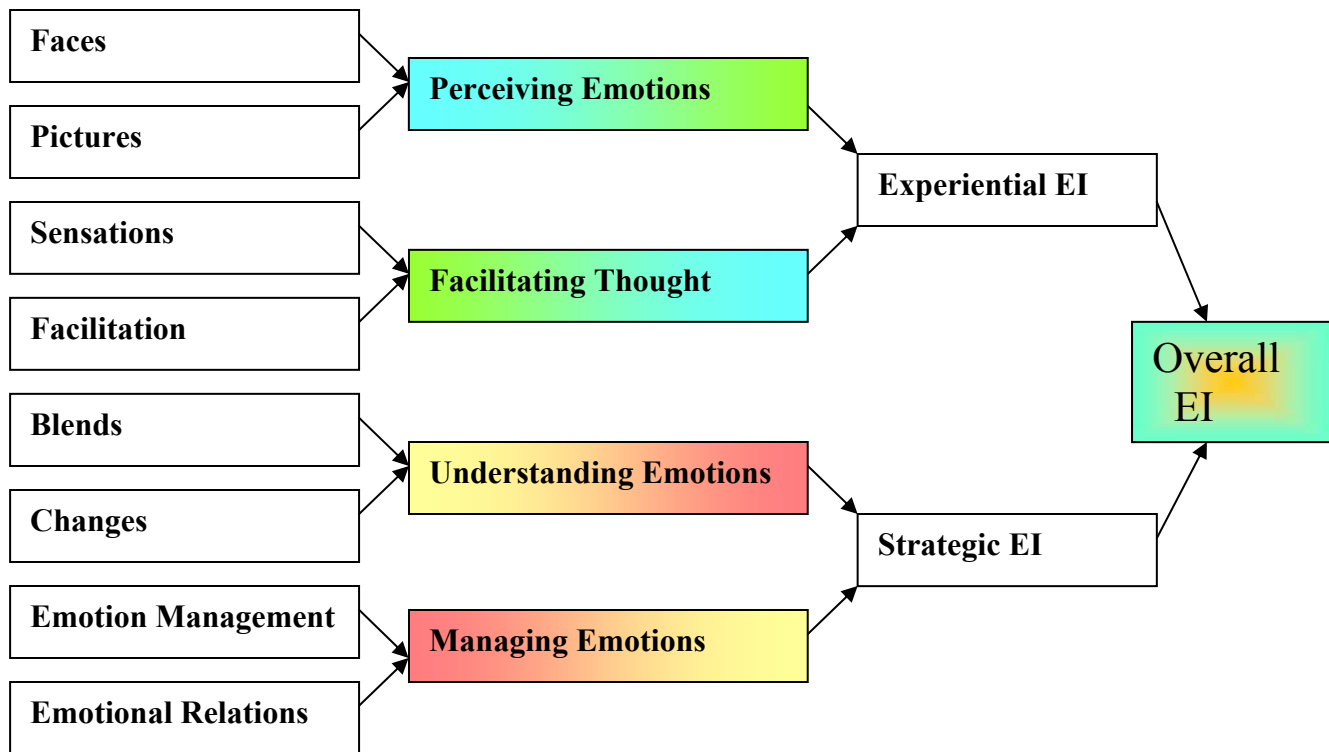


Figure 1. Hierarchy of specific scores on the MSCEIT which are cumulated to yield overall emotional intelligence. (Mayer, Salovey, Caruso, & Sitarenios, 2003).

Each Task on the MSCEIT asks the test taker to perform differently. The Task of Faces requires respondents to identify emotions being displayed by faces, displayed as pictures. The Task of Pictures presents various images and landscapes and asks respondents to identify what emotions are expressed in them. In the Sensations Task respondents

compare emotions to different sensations. These sensations include colors, light, and temperature. The Facilitation task asks respondents to demonstrate their understanding of how different moods interact and affect thinking and reasoning. The Blends Task has respondents to construct and deconstruct complex emotions that consist of more than one underlying emotion. The transition of emotions from one to another is assessed by the Changes Task. For example; sadness may lead to depression. Emotional Management asks respondents to rate the effectiveness of alternative actions in an emotional situation. Lastly, the Emotional Relations Task has respondents evaluate different actions that incorporate emotions and involve other people.

MSCEIT Scoring

The scores for the MSCEIT are standardized by consensus taking. As Mayer, Caruso, Salovey, and Sitarenios (2003) explain, “Our model of EI hypothesizes that emotional knowledge is embedded within general, evolved, social context of communication and interaction. Consequently, correct test answers often can be identified according to the consensus response of a group of unselected test-takers (p. 98).” Therefore, if the normative population viewed a picture and a majority of them thought that it represented happiness, then happiness would be the correct answer.

Let us say 70% of the norming sample thought it represented happiness and 30% thought it represented sadness. A person taking the test will be scored accordingly. If they answer happiness for that question, they would receive a raw score of .7. If they answered sadness they would receive a score of .3.

There are two methods available to score the MSCEIT, General and Expert scoring. The Expert scoring method uses a consensus of experts in the field of emotion research. The General scoring method uses a consensus sample from the general population. The response frequencies for General and Expert Scoring are highly correlated (Mayer, Salovey, & Caruso, 2002)

This research used the General scoring method with scores adjusted for age and gender differences. One participant did not report age, thus making it impossible to adjust score accordingly. All 35 participants reported gender.

The normative sample for the General scoring on the MSCEIT consists of 5000 respondents. Most of the respondents were from the United States but also multi-national data from Europe, Asia, Africa, North America outside the U.S. and Australia was included. The sample space in the normative sample was quite comprehensive, and so it possible to adjust the scores to the demographic make up of the United States.

The raw scores from the MSCEIT can be standardized just as Intelligence Quotient scores are standardized to a mean of 100 with standard deviation of 15. The distribution of the normative population scores is not symmetric, and therefore standardization to mean 100 and SD 15 requires information on skew in the scores. This information and the computing algorithms are retained as proprietary information by the owners of the MSCEIT, and were not available with the budget of this research. Because the research objectives of this paper can be addressed through the raw scores, converting the raw data of the MSCEIT into standard scores with a mean of 100 was not done.

Sample

The sample consisted of volunteers from the International High IQ Society. The IHIQS accepts members who have IQ's in the top five percent of the general population. Currently there are 1765 members. All persons who have gained admission to the society have taken one of their IQ tests that were created by The International Intelligence Testing Committee (IITC). IITC consists of the top test designers in the world who have made a test that is valid and reliable (International High IQ Society, 2003). Despite this, the test takers are expected to complete the tests in

good faith. There is no system allowing for the assurance that test takers have not received assistance in completing them.

Demographic information was collected regarding the age, sex, race, salary, country of residence and IQ. Of the 35 persons who completed the survey and test 34 reported their age. The mean age of those 34 participants was 33. The minimum age was 19 years old and the maximum was 53. There were 26 males and 9 females in the sample. The racial make up of the sample consisted of 30 whites, 2 Asians. Three participants did not report their race. Salary information was adjusted for the cost of living and standardized to Rochester, NY. Salary was defined as their income from last year including any bonuses received. The 29 participants who reported a salary had a mean of \$80,636. The minimum salary reported was 10,783 and the maximum was \$338, 536. Thirty-four participants reported the country they live in. There were 22 participants from the United States, 3 from Canada, 2 from the United Kingdom, 2 from Australia, 1 from Germany, 1 from Portugal, 1 from Trinidad and Tobago, 1 from Brazil, and 1 from China. Persons participating in this study reported their qualifying IQ scores for the IHIQS. These scores are on a Binet-Stanford type scale. A score of 126 or above qualifies persons to join the IHIQS. The mean IQ score was 138. The minimum IQ score reported was 126 and the maximum was 161.

Data Management

A short description of the research was posted on the IHIQS's website inviting persons to participate. This posting contained a link to the survey hosted on SurveyMonkey.com. In order to take the survey an electronic signature was required. Before starting the survey participants were asked to provide an electronic signature indicating that they understood their rights and they are over the age of 18. If they indicated contrary to that they were not allowed to proceed.

At the end of the survey on SurveyMonkey.com participants created a unique alphanumeric identifier that they used in the name section on the MSCEIT. By doing this the SurveyMonkey.com questions and MSCEIT questions may be linked. In the event that this failed, surveys and emotional intelligence tests were linked by time stamps provided. One MSCEIT completed did not have a corresponding SurveyMonkey.com survey to link to it.

Both the survey and emotional intelligence tests were remotely hosted. Multi-Health Systems Inc. hosted the MSCEIT test on their server. SurveyMonkey.com hosted the survey. Each host provided me with data sets.

A copy of the final thesis will be provided to the IHIQS.

Limitations

The primary limitation in this study is due to the sample. The stratified sample in this study represents only persons with high IQs. This does not give, and is not intended to give, a full picture of the broad range of IQ across the general population and its relation to EI. In addition, participants in the survey are self selected members of the International High IQ Society. One could speculate that persons may choose to join such a society for reasons linked, positively or negatively, to EI. This could directly effect the outcome of the MSCEIT results.

CHAPTER 4: Results

This chapter presents the results of the data analysis from the study. Relationships were investigated among: EI, MSCEIT sample population, MSCEIT normed population, career success, salary, promotions, age and IQ. This chapter begins with a summary of the key findings, then presents these findings in detail, and then again presents a summary of the main findings. Specifically the sections are: 1) overview of study results; 2) presentation of findings for each of the two research questions; Summary of the study's key findings.

Figure 2 presents a summary of the key findings in this study.

Finding	Research Question	Key Findings
1	R1	The high IQ population as a whole scored significantly below the norm on the MSCEIT.
2	R2	Despite below norm EI, the high intelligence sample population indicated career success.
3	R2	There were no correlations between Career success and Overall EI. Only a few correlations were made between career success and specific MSCEIT Tasks or groupings.

Figure 2. Key findings

Presentation of Key Findings

Simple statistics.

Table 1 provides the set of simple statistics describing the input from the survey population from each of the two survey instruments.

All three of the career success measures, salary, promotions and progress cover a broad range. This is useful because an objective of this study is to determine if there is a relationship between EI as a predictor and career success as a response. If the response showed little variability it would not be suitable for demonstrating this effect.

The mean value of Salary 2, after the cost of living adjusted to Rochester, NY is applied, was \$80,291. Although, this represents individual income of the research participants, it is still well above the mean family income of \$62,129 for Rochester, New York (U.S. Census Bureau, 2002). This would indicate that on average the research participants have achieved a high level of career success in financial terms. Individual values do remain broadly distributed over a wide range.

The subjects' ages range from 19 to 52. Career success clearly will have some dependence on time in the workforce. This is particularly true with Salary and Promotions which would normally increase as age increases. The analysis will have to be alert not to confuse an age – related effect with one driven by EI.

Table 1. Variables and simple statistics.

Variable	Number of Responses	Mean	Standard Deviation	Minimum	Maximum
Subject Information					
Age	34	33.32	9.02	19	52
IQ (Reported IHIQS Qualifying IQ score)	31	137.94	9.32	126	161
Salary (Zeros Included)	31	75,111	80,347	0	338,526
Salary2 (Zeros dropped)	29	80,291	80,536	10,738	338,526
Promotions (Career Promotions)	33	4.06	3.70	0	13
Progress (Average of the 5 questions)	33	3.50	.96	1.20	5
MSCEIT Tasks					
Faces	35	.42	.13	.18	.59
Facilitation	35	.41	.10	.19	.56
Changes	35	.57	.06	.44	.67
Emotional Management	35	.38	.05	.25	.46
Pictures	35	.48	.09	.22	.58
Sensations	35	.38	.07	.22	.49
Blends	35	.52	.07	.36	.60
Emotional Relations	35	.42	.08	.17	.54
MSCEIT Branches					
Perceiving Emotions	35	.45	.09	.23	.58

Facilitation Thought	35	.40	.07	.21	.50
Understanding Emotion	35	.54	.05	.45	.62
Managing Emotions	35	.40	.05	.25	.48
MSCEIT Areas					
Experiential	35	.42	.07	.22	.54
Strategic	35	.47	.04	.38	.55
MSCEIT Overall					
Summary measure	35	.45	.05	.31	.52

Research question one.

What is the distribution of emotional intelligence scores for a population with high intelligence quotients?

Table 2 presents the results of a two tailed *t* test between the MSCEIT scores for the high IQ population and MSCEIT normed population. The MSCEIT scores for the 35 high IQ respondents (N1) were scored to minimize any bias occurring from age and gender. One of the 35 respondents did not report age and in that case the score was only adjusted for gender. The data for the 5000 respondents in the normative sample (N2) has been adjusted to reflect the ideal demographic population in the United States.

The *t* test shows that the average of the IHIQS sample population to be significantly lower than the normative sample on three of the eight task

scores and one Branch score. Of the Task scores Faces, Emotional Management, Pictures, Sensations and Emotional Relationships were all significantly below the norm. Facilitation, Changes, and Blends all showed no significant deviation from the normative sample. The Understanding Emotions Branch, comprised of the Blends and Changes Tasks, also showed no significant difference between the study population and the norm. The remaining three Branch scores, the two Area scores and overall emotional intelligence were found to be significantly below the norm.

Table 2. Relationship between MSCEIT high IQ sample and normed sample.

MSCEIT	N1	M1	SD1	N2	M2	SD2	t	p (2-tailed)
Task								
Faces	35	.42	.13	5000	.51	.12	4.26	.001*
Facilitation	35	.41	.10	5000	.44	.09	1.47	Not significant
Changes	35	.57	.06	5000	.57	.10	0.35	Not significant
Emotional Management	35	.38	.05	5000	.44	.09	7.49	.001*
Pictures	35	.48	.09	5000	.53	.13	3.29	.001*
Sensations	35	.38	.07	5000	.52	.11	12.53	.001*
Blends	35	.52	.07	5000	.53	.10	1.18	Not significant
Emotional Relationships	35	.42	.08	5000	.46	.11	2.70	.010*
Perceiving Emotions	35	.45	.09	5000	.52	.10	4.48	.001*
Branch								
Facilitating	35	.40	.07	5000	.48	.08	6.68	.001*

Thought Understanding Emotions	35	.54	.05	5000	.55	.08	1.03	Not significant
Managing Emotions	35	.40	.05	5000	.45	.08	5.63	.001*
Experiential Emotional intelligence	35	.42	.07	5000	.50	.07	6.15	0.001*
Area								
Strategic Emotional Intelligence	35	.47	.04	5000	.50	.07	4.10	.001*
Overall (Total EI)								
Overall emotional intelligence	35	.45	.05	5000	.51	.06	7.72	.001*

Note: N2, M2, & SD2 from Mayer, J. D., Salovey, P. & Caruso, D. R. (2002).

Research question two.

What is the relationship between emotional intelligence and career success?

Despite the fact that the high IQ population scored significantly below the normed sample on the MSCEIT, the Progress scores and Individual Salary scores do not indicate lack of success in their careers. In fact the mean income was above normal and the Progress score had a mean of 3.50 on a scale from where one is less satisfied and five is very satisfied.

A Pearson correlation analysis was completed using all 21 of the variables. Table 3 shows the results of the Pearson correlation of career success with MSCEIT Items and Inter-correlations between career

successes. If p , the probability that the apparent correlation would occur if in fact there were no correlation, was less than or equal to .05, the correlation result was considered significant. Instances of p meeting this criterion are bolded. No correlation was found between Overall EI and Career Success, two Task, one Branch, and one Area scores from the MSCEIT were correlated with career success.

Table 3. Pearson correlation matrix

Variables		Age	IQ	Salary	Salary 2	Promotions	Progress
Age	$r =$	1.00	.06	.42	.39	.58	.25
	$p =$		.73	.02*	.03*	.00*	.17
IQ	$r =$	.06	1.00	.20	.20	.19	.40
	$p =$	.74		.28	.31	.31	.03*
Salary	$r =$	.42	.20	1.00	1.00	.46	.21
	$p =$	.02*	.29			.01*	.24
Salary2	$r =$	.39	.20	1.00	1.00	.42	.22
	$p =$	.03*	.31			.02*	.24
Promotion	$r =$	.58	.19	.46	.41	1.00	.24
	$p =$	.00*	.31	.00*	.02*		.18
Progress	$r =$	.25	.40	.21	.22	.23	1.00
	$p =$	.17	.03*	.25	.24	.18	
MSCEIT Task Scores							
Faces	$r =$	-.17	.15	-.32	-.37	-.07	-.10
	$p =$	.35	.43	.08	.04*	.69	.56
Facilitation	$r =$	-.16	.33	-.16	-.20	-.18	.10
	$p =$	.38	.07	.38	.29	.30	.56
Changes	$r =$	.39	.26	.25	.27	.39	.46
	$p =$	.02*	.16	.17	.16	.02*	.01*
Emotional Management	$r =$	.02	-.17	.05	.05	.11	.08
	$p =$	.93	.35	.80	.80	.53	.63
Pictures	$r =$	.01	.16	-.14	-.09	.00	.07
	$p =$	.94	.38	.47	.63	.10	.72
Sensations	$r =$	-.26	.20	.06	.11	-.29	.05
	$p =$						

	p=	.14	.28	.73	.57	.10	.77
Blends	r =	-.01	.07	.07	.11	.08	.13
	p=	1.00	.70	.71	.57	.66	.46
Emotional	r =	.25	.23	.05	.05	.06	.28
Reactions	p=	.15	.21	.78	.80	.80	.11
MSCEIT							
Branch							
Perceived	r =	-.10	.19	-.29	-.30	-.04	-.04
Emotions	p=	.57	.34	.12	.11	.81	.84
Facilitating	r =	-.23	.32	-.08	-.09	-.26	.10
Thought	p=	.20	.07	.65	.63	.15	.59
Understanding	r =	.23	.20	.20	.23	.30	.38
Emotions	p=	.20	.28	.29	.24	.87	.03*
Managing	r =	.20	.12	.07	.64	.10	.26
Emotions	p=	.25	.54	.72	.74	.59	.14
MSCEIT Area							
Experiential EI	r =	-.17	.28	-.23	-.24	-.15	.02
	p=	.32	.13	.22	.20	.40	.90
Strategic EI	r =	.26	.19	.16	.18	.24	.39
	p=	.14	.30	.39	.36	.18	.03*
MSCEIT Total							
Overall EI	r =	-.02	.31	-.11	-.11	-.02	.18
	p=	.89	.09	.56	.57	.91	.31

The Pearson correlation matrix revealed positive correlations between Progress, Promotion and certain MSCEIT scores. The Task of Changes on the MSCEIT was shown to be correlated with Progress and Promotion. In this instance, the correlation was strong enough to influence the relationship of the corresponding Branch and Area scores for that Task.

The Progress score, taken as an average of all five progress questions, was positively correlated with MSCEIT Task Changes. Figure 3 is a scatter diagram of showing the relationship between Progress and

Changes where r is .46 and p is .01. This relationship between Changes and Progress caused its respective Branch score Understanding Emotions to be positively correlated to Progress. The corresponding Area of Strategic intelligence also showed a positive correlation.

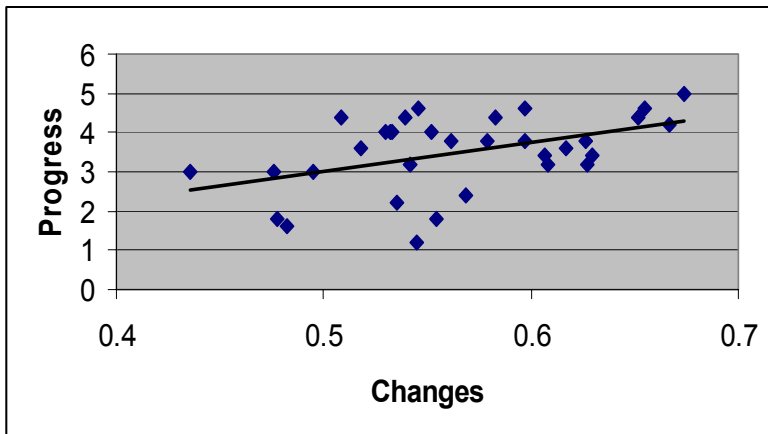


Figure 3. Changes vs Progress

The promotions reported by the IHIQS participants showed correlation with one Task, the Task of Changes. This correlation is shown with a scatter diagram in figure 4 where r is .39 and p is .02. The relationship of Promotions to Changes was not strong enough to cause the Branch or

Area scores that contain the Changes Task to show a correlation.

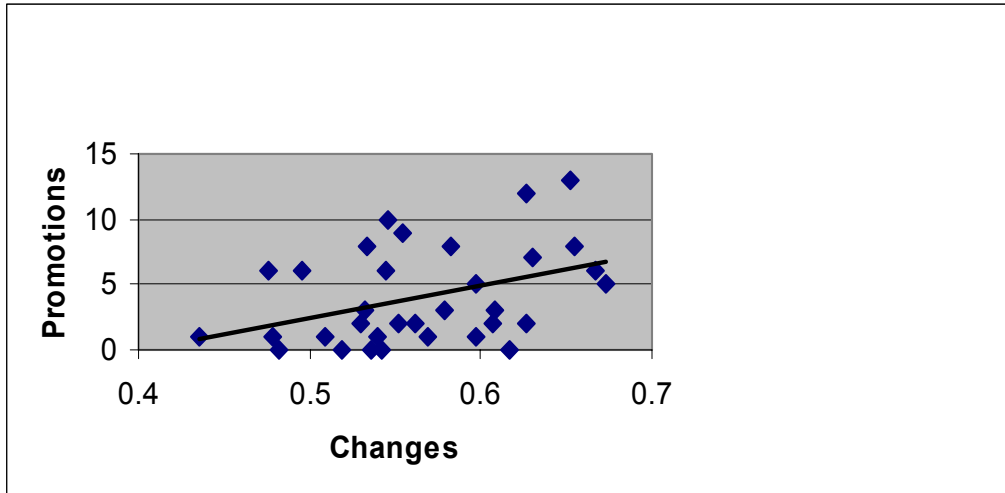


Figure 4. Changes vs Promotions

In addition to the significant relationships found with the Task of Changes, the Pearson correlation coefficients indicated a significant relationship with the Task of Faces and Salary. Figure 5 show the scatter diagram for Faces and Salary2. The r value is $-.37$ and the p value is $.04$.

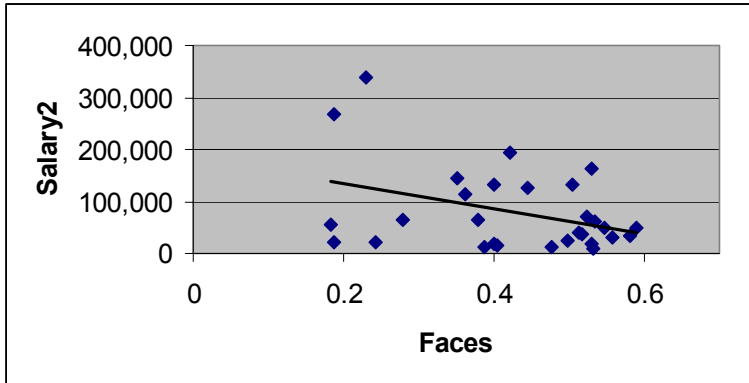


Figure 4. Faces vs Salary2

Inter-correlation between elements of career success was not surprising. This holds true with correlations of age with measures of career success. As age increase so did Progress. Salary and Promotions was positively correlated as one would expect in normal advancement career advancement. Likewise both Salary2 and Promotions were positively correlated with age.

Summary of Results

Research question one was; what is the distribution of EI scores for a population with high IQs? To address R1, a two tailed t test was used to analyze the relationship between the research sample and the norm. The t test revealed that EI was distributed below the norm for the high IQ population. Specifically, among the various sections and grouping in on

the MSCEIT the high IQ sample scored significantly below the norm on 11 of 15 items. The scores that were not significantly below the norm on the MSCEIT included three Task scores and one Branch score. The Task scores not significantly below the norm were Facilitation, Changes, and Blends. The Branch score not significantly below the norm was Understanding Emotions. The Understanding Emotions Branch score is derived from the Blends and Changes Task scores.

Research question two was; What is the relationship between emotional intelligence and career success?

The results of this study indicate that there is little relation between career success and emotional intelligence in the sample population. The study's participants are successful despite scoring below the norm on the MSCEIT. The Pearson correlation failed to show a significant correlation with Career Success and Overall EI. Although Overall EI showed no correlation with career success, some components of Overall EI were correlated with career success measures.

Figure 6 summarizes the correlations made with measures of career success and the specific MSCEIT Tasks. The MSCEIT Task of Changes was positively correlated with Progress. The Changes Task asks respondent to identify the emotion resulting from a combination of differing emotions. Since the Task of Changes is also a component of the MSCEIT

Branch Understanding Emotions and the MSCEIT Area score Strategic EI, those scores also showed a positive correlation. Additionally, Age and Promotions were positively correlated with the Task of Changes. The Task of Faces was negatively correlated with Salary. The Faces Task Asks respondents to identify the emotions being expressed in a persons face by looking at pictures.

Finding	Summary
1	Progress was positively correlated with the MSCEIT Task of Changes. The correlation was strong enough to cause the Branch and Area scores containing the Task of Changes to also be positively correlated.
2	The Task of Changes was positively correlated with Promotion and Age.
3	The Task of Faces was negatively correlated with Salary.

Figure 6. Summary of correlations relating to R2

CHAPTER 5: Discussion

Findings One:

Discussion of results for research question one

The findings in this research found that the high intelligence population had EI significantly below the norm. This is contrary to past research that indicated IQ and EI have no relationship or a minimal positive correlation (Mayer, Salovey, & Caruso, 2002). The expected distribution of the high intelligence population based on that research would have been normal or slightly displaced toward the high end. Instead the t test revealed a displacement of the distribution to the low end of the normed sample. This prompts the question then, “Why is the distribution of EI scores in this sample displaced to the low end of the distribution?” Due to the limited scope and stratified sample in this research causation can not be directly attributed. Note that the sample was only a small fraction of the total variation in IQ, and there were no significant correlations made within the sample between IQ and the MSCEIT results.

The IHIQS members have elected to become members of this society and participate in this study. The myriad of possible reasons persons would do this could be related to their emotional intelligence. A study that sampled IQ randomly is needed to clarify this.

Future research needs to be conducted to better understand the relationship between EI and IQ. Nonetheless, this study has demonstrated that generalizations about EI and its relationship to IQ and career success are not found in this sample of high IQ individuals.

Findings Two:

Discussion of results for research question two

The high IQ study participants are successful by objective and subjective measures despite EI below the norm. If emotional intelligence has little or no effect on career success but IQ does then the sample in this study should have a high level of career success. This research has shown that low EI does not seem to have hindered career success in this high IQ population. The mean for the career success measured by Progress is 3.5 and shows that the study participants as a whole are satisfied with their career success.

EI overall is not a good prediction of success for the study population. This would suggest that emotional intelligence has not greatly hampered the success of those who have superior intellectual capabilities, at least those who participated in this study. This finding is consistent with Murry's (1997) study that has shown that IQ alone is a strong predictor of economic success. Further research may uncover if there is a threshold

where EI becomes more important than IQ as IQ decreases. Potentially, as IQ decreases, EI characteristics such as the ability to sway the emotions of others for one's benefit may become important when they are needed to overcome intellectual ability limitations.

Within the domain of EI there are aspects that relate to career success. The subjective measure of Progress and objective Promotions are positively correlated to the MSCEIT Changes Task. Progress is also positively correlated to the MSCEIT Understanding Emotions Branch, and the Strategic Intelligence Area scores. This is a collateral effect caused by the correlation with the Changes Task. The Changes Task is an element in these two MSCEIT subcategories (see Figure 1).

The Changes Task asks the MSCEIT test taker to identify how emotions can change from one to another due to escalation or de-escalation. In a work environment this means that people must recognize how their actions may cause others to respond emotionally. If a person can act in a way to decrease fear that is present in another employee they would likely benefit along with their organization. For example, in today's fast paced environment many organizations find themselves needing to downsize. This is a common cause of fear among employees because they are afraid they could lose their jobs. Employees sometimes leave organizations voluntarily during downsizing for opportunities that appear

more secure. This can lead to the loss of valuable employees. A successful person would be able to calm those fears so that employees can remain productive. This saves time and money for organizations. When that is recognized people benefit with rewards and career advancement. Conversely, if they act in a way to escalate that fear, they and their organization are likely to endure negative consequences.

The strategic employment of emotional knowledge, specifically the Changes Task, is important in career success. Strategic EI is the ability to effectively use emotional knowledge in planning and self management. One must manage and plan using emotional knowledge to maximize productivity and loyalty among employees. Those persons who are able to do so effectively are most likely to have successful careers. This may account the positive correlations found between Progress and the MSCEIT results for the Changes, Understanding Emotions, and Strategic EI.

There was a negative correlation of the Faces Task with Salary². The two highest incomes, both above \$260,000, help to drive this correlation with low scores on the Faces Task. This suggests that lower abilities in some domains of EI can lead to greater success. For example, those who do not recognize the emotions expressed in one's face will not be able to empathize with those emotions. This could be a beneficial attribute is

situations requiring hard-nosed negotiation to produce the maximum outcome. The blocking out of emotional input during negotiations may allow for the negotiator to avoid emotional manipulation. The negotiator can thus maintain their objectives and not concede or compromise them out of empathy. They have effectively avoided the consequences of the open-loop limbic system that causes a person's emotions to be shaped by those around them.

Implications for HRD Practitioners

Emotional Intelligence is a relatively new and complex concept. Despite Goleman's (1995) popularization of the concept and its adoption by organizations to identify employees who will be successful, there is still much research needed to clarify its predictive value. This study has shown that EI may not be predictive as IQ in career success. As pointed out by Barth (2003), there is something attractive about helping people better manage their feelings but using it as a selection tool while so little is known about it is premature.

Unlike traditional IQ which this reader thought to be a fixed characteristic, EI is considered a learnable intelligence (Goleman, Boyatzis, & McKee, 2002). Being a learnable ability, EI should perhaps be a secondary consideration to IQ when trying to identify who will be most

successful within companies. IQ allows for deeper abstract thoughts that can lead to quality innovations within a company. A focus by HRD practitioners on developing EI in a high IQ population may yield the best results. Clearly the interpersonal skills associated with EI are important. EI skills help employees effectively communicate information within and organization. The better the intellectually gifted employees can communicate their insights to an organization the more effective they will be as employees.

Those involved in recruiting the right people for an organization must carefully consider their decisions. If those persons do not consider the competencies needed and rely on claims like Chen, Jacobs, and Spencer's (1998) that close to 90% of success can be attributable to EI, mistakes are likely to be made. EI and IQ are two unique measures that may or may not contribute to a persons success. They must be considered objectively in light of specific needs.

Concluding Thoughts

The short history of EI, relative to IQ, its faddish popularization by Goleman (1995), and the results of this study leave this researcher less certain about the value and application of EI as a tool in Organization

Development. Is it correct to view the low scores on the MSCEIT among the high IQ population sampled in this study as negative?

It is the cognitive brain that distinguishes humans from other animals, not the emotional brain. The cognitive brain is also the mediator of emotional input. The possibility exists that those with high IQ's process emotions differently than the rest of the population due to their high level cognitive abilities. As more is understood we may find that this emotional processing can be the most conducive to professional achievement.

It remains to be seen if EI will continue to gain popularity as a tool to identify achievement potential. The measurement and mismeasurement of persons will no doubt continue as organizations search for the competitive edge. It is, and probably will always be, wise to use caution when ascribing value to a person's potential using tools such as EI and IQ tests. Generalizations about EI and IQ abound, but humans are unique in their complexity and potential can exist and be expressed in innumerable ways.

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