THE EFFECTS OF APPRECIATIVE INQUIRY
ON EMOTIONAL INTELLIGENCE

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By

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THE EFFECTS OF APPRECIATIVE INQUIRY ON EMOTIONAL INTELLIGENCE

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The purpose of this study was to explore the affects of experiencing Appreciative Inquiry on a group’s Emotional Intelligence. The authors of Appreciative Inquiry call for a study of organizations in which evolving, social constructions change and transform the capacity of the organization to possibilities not probable in a hierarchical ordered system (Cooperrider, Barrett, & Srivastva, 1995). In order for organizational leaders to provide a structure in which optimal change processes may occur, they must understand, as in the instance of using Appreciative Inquiry, what affects it may have on individuals. Both quantitative and qualitative data collection and analysis contribute to this research. This study examined one consequence of change that may be useful to leaders as they work within organizations to accomplish goals and move to increased levels of effectiveness for the organization.
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DEDICATION

This work is dedicated to Jim, my husband and my proof on earth that God sends us all the help we need.
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CHAPTER I

Introduction

“Change is inevitable.... Change is constant.” -- Benjamin Disraeli

The purpose of this study was to explore the effects of using Appreciative Inquiry on a group member’s Emotional Intelligence. In order for organizational leaders to provide a structure in which optimal change processes may occur, they must understand, as in the instance of using Appreciative Inquiry, what effects it may have on individuals.

The problem of knowing what effects change-processes may have on individuals is presented first in this chapter. The significance of studying the result of Appreciative Inquiry on a group’s Emotional Intelligence is presented and a focused question is developed. Consideration of organizational change in today’s environment is then examined. Following is a brief overview on the background of Emotional Intelligence and Appreciative Inquiry. Possible links or connections between Emotional Intelligence and Appreciative Inquiry based on a social constructionist approach are discussed, and the definitions of key terms in the study are included.

Statement of the Problem

Appreciative Inquiry is a process for organizational change/transformation and Emotional Intelligence is a relatively new concept regarding intelligence. Researchers have not yet come to a consensus regarding the definition of Emotional Intelligence (Mayer, Roberts, & Barsade, 2008). Is it aptitude or social skills? The validity and reliability of the measurements tools are yet being scrutinized (Schutte, Malouff, Hall, Haggerty, Cooper, Golden, & Dornheim 1998; Stys & Brown, 2004; Van Rooy,
Viswesvaran, & Pluta, 2005). Can Emotional Intelligence be increased? Time and money have been devoted to the pursuance of increased Emotional Intelligence. Yet researchers debate if it is possible to change Emotional Intelligence or even change emotional knowledge (Mayer, Roberts, & Barsade, 2008). Does Appreciative Inquiry, by its definition as a vehicle for transformational positive change, affect Emotional Intelligence? This question, does Appreciative Inquiry affect Emotional Intelligence, was the central issue in this study. The answer may be important for many reasons, but considering just the financial aspect could be quite valuable.

In a study by Cherniss, Goleman, Emmerling, Cowan, and Adler (1998), the estimated lost cost of training programs aimed at increasing social or emotional competencies was between 5.6 and 16.8 billion dollars. They presented a detailed design, based on research, for training or professional development in Emotional Intelligence. Limited funds and budgeting for professional development training (specifically in this study, Emotional Intelligence) along with the need to pay for strategic planning (specifically in this study Appreciative Inquiry) is problematic today.

Guskey and Huberman (1995) examined professional development in education. Professional development can be what they refer to as a “deficit model” (p. 269). They suggested that the deficit is typically determined by someone else, usually a superior, and “...is based on the idea that something is lacking and needs to be corrected” (p. 269). Because the positive principle of Appreciative Inquiry considers “organizations as human constructions [that] are largely affirming systems and thus responsive to positive thought and positive knowledge” (Cooperrider, Whitney, & Starvos, 2003, p. 9) it is logical to ask if this orientation affects a group in ways other than just the intended change that an
Appreciative Inquiry event was to bring about? Is it possible that by using Appreciative Inquiry to change an organization, the Emotional Intelligence of the employees is affected? If so, then the possibility of developing the individual professionally, as in the case of Emotional intelligence, may be accomplished, in part, through Appreciative Inquiry. Balancing the needs of an organization as it engages in developing its employees and plans for the future may be impacted by the results of this exploratory study. Evidence suggested that Appreciative Inquiry may affect Emotional Intelligence can be valuable information to organizational leaders as they prepare for the needs of the organization.

Central Question and Significance of Study

The general question for us of this study was to determine if organizational change processes have specific effects on the individuals in the organization. Does Appreciative Inquiry affect Emotional Intelligence? In addition, what significance could there be in studying this? Part of the answer may be in the understanding of systems theory. Systems theory (Laszlo, 1972, 1973, 1996; Wheatley, 2006), the study of complex and whole systems’ interactions, suggests that the “...investigation of organized wholes of many variables requires new categories of interaction...” (Bertalanffy, 1972, p. 423). Data collected regarding the interaction between the participants and the structure of the change process that they are going through may provide information that can help to improve the understanding of the dynamic picture of organizational change.

Of course, the intention is for the people in the organization to change, they should change in ways that will support the goals of organization. Companies plan for it. Endless time is spent designing and implementing strategic planning, organizational
restructuring, and goal-setting. Yet, as leaders choose methods for organizational change/transformation in this rapidly shifting environment, is it possible that individuals who participate in these processes are changed, changed in ways that were unplanned?

Appreciative Inquiry has taken a “constructive view of . . . social-organizational theory. . .” (Cooperrider, Barrett, & Srivastva, 1995, p. 176). It is a process for organizational change or transformation based on the presumption that the very act of inquiry, or asking questions, focuses the organization on that topic or subject and obscures others. By asking the question, the organization sets the template for discovery and future possibilities on that subject. If the question is focused on a problem, then the organization is focused on the problem. This limits the possibilities that may exist in other areas in which strengths and unique skills lie. If questions are asked regarding the capacities of the organization, does this inquiry bring awareness of self, others (aspects of Emotional Intelligence) to the level of cognitive knowledge for members of the organization? In other words, does Appreciative Inquiry affect Emotional Intelligence?

Ludema (2000) considered that human systems have a language of hope, and he stated that knowledge in the organization is a social artifact. Action in the direction of positive and affirming understandings of the organization links the two (hope and knowledge) and opens new possibilities for human organizing. This is, he concluded, the power of Appreciative Inquiry. The human system or organization is impacted by not only external stimuli but also by internal factors of hope and knowledge.

Therefore, if considering systems theory and the interaction between the participants and the structure of the change process as well as the perspective of the change process, the general question of this study became, do organizational change
processes have specific effects on the individuals in the organization? This has important significance particularly when choosing a change strategy. Does Appreciative Inquiry, which is anchored in a relational constructionist perspective, have an effect on the individuals in the organization beyond that of implementing change strategies? This posed the question: does Appreciative Inquiry affect Emotional Intelligence?

Of course, when implementing change strategies, the expectation is for group members to change. Do organizational change processes have effects on the individuals in the organization? What is expected is a change directly related to, and in support of, the goals of the organization. However, as an organization changes does the individual change at a personal level, and is the change limited to the functions of the organization? How important are the traits of individual group members to the change process? The answers seem logical; if the organization undergoes a dramatic shift, the people in the organization are changed. However, is this true and how are they changed? Is it measurable?

If the focus of the question is one aspect of an individual, and the focus of the change method is one specific process, it may then be possible to examine this question in a limited environment. This exploratory study focused on the individual aspect of Emotional Intelligence and on the organizational change process built on strength-based resources developed through Appreciative Inquiry. Measuring the Emotional Intelligence of an individual before, during, and after a change process (specifically Appreciative Inquiry) may bear information that might contribute to an exploratory study of such a question. Framing a singular question from this focus may provide insight to an understanding of how Appreciative Inquiry affects the Emotional Intelligence of group
members. It is advantageous for members of an organization to be competent in Emotional Intelligence. In addition, Appreciative Inquiry is a change process that is intended to transform the organization in positive generative ways. Individual Emotional Intelligence and the Appreciative Inquiry process provide a focus to an investigation of what effects change processes may have on an individual.

A member of an organization who has the ability “...to process emotion laden information completely and to use it to guide cognitive activities like problem solving and to focus energy on the required behaviors” (Salovey, Mayer, & Carusco, 2002, p. 62) is said to be Emotionally Intelligent. This is generally a desirable trait in members of an organization. So desirable, in fact, that organizations spend vast amounts, possibly billions (Cherniss, Goleman, Emmerling, Cowan, & Adler, 1998), in professional development training that concentrates on Emotional Intelligence. Educational systems have even designed curricula around the notion of increasing Emotional Intelligence in learners.

This study investigated the relationship between the level of Emotional Intelligence of an organization’s members and a planned organizational change process, Appreciative Inquiry. Therefore, Emotional Intelligence may not be rigid, but rather changeable. Deepening the understanding of change, and how specific change processes affect individuals has significance today in a dynamic and changing world.
Understanding Organizational Change Today

Organizations are experiencing rapid change. Schools are no exception. The change that educational systems are undergoing at this time is unparalleled in its challenges (Evans, 1996). Peters (1987) told managers that they must learn how to thrive with massive changes in society because the environment is changing so rapidly that what is excellent is uncertain. In 1999, Future Trends Affecting Education Report of the Education Commission of the States stated:

The world is changing in ways that dramatically alter the assumptions, beliefs, traditions, and policies that previously served American citizens. Moreover, the rate of change is increasing at an astounding pace, resulting in many traditions and institutions lagging behind developments in some areas, such as technology. To anticipate change, rather than react to it, organizations are identifying trends and examining their possible implications. Rather than predicting what the future will be, trends indicate directions of change and bring focus to what the future may look like. (p. 1)

In the decade since that was written, the world has indeed witnessed changes that have caused even global perspectives to shift to a more inclusive and connected view of the world. This has been particularly apparent with the events of 9/11 that seemed to draw attention to the international community. Keil (2007) used the term global topology to describe this new perspective. Rapid change is occurring in all venues. While institutions are undergoing change, “...ideas about people and organizations are being directly challenged and transformed on an unprecedented scale” (Cooperrider et al., 1995, p. 157). While institutions, such as schools, go through change, the people in the organizations are
likely also going through change. For example, a snapshot of students shows a marked change in recent decades. In the U.S. Department of Education’s report on the *Findings from the Condition of Education 2008: Enrollment, Student Diversity on the Rise*, there were some bulleted points that helped to verify this changing student profile:

- Minority students make up 43 percent of public school enrollment. Twenty percent of school-age children speak a language other than English at home. The rate of college enrollment immediately after high school increased from 49 percent in 1972 to 67 percent by 1997, but has since fluctuated between 62 and 69 percent. Since 1970, women’s undergraduate enrollment has increased over three times as fast as men’s. Currently, women make up 57 percent of undergraduate enrollment. Minority students have accounted for about half of the growth in associate’s and bachelor’s degrees awarded between 1989-90 and 2003-04. (pp. 1-2)

Understanding change, understanding people as they move through change, and knowing how to support change are all essential today as organizations develop and transform at rates never before experienced. What must be considered as organizations anticipate change? Certainly, the literature is replete with research and examples of organizational change processes. Indeed, there are models of change processes and guidelines of how to plan for and how to implement successful organizational change (Bolman & Deal, 2003; Cameron, Dutton, & Quinn, 2003, Drucker, 1995, 1999; Evans, 1996; Fullan, 2001; Senge, 1990; Senge, Cambron-McCabe, Lucas, Kleiner, Dutton, & Smith, 2000; Sergiovanni, 1994). Organizational psychologists have called for understanding organizational change from the human perspective (French, Bell,
Some researchers have begun to examine the culture and climate of the organization as it relates to change (Schein, 1994). This research has had an impact on the understanding of the nature of organizations today. A very different landscape of research is available now than when F. W. Taylor (1911), often referred to as the Father of Scientific Management (French, et al., 2005), began his work. Today, successfully attaining an organization’s goals requires the consideration of much more than mechanistic and linear aspects of a task in the way that Taylor did.

The institutions that define society are undergoing change at exponential rates (ECS, 1999). Is it, therefore, likely that the people are also changing? Are people changing in specific ways? Are there any patterns or relationships between the individuals and the change process itself? Does a specific change process modify an individual? Gaining insight into these questions may have importance in an ever-changing future. The general systems theory (Bertalanffy, 1972; Laszlo, 1972, 1973, 1996) is now foundational to understanding the interconnectedness of external and internal forces in an organization. Organizations must not only consider the tasks that are required, but must also engage in deep consideration of the people who occupy every level of an organization. In doing so, a clearer picture of the entire organization emerges, and an understanding that just one factor can influence the balance or equilibrium of that system. Systems theory takes into consideration that, just as in nature when one factor can tip the scales significantly in one way or another, an organization may be dramatically affected when just one feature of the internal or external forces changes (Wheatley, 2006). In considering systems theory, Wheatley encouraged a look at the structures that might facilitate relationships because it is through relationships that the
understanding of the entire system/organization is possible. In view of the possibility of this profound interconnectedness of an organization to internal and external forces, the considerations of influences and factors that may have at once been thought insignificant now require scrutiny. Do these unintended effects on individuals influence the change process or the system being changed?

Is it important for leaders to consider not only the changes that must be made in an organization as it moves towards excellence, but also must they give meaningful consideration to the specific change process/es that they choose to implement? Does the type of change process used influence the system in subtle, unintentional ways not usually considered? Are there unplanned effects on individuals when specific change processes are used?

Background of Emotional Intelligence and Appreciative Inquiry

*Emotional Intelligence*

Identifying and defining the elements that make up human intelligence is not new. As far back as about 360 BC in *The Republic*, Plato referred to knowledge and intelligence, proposing that there is a difference. Although man’s intelligence can be defined as the abilities of logic and computation, many find the meaning of intelligence to be much more complex. Today researchers have categorized and attempted to measure man’s intelligence (Gilliland & Burke, 1926; Goleman, 1995; Mayer, Salovey, & Caruso, 2004; Mayer & Salovey, 1997; Salovey & Mayer, 1990; Spearman, 1904; Sternberg, 1985, 1996; Thorndike, 1904; Thorndike, 1920; Thorndike & Stein, 1937; Wechsler, 1940, 1975). The brain’s complexity suggests that there is much more to consider
regarding intelligence than previously thought. Researchers attending the Harvard Mind
Science Symposium are suggesting that further understanding of the mind may be found
in collaboration with modern science and ancient Tibetan study (Goleman & Thurman,
1991). Today’s advances in imaging technology provide a view, 3-dimensionally in real
time, of the functioning of the brain and nervous system even at the molecular level and
beyond (Anand, 2006; Miller, 2005). Advances in how the brain and the mind function
have led to new research and analysis of what human intelligence means.

Emotional Intelligence is a relatively new body of research. It is a scientific
theory that has captured the mind of the non-scientist. Business spends billions to train
employees to use Emotional Intelligence, and educators design curricula with resources
that incorporate constructs of Emotional Intelligence. Professional development gurus
have stepped on the bandwagon to provide training to make us more Emotionally
Intelligent (Cherniss, Goleman, Emmerling, Cowan, & Adler 1998). In 1995, Goleman’s
book, Emotional Intelligence, reached number two on the New York Times non-fiction
best-sellers book list (Goleman, 2008). Today there are over 5 million copies in print
worldwide in 30 languages. The term Emotional Intelligence became part of the common
vernacular when Harvard researcher, Goleman (1995), claimed that one's performance
effectiveness was due to emotional savvy rather than technological knowledge.

Businesses paid respect to Goleman’s claim. Huge amounts of money are spent to
improve the emotional competencies of employees. Cherniss, Goleman, Emmerling,
Cowan and Adler (1998) confirmed this in research and reported that businesses lose
between 5.6 and 16.8 billion dollars in failed training programs for social and emotional
competence. The authors outlined what successful training should entail. They
maintained that social and emotional competence can be successfully taught.

Several slightly differing definitions currently exist for Emotional Intelligence. Mayer, Salovey, and Caruso (2004), sometimes referred to as the original experts on Emotional Intelligence, focused their understanding of Emotional Intelligence specifically on “...the cooperative combination of intelligence and emotion” (p. 197). They divided Emotional Intelligence into four areas: the ability to perceive emotion, use emotion to facilitate thought, understand emotions, and manage emotions (Mayer, et al., 2004). They purported that emotional knowledge can increase over one’s lifetime. Training or professional development may focus on doing just that, but Emotional Intelligence is a standard form of intelligence, not unlike IQ or the g factor (general intelligence). Others such as Bar-On and Parker (1997), Bar-On (2000), Goleman (1995, 1998), and Goleman, Boyatsis, and McKee (2002) see Emotional Intelligence as constructs similar to personality and social skills and they broadly defined it as the capacity to perceive and regulate emotions in oneself as well as those of others.

Measuring, evaluating, or rating one’s Emotional Intelligence may be important because it could predict an individual’s success in the workplace, home, or social setting (Goleman, 1995; Goleman, Boyatsis, & McKee, 2002). There are several tools for measuring Emotional Intelligence. The variation in measurement tools is indicative of the differing opinions of researchers regarding the constructs of Emotional Intelligence. Mayer, Salovey, and Caruso (2002a) developed the Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT), and subsequent to this the Mayer Salovey Caruso Emotional Intelligence Test, version two (MSCEIT V.2). Schutte, Malouff, Hill, Haggerty, Cooper Golden and Dornheim (1998) developed a self-report Emotional Intelligence test
Bar-On (2000) developed the Emotional Quotient Inventory (EQ-I). Boyatzis, Goleman, and Rhee (2000) developed the Emotional Competency Inventory (ECI). There are differences in each measurement tool based on the concepts of its authors regarding the constructs of Emotional Intelligence.

Mayer, et al., (2004) called for research that may help in “...determining whether teaching emotional knowledge has a desirable effect on behavioral outcomes and might change EI itself. . .” (p. 211). They made a distinction between emotional knowledge and Emotional Intelligence, “We have speculated that EI is a relatively stable aptitude, whereas emotional knowledge—the kind of information that emotional intelligence operates on—is relatively easy to acquire and teach” (p. 209).

**Appreciative Inquiry**

Appreciative Inquiry has its origin as recently as the late 1980s. This model for “large scale system-wide change” (French, Bell, & Zawacki, 2005, p. 214) is not a technique or method, but a view that shapes the way in which organizations are understood. It is a decision to choose “affirmative, valuing, and generative ways” (Fitzgerald, Murrell, & Newman, 2002, p. 223) to understand the system and to build on the strengths and vitality of the members rather than on a deficient analysis of the problematic aspects of an organization. Some organizational change processes are transformational or paradigm-shifting (French, et al., 2005); Appreciative Inquiry is one such process. Based on the concept that the members of the organization hold the reality of the organization, Appreciative Inquiry is grounded in social constructivism. The constructivist perspective underscores Appreciative Inquiry (Cooperrider, et al., 1995). “There is no such thing as immaculate perception” (Cooperrider, et al., 1995, p. 167).
Cooperrider re-envisioned Lewin’s (1947) action research as he developed appreciative modes of knowing that would be capable of “inspiring, mobilizing, and sustaining significant human change” (D. Cooperrider, personal communication, November, 2006).

There are five principles of Appreciative Inquiry: constructivist, poetic, simultaneity, anticipatory, and positive. The first three principles are grounded in social constructivism. The anticipatory and positive principles involve envisioning the future based on the strengths and provocative possibilities of the future (Cooperrider, Whitney, & Stavros, 2003).

Botanists use the term heliotropic to describe the behavior of plants that move toward the sunlight. The word is from the Greek helios which means sun. Cooperrider, et al., (2003) uses the word heliotropic to imply “. . . that people have an observable and largely “automatic” tendency to move in the direction of affirming images of the future” (p. 417). They suggest that the heliotropic hypothesis (“human systems have an observable tendency to evolve in the direction of those positive images that are the brightest . . . and most illuminating . . .” 2003, p. 12) may be a characteristic of organizations. This is an underlying tenet of the positive and affirming orientation of Appreciative Inquiry. In fact, Cooperrider et al., ask “is it possible to develop a metacognitive capacity and thereby choose positive ways of constructing the world” (2003, p. 12)

The growing documentation of experiences using Appreciative Inquiry in the field come from a wide range of venues: corporate board rooms, schools, urban neighborhoods, non-profits, strategic planning forces, government sector, global institutions, and military bases to name a few. Each experience has had unique goals and
outcomes, but a common theme present in all is the participatory, relationship-based inclusion of all members that is consistent with the social constructionist foundation of Appreciative Inquiry (Fry, Barrett, Seiling, & Whitney 2002). The 2007 International Appreciative Inquiry Conference highlighted recent AI success stories: a coffee company changed an $18 per share rate within five years of using AI, to a that of over $61 and continues to skyrocket; a major food company used an AI approach and a year later the company reported a record 300% increase in earnings, a 75% decrease in absenteeism, and subsequently recognized as one of the top 100 best places to work in the nation; and a crippled defense program within five years of using AI became the "cash cow" of the largest aerospace company in the world. It won the Malcolm Baldrige Quality Award and the product was referred to as "A National Treasure‖ (AI Conference, 2007).

Emotional Intelligence and Appreciative Inquiry – Links

How do organizations and members within the organization change? Experts know how to educate, train, and coach the members of an organization. Certainly, the field is crowded with experts ready to offer professional development seminars and workshops. The steps to change seem clear. They are linear and can be charted on a timeline, beginning to end. However, is this really the way that organizations change? The literature is beginning to suggest that change may not truly be understood. The mechanistic or linear views of change have been challenged from the fields of chaos theory and quantum physics. Some researchers propose that organizations are self-organizing systems that operate and are sustained through participation, and relationships, and the influences and connections that work across large, complex systems (Wheatley, 2006). Researcher Boyatzis (2006) suggested that the concepts of complexity theory offer
suggestions to understanding intentional change theory as applied to organizations. Does this suggest that there are new ways to educate, train, and coach members of organizations? Does only the intended training and professional development occur in workshops and meetings? Are there different ways to consider change? Billions of dollars are spent in the pursuit of changing the members of an organization (Cherniss, Goleman, Emmerling, Cowan, & Adler, 1998) so the goals of that organization can be more efficiently and effectively met. There are many guidebooks and polished professionals ready to provide the means for an organization to change.

Is there another way to address change in an organization? Are professional development and workshop training the best practices for organizations to employ to affect change in employees? Is strategic planning the best-case scenario for organizational development? Is it possible that by using a change process, one that is based on relationships, interconnectedness and open information shared across the whole system, that the organization could shift or transform its members into a positive, generative, self-sustaining change?

The research on Emotional Intelligence and Appreciative Inquiry is relatively new. Rigorous literature in both areas began less than forty years ago. New research continues to be published and new information may be amassed as this study is being written. Appreciative Inquiry “suggests that for an organization to be effective in its executives, its leadership, and as a change agent, it must be adept at the art of understanding, reading, and analyzing organizations as living, human constructions” (Fitzgerald, et al., 2002, p. 225).
I suggest the possibility that the principles of Appreciative Inquiry may be similar in part to the branches of Emotional Intelligence (Mayer, et al., 2004), particularly those aspects of Emotional Intelligence that focus on reflection, understanding and analysis of self and others. If so, is it possible that by using Appreciative Inquiry, a group or individual’s Emotional Intelligence can be affected? The finding in such a study could have interesting and significant outcomes regarding training and professional development in Emotional Intelligence. Businesses and education now concentrate resources on improving Emotional Intelligence. Organizational change processes cost companies untold dollars and time (Cherniss, Goleman, Emmerling, Cowan, & Adler, 1998). A study that brings to light unplanned consequences from using Appreciative Inquiry has importance. The results from such a study have significance to not only the fields of Appreciative Inquiry and Emotional Intelligence but to organizational behavior. The results from a study that explores a relationship between an organizational change process that intends positive social constructivist outcomes, such as Appreciative Inquiry, and an individual’s Emotional Intelligence level has importance to (a) the field of organizational change, (b) the field of professional development, (c) the field of Emotional Intelligence, and (d) the field of Appreciative Inquiry. Deepening understanding of organizational change processes in this time of unprecedented change is valuable in supporting and sustaining organizational life that focuses on goals that give meaning to work and provide a quality of life that is fitting to all.

One connection between Appreciative Inquiry and Emotional Intelligence may be the poetic principle (Cooperrider, et al., 2003) that posits that human organizations are an open book, constantly being co-authored by its members. The poetic principle is engaged
in the collection of stories. Another principle of Appreciative Inquiry is that of simultaneity which suggests inquiry, change, learning, and formation happen simultaneously (2003). When a question is posed, at that very moment learning or understanding about what was asked begins to deepen (2003). Both of these principles of Appreciative Inquiry are deeply reliant upon the individual and that individual’s relationship to the group.

Key Terms

Emotional behavior research is not new. Psychologists have been studying this topic for years. However, Emotional Intelligence is not the same. In general, it is the ability to read, interpret, and respond appropriately to the moods, needs and behaviors of others, to regulate one’s own emotions and behavior and to effectively use emotions to motivate, plan and achieve goals to be successful in life (Goleman, 1995). For this study, the term is defined as a “set of competencies, or abilities, in how a person: (a) is aware of himself/herself; (b) manages him/herself; (c) is aware of others; and (d) manages his/her relationships with others” (Boyatzis & Sala, 2004, p. 149).

Appreciative Inquiry is not a methodology or theory. It is an approach to strategic change and sustainable growth for organizations. The intent of Appreciative Inquiry is to engage all stakeholder groups in inquiry into the positive potential for cultural and systemic change. It is grounded in social constructivism.

Limitations of the Study

It is important to mention possible “…limitations [of this study] …openly and honestly” (Gay, Mills, & Airasian, 2006, p. 83). One limitation may be the sample size
used in the research. Although the number of participants in the study (14) do not adversely affect the qualitative methodology for data collective and results, it may be not be a desirable number for a quantitative study. In addition, the fact that the researcher is involved in the study in a central role as the meeting facilitator, this may contribute to researcher bias in the analysis of the data and results.

Another limitation may be the length of the study in regards to the quantitative measurement. Participants in the study were measured or tested once before the Appreciative Inquiry meeting and then again three months later. This interval of time caused a mortality or “...reduction in the number participants of research participants who drop out of the study...” (Gay, et al., 2006, p. 240). In this instance, the study lost one participant due to a job change and subsequent move from the area. Therefore it may too long of a time. However, it may also be determined that the study was too short. A longer time period may have allowed for testing to occur at additional intervals. For example, the scores of participants could be taken three months before the meeting, again one week before the meeting, three months after the meeting, and six months after the meeting in order to provide a continuum or series of scores.

Summary

As change within an organization is studied, it becomes evident that looking through the lens of systems theory is helpful in gaining insight into the complex and sometimes complicated state of an organization. Understanding systems theory helps to regard how both internal and external forces influence an organization and elements within the organization. This causes a consideration that even the specific type of change strategy/methodology used may have unplanned consequential influence not only for the
participants in the change, but perhaps the entire organization.

This study asked if a specific type of change methodology influences the participants in ways that are not planned or expected. What effects, besides those directly intended, occur when using change methodologies/strategies with a theoretical base in positive constructivism theory? Do the individual participants change in positive measurable ways? By its definition, Appreciative Inquiry is a vehicle for transformational positive change. Does Appreciative Inquiry affect individuals in an organization in ways that were not directly intended? Is it possible that such a process can improve individuals’ skills/competencies in areas such as Emotional Intelligence? These questions can be encapsulated in one, does Appreciative Inquiry affect the Emotional Intelligence of the individual?

Exploring change in the Emotional Intelligence of group members who engaged in Appreciative Inquiry can be done through the process of pre- and post-testing measures. Observations during the Appreciative Inquiry meeting in the form of documents, diagramming the interactions, journals, and evaluations by group members adds descriptive data to the study.

As leaders consider the direction of change they want to implement in an organization, they plan for that change and use the tools of change strategies or methodologies to directly affect that change. Do unplanned consequences result from change strategies? Worldwide change is moving at almost exponential rates. Yet, according to authors Wheatley and Kellner-Rogers (1998), “CEOS report that up to 75% of their organizational change efforts do not yield the promised results” (¶ 4). In light of this, it appears that understanding the very nature of change is imperative. This study
examines one consequence of change that may be useful to leaders as they work within organizations to accomplish goals and move to increased levels of effectiveness for the organization.
CHAPTER II

REVIEW OF LITERATURE

Introduction

This research examined the Emotional Intelligence of group members before, during, and after undergoing a specific planned organizational change process called Appreciative Inquiry. There were three distinct topics involved in this study: organizational change theory, Emotional Intelligence and Appreciative Inquiry. This chapter contains a discussion of the literature regarding each of these areas. Contemporary research in closely related fields was also reviewed.

Appearing first is a broad review of philosophical and theoretical literature as it relates to organizational change theory. Understanding organizational change sets the starting point for the literature review. Literature regarding Emotional Intelligence, or the dependent variable in first part of this study, is next. Research on the reliability and validity of the measurements tools used to assess emotional intelligence is reviewed. Then the literature regarding Appreciative Inquiry, or the independent variable, is presented. Finally, a brief scan of new research in these and similar fields is examined.

Organizational Change Theory

Organizational Philosophy

The philosophy of science is concerned with establishing truths (McKelvey, 1997). Determining how truth is understood is important to any research. Before examining any change in an organization, it is necessary to know what guiding
philosophical perspective is used to seek truth or knowledge. Is truth discerned solely through empirical inquiry or philosophical speculation (McKelvey, 1997)? This can be especially complicated when the explanations of what is true contain immeasurable, unobservable or metaphysical terms or conditions (1997). Organizational scientists can be faced with a choice when dealing with good science and metaphysical terms. The epistemology of organizations, or the way that knowledge and truth are gained about organizations, has changed during the past century. This has been particularly noted in the way in which organizations become known or understood as we study this field. The literature indicated a shift in philosophical orientation over the past century (Beckhard, 1969; Bennis, 1993; Bertalanffy, 1972; Cooperrider, Barrett, & Srivastva, 1995; Cooperrider & Srivastva, 1999; Cooperrider, Whitney, & Stavros, 2003; Drucker, 1999; French, Bell, & Zawacki, 2005; Frick & Spears, 1996; Fullan, 2001; Gleick, 1987; Laszlo, 1972, 1973, 1996; Lewin, 1947; McGregor, 2006; Owens, 2004; Peters, 1987; Porras & Silvers, 1991; Quinn, 1988, 1996, 2004; Schein, 1994; Senge, 1990; Sergiovanni, 1994; Taylor, 1911; Weick, 1979; Wheatley, 2006).

The epistemology that predominated the first part of the 20th century’s study of organizations was that of positivism, or a view that a real, true, and objective world exists out there. Newtonian physics and a linear, deterministic, or mechanistic understanding of the world influenced philosophies, theories, and processes of organizations and how they change (Drucker, 1995; French, et al., 2005; Owens, 2004; Wheatley, 2006). Taylor authored seminal work regarding organizational theory from this philosophical orientation in the early 1900s. Regarded as the Father of Scientific Management, he wrote, “...develop a science for each element of a man’s work. ...scientifically select
and then train, teach, and develop the workman. . .scientific management [is] so much more efficient than the old plan” (Taylor, 1911, pp. 36-37). This brief quotation demonstrates an example of the linear, deterministic perspective.

However, before the end of the 20th century, many theorists (Cooperrider, Barrett, & Srivastva, 1995; Cooperrider & Srivastva, 1999; Gleick, 1987; Kast & Rosenzweig, 1985; Lewin, 1947; McGregor, 2006; Schein, 1994; Senge, 1990; Weick, 1979; Wheatley, 2006) considered the organization from the philosophical orientation of postpositivism or constructivism—the possibility of objective truth. No longer limited by the Newtonian viewpoint, the new sciences with discoveries in quantum mechanics, chaos theory in physics, evolutionary theory in the biological sciences, string theory, and thermodynamics (Gleick, 1987) now considered the possible implications of indeterminate or co-determinate realities (Wheatley, 2006). The belief that a real, definable, static world existed out there has evolved to suggest that organizations are dynamic and self-organizing and living (Wheatley, 2006), relying on the observer influence.

The contributions of the social sciences (Herzberg, Mausner, & Snyderman, 2005; Lewin, 1947; Maslow, 1970; McGregor, 2006; Schein, 1994; Weick, 1979) have also caused the viewpoint to shift from positivism to constructivism. Although McKelvey (1997) indicated that by the 1970s positivism may have been abandoned by most, there is no clear demarcation line of the philosophy of organizational positivism ending and constructivism beginning. Yet the “. . .cacophony of voices and styles which compels everyone to agree that something post modern has happened” (Cooperrider, Barrett, & Srivastva, 1995, p. 158) may be the unpinning of the idea that “. . .organizations are the
triumph of the imagination” (p. 157).

Organizational Management, Development, and Transformation

The philosophical perspective of how organizations are understood has changed over the past century. Understandings of change in organizations have evolved as well. Taylor (1911) sought to improve the efficiency of the organization through controls. This mechanistic model was a way of managing the organization or organizational management [italics added]. It relied on understanding the organization from a linear perspective. The study of organizational development [italics added] came into focus around the 1950s and 1960s as a means to improve the quality of the work life for members of the organization (French, et al., 2005). Lewin (1947), a social and organizational psychologist, used action research [italics added] and the concept of a total picture in his field theory as a means to improve or develop the effectiveness of an organization. This organizational development was defined by Beckhard (1969) as “an effort (1) planned, (2) organization-wide, and (3) managed from the top, to (4) increase organizational effectiveness, and health through (5) planned interventions in the organization’s processes using behavioral-science knowledge” (p. 12).

Beginning in the 1980s, a shift in the fundamental nature of the organization sought radical transformation (French, et al., 2005). Porras & Silvers (1991) defined organizational transformation [italics added] as:

1. a set of behavioral science theories, values, strategies, and techniques 2. aimed at the planned change of an organizational vision. . . 3. with the intention of generating alpha, beta, gamma (A) and/or gamma (B) cognition changes in individual organizational members, leading to behavioral change and thus 4.
promoting the paradigmatic change that helps the organization better fit or create a desirable future environments (p. 54).

Cooperrider (as cited in Cooperrider, Whitney, & Starvos, 2003) and Wheatley (2006) have sought to transform organizations through an understanding of the organization that is not mechanistic, linear or even multidimensional. Cooperrider, et al. (1995) suggested that organizations may be “products of human interaction and social construction rather than some anonymous expression of an underlying natural order” (p. 157). Researchers, Cooperrider, et al. (1995) and Wheatley (2006), promoted an understanding of the organization as a holistic and living organism; studied from infinite, simultaneous perspectives constructed through personal, social, cultural, and historical inferences and biases, while governed by the laws of self-regulating systems theory. This new paradigm, organizational transformation, is exactly what Appreciative Inquiry intended as it changed an organization’s way of perceiving, thinking, behaving, and imagining. This is a social constructivist view (postmodern) rather than a mechanistic one (positivist). The traditional bureaucratic, hierarchical structures were no longer the single model for organizations (Bennis, 1993; Cooperrider & Dutton, 1999; Drucker, 1999; Frick, & Spears, 1996; McGregor, 2006; Owens, 2004; Quinn, 1996; Schein, 1994; Sergiovanni, 1994; Wheatley, 2006).

It is possible to link the evolution of organizational theory and Emotional Intelligence. According to Anthony (2006) “. . . mainstream modernist depictions of mind and intelligence invariably posit intelligence and mind in mechanistic terms. Typically, rational, linguistic, and mathematical cognitive capacities form the locus of what it means to be intelligent . . .” (p. 43). Therefore, the development of theories regarding Emotional
Intelligence, may have, in some way, paralleled the evolution of organizational theory as it moved from a mechanistic, modern epistemology to that of a postmodern understanding.

Emotional Intelligence

Background

The topic and research on Emotional Intelligence is not new. Studies began to refer to this topic about 20 years ago. However, the history of human intelligence theory has its beginnings as far back as Plato. Although studied for centuries, the defining factors of human intelligence yet remain to be empirically defined. Intelligence is not an easily understood concept (Esters & Ittenbach, 1999; Weschler, 1975). Even noted twentieth century intelligence experts Binet and Simon (1916) and Weschler (1940), whose tests are still relied upon today, found intelligence difficult to define. Binet and Simon sought to categorize the intelligence of what they called subnormal children in order to better assist them with treatment (1916). They felt that evaluating intelligence could be done by considering medical, pedagogical, and psychological assessments. Weschler (1975) said intelligence was a complex concept. He stated that “intelligence is a many-faceted. . . a polymorphous concept, which means that it has many aspects and, as a consequence is hard to delimit” (p. 135).

The March 1921 edition of The Journal of Educational Psychology was devoted to articles of the topic of intelligence, both definition and measurement. Almost none of the seventeen leading researchers, at that time, agreed on a definition (Weschler, 1975). Thorndike (1920) maintained that there are three types of intelligence: abstract, mechanical, and social intelligence. Edward Thorndike (not to be confused with his son,
Robert, also a researcher) is considered the first to refer to social intelligence (Cherniss, 2000). Similarly, when Weschler’s (1940) research reported that “this leaves anywhere from 30% to 50% of the total factorial variance unaccounted for after recognizable intellectual factors were considered” (p. 444), he questioned if cognitive ability was the only demarcation of intelligence. He stated that “as soon as one attempts to define general intelligence in terms other than test scores, one is forced to conclude that intelligent behavior must involve something more than sheer intellectual ability” (p. 444).

Thorndike’s original suggestion that intelligence also has social constructs has provided us with perspectives for a more complete understanding of intelligence. It may be here that the beginnings of Emotional Intelligence were proposed. Salovey and Mayer (1990) considered Thorndike’s explanation of social intelligence as a basis for proposing the concept of Emotional Intelligence. They noted that “. . .emotional intelligence may or may not correlate with other types of intelligence. . .” and that “the notion that there are different types of intelligence has been a part of the intelligence field almost since its inception” (p. 187).

Jensen (1969) said that intelligence is easier to measure than to define. Salovey and Mayer (1990) pointed out that the psychometrically designed tests used for measuring intelligence are predominately based on a general factor or g intelligence theory (Jensen, 1969; Spearman, 1904). This is focused on cognitive/mental ability alone. Most sociologists have approached emotion in more philosophical than scientific terms (Massey, 2002). “With the great advances already made in cognitive neuroscience and with those on the horizon, no longer must researchers rely on assumptions” (p. 25) or theories, but rather look to the biological understandings of human behavior that are
increasingly being made known to us through the hard sciences.

Today, the public recognizes the term Emotional Intelligence. This may be due in great part to the influence of Goleman’s (1995) bestseller, *Emotional Intelligence: Why is May Matter More Than IQ*. It was on “The New York Times bestseller list for a year-and-a-half; with more than 5,000,000 copies in print worldwide in 30 languages” (Goleman, 2008, ¶ 1). Even though many people have a general understanding of what Emotional Intelligence is, the scholarly literature is filled with a debate regarding the constructs that make up Emotional Intelligence and the measurement thereof.

The personality factors of employees have been of interest to researchers such as Argyris for many years (1954). More recently, identifying factors that may be aspects of Emotional Intelligence and separate from personality have been examined by researchers (Mayer, Roberts, & Barsade, 2008). The importance of using Emotional Intelligence to predict job performance has been established by researchers (Goleman, Boyatzis, & McKee, 2002; Van Rooy & Viswesvaran, as cited in Van Rooy, Viswesvaran, & Pluta, 2005). Emotional Intelligence has been defined as a list of traits “such as achievement motivation, flexibility, happiness, and self-regard” (Mayer, Roberts, & Barsade, 2008, p. 509). Others claim that Emotional Intelligence is no more than the renaming of already existing constructs (Brody, 2004; Eysenck, 1998), or personality styles. Still others define it as intelligence similar to IQ (Mayer, et al., 2008).

and Goleman, Boyatzis and McKee’s (2002) emotional intelligence research all reported findings that support the existence of constructs of intelligence that exist in addition to or outside of cognitive ability. Goleman’s (1998) definition of Emotional Intelligence is the capacity for recognizing one’s own feelings and those of others, for self-motivation, and for managing emotions well both individually and in interpersonal relationships. This is more dispositional or trait-based in nature (Livingstone & Day, 2005; Petrides & Furnham, 2006; Van Rooy, Viswesvaran, & Pluta, 2005).

According to research by Conte (2005), “...critical questions remain about the concept, theory, and measurement of EI” (p. 433). There is a difference among researchers regarding the theory of Emotional Intelligence hence the different constructs. A survey of the last 18 years of research in the field of Emotional Intelligence has defined it as related to emotion and intelligence while at the same time distinct from each (Mayer, Roberts, & Barsade, 2008).

Lyusin (2006) and Livingstone and Day (2005) stated that this multiplicity of models has made it necessary to classify them. A study in 2008 (Mayer, et. al, 2008) divided Emotional Intelligence into three separate approaches: specific abilities model, integrated model, and mixed model. These divisions are parallel to the constructs of Emotional Intelligence as understood by different researchers. Each model infers a slightly different definition of Emotional Intelligence.

Models

Petrides and Furnham (2006) noted that the different models of Emotional Intelligence (i.e., trait and ability) are not classified because of the theory (definition) of Emotional Intelligence, but rather from the constructs used in measurement. Perhaps the
first model to be developed was that of Salovey and Mayer in the early 1990s (Lyusin, 2006; Salovey, 2005; Salovey & Mayer, 1990). Later, others such as Bar-On (1997), Bar-On and Parker (2000), and Goleman (Goleman, 1995, 1998; Goleman, Boyatzis, & McKee, 2002; Goleman, Boyatzis, & Rhee, 2000) used personality components and broad interpretations to develop the constructs of Emotional Intelligence. According to Lyusin (2006), the “diversity of EI models that have appeared over the past decade gives rise to the need for a way to classify them” (p. 57). The classifications of models were derived from the constructs of Emotional Intelligence. These different approaches seem to suggest that the researchers had not yet empirically defined Emotional Intelligence because the constructs were different in each model.

Two models of Emotional Intelligence, the ability and mixed models, were described by Mayer, Salovey, and Caruso in 2000. The mental ability model (theirs), they suggested, “. . . is probably the only one that is aptly called emotional intelligence” (p. 109). The ability model had its basis in understanding Emotional Intelligence as a type of intelligence (Caruso, Mayer, & Salovey, 2002; Mayer & Salovey, 1997). The mixed model considered Emotional Intelligence to be trait or dispositional based (Mayer, et al., 2008; Van Rooy, et al., 2005). In 2003, Caruso, Salovey, and Mayer again suggested that “there are two broad approaches to emotional intelligence: an ability approach (that views emotional intelligence as a set of cognitive abilities) and a mixed approach (that combines abilities and a broad range of personality traits)” (p. 306).

In 2008, Mayer, Roberts, and Barsade categorized three Emotional Intelligence models that were classified according to the measurements used. These models were the specific-ability model, concerned with “. . . individual mental capacities important to EI”
(p. 511), the integrative model which regarded “. . . EI as a cohesive, global ability” (p. 511), and finally, the mixed model which “. . . mixes a variety of non-EI qualities and consequently appears to fall partway or largely outside the boundaries of the concept” (p. 511). This shifting of categories and naming of models can lead to confusion when trying to define or identify the theoretical constructs of Emotional Intelligence.

Measurement

If Emotional Intelligence is to be defined as an ability or type of intelligence, then Salovey and Mayer’s (1990) definition of emotional intelligence as “the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (p. 189) is perhaps the most cogent. In order to measure the constructs of this model, a performance-based evaluation is used. Mayer, Salovey, and Caruso (2004) stated that if Emotional Intelligence is a true intelligence, then it can and must be evaluated by a measurement in which more or less correct answers exist. They used both expert criterion and general consensus to establish correct answers for the measurement or test of Emotional Intelligence they developed. They noted that a consensus of a group can establish a correct answer because emotions are evolved signals that have meaning for the majority of the group. The MSCEIT (Mayer Salovey Caruso Emotional Intelligence Test) and subsequent MSCEIT V. 2 is a measurement tool based on the concept of the ability model. Studies of the construct validity of Emotional Intelligence measures (Livingston & Day, 2005; Van Rooy, et al., 2005) find the MSCEIT to account for some statistically significant variance associated with cognitive abilities, but this was only in one minor area. The researchers concluded that more meta-analysis studies were
needed. A criticism of the MSCEIT has been that it “. . .tests knowledge of emotions but not necessarily the ability to perform tasks that are related to the knowledge that is assessed. The distinction is fundamental” (Brody, 2004, p. 234). In a study comparing the construct- and criterion-related validity of the ability and mixed models of Emotional Intelligence, Livingston and Day (2005) concluded that the MSCEIT measurement of Emotional Intelligence based on the concept of the ability model, did not show a correlation with other intelligence measures. The study, however, did show one area of statistically significant variance. In addition, this meta-analysis study (Livingston & Day, 2005) indicated that cognitive ability did not account for any statistically significant amount in mixed models examined.

Many measurements exist for the mixed model. Another is the Emotional and Social Competency Inventory (ESCI or ESCI-U) and the Emotional Competency Inventory (ECI). Using Goleman's 4-quadrant model and developed by both Boyatzis and Goleman, the ESCI measures specific competencies believed to affect workplace performance (Boyatzis & Goleman, 2007). The ESCI is both a self-report and a multi-rater measure.

**Critique of Emotional Intelligence**

In a sharp criticism of the concept of Emotional Intelligence, Brody (2004) stated “there is not a single study reported that indicates that El has nontrivial incremental validity for a socially important outcome variable after controlling for intelligence and personality” (p. 237). Conte (2005) referred to “serious concerns” (p. 438) about all Emotional Intelligence measures from the ability models to the self-report models. Anthony’s (2006) article on the theory of intelligences, specifically noting Jensen and
Goleman’s theory, questioned the “...consistently mechanistic representation of the mind where integrated intelligence is absent” (p. 59). He suggested that Goleman takes a reductionist approach to “intelligence, mind and intuition” (p. 58, 2006), therefore making it a mechanistic representation.

There has been controversy in some camps over the mixed model (Daus & Ashkanasy, as cited in Van Rooy, et al., 2005). Recognized for its application and value in organizational settings, the mixed model has been thought by some to be too closely related to personality traits to be a valid model on its own (Livingston & Day, 2005; Lyusin, 2006; Petrides & Furnham, 2006; Van Rooy, et al., 2005).

In a review by Anthony (2006), in which he attempted to deconstruct theories of intelligence in order to make comparisons, he found Goleman to be contradictory when he “criticizes the mind-as-computer model” (p. 53). Anthony claimed that “...Goleman’s thesis is replete with mechanistic language and images” (p. 53) and gave several examples to support his statement. The conclusion of his review of intelligence theories, those by Goleman and Jensen (g theory), raised the suggestion that the “...tenets of mechanical science and its mechanistic representations of the mind” (p. 58) have been the paradigm for understanding employed by both Goleman and Jensen. Anthony (2006) found this to be a weakness because it eliminated the integrated and intuitive aspects of the mind.
Appreciative Inquiry

Defining Appreciative Inquiry

Appreciative Inquiry, was first developed by Cooperrider and Srivastva (as cited in Porras & Silvers, 1991) in the late 1980s, entails a set of principles and techniques of organizational transformation as stated in the following:

...aimed at the planned change of an organizational vision work settings... with the intention of generating... cognition change in individual organizational members, leading to behavioral change and thus... promoting the paradigmatic change that helps the organization better fit or create desirable future environments (p. 54).

The authors of Appreciative Inquiry described it as “...a new paradigm for accelerating organizational learning and transformation” (Cooperrider, et al., 2003, p. xxviii). It is both a social research method and an organizational development intervention, according to Bushe (1995). Cooperrider and Srivastva (1999) published an article presenting the theoretical basis for Appreciative Inquiry in which they claimed “...there is a growing movement toward granting preeminence to the cognitive processes of mind and the symbolic processes of social construction” (p. 342). First, they examined the history of action research and called for a theory-building perspective, or a move toward generative theory in action research. They suggested that action-research should “...both generate theory and develop organizations” (Cooperrider & Srivastva, 1999, p. 337). Their construction of a table (see Appendix A) concisely summarized and contrasted the sociorationalism and logical empiricism views of science. They suggested that the role of the scientist changes “when the social inquiry is viewed from the
perspective of sociorationalism. . . [the social scientist becomes] . . . an active agent, an invested participant whose work might well become a powerful source of change. . .” (p. 344). The authors queried if an administrative science based on a physical science model (logical empiricism) were adequate as a means for understanding or contributing in relevant ways to the workings of complex, organized human systems. They called for a conceptual reconfiguration of action-research, and this has been the basis for the development of Appreciative Inquiry.

Therefore, it appears since its inception, the authors of Appreciative Inquiry did not view it as a new theory, but rather a practice to generate theory. They referred to both Kurt Lewin and Kenneth Gergen’s work (Cooperrider & Srivastva, 1999) as the basis for the development of Appreciative Inquiry from a social rationalist perspective. “The impetus for [developing Appreciative Inquiry was] the insight that action-research had not lived up to its potential as an innovative change method” (Fry, Barrett, Seiling, & Whitney, 2002, p. 4). Appreciative Inquiry has served as a means for “. . . helping social systems evolve, adapt, and creatively alter their patterns over time” (Cooperrider & Srivastva, 1999, p. 346).

Using the metatheoretical perspective, Cooperrider and Srivastva (1999) listed five ways in which theory strengthens Appreciative Inquiry:

1. Establishing a conceptual and contextual frame;

2. Providing presumptions of logic;

3. Transmitting a system of values;

4. Creating a group-building language;

5. Extending visions of possibility and constraint. (p. 346)
Appreciative Inquiry has five basic principles that anchor its implementation as an organizational change process:

1. Constructionist Principle
2. Simultaneity Principle
3. Poetic Principle
4. Anticipatory Principle

There seems to be a relationship between the original focus on “good theory. . . as a means for helping social systems evolve, adapt and creatively alter patterns over time” (Cooperrider & Srivastva, 1999, pp. 344-346) and the five principles of Appreciative Inquiry.

A handbook on Appreciative Inquiry was published (Cooperrider, Whitney, & Stavros) in 2003. Written for readers who may be the practitioners of planned change rather than a scholarly audience, the book describes the design and steps of Appreciative Inquiry in a concise and clear manner with examples of implementation and several case studies of Appreciative Inquiry implemented in an organization. Filled with stories and examples, the authors included a lengthy section of selected scholarly articles in the end. A systematic guide for implementing Appreciative Inquiry in an organization was carefully detailed. Five principles of Appreciative Inquiry and four stages of design were described.

In a critique of Appreciative Inquiry, van der Haar and Hosking (2004), discuss the fine differences between constructivism and constructionism in reference to Appreciative Inquiry. They suggest that from the perspective of a “. . . relational approach
that focuses on construction processes” (p. 1019), Appreciative Inquiry may produce a singular reality when, in fact, there are “multiple local realities” (p. 1032). According to their article, “. . . to rule out critical reflection may be experienced as negative and – by one person seeking to impose his/her reality on others” (p. 1032) may not be in line with the basis of how Appreciative Inquiry is defined.

Summary

A scan of some recent literature indicates that using a positive approach to organizational development and transformation is a focus not only in Appreciative Inquiry but also in other organizational studies. Researchers are studying topics such as positive deviancy (Spreitzer & Sonenshein, 2004), the effects of positive emotions (Frederickson & Losada, 2005), a positive orientation to organization development (Dutton, & Glynn, 2008), and positive organizational scholarship (Cameron, Dutton, & Quinn, 2003).

In addition, as the workplace becomes more flattened hierarchically, there is a growing emphasis on the individual and his or her creative contributions. A review of recent literature regarding Emotional Intelligence and Appreciative Inquiry speaks to the emphasis on the individual’s capacity to influence organizational change. As Mayer, et al. (2008) pointed out that Emotional Intelligence offers a way to consider that “. . . people can reason about emotions and use emotions to assist reasoning” (p. 508), they also referred to studies in which emotion can ripple through groups and through society. This rippling of emotion may have the potential to affect change in a group. Studying the Emotional Intelligence of a group and how that may change is one element of this study. In addition, this study considers and hypothesizes that inquiry processes (such as
Appreciative Inquiry) directed at the symbolic social construction of meaning (Cooperrider & Srivastva, 1999) within an organization may influence or moderate the Emotional Intelligence of the individuals in the organization. Appreciative Inquiry is a means for an organization to direct change through positive social construction. Emotional Intelligence can be defined as the ability to reason about emotions. If the environment of a group is structured to deal with only the positive attributes of the group and not a deficient analysis of the problem (which is core to Appreciative Inquiry), does this investigation of life-sustaining provocative possibilities for the future affect the Emotional Intelligence of a group? Does the configuration of the environment to engage in positive emotions, not negative or deficient analysis, affect an individual’s capacity to reason about emotions and use emotions to assist reasoning? In summary, does Appreciative Inquiry affect Emotional Intelligence?
CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Introduction

Problem
Organizational change, particularly in education, is increasing at exponential rates (Evans, 1996). Consequently, organizational leaders concentrate great amounts of time and capital to support change processes. In addition to implementing and sustaining successful change processes, billions of dollars are spent annually for professional development. Social and emotional competence training programs alone may cost as much as 5.6 to 16.8 billion dollars (Cherniss, Goleman, Emmerling, Cowan, & Adler, 1998). Organizations are faced with both the need to manage change and with the ongoing demand for professional development/training (French, Bell, & Zawacki, 2005; Gusky & Huberman, 1995, Wheatley, 2006).

Question
Is it possible to affect both change and professional development simultaneously? Do certain change processes (specifically Appreciative Inquiry) affect the development of skills or competencies (specifically the Emotional Intelligence of participants)? This exploratory research study investigated if Appreciative Inquiry affects Emotional Intelligence.
Methodological Approach

This study used a mixed-methods research design (Gay, Mills, & Airasian, 2006; Onwuegbuzie & Leech, 2006; Patton, 1990). The two perspectives, quantitative and qualitative, were combined as “quantitative primary and quantitative first [with the] quantitative approach as the primary method, using qualitative follow-up to evaluate and interpret the quantitative results” (Morgan, as cited in Glatthorn & Joyner, 2005, p. 40). This study’s mixed-method design, the data analysis, and interpretation procedures simultaneously collected quantitative and qualitative data and then compared the results. This was referred to by Gay, Mills, and Airasian (2006) as triangulation of quantitative and qualitative data simultaneously. The purpose of a mixed-methods approach is to understand fully a phenomenon and to “build on the synergy and strength” (2006, p. 490) that exists between quantitative and qualitative methods.

Mixed Methods Labeling

The choice to use a mixed-methods research design was carefully considered. A study by Sale, Lohfeld, and Brazil (2002) raised specific concern regarding the mixed-method design. They stated, “We believe that mixed-methods research is now being adopted uncritically by a new generation of researchers who have overlooked the underlying assumptions behind the qualitative-quantitative debate” (p. 44). In order to address this concern, this study followed this suggestion from Sale, Lohfeld, and Brazil (2002). They proposed:

. . . a solution to mixed-methods research and the quantitative qualitative debate. Qualitative and quantitative research methods have grown out of, and still represent, different paradigms. However, the fact that the approaches are
incommensurate does not mean that multiple methods cannot be combined in a single study if it is done for complementary purposes. Each method studies different phenomena. The distinction of phenomena in mixed-methods research is crucial and can be clarified by labeling the phenomenon examined by each method. (p. 50)

Therefore, in order to carefully distinguish between the phenomena in this study, each investigation is labeled. The quantitative measure of Emotional Intelligence taken of each group member in the sample, both before and after the Appreciative Inquiry, informs the study of the Emotional Intelligence in context of the treatment (Appreciative Inquiry process). This is labeled *The Measure of Emotional Intelligence in Context of Appreciative Inquiry.*

The qualitative case study investigation regarding the Emotional Intelligence of the participants within the context of the Appreciative Inquiry process is a description of the” lived experience” (van Manen, 1977 as cited in Miles & Huberman, 1994, p.10). In this study, the label given to this process is *The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence.*

**Methodological Design**

*Quantitative- The Measure of Emotional Intelligence in Context of Appreciative Inquiry*

The first step in the study was to collect the quantitative data for analysis. A single variable quasi-experimental “one-group pretest – posttest design” (Gay, Mills, & Airasian, 2006, p. 251) was used (see Figure 1). This involves the use of intact groups of subjects; in this instance, the Admissions Department at a college. The pre-test and post-
test were the same, and as a measurement tool the test has a test-retest reliability of \( r = .86 \) with an \( N \) of 62 (Brackett & Mayer as cited in Mayer, et al., 2002b).

*Figure 1.* Non-equivalent group design.

![Non-equivalent group design](image)

*Note.* \( O_1 \) = pre-test measurement of Emotional Intelligence, \( X \) = treatment or Appreciative Inquiry meeting, \( O_2 \) = post-test measurement of Emotional Intelligence

*Research Hypotheses*

Appreciative Inquiry engages the participants in positive social constructivism. The awareness of the group’s positive and life-giving attributes constructs meaning for the individual regarding provocative possibilities for the future of the group (Cooperrider & Srivastva, 1999; Cooperrider, Whitney, & Stavros, 2003). Does this activity have an effect on Emotional Intelligence?

Epistemological assumptions for qualitative research are usually from a positivist perspective (McKelvey, 1997). In others words, the representation of truth can be gained from empirical numerical data. From a positivist research perspective, the null hypothesis (\( H_0: \mu_1 = \mu_2 \)) was tested. For this investigation, this was stated as: the average score of Emotional Intelligence of the group before the Appreciative Inquiry process (\( \mu_1 \)) is equal to the average Emotional Intelligence score of the group after the process (\( \mu_2 \)). Measuring the Emotional Intelligence of the group before and after Appreciative Inquiry captures the affects that one variable (Appreciative Inquiry) may have. As referred to earlier in the chapter, this is labeled a *Measure of Emotional Intelligence in Context of Appreciative Inquiry.*
Qualitative- The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence

The next step in the study was to collect qualitative descriptive data for analysis. A single case study method was used. The rationale for a single case study can be “analogous to a single experiment” (Yin, 1994, p. 38) and can contribute to understanding, in this case, an organization or even an individual. From a postmodern research perspective, the collection of data sources in a case study includes interviews, observations, and documents (Merriam & Associates, 2002). An analysis of this data will contribute to answering the question: How can organizations better understand the Emotional Intelligence of people before and after Appreciative Inquiry? This describes The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence.

Population and Sample

The sample was drawn from the faculty and staff in a small liberal arts four-year college in Ohio. The Admissions Department of this college has undergone dramatic change generated from external and internal forces. They chose to use Appreciative Inquiry to guide them through dynamic change as they plan for the future. All participants in the Appreciative Inquiry were included in the sample. All members of the Admissions Department, along with representatives from other departments on campus as well as students, were included. The total number of participants in the study was 13. Using this existing group is defined as a convenience sample (Gay, Mills, & Airasian, 2006). Because “convenience sampling uses groups of participants that simply happen to be available. . .” (Charles & Mertler, 2002, p. 151) this study may not claim to generalize to the greater population. Information regarding the gender, age, and ethnicity of each
participant was also collected at the time that the test in Emotional Intelligence was administered.

The Human Subjects Review Board at Ashland University approved of the data collection procedure for this population (see Appendix B). The Vice President of Academic Affairs and Dean at the college gave written approval for the study to be conducted on campus (see Appendix C).

Methodological Procedures

Data Collection and Instrumentation

Measure of emotional intelligence in context of appreciative inquiry.

The measurement tool used to gather data for The Measure of Emotional Intelligence in Context of Appreciative Inquiry was the Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT). The MSCEIT may be obtained by permission for research purposes from the Multi-Health Systems Incorporated (MHS, 2001). The MSCEIT is “based on the idea the EI involves problem solving with and about emotions” (Mayer, Salovey, Caruso, & Sitarenios, 2003, p. 97). The test is the ability (or integrative) model of Emotional Intelligence (Mayer, Roberts, & Barsade, 2008; Mayer, Salovey, & Caruso, 2002a). This measurement tool is a “performance measure which requires the participant to complete tasks associated with emotional intelligence” (Stys, & Brown, 2004, ¶ 4). A sample of the test questions may be found in Appendix D. A description of the test states that it tests the ability to perceive, use, understand, and manage emotions (Mayer, Salovey, & Caruso, 2002b). The scoring is divided into four tasks. They are perceiving emotions, using emotions, understanding emotions, and
managing emotions.

The MSCEIT includes both consensus and expert scoring with “. . . full scale reliability of .91 and area reliabilities of .90 (experiential) and .85 (strategic)” (Mayer, Salovey, & Caruso, 2002b, p. 35). For this study, the expert criterion was used. According to Brackett and Mayer (as cited in Mayer, Salovey, Caruso, & Sitarenios, 2003) the test-retest reliability of the MSCEIT is \( r(60) = .86 \).

A technical report on the MSCEIT, located on a web site maintained by David Caruso, http://www.emotionaliq.org/, contains information regarding the validity of this measurement tool. Here Caruso (n.d.) cites work by Pusey that indicates the MSCEIT has good face validity. This technical report also lists the discriminate validity of the MSCEIT as correlated to other tests and the reports are low. Low discriminate validity indicates that the MSCEIT may measure for a unique or separate ability (Gay, Mills, & Airasian, 2006).

Before the Emotional Intelligence test was taken, the group of participants was gathered together in order to have the facilitator explain the procedures of the test. This also enabled each person to have the ability to ask questions and receive clarification on any points of the testing. In addition, an e-mail was sent to each person with an outline of the procedures. Each participant was given an online Internet code to use as a log-in to a secured site that administered the MSCEIT. The test was individually administered at the participants’ convenience. If the access to a computer system was not easily available to the participant, a paper-pencil form of the test was offered for that participant’s convenience. According to Buchanan and Smith (as cited in Mayer, et al., 2003), there is no difference between an online test form and a booklet form. Two tests were taken by
each participant, one before and one after the Appreciative Inquiry. All participants completed the pretest within 48 hours prior to the Appreciative Inquiry meeting. The posttest was completed exactly 3 months after the Appreciative Inquiry meeting.

The results were tabulated by the test supplier via an online database and recorded in a Microsoft Excel format. Individual results and the interpretations of the scoring was also made available from Multi-Health Systems Incorporated (MHS, 2000).

*Lived experience of appreciative inquiry with regard to emotional intelligence.*

The tools used to gather data from the case study to explore *The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence* were collected in three forms: journal interviews, documents, and observations. This use of multiple sources of data collection is called triangulation (Creswell, 1998; Denzin & Lincoln, 1994). Data triangulation can “provide an additional powerful safeguard” (Gay, et al., 2006, p. 423) against researcher bias.

The collection of three forms of data by students who were trained for this procedure helped to assure that “correct operational measures” (Yin, 1994, p. 33) were followed. This helped to establish construct validity. The structure and detail of the collection of data helped to guarantee that the study could be repeated with the same results, thereby establishing a reliability of the study (1994).

The first of the three areas of data collected in the case study was the journal interviews. These included what Patton (1990) identified as probes: detail-oriented probes, elaboration probes, and clarification probes. Each participant was given a journal with prompts (see Appendix E). They were asked to complete open-ended responses at intervals before, during, and after the Appreciative Inquiry Experience. The facilitator
allotted time for this exercise. This data yields a rich and deep description of what Merriam and Associates (2002) referred to as the “multiple constructions and interpretations of reality” (p. 4).

The second form of data was documents that the participants completed evaluating the meeting and their experience. This documentation included both open-ended questions and a rating scale format. Using a Likert scale and prompts (see Appendix F) the evaluation was a brief summative report by the participants of their experience. This helped to add to the descriptive data collection.

Before the meeting began, trained student aides, who helped with the logistics of the meeting, received both an e-mail and verbal instructions for their responsibilities at the Appreciative Inquiry event (see Appendix G). Immediately before the meeting they were assembled to review their assignments. They were directed to monitor specific break out groups during the meeting and capture what they observed. In order to avoid observer biases, the student aides were asked to switch groups throughout the process.

These observations were recorded in the form of diagrams and notes. The diagrams were of the exchange of participation in the process of Appreciative Inquiry and observation notes taken by trained student aides. The verbal exchanges were captured in diagrams. These diagrams were collected from the drawings of the student aides. Interactions were recorded on paper. As part of the raw data, these diagrams were later entered into a software program (Kidspiration V. 3® software, 2006). To explain further, there were aides instructed to both scribe and take notes as well as to record the interactions during group breakout sessions. As one member of a group spoke, the student aides captured whether this was addressed to the group at large or to specific
members of the group. Using simple circles and arrows, the participants’ verbal exchanges were charted. Depicting visually the frequency and scope of a member’s participation added to the understanding of the level of engagement at the Appreciative Inquiry meeting. This allowed the information regarding the level of verbal exchange to be captured in a visual manner (see example in Figure 2). The documents from these scribed drawings and notes hold what Miles and Huberman (1994) referred to as going beyond the snapshots of what or how, in order to understand what is really going on in the contextual lived experience.

*Figure 2.* Diagram of group participation.

This is a diagram of group participation. Arrows depict the flow of conversation. Further description of all group participation diagrams is included in Appendix H.

*Data Analysis*

The data analysis used for *The Measure of Emotional Intelligence in Context of Appreciative Inquiry* was a *t*-test using the MSCEIT mean scores of the group participating in Appreciative Inquiry. This analyzes the difference between group means for significance (Gay, et al., 2006). It determines if the null hypothesis is rejected, or if
the average score of Emotional Intelligence of the group before the Appreciative Inquiry process is equal to the average Emotional Intelligence score of the group after the process.

The data analysis for *The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence* was a method of constant comparison, organizing, and categorizing to uncover themes or patterns in the data. The raw data was “processed” (Miles & Huberman, 1994, p. 51) or made ready for analysis by using diagrams, charts and scales.

**Limitations of the Methodology**

From a quantitative perspective, the sample number (14) may not allow confidence that ‘. . .the results of a single study based on a small sample. . .’ (Gay, et al., 2006, p. 110) can be easily generalized to the larger population. It should also be noted, that the interval of time caused a mortality or “reduction in the number participants. . . who drop out of the study” (Gay, et al., 2006, p. 240). On the other hand, a longer time would have allowed for a series of measurements to be taken of the participant’s Emotional Intelligence, making a more complete picture of changes in Emotional Intelligence scores.

From a qualitative perspective, researchers participate in the research. This was the instance in this study. I facilitated the Appreciative Inquiry event. Therefore, it may be possible that the analysis and results of the study could be biased. In addition, the observer effect is a phenomenon in which the people who are being observed may react to the researcher’s presence (Gay, Mills, & Airasian, 2006). Because the student aides were taking notes and actively watching people at the Appreciative Inquiry meeting, it is
possible that some of the data they collected may be influenced by the observer effect.

Generalizability

The external validity of the study is the degree to which the results can be applied to organizations or groups outside of this study (Gay, Mills, & Airasian, 2006). Due to the small sample size used, generalizability to other groups may not be high. The non-random selection of the participants may also have an effect. The participants were selected because of their association with the Admissions Department. It is possible that these participants have a genre or orientation to developing emotional knowledge and therefore increasing Emotional Intelligence.

Summary

In order to study the effects of Appreciative Inquiry on the Emotional Intelligence of individuals who have been exposed to an Appreciative Inquiry experience, this exploratory study used a mixed-methods approach. This was designed to capture both the quantitative measure and contextual lived experience of Emotional Intelligence as it relates to Appreciative Inquiry experience.

The measurement tool for collecting quantitative data was the MSCEIT. The psychometric properties of the MSCEIT test include high ratings on reliability and validity. Using a triangulation of data from journal interviews, documents, and observations for capturing quantitative data provided a broad field from which to gather data. This study’s mixed-method design and the data analysis procedures simultaneously collected quantitative and qualitative data and then compared the results.

Data from both the measurement of Emotional Intelligence within the context of Appreciative Inquiry and the lived experience of Appreciative Inquiry contributed to this
study. The design and methodology of the study made it possible to gain an understanding, from a singular case, of the affects of Appreciative Inquiry on Emotional Intelligence.
CHAPTER IV

RESULTS

Introduction

This chapter presents an analysis of the data from the exploratory study of the effects of Appreciative Inquiry on Emotional Intelligence. The results of the collection and analysis of data from a quantitative perspective is described first in the section Measure of Emotional Intelligence in Context of Appreciative Inquiry. Here, the outcome of the null hypothesis of the research question is investigated. Next, the results and analysis from a qualitative perspective is presented in The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence. Here the depth and detail of the experience of Appreciative Inquiry is explored.

Measure of Emotional Intelligence in the Context of Appreciative Inquiry

Participants

The members of the Admissions Department in a small college, along with some of their stakeholders on campus, gathered for an Appreciative Inquiry meeting. The purpose of the meeting was to move the group more effectively toward accomplishing department goals for recruitment. Although attending the Appreciative Inquiry meeting was voluntary, it was understood that the administration was supporting this activity and attendance was strongly suggested. In total, 15 participants were invited. Two members of the Admissions Department did not respond to the invitation to attend. A subsequent, personal follow-up from both myself (the researcher) and the participants’ immediate
supervisor did not result in getting them to take part in the meeting. In the end, only 13 people out of 15 invited responded to the invitation and agreed to be involved in the study. All 13 participated in the Emotional Intelligence measurements. These 13 participants at the Appreciative Inquiry meeting could be defined as a convenience sample (Gay, Mills, & Airasian, 2006). Four of the 13 people attending were student workers. These student workers had been with the department for more than a year and were integral to the function of the Admissions Department. As part of this study, they were asked to assist in the collection of qualitative data. The student workers not only assisted in collecting data, but also participated fully in the Appreciative Inquiry meeting. Verification of all participants’ support is demonstrated in the approved Human Subjects Review Form (see Appendix B).

Each of the participants received information regarding the Emotional Intelligence test from me via an e-mail before the meeting. All emails were followed up with a personal communication. The point of the follow-up was to inform them of the logistics of the off-campus location for the meeting, and to have the opportunity to clear up any questions regarding the research in which they had agreed to participate.

Everyone completed the Emotional Intelligence test prior to the Appreciative Inquiry meeting. At the culmination of the meeting, each participant was privately shown a copy of their Total Emotional Intelligence scores. They were informed that these scores would be compared to the results of a re-test that they would take in the future. No analysis of what the score represented was explained at that time.

In summary, it is important to note that of the 15 people who were invited, 13 accepted the invitation. All 13 participants took the Emotional Intelligence test one week
prior to the Appreciative Inquiry meeting, and post-tested 3 months following the meeting. In addition, it is important to note that as a participant, I also took the Emotional Intelligence tests, but did not complete or contribute to any other data collection used in this study. Because I facilitated the Appreciative Inquiry meeting, I also took the pre-test and post-test, and was immersed in the study, this is what is referred to by Gay, Mills, and Airasian (2006) as participant observer. Any issues of researcher bias may be addressed in the design method using triangulation of data.

Data Collection

There are several tools designed to measure Emotional Intelligence. It is important to identify the specific model through which Emotional Intelligence is understood in order to choose a measurement instrument that is designed to reflect that model or understanding. For this study, the understanding that Emotional Intelligence “takes its place within personality as an important aspect that predicts important life criteria” (Mayer, Salovey, & Caruso, 2002b, p. 17) is significant. While at the same time understanding that Emotional Intelligence “…appears relatively unrelated to most personality characteristics…” (Mayer, et al., 2002b, p. 17) is important. The Mayer, Salovey, and Caruso Emotional Intelligence Test (MSCEIT) was used in this study. It is based on the model of Emotional Intelligence that is “…focused on the ability to think clearly about emotions to enhance intelligence” (Mayer, et al., 2002b, p. 17). This is not to be confused with what sometimes is referred to as thinking with the heart. A common misunderstanding is that this has the same meaning as Emotional Intelligence. The MSCEIT specifically measures “the ability to (1) accurately perceive emotions; (2) use emotions to facilitate thinking, problem solving, and creativity; (3) understand emotions;
and (4) manage emotions for personal growth” (Mayer, et al., 2002b, p. 1).

In order to test the null hypothesis \( H_0: \mu_1 = \mu_2 \) stated as: the average score of Emotional Intelligence of the group members before the Appreciative Inquiry process \((\mu_1)\) is equal to the average Emotional Intelligence score of the group members after the process \((\mu_2)\), a dependent \( t \)-test was used. This tests for a difference between two independent groups on the means of a continuous variable (Gay, Mills, & Airasian, 2006). The criteria for correctness on the MSCEIT used for this study was that of expert consensus. This indicates that “...experts...judge which answers are correct, and use their averaged response to a given alternative as a criterion” (Mayer, et al., 2002b, p. 7). Therefore, it is a criterion-referenced scoring with normative values set by the experts (Gay, et al., 2006). This measurement tool is a “performance measure which requires the participant to complete tasks associated with emotional intelligence” (Stys & Brown, 2004, ¶ 4). The test supplier, Multi-Health Systems, Inc. (MHS), scored the data from the MSCEIT. All scoring was recorded in numerical values. The MSCEIT Interpretive Guide states that scores are “reported as normed standard scores with a mean = 100 and a standard deviation = 15” (Multi-Health Systems, Incorporated, 2000, ¶ 2). This indicates that the score has been related to a normed group of over 5000 respondents (Mayer, et al., 2002b) and the score of 100 is the average. The standard deviation of 15 means that the variability or spread of most scores is somewhere between 85 and 115 (2002b). Other intelligence tests are similarly reported.

The scoring of the online form of the MSCEIT was complied in two formats. Each format presents the scores of the 15 categories in a different manner. One format was a Microsoft 2003 Excel® database with numerical values entered into categories of
individual test items as well as 15 general scoring categories. The other format used a multi-page document called a Personal Summary Report (Mayer, et al., 2002b). This explained each section, the scoring, and the information about the Emotional Intelligence ability area that was being scored. It was in easy to understand language.

Both formats include 15 categories of scores. There is an overall *Total Emotional Intelligence* score. Two categories or sub scores under this are called areas scores and labeled *Strategic Emotional Intelligence* and *Experiential Emotional Intelligence*. There are four subsets under each area score. They are called branch scores and labeled *Perceiving*, *Facilitating*, *Understanding*, and *Management*. In the Microsoft 2003 Excel® database format there are columns with abbreviations for all 15 categories as well as individual test item responses. No explanation or interpretation is available in this format (see Appendix I). This database design supports the ability to run statistical research reports.

In the other format, the Personal Summary Report, there is a graphic of the 15 categories called “MSCEIT™ Performance Flowchart” (Mayer, et al., 2002b, p. 86). The Personal Summary Report of the MSCEIT shows the *Total Emotional Intelligence* score along with 14 other categories. Once the test is completed, a numerical value for the score is entered into each box in the flowchart design on the Personal Summary Report (see Figure 3.). It is appears to be easy to understand and user friendly.
Figure 3. MSCEIT personal summary scoring diagram.

Adapted from MSCEIT: User’s manual, 2002b, p. 86, by J. D. Mayer, P. Salovey, & D R. Caruso with permission by the authors.

Data Results

The entire group was targeted for change. Appreciative Inquiry was used as a vehicle for that change. Therefore, considering group statistics as well as individual group member scores may hold valuable information for future change strategies. This study looks at both.

The participants took the MSCEIT before the Appreciative Inquiry meeting and again three months after the meeting. According to Mayer, Salovey, and Caruso, “a test-retest reliability for the full-scale MSCEIT V2.0 [which is what was used]... is r = .86” (2002b, p. 35). This means that the chance of a participant receiving a re-test score within the same interval as the first test is within 86% reliability. The test authors point out that “motivation, fatigue, language and fluency” (2002b, p. 71) can influence the results of a test and therefore re-testing may produce a slightly different score.
The Total Emotional Intelligence pre-test scores of the participants ranged from a high score of 132 (participant #5), to a low score of 79 (participant #11). The mean or average was 104, the median was 104, and the mode or the most frequently occurring score was 110 (see Figure 4.).

*Figure 4.* MSCEIT pre-test total Emotional Intelligence scores.

The Total Emotional Intelligence post-test scores of the participants ranged from a high score of 110 (participants #3, 8, 14), to a low score of 72 (participant #11). The mean or average was 102, the median was 103, and the mode or the most frequently occurring score was 110 (see Figure 5.).

*Figure 5.* MSCEIT post-test total Emotional Intelligence scores.
A comparison of the pre-test and post-test Total Emotional Intelligence scores of the group to a “guideline of ranges” established by Mayer, Salovey, and Caruso (2002b, p. 18) provides information about how the group as a whole compares to established norms of the measurement tool, MSCEIT (see Table 1). Mayer, et al. have computed guidelines for a normative range of scores. The descriptions are similar to ranges in IQ scores (2002b). Generally, a score from 90 to 109 is considered low average to high average. A score of 110 to 119 is competent. Scoring at levels of 89 or below signals a need for improvement or development. Scores over 130 represent significant strength. Making comparisons provides information regarding how group members may have measured up to the ranges. Table 1 depicts the Emotional Intelligence scores of the group before and after the Appreciative Inquiry meeting. This is useful in understanding how Emotional Intelligence may be effected by Appreciative Inquiry. Before the meeting, more people scored in the competent range than in any other. After the meeting the Total Emotional Intelligence group scored on the average a bit lower, in the high average range.

In addition, a comparison of the pre-test and post-test scores of Total Emotional Intelligence indicates any changes that may have occurred within the group (see Table 1).
<table>
<thead>
<tr>
<th>Range of scores</th>
<th>Participant’s pre-test</th>
<th>Participant’s post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤69 - consider development</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>70-89 - consider improvement</td>
<td>79, 88</td>
<td>72</td>
</tr>
<tr>
<td>90-99 - low average score</td>
<td>93, 97, 99, 99</td>
<td>95, 97, 99, 99</td>
</tr>
<tr>
<td>100-109 - high average score</td>
<td>103, 104</td>
<td>101, 103, 103, 103, 108</td>
</tr>
<tr>
<td>110-119 - competent</td>
<td>110, 110, 111, 114, 116</td>
<td>110, 110, 110</td>
</tr>
<tr>
<td>120-129 - strength</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>≥130 - significant strength</td>
<td>132</td>
<td>n/a</td>
</tr>
</tbody>
</table>


*None of the participants scored in this range, therefore (n/a).*

In addition to the *Total Emotional Intelligence* scores, it is useful to examine the scores in the other categories such as the four branch scores; *Perceiving Emotions, Facilitating Thought, Understanding Emotions,* and *Managing Emotions* (see Appendix M). This may be helpful because the branch scores are “. . .information on a respondent’s specific emotional abilities” (Mayer, Salovey, & Caruso, 2002b, p. 19). In fact, in the MSCEIT pre-test there is a spike in group scores in the branches *Facilitating Thought* and *Understanding Emotion.* An overall comparison of the group’s averages is depicted in Figure 6.
Null Hypothesis

The null hypothesis ($H_0$: $\mu_1 = \mu_2$) was tested. The data collected from the MSCEIT scores in each of the scored areas was entered into a SPSS® software program. The scores of the MSCEIT (in all 15 areas) before the Appreciative Inquiry meeting and after the meeting were analyzed. First, the Total Emotional Intelligence score and then all other 14 categories were paired and a paired samples $t$-test was used to analyze the data. This was a two-tailed test because it could not be determined ahead of time whether a difference between the pre-test and post-tests will be positive or negative (Gay, Mills, & Airasian, 2006). The sample size is $N=13$. Alpha, or significance level, was set at .05 for each test so that a Type II error could be avoided, or to miss the opportunity “to correctly reject the null hypothesis” (2006, p. 388).

The results of the paired samples $t$-test run in SPSS® gives the descriptive statistics for each of the two groups (pre-test and post-test). Eleven people took both measurements. They had a mean group score for the pre-test of the MSCEIT pre-test of
102 ($M = 102$) and a standard deviation of 11 ($SD = 10.81$). They had a mean group score for the post-test of 101 ($M = 100.95$) and a standard deviation of 10 ($SD = 10.02$).

The statistics of the correlation between the 13 pairs shows $r = .59$. The probability or $p$ value is .032. The inferential statistics indicate that the mean ($M = 1.05$) between the pre-test and post-test scores went down. The standard deviation between the two is $SD = 9.39$. The $t$ value is .40 and the degrees of freedom associated with this test is 12. The two-tailed $p$ value associated with this test is $p = .694$. In this case, $p$ is not less than or equal to .05, so this study fails to reject the null hypothesis ($H_0: \mu_1 = \mu_2$). That infers that there is insufficient statistical evidence to conclude that Appreciative Inquiry effects Emotional Intelligence.

The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence

*Participants and Data Collection*

Thirteen people participated in the Appreciative Inquiry meeting. Of these 13, four were student workers who had been assigned to the Admissions Department for more than a year. They were asked to assist in collecting qualitative data for the study, and to fully participate in the Appreciative Inquiry meeting. They did both.

In addition to the MSCEIT pre-test and post-test quantitative data that was collected on each person, a collection of qualitative data from journal interviews, documents, and observations was taken. Using these three sources of data collection is called triangulation of data (Creswell, 1998; Denzin & Lincoln, 1994) and is intended to reduce researcher bias (Gay, Mills, & Airasian, 2006).
It should be noted that participant J (depicted in both Appendix H and in Table 2) was not a member of the sample group. This person was brought in at the discretion of the Dean of the Admission Department at the last minute. As the researcher and facilitator, I had no control over this action. Therefore, participant J did not take the Emotional Intelligence test, but did take part in the meeting activities. Therefore, J will appear only in *The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence*.

*Journal Interview Data*

The first of the three areas of data collected for the *Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence* was the journal interviews (see Appendix E). The participants were asked to make journal entries at three stages of the meeting: before, during, and after the Appreciative Inquiry experience. These open-ended responses to prompts were collected in complete detail and recorded in one document (see Appendix J). Of the 13 participants, only 10 responded to the request for completing journal entries. The three missing journal entries were those of the student workers. They reported to me, the facilitator, that because of the assigned tasks with the logistical aspects of the meeting (i.e., set up, lunch, take down, recording etc.), they were very busy and did not complete journals.

The first prompt asked the participants to record their thoughts, feelings, perceptions, and attitudes before they began the meeting. Of the 10 responses, half (five) of them recorded an inquisitiveness or curiosity about what was going to happen at the meeting. This was demonstrated in the following responses: “not sure what to expect,” “didn’t know what to think or what was going to happen,” “no idea what to expect”. Four
of the 10 anticipated the upcoming day to be positive, as evidenced in the following optimistic statements: “knew it would be good,” “thought it would be beneficial,” “optimistic, open to new material”.

The next prompt asked them to record their thoughts, feelings, perceptions, and attitudes at midday in the meeting. Of the 10 responses to this prompt, eight of the responses recorded a sense of positive engagement in the process at this point. Evidence of an optimistic outlook on the process was found in these examples: “amazed at how fast the morning went,” “feeling good about the planning,” “enjoyed the sharing and the stories,” “enjoyed storytelling & how it boiled down to positive points”. One of the 10 had a neutral stance: “some people SHOULD be here-why aren’t they”? One of the 10 could be interpreted as negative: “even though we understand and see how to work together, we go back and return to the status quo”.

The last prompt asked them to record their thoughts, feelings, perceptions, and attitudes at the end of the meeting. Eight of the 10 participants recorded positive statements in this section of the journal. These quotes from the journals demonstrate some of the positive responses: “the group strategy discussion really went well,” “great way to collaborate,” “great end result!”, “very productive day”. Two of the responses were not entirely positive. One recorded: “it was not what I expected,” “interested to see if our great ideas can really be implemented”. The other wrote that there were a “few good, fairly concrete ideas, disconnect with morning session, afternoon better than morning”.
Themes from Journal Data

At the beginning of the day, half of the journal entries contained a sense of curiosity. Some had a positive anticipation for the upcoming day. At both midday and at the end, eight of the participants recorded positive statements regarding their thoughts, feelings, perceptions, and attitudes. The dispositional orientation of the participants, as recorded in the journals, went from a curious and somewhat optimistic anticipation in the beginning to a very affirming orientation regarding the Appreciative Inquiry meeting at both midday and by the end. Two general themes emerged from the journal entries. First, there was a moderate curiosity of the process and next, a strong positive orientation of the participants regarding their engagement in the Appreciative Inquiry meeting. Data collected from the journals provided evidence of patterns of curiosity, optimism, and positive orientation among the participants.

Documents Data

Participant evaluation documents (see Appendix F) were another form of data collected. Participants completed a written evaluation of the meeting and their experiences. This documentation included both open-ended questions and a Likert scaling method for survey items. Of the 13 participants, 12 completed evaluations were collected. There is no apparent reason for the failure of a participant to complete an evaluation. The researcher was not able to identify who had not completed an evaluation document.

On the evaluation documents, it was suggested by eight of the 12 respondents that group participation was valued. This is apparent from the following replies to the prompt that asked -what was the best part of AI: “group strategy sessions,” “ability to discuss as
a group...,” “2 persons, to 4 person group, to 6 person group”. Four of the responses reported that including outside stakeholders was a plus. Incidentally, interaction with other departments was uncommon on campus at the time.

When asked to comment on what may be improved regarding the Appreciative Inquiry approach, only nine comments of the 12 responded. None of the responses was negative. Of the nine, only one suggested a constructive criticism, and that was to “tie the morning to the afternoon”. All other comments were positive, and three of the responses asked for more stakeholders to be present.

Participants were asked to comment on the logistics of the meeting, (i.e., location, setting, environment, etc.). Here again, most of the comments were positive. Nine of the comments cited specifically that the off-campus location was a positive factor. One response included a request for more departments to participate.

The items on the evaluation document used a Likert scale for responses. This scaling method had 5 as the highest rating and 1 as the lowest. A series of five statements was designed to survey the participants’ attitudes regarding group interactions (see Appendix K). Out of 60 possible positions on the scale of 1 through 5, only 4 tallies were recorded in the 3rd interval of the scale. In intervals 1 and 2, there were no tallies. In interval 4, there were 22 tallies and in interval 5 there were 34. This indicates a response of approximately 57% at interval 5, 37% at interval 4, and 7% at interval 3. In summary, more than about 94% of the responses on the Likert survey regarding group interactions reflected a positive orientation of the participants toward their experiences.
Themes from Documents

The collection of data from documents indicated that the participants’ experience at the Appreciative Inquiry meeting (a) valued group participation, (b) suggested that more outside stakeholders should be included, (c) found the off campus location desirable, and (d) overwhelmingly cited group interactions as a positive experience at the meeting. Data collected from the evaluations provided evidence of themes of positive orientation toward working in groups, including others in the group, and valuing off-campus location for meetings.

Observations Data

Student aides were directed to monitor break-out groups during the meeting and capture what they observed. These observations took two forms: diagrams and notes. Both forms of observation data were intended to capture each participant’s engagement in group settings. The content of the conversations was not recorded. Only the observable exchanges of conversation and participation in the Appreciative Inquiry process were described. The intent of gathering this observation data was to provide information about each participant’s overall interaction with group processes and partnering sessions.

The diagrams were generated by student aide workers observing the group sessions. First, participants worked with a partner to complete a task and then pairs were combined to share information they had developed with their colleague/partner. In these group sessions, they were asked to discover positive commonalities, to dream, and later to design strategic plans for incorporating the common positive core of the group. It was from these grouping sessions that diagrams captured the frequency and direction of conversation from each participant. The student aides created the diagrams by drawing
circles representing each person. As one member of a group spoke, an aide drew an arrow to show the speaker and the target of the conversation. The result was a sketch of simple circles and arrows. The raw data was entered into a software program (Kidspiration V.3® software, 2006). This generated diagrams depicting the frequency of conversations in group settings. All diagrams of group interaction are in Appendix H. In addition, a table displays information from these diagrams (see Table 2). This chart uses alpha symbols to represent the participants. It shows the number of times that each participant engaged in conversation in the group processes during the Appreciative Inquiry meeting.

Some of the participants engaged more frequently than others in conversation, and this is shown in Figure 7. However, it is important to understand that not every participant had equal access to opportunities for participation. Some participants were only in one group setting while others may have been in two or even three groups. This gave some people more opportunity for participation. Therefore, in order to analyze the number of times that a person engaged in conversation, it is important to know how many opportunities they had. Comparing the number of times a person spoke to how many times they were in a group, yields a ratio that can offer clarity to the total opportunities one had to engage in conversation while in a group setting (see Figure 7).

One participant spoke an average of two times in each group setting. Most others (six) spoke an average of three to five times. Another spoke about 14.5 times per group.

*Figure 7. Frequency of participation in group sessions.*
Evaluating the mean, median, and mode in this instance will provide a way to understand what the typical participation for a member of this group is. Central tendency is “...a statistical concept referring to what is typical for a group” (Charles & Mertler, 2002, p. 319). The computations are as follows: the average frequency of participation by group members was 5.81, the median frequency of group member participation was 4, and the mode or most often occurring frequency of participation was also 4.

Table 2

*Table of the Frequency of Participant’s Group Conversations*

<table>
<thead>
<tr>
<th>Participant alpha code</th>
<th>Number of times in a group</th>
<th>Number of times in conversation</th>
<th>Ratio of conversation to group or frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>29</td>
<td>14.5</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>7</td>
<td>3.5</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>F</td>
<td>2</td>
<td>19</td>
<td>9.5</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>7</td>
<td>3.5</td>
</tr>
<tr>
<td>H</td>
<td>2</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>J</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

*Note.* The participants are represented by alpha symbols.

The other form of observations were notes. Ten of the participants paired up to
share information. During a period of about 20-25 minutes, the student aides were instructed to record their observations of the behaviors of the participants. This was to include such items as body language, attitude, and other observable data. These notes were handwritten by the student aides during partnering sessions and collected by the researcher. The raw data was typed into a MS 2007 Word® document (see Appendix L). These observations were intended to monitor the engagement of conversations among the pairs and describe the general behavior of each person.

The pairs were made up of the following participant: Pair 1 = participants (F)(H), Pair 2 = participants (E)(I), Pair 3 = (A)(B), Pair 4 = (C)(D), and Pair 5 = (G)(J). Three of the five pairs engaged easily in conversation. This is demonstrated in the following observations: “attentive listener,” “good at flowing conversation,” “comments to on partner’s story to make more conversation,” “both willing to participate,” “both smiling,” “both laughing”. Two of the five pairs had less engaging sessions. This is evidenced in the following statements; “neither wanted to start,” “awkward silence,” “worried that I am writing” (statement by student aide), “doesn’t always look at person” (see Appendix K).

Themes from Observations

The observations were a snapshot of the engagement levels of the participants. Even though the group settings had a central tendency value of 4-5 regarding the times of engagement in conversation per person (as demonstrated by the mode, mean and median), there was one person who spoke only twice per group, and another who spoke more an average of 14.5 times per group. The overall pattern of engagement may be stated to be about four or five times per person in a 20-25 minute group setting.
Three of the five pairs engaged easily in conversation while two of the pairs had hesitation sharing. Data collected from the observations provided evidence of moderate patterns of engagement while working in groups, and in moderate to high while working in pairs.

_Triangulation of the Data_

Triangulation refers to an analysis of the data that includes several sources. As in this study the measurement scores of the participants, documents, observed behaviors, and surveys demonstrate the use of multiple sources of evidence and therefore strengthen the results of the study (Gay, et al., 2006; Yin, 1994).

A triangulation of data can help to reduce bias because information is collected from several sources (2006). The observer effect is a phenomenon in which the people who are being observed may react to the researcher’s presence (Gay, et al., 2006). Because the student aides were taking notes and actively watching people at the Appreciative Inquiry meeting, it is possible that some of the data they collected may be influenced by the observer effect. By collecting several sources of data, this and other researcher bias may be reduced. Therefore, the data collected for _The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence_ comes from several sources in order to strengthen the study, and reduce bias.

In considering all of the sources from _The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence_ (i.e., journals, evaluations, and observations, surveys), it is possible to make an observation about the general themes or patterns of the lived experience. In review:

(1) data collected from the journals provided evidence of patterns of curiosity,
optimism, and, positive orientation among the participants;
(2) data collected from the evaluations provided evidence of patterns of positive orientation toward working in groups, including others in the group, and valuing off-campus location for meetings among the participants; and
(3) data collected from the observations provided evidence of moderate patterns of engagement while working in groups and moderate to high engagement while working in pairs.

Participants were curious, optimistic, and positive about the day. The off-campus setting added to the meeting. They liked working in groups, valued the participation of other stakeholders, and while working in groups, they were moderately to highly engaged.

Another step was taken in the study that Glatthorn and Joyner refer to as “. . . using qualitative follow-up to evaluate and interpret the quantitative results” (2005, p. 40). Examining the data of *The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence* together with that of the *Measure of Emotional Intelligence in Context of Appreciative Inquiry* further triangulates the data. In analyzing the quantitative data from the MSCEIT and comparing it to the themes/patterns of *The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence*, it may be possible to understand more deeply the experience of Appreciate Inquiry and its effects.

A triangulation of the data in the mixed methods approach in this study confirmed results first found independently in each methodology. What follows is the description of the triangulation of data from the quantitative and qualitative methods.

In order to understand the central-tendency of the group regarding MSCEIT test scores, the median, mean, and mode for the pre-test/post-test branch scores were
examined. Scoring was highest in *Facilitating Thought* and *Understanding Emotions* in the pre-test (see Table 3). It remained highest in the post-test, representing the only consistent pre-test/post-test scores in all 15 categories.

*Facilitating Thought* scores represent the ability to “. . .generate emotion, and then reason with this emotion” (Multi-Health Systems, Incorporated (MHS), 2001, p. 2). *Understanding Emotions* branch scores represent the ability to “. . .understand complex emotions and emotional “chains,” and how emotions transition from one stage to another” (2001, p. 2). The range of these scores was in the high average ability. For this group, the numerical data suggests a tendency to be higher than average regarding abilities in *Facilitating Thought* and *Understanding Emotions*. This suggests the group has the capability to use positive thoughts to change thinking, to “. . .foster creative thinking, [and] . . .deal with other people. . .” (2001, p. 2).

Table 3

*Table of Pre-test & Post-test Results on the Branch Categories of Emotional Intelligence*

<table>
<thead>
<tr>
<th>Tests</th>
<th>Perceiving Emotions</th>
<th>Facilitating Thought</th>
<th>Understanding Emotions</th>
<th>Managing Emotions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test mean</td>
<td>100</td>
<td>107</td>
<td>107</td>
<td>100</td>
</tr>
<tr>
<td>Post-test mean</td>
<td>94</td>
<td>107</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>Pre-test median</td>
<td>100</td>
<td>105</td>
<td>107</td>
<td>98</td>
</tr>
<tr>
<td>Post-test median</td>
<td>96</td>
<td>105</td>
<td>105</td>
<td>106</td>
</tr>
<tr>
<td>Pre-test mode</td>
<td>102</td>
<td>110</td>
<td>n/a&lt;sup&gt;a&lt;/sup&gt;</td>
<td>97</td>
</tr>
<tr>
<td>Post-test mode</td>
<td>102</td>
<td>102</td>
<td>n/a&lt;sup&gt;a&lt;/sup&gt;</td>
<td>100</td>
</tr>
</tbody>
</table>

<sup>a</sup>None of the participants scored in this range, therefore (n/a).
This supports the results of the qualitative data concerning theme/pattern (1) which was stated as, (1) data collected from the journals provided evidence of patterns of curiosity, optimism, and, positive orientation among the participants. The group had a positive orientation toward the meeting. They were optimistic and anticipated a positive outcome for the day. In addition, anecdotal, or unsolicited, data from the meeting has included several conversations (post Appreciative Inquiry meeting) in which participants initiated communications to cite positive outcomes for the Admissions Department from the meeting. Participants had higher than average scores in the ability to use emotions to foster creative thinking, to use positive emotions to generate thought, and to deal with other people.

The group’s high pre-test and post-test scores in the branch categories of Facilitating Thought and Understanding Emotions also support the results of the qualitative data concerning theme/pattern (2). This result was stated as, (2) data collected from the evaluations provided evidence of patterns of positive orientation toward working in groups, including others in the group, and valuing off-campus location for meetings among the participants. High average abilities in Emotional Intelligence in these areas indicate success “in dealings with other people and in enhancing oneself” (Multi-Health Systems, Incorporated (MHS), 2000, p. 19).

The test scores were compared to the themes/patterns. Data provided evidence of similar information about the make-up of the group’s Emotional Intelligence. The mixed methods approach enabled a triangulation of data from numerical scores and emergent themes/patterns to confirm this result (see Appendix N).
Summary

The results of the exploratory study in the Measure of Emotional Intelligence in Context of Appreciative Inquiry provide statistical data to answer the question, does Appreciative Inquiry effect Emotional Intelligence. The results of the exploratory study in The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence provide descriptive data that contributes to the understanding of the effects of an Appreciative Inquiry meeting on a group member’s Emotional Intelligence. The use of a mixed methods study and triangulation of data from multiple sources confirmed some of the results.
CHAPTER V

SUMMARY AND DISCUSSION

Introduction

This chapter summarizes the importance of understanding Emotional Intelligence and Appreciative Inquiry from the perspective of organizational change. Contributions to this topic, and implications of the findings as they relate to theory and practice is presented. Limitations of the study and implications for future research are discussed.

Importance of Topic

The study of organizational change is no longer confined to the models of mechanistic and linear designs (Beckhard, 1969; Bennis, 1993; Cooperrider, Barrett, & Srivastva, 1995; Drucker, 1995, 1999; French, Bell, & Zawacki, 2005; Peters, 1987; Senge, 1990; Wheatley, 2006). Researchers have proposed that the developments in systems theory and the new sciences of quantum physics suggest a different way for understanding organizations and offer new approaches for affecting deep change in the organization (Cooperrider, Barrett, & Srivastva, 1995; Cooperrider & Dutton, 1999; Wheatley, 2006). Appreciative Inquiry is an approach to change that considers an organization to be a human system that is socially constructed and has a natural tendency to evolve in the direction of a positive future (Cooperrider, Barrett, & Srivastva, 1995; Cooperrider, Whitney, & Stavros, 2003).

Leaders choose specific processes or strategies to change/develop organizations (Bolman & Deal, 2003; Evans, 1996; French, Bell, & Zawacki, 2005; Senge, 1990;
Sergiovanni, 1994). They also implement professional development training to change individuals within the organization (Guskey & Huberman, 1995). One area of professional development that has been the focus of intense training is Emotional Intelligence (Cherniss, 2000). The theory of Emotional Intelligence suggests that human intelligence is multi-faceted and not confined to one quantifiable measure, such as IQ alone (Bar-On & Parker, 2000; Boyatzis, Goleman, & Rhee, 2000; Cherniss, 2000; Goleman, 1995, 1998, 2008; Mayer, Roberts, & Barsade, 2008; Mayer, & Salovey, 1997; Mayer, Salovey, & Caruso, 2004). Increasing emotional knowledge can be helpful in developing successful relationships in the workplace and in personal life as well. Therefore, studying a specific change model, Appreciative Inquiry, and exploring the effects it may have on the Emotional Intelligence of members of the organization has importance. It has importance, because at this time of rapid change in organizations (Wheatley, 2006), it is imperative to choose wisely when determining change strategy and professional development of the organization. Not only is the conservation of resources such as time, capital, and employees a primary consideration, but the effective and efficient management of change to achieve organizational goals is at stake when implementing organizational change or development.

This exploratory study contributes to the understanding of change from the perspective of two areas, Emotional Intelligence and Appreciative Inquiry. Posing the question, does Appreciative Inquiry affect Emotional Intelligence, may produce findings that contribute to understanding the consequences to employees and ultimately the organization as a whole when deciding on what change strategies to use.
Findings and Implications

This study relied on a positivist epistemology from which to understand the reality (Glatthorn & Joyner, 2005) of the effects of Appreciative Inquiry on Emotional Intelligence. This study also relied on the lived experience of the participants from which to learn of the reality of how Emotional Intelligence may be effected by Appreciative Inquiry. Glatthorn and Joyner (2005) state that this phenomenological view is one “in which reality inheres in the perceptions of the individual” (p. 40). The combination of these different perspectives resulted in using a mixed methods approach for this exploratory study.

Considering first the quantitative perspective or the Measure of Emotional Intelligence in Context of Appreciative Inquiry, a statistical analysis provided an answer to the research question, does Appreciative Inquiry affect Emotional Intelligence. The pre-test and post-test scores of the MSCEIT provided numerical data that was statistically analyzed using a t-test. This tests for a difference between two independent groups on the means of a continuous variable (Gay, Mills, & Airasian, 2006). The results of this analysis did not indicate a difference in the Emotional Intelligence within group members, or of the group as a whole, after the Appreciative Inquiry meeting was conducted for the Admissions Department at a small college. There were no statistically significant change in the Emotional Intelligence of the group members. Therefore, this study fails to reject the null hypothesis ($H_0: \mu_1 = \mu_2$) stated as: the average score of Emotional Intelligence of the group members before the Appreciative Inquiry process ($\mu_1$) was equal to the average Emotional Intelligence score of the group members after the process ($\mu_2$). A paired samples $t$ test failed to reveal a statistically reliable difference
between the mean pre-test \((M_{\text{pre}} = 102, SD = 10.81)\) and post-test \((M_{\text{post}} = 100.95, SD = 10.02)\) scores of the group that experienced an Appreciative Inquiry meeting, \(t(10) = .694, p = .781\) (two-tailed), \(\alpha = .05\). This study failed to reject the null hypothesis, \(H_0: \mu_1 = \mu_2\). Appreciative Inquiry did not appear to have an effect on the Emotional Intelligence of group members (see Appendix O).

Further analysis can be made by looking at the scores of all 15 categories of the MSCEIT. No statistically significant differences between the pre-test and post-test scores were indicated in any of these categories. The test re-test reliability is “\(r = .86\)” (Mayer, Salovery, & Carusco, 2002b, p. 35). Only one participant re-tested with a score that changed from the original interval, and that change was only in one sub-category. Therefore, it can be assumed that the members of this group did not have a change in their Emotional Intelligence because of participation in an Appreciative Inquiry meeting.

From the quantitative data, it can be assumed that participation in an Appreciative Inquiry meeting did not have an effect on the Emotional Intelligence of a group or of individual group members.

The MSCEIT records scores in four branch areas in addition to the Total Emotional Intelligence score. In two of the four branch scores, the group scored consistently high in both the pre-test and post-test. The group ranked at a level of high average in Facilitating Thought and Understanding Emotions. Abilities in these areas are described as being able to: use emotions to solve problems, use positive and negative emotions to foster creativity, know how to deal with other people, and understand one’s self (Mayer, Salovey, & Caruso, 2002b). These are abilities that enable successful interaction with others, particularly in group settings.
From a qualitative perspective, the study explored the effects of Appreciative inquiry on group members from the *Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence*. Three themes/patterns emerged. They included: first, patterns of curiosity, optimism, and, positive orientation among the participants, second, patterns of positive orientation toward working in groups, including others in the group, and valuing off-campus location for meetings among the participants’, and third, patterns of engagement while working in groups and in moderate to high engagement while working in pairs.

The group scored high in abilities that are core to successful interaction with others, particularly in groups, as evidenced by the *Facilitating Thought* and *Understanding Emotions* branch scores. In the themes/patterns that emerged, a repeated theme was that of group interaction as evidenced by descriptions of optimism, a positive orientation among the participants and toward groups, as well as engagement while working in groups and while working in pairs. This mirrors what was demonstrated by numerical data of the test scores in the MSCEIT branch scores of *Facilitating Thought* and *Understanding Emotions*. A triangulation of the data from both the quantitative and qualitative methods confirmed that themes/patterns of the group were supported by numerical data from the test scores.

**Limitations of the Study**

There may be limitations to the generalizability of this study due to the small sample size. The small sample number contributed to reducing the external validity of the study (Gay, Mills, & Airasian, 2006). This was further compromised by participants who did not complete the post-testing. The study started with 14 participants in the pre-test. Of
these 14 only 13 completed a post-test. One of the participants moved onto a job in another city.

The fact that the sample group came from one organization, and therefore the make-up of the group was predominately in the same career field, may have influenced the Emotional Intelligence scores. It is possible that with a sample that includes individuals from multiple career fields there may be altogether different scores on the MSCEIT. The repetition of this study in other organizations and with larger sample sizes may help to confirm or refute the findings. As long as the issues of the small sample size and lack of differentiation among group members exists, this study lacks strong external validity.

The MSCEIT was administered twice in this study. Using only one measurement tool may be another limitation because there is a variation in assessments for Emotional Intelligence. There are other models to choose from, which were developed from slightly different theoretical perspectives (Mayer, Roberts, & Barsade, 2008). Use of a different measurement tool may produce different results.

Implications for Future Research

This exploratory study raised did yield information regarding the Emotional Intelligence of group members before and after an Appreciative Inquiry meeting. The descriptive reality of the lived experience of the meeting was also captured. However, according to Gay, Mills, and Airasian (2006) the design of the study (i.e. mixed methods) requires that the researcher to interpret and explain. Therefore, it is in the elaboration of the results that implications for future research may be considered.

One possibility for future research is the repetition of the study. Replicating the
study in other organizations may be valuable for two reasons. One, because the Emotional Intelligence makeup of the group members in this convenience sample may be clustered around the career field orientation of the people. Most of the people in this sample were in the Admissions Department. Do different career fields attract people with different clustering scores of Emotional Intelligence? Are high scores in the branch area of *Facilitating Thought* and *Understanding Emotions* common to people in this career field or was this an anomaly? Would a random sampling or group members from many departments within an organization change the results? Would a larger group with more members from different occupations change the results? Does working together over time cause Emotional Intelligence scores to cluster around a central tendency point of the group? Does the group leader’s Emotional intelligence scores affect the group?

Another reason to repeat the study would be the small number in this study. Although the qualitative methods were not affected by the number, the data for the statistical analysis would be more externally valid with a higher number (Gay, Mills, & Airasian, 2006). A larger sample size will address the limits on generalizability. Does a larger N confirm or refute the findings?

The group members sought the researcher out to discuss the possibility of future meetings done using Appreciative Inquiry because they felt that the group was working much better as a whole following the meeting. Even though these conversations were unsolicited and anecdotal in nature, it raises the possibility that Appreciative Inquiry had an effect on the group in defining or establishing group identity and common goals. A longitudinal study that explored the effects of an Appreciative Inquiry meeting on a group may provide information regarding short-term and long-term effects of this change.
process. The use of a control group would provide a comparison for such a study. It may
be interesting to take a series of Emotional Intelligence measures over several months
before and after the meeting. Does working in a group that uses Appreciative Inquiry
cause Emotional Intelligence scores to change, or to collect around a central tendency
point of the group?

Do the ages of the members of the group influence Emotional Intelligence scores?
Is there any correlation between age and scoring in the branch areas? Is change in
Emotional Intelligence more easily affected at certain ages?

A study in which two different measurement tools for Emotional Intelligence are
used to evaluate the group may offer information about the theories of Emotional
Intelligence. Is it an ability that is innate, learned or acquired? Can it be taught? Do all
people learn it in the same way?

Goleman, Boyatzis, and McKee (2002) discuss the open limbic system and the
sharing of emotions between leaders and group members. Is this at play in an
Appreciative Inquiry meeting or in any meeting? Can group members affect others’
Emotional Intelligence through interactions and relationships in unintended ways? Do
people who work in or belong to groups over long periods change the Emotional
Intelligence of others? Does a leader, a teacher, a parent, a co-worker change or effect the
Emotional Intelligence of another? A time series study that measures and tracks changes
of group members would offer information about this.

What role does the facilitator play in all this? When considering the facilitator we
are actually looking at the role of the group’s leader. Leadership study and the
development of leaders is not new to the field of organizational behavior. However,
what specific leadership skills come into play when an Appreciative Inquiry event is facilitated? Does the facilitator need more than just training in Appreciative Inquiry for the change process to be optimally implemented? Is there a correlation between the effectiveness of Appreciative Inquiry and the leadership skills of the facilitator? In this exploratory study, it should be noted that the facilitator had high scores in Emotional Intelligence and specifically scored very high in the same areas as the group’s high scores. Is this a coincidence or did the group resonate the Emotional Intelligence of the leader (facilitator)? Even though the overall Emotional Intelligence scores of the group members may not change in a statistically significant way if there was another facilitator, but, would the sub scores reflect highs and lows in the same areas as the facilitator’s scores? If correlations exist, are they only apparent in Appreciative Inquiry events or in all types of facilitated events? Should the consideration of leadership skills or the Emotional Intelligence of a facilitator be evaluated before an organization implements Appreciative Inquiry? Does the Emotional Intelligence of the facilitator play a role in effecting the group members’ orientation toward the meeting? What changes would ensue if a different facilitator was used, or if there were multiple facilitators over time with the same group? Further study to investigate the Emotional Intelligence scores of facilitators and group members may yield interesting results. The body of information that has been accumulated from leadership studies may contribute to understanding what role the facilitator may have on the group, not only in areas of Emotional Intelligence but also in effectiveness of the training.

As people come together in groups to work toward common goals and missions, what factors come into play that influence the Emotional intelligence of a group? Is the
only way to affect Emotional Intelligence through direct training? Does a group leader or other group members influence and affect the Emotional Intelligence of individuals or the group? Is there a tendency of the group to emulate the leader’s Emotional Intelligence?

Another implication from this study may come from an unexpected source, the basis of Appreciative Inquiry. Appreciative Inquiry is anchored in sociorationalism (see Appendix A) or the understanding that there is instability in social order and that any pattern of social order is open to reinvention (Cooperrider & Srivastva, 1999). This suggests that organizations create or reinvent their futures. Cooperrider et al. (2003, p. 12) ask “is it possible to develop a metacognitive capacity and thereby choose positive ways of constructing the world?”

A finding from this study was the positive orientation of the group and positive anticipation of the meeting. Another finding was the collective high average scores in Emotional Intelligence in the branch scores Facilitating Thought and Understanding Emotions. The members of the group (according to the data collected) positively anticipated the events of the meeting. Their evaluations of the event were positive and they collectively maintained a positive outlook of the meeting as evidenced by their unsolicited comments to the facilitator. Does this imply that the group was poised to “. . .develop a metacognitive capacity and thereby choose positive ways of constructing the world” (Cooperrider, Whitney, & Stavros, 2003, p. 12)? Was this positive orientation a result of the high branch scores in Facilitating Thought and Understanding Emotions? Or does this group confirm the heliotropic hypothesis stated by Cooperrider et al. as “human systems have an observable tendency to evolve in the direction of those positive images that are the brightest . . . and most illuminating. . .” (2003, p. 12). The findings in
this study suggest that the heliotropic hypothesis may have been observed in this group. A follow-up analysis of the group’s ability to accomplish the goals for change may confirm if the positive orientation of the group members and the ability to use emotions to facilitate cognitive processes occurred. Was their potential increased for continued positive change? Was the heliotropic character, or the tendency to have a positive orientation regarding the group’s future, observed in the group? Anecdotal conversations following the Appreciative Inquiry meeting, that were initiated by group members, suggest to the researcher that this was a unique and successful event with outcomes that have supported the Admissions Department in surpassing expectations of achievement. Exploring the heliotropic character of the group may contribute to an increased understanding of the change process in organizations.

Summary

The results of the exploratory study in the *Measure of Emotional Intelligence in Context of Appreciative Inquiry* provide an answer to the question, does Appreciative Inquiry effect Emotional Intelligence. As a result of the analysis, there is no statistical evidence of an influence or effect on a group member’s Emotional Intelligence as a result of participation in an Appreciative Inquiry meeting.

The results of the exploratory study in *The Lived Experience of Appreciative Inquiry with Regard to Emotional Intelligence* provide information that contributes to the understanding of the effects of an Appreciative Inquiry meeting on a group. The findings of this exploratory study indicate that group interaction and positive orientation emerge as themes/patterns.
The findings of this exploratory study raised questions about the effects of Appreciative Inquiry on a group member’s Emotional Intelligence. In this instance, the positive orientation of the group and the high average scores in two branches of Emotional Intelligence, *Facilitating Thought* and *Understanding Emotions*, suggests, among other implications, that further study of the heliotropic hypothesis may contribute to the understanding of the effects of Appreciative Inquiry. Continued investigation into shared and local realities of a group undergoing change processes will enable organizations to effectively manage change.
References


APPENDIX A

TABLE OF COMPARISON OF LOGICAL EMPIRICIST AND
SOCIAL-RATIONALIST CONCEPTIONS OF SOCIAL SCIENCE
Table 3.1: Comparison of Logical Empiricist and Social-Rationalist Conceptions of Social Science

<table>
<thead>
<tr>
<th>Dimension for Comparison</th>
<th>Logical Empiricism</th>
<th>Socio-Rationalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. Primary Function of Science</td>
<td>Enhance goals of understanding, prediction, and control by discerning general laws or principles governing the relationship among units of observable phenomena.</td>
<td>Enhance understanding in the sense of assigning meaning to something, thus creating its status through the use of concepts. Science is a means for expanding flexibility and choice in cultural evolution.</td>
</tr>
<tr>
<td>02. Theory of Knowledge and Mind</td>
<td>Exogenic—grants priority to the external world in the generation of human knowledge (i.e., the preeminence of objective fact). Mind is a mirror.</td>
<td>Endogenic—holds the processes of mind and symbolic interaction as preeminent source of human knowledge. Mind is both a mirror and a lamp.</td>
</tr>
<tr>
<td>03. Perspective on Time</td>
<td>Assumption of temporal irrelevance: searches for transhistorical principles.</td>
<td>Assumption of historically and contextually relevant meanings; existing regularities in social order are contingent on prevailing meaning systems.</td>
</tr>
<tr>
<td>04. Assuming Stability of Social Patterns</td>
<td>Social phenomena are sufficiently stable, enduring, reliable and replicable to allow for lawful principles.</td>
<td>Social order is fundamentally unstable. Social phenomena are guided by cognitive heuristics, limited only by the human imagination: the social order is a subject matter capable of infinite variation through the linkage of ideas and action.</td>
</tr>
<tr>
<td>05. Value Stance</td>
<td>Separation of fact and values. Possibility of objective knowledge through behavioral observation.</td>
<td>Social sciences are fundamentally nonobjective. Any behavioral event is open to virtually any interpretative explanation. All interpretation is filtered through prevailing values of a culture. “There is no description without prescription.”</td>
</tr>
</tbody>
</table>
Table 3.1: Comparison of Logical Empiricist and Social–Rationalist Conceptions of Social Science (continued)

<table>
<thead>
<tr>
<th>Dimension for Comparison</th>
<th>Logical Empiricism</th>
<th>Socio-Rationalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>06. Features of “Good” Theory</td>
<td>Discovery of transhistorically valid principles; a theory’s correspondence with face.</td>
<td>Degree to which theory furnishes alternatives for social innovation and thereby opens vistas for action; expansion of “the realm of the possible.”</td>
</tr>
<tr>
<td>07. Criteria for Confirmation or Verification (Life of a Theory)</td>
<td>Logical consistency and empirical prediction; subject to falsification.</td>
<td>Persuasive appeal, impact, and overall generative capacity; subject to community agreement; truth is a product of a community of truth makers.</td>
</tr>
<tr>
<td>08. Role of Scientist</td>
<td>Impartial bystander and dispassionate spectator of the inevitable; content to accept that which seems given.</td>
<td>Active agent and coparticipant who is primarily a source of linguistic activity (theoretical language) which serves as input into common meaning systems. Interested in “breaking the hammerlock” of what appears as given in human nature.</td>
</tr>
<tr>
<td>09. Chief Product of Research</td>
<td>Cumulation of objective knowledge through the production of empiracally disconfirmable hypothesis.</td>
<td>Continued improvement in theory building capacity; improvement in the capacity to create generative-theoretical language.</td>
</tr>
<tr>
<td>10. Emphasis in the Education of Future Social Science Professionals</td>
<td>Rigorous experimental methods and statistical analysis; a premium is placed on method (training in theory construction is a rarity).</td>
<td>Hermeneutic interpretation and catalytic theorizing; a premium is placed on the theoretical imagination. Sociorationalism invites the student toward intellectual expression in the service of his or her vision of the good.</td>
</tr>
</tbody>
</table>

APPENDIX B

HUMAN SUBJECTS REVIEW BOARD APPROVAL
The Human Subjects Review Board has approved the research proposal that has been submitted by Linda Siegel. The investigator may proceed with this project.

The primary function of the HSRB is to ensure protection of human research subjects. As a result of this mandate, we ask that you pay close attention to the fundamental ethical principles of autonomy, justice, and beneficence when establishing your research proposal. These ethical principles pertain specifically to the issues of informed consent, fair selection of subjects, and risk/benefit considerations.

If you have any questions, please contact me.

Sincerely,

David Vanata
Phone: 419-289-5292
Fax: 419-289-5460
E-mail: dvanata@ashland.edu
APPENDIX C

APPROVAL OF DEAN TO CONDUCT STUDY ON CAMPUS
EXPLANATION OF PROCEDURES FOR RESEARCH STUDY
Emotional Intelligence and Appreciative Inquiry

PURPOSE AND BACKGROUND
Linda Siegel, a doctoral candidate with Ashland University and full time faculty at Lake Erie College, is conducting a study to determine the effects of Emotional Intelligence and Appreciative Inquiry in organizational change processes. Understanding the effects of group interactions in organizations may help to support the success of change strategies that optimize the strengths of an organization. Appreciative Inquiry and Emotional Intelligence in educational settings has not been extensively studied.

PROCEDURES
As a member of the steering committee for the Entrepreneurship Center at Lake Erie College, Linda Siegel has conducted an initial strategic planning session with the Equine Studies Department. As further sessions are conducted within this department, and possibly others on campus, participants may be asked to respond to survey questions and to be recorded for qualitative documentation.

As part of the study, a participants emotional intelligence will be measured twice. This will take the form of a survey. Each measurement may take about one hour. In addition, they may be interviewed and taped. This will also take about one hour.

Lake Erie College’s VP of Academic Affairs and Dean of College, Dr. Richard Sax, will receive a copy of the completed document at the end of the study.

If you have any comments or concerns about participation in this study, you should first talk with the researcher, Linda Siegel. You may call her at 440.259.2768. If for some reason you do not wish to do this, you may contact Dr. HE Wilson (419-289-5339) hwilson@ashland.edu Dwight Schar Building, 340 Samaritan Ave. Ashland, OH 44805.

Additional information regarding the study is attached.

I approve of the research activities as outlined above.

[Signature]

Date: 7/2/2007

Richard Sax, PhD - VP of Academic Affairs and Dean of
APPENDIX D

SAMPLE MSCEIT ITEMS
Sample MSCEIT Items

**Identifying Emotions**
Indicate how much of each emotion is present in this picture.

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Not Much</th>
<th>Very</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Fear</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Sadness</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Surprise</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

**Using Emotions**
What mood(s) might be helpful to feel when meeting in-laws for the very first time?

<table>
<thead>
<tr>
<th>Mood</th>
<th>Not Useful</th>
<th>Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tension</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Surprise</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Joy</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

**Understanding Emotions**
Tom felt anxious, and became a bit stressed when he thought about all the work he needed to do. When his supervisor brought him an additional project, he felt _____.
(Select the best choice.)

a) Overwhelmed  c) Ashamed  e) Jittery
b) Depressed  d) Self Conscious

**Managing Emotions**
Debbie just came back from vacation. She was feeling peaceful and content. How well would each action preserve her mood?
Action 1: She started to make a list of things at home that she needed to do.
Very Ineffective..1......2......3......4......5..Very Effective

Action 2: She began thinking about where and when she would go on her next vacation.
Very Ineffective..1......2......3......4......5..Very Effective

Action 3: She decided it was best to ignore the feeling since it wouldn't last anyway.
Very Ineffective..1......2......3......4......5..Very Effective

APPENDIX E

JOURNAL
First Entry - record your thoughts, feelings, perceptions, attitudes BEFORE you began the meeting

Second Entry - record your thoughts, feelings, perceptions, attitudes MID_DAY in the meeting

Third Entry - record your thoughts, feelings, perceptions, attitudes at the END of the meeting
APPENDIX F

PARTICIPANT EVALUATIONS
Participant evaluations

Appreciative Inquiry

Participants: Lake Erie College Admissions

Date: June 17th

Best part of the Appreciative Inquiry

Best part of the Location/logistics

Next time, I would (Appreciative Inquiry)

Next time, I would (location, logistics)

On a scale from 1 to 5, rate your group on the following items.

<table>
<thead>
<tr>
<th>1 = Strongly Disagree</th>
<th>2 = Disagree</th>
<th>3 = Agree</th>
<th>4 = Strongly Agree</th>
<th>5 = Couldn’t agree more!</th>
</tr>
</thead>
<tbody>
<tr>
<td>All members contributed equally to the project.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our group worked well together.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our group met deadlines and did not procrastinate.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt encouraged by my group members to work on the project.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would like to work with this group again.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX G

STUDENT AIDE DIRECTION
**Student aide directions**

**Students’ responsibilities for the day**

**Facility Help**

1) *supplies*
   - Help to set up, take down and keep all supplies replenished and in neat order
   - Help to arrange chairs and seating for the convenience of the folks attending

2) *check in and check out attendees*
   - Hand out folders and collect all materials at the end of the day
   - Make certain no one leaves without handing in all materials and documents

3) *help to make the transition from meeting to lunch and back go smoothly*
   - You are NOT food service staff, but please gather all food and eating supplies after the meal so that no mess or food is left around the area. The facility is open to the public at 2:00 and we are asked to keep to in good order

**Meeting Help**

I need to have the following tasks completed during the meeting. Divide yourselves into the tasks that you want, or switch as you may like.

1) **10:45 – 11:15 DISCOVERY Pairs, interviews, Small Group**
   - The group will break into pairs for interviews. There will be 6 groups. During this time, I need each of you to take a group. Two of you will stay the entire time with your group. Two of you will have to divide your time in half between two groups.
   - Your task is to simply record (script) what is being said. You are a reporter. You will NOT use any judgment or opinion in your description; just record what is happening and what is being said. It is as if you are an observer telling what is going on. Describe the body language, the conversation, the emotions you see.
   - See your folder for documents for this task.
2) After the pairs interview, the entire group will break into two sections. Each section will have two of you (students) sitting with each group. You will follow the same procedure as you did in Task 1. See your folder for documents for this task.

3) 11:15 – 12:00 Charting, sharing information, Full Group
During this time of the meeting, you will be recording on the flip chart pages the information from each group. Two of you (students) will be with each group. Record on the flip chart page what information the group finds as common themes or patterns or threads from the interviews. Write in large script so that the information can later be seen by the whole group.

4) 12:00 – 12:40 Working Lunch
Enjoy a break and leave time at the end to generally pick up the food & supplies. I really appreciate you doing this. It keeps us in good graces with the owners!

5) 12:40 – 1:00 Whole Group discussion and Positive Core
During this time you have no specific tasks. I hope that you will find what happened interesting and helpful to understanding group processes.

6) 1:00 – 1:45 DREAM, begin DESIGN
Make certain that each group is very different from the morning configuration. Again repeat the scripting of what you see.

7) 1:45 – 2:00 Close up
Collect all of the material from the day. I must have:
1) all documents from your work
2) all papers from the attendees (journals and evaluations and artifacts)
3) all food and drink gathered and carried out
APPENDIX H

GROUP PARTICIPATION DIAGRAMS
Group Participation Diagram 1

- Participant A contributed 3 times to the group at large
- Participant B contributed 4 times to the group at large and engaged conversation 2 times with participant A and 2 times with participant C.
- Participant C contributed 1 time to the group at large and engaged conversation 1 time with participant B and 1 time with participant D.
- Participant D contributed 2 times to the group at large and engaged conversation 1 time with participant C.
Group Participation Diagram 2

- Participant A contributed 3 times to the group at large.
- Participant E contributed 3 times to the group at large and engaged conversation 2 times with participant J.
- Participant F contributed 12 times to the group at large and engaged conversation 1 time with participant G.
- Participant G contributed 4 times to the group at large.
- Participant H contributed 2 times to the group at large and engaged conversation 3 times with participant A.
Group Participation Diagram 3

- Participant A contributed 6 times to the group at large
- Participant I contributed 7 times to the group at large and engaged the facilitator in conversation 2 times.
- Participant J contributed 5 times to the group at large and engaged the facilitator in conversation 1 time.
- Participant B contributed 19 times to the group at large and engaged the facilitator in conversation 2 times.
Participant D contributed 4 times to the group at large.

Participant C contributed 1 time to the group at large.

Participant F contributed 6 times to the group at large.

Participant H contributed 1 time to the group at large.

Participant G contributed 3 times to the group at large.

Participant E contributed 3 times to the group at large.
APPENDIX I

SAMPLE DATABASE SCORING FORMAT MICROSOFT 2003 EXCEL®
Sample Database Scoring Format in Microsoft 2003 Excel®

<table>
<thead>
<tr>
<th>SSREA</th>
<th>SS_TOT</th>
<th>SS_PostNeg</th>
<th>SS_Scat</th>
<th>AssessmentNo</th>
<th>AssessmentDate</th>
</tr>
</thead>
<tbody>
<tr>
<td>112.16</td>
<td>116.28</td>
<td>92.40</td>
<td>95.61</td>
<td>470013</td>
<td>2008/06/13 08:22:18</td>
</tr>
<tr>
<td>111.66</td>
<td>110.42</td>
<td>121.59</td>
<td>92.62</td>
<td>470910</td>
<td>2008/06/16 16:39:13</td>
</tr>
<tr>
<td>116.46</td>
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<td>94.40</td>
<td>102.25</td>
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<tr>
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<td>112.26</td>
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<tr>
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</tr>
<tr>
<td>98.58</td>
<td>99.83</td>
<td>107.62</td>
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</tr>
<tr>
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</tr>
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<td>122.84</td>
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</tr>
<tr>
<td>115.20</td>
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<td>97.51</td>
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<tr>
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<td>106.48</td>
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<tr>
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<td>117.80</td>
<td>86.38</td>
<td>470896</td>
<td>2008/06/16 13:48:27</td>
</tr>
</tbody>
</table>

Note. This section of the database format from MHS shows scores from the MSCEIT in a Microsoft 2003 Excel® document. This sample section has the raw scores in columns with abbreviations. For example, the columns SS_REA and SS_TOT stand for the area level score Strategic Emotional Intelligence and the Total Emotional Intelligence scores. The last columns shown are the participants code number and the date and time the test was taken. This information comes from MSCEIT Manual (Mayer, Salovey, & Caruso (2002b).
APPENDIX J

COMPILED JOURNAL DATA
<table>
<thead>
<tr>
<th>JOURNAL ENTRIES</th>
<th>Record your thoughts, feeling, perceptions, attitudes BEFORE you began the meeting</th>
<th>Record your thoughts, feeling, perceptions, attitudes at MID DAY in the meeting</th>
<th>Record your thoughts, feeling, perceptions, attitudes at the END of the meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nervous, hate icebreakers, why non-admissions staff</td>
<td>Amazed at how fast the morning went, feeling good about the planning</td>
<td>Very productive day, good ideas, good communication, no icebreakers!</td>
<td></td>
</tr>
<tr>
<td>Optimistic, open to new material, relaxed due to casual surroundings</td>
<td>Still optimistic, proud of group work</td>
<td>Encouraged by results</td>
<td></td>
</tr>
<tr>
<td>Curious about the EI test</td>
<td>Some people SHOULd be here-why aren’t they? The other stakeholders don’t know what we do</td>
<td>It was not what I expected, interested to see if our great ideas can really be implemented</td>
<td></td>
</tr>
<tr>
<td>No idea what to expect, happy for change, I do not want to get all touchy feel this is a business</td>
<td>Even though we understand and see how to work together, we go back and return to the status quo</td>
<td>Few good, fairly concrete ideas, disconnect with morning session, afternoon better than morning</td>
<td></td>
</tr>
<tr>
<td>‘been to other team building session, didn’t have preconceived notions</td>
<td>Enjoyed storytelling &amp; how it boiled down to positive points</td>
<td>All tied up and completed well</td>
<td></td>
</tr>
<tr>
<td>Didn’t know what to think or what was going to happen</td>
<td>Enjoyed the sharing and the stories, great setting</td>
<td>Very productive, strategies developed were good</td>
<td></td>
</tr>
<tr>
<td>I hope this is fun</td>
<td>This is kinda fun, I hope it gets better</td>
<td>Great end result! We worked together and have great ideas for the future</td>
<td></td>
</tr>
<tr>
<td>Didn’t want to come until I knew Linda was facilitating, knew it would be good</td>
<td>So far interesting, I am looking forward to the afternoon</td>
<td>I thought a lot of information was good, great ideas, I am ready to go home</td>
<td></td>
</tr>
<tr>
<td>Not sure what to expect, but thought it would be beneficial, worried about missing work at the office</td>
<td>Day has been helpful, great to work with individuals from other departments to gain better understanding of where they are coming from. At this point I am finding the discussions useful</td>
<td>Great way to collaborate ideas BTW the office – would be nice to have individuals from the registrar and faculty just to get different points of view, thought it was great how open everyone was – good participation</td>
<td></td>
</tr>
<tr>
<td>Before day started wasn’t sure what to expect, starting to understand a little better, but interested to see the results at the end of the day and the analysis</td>
<td>Seems like an interesting evaluation so far, interested to see evaluation from the online survey, the high emotional intelligence makes sense as we deal with people in all different situations</td>
<td>The group strategy discussion really went well and allowed my group to openly discuss some major issues that need to be addressed with a group that doesn’t usually get to discuss issues together</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX K

PARTICIPANT EVALUATIONS
## Participant Evaluations

<table>
<thead>
<tr>
<th>Best Part of AI</th>
<th>Best part of Logistics</th>
<th>Next time I would... (AI)</th>
<th>Next time I would... (logistics)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group strategy sessions</td>
<td>Off campus!</td>
<td></td>
<td>Involve more departments</td>
</tr>
<tr>
<td>Concrete ideas built</td>
<td>Off campus, relaxing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting interacting with new people</td>
<td>location</td>
<td></td>
<td>Keep location</td>
</tr>
<tr>
<td>Insight into what we are doing well</td>
<td>Great location, off</td>
<td></td>
<td>Great location</td>
</tr>
<tr>
<td>Working with new people</td>
<td>Quiet, peaceful location</td>
<td>Everything went well</td>
<td>Everything went well</td>
</tr>
<tr>
<td>End result of great ideas for future</td>
<td>isolated</td>
<td>Great job</td>
<td>Dietary needs</td>
</tr>
<tr>
<td>Collaboration in and out of the department</td>
<td>Off campus, new setting</td>
<td>More departments included</td>
<td>More comfortable chairs</td>
</tr>
<tr>
<td>Ability to discuss as a group the opportunities available</td>
<td>Off campus, private,</td>
<td>Include more faculty,</td>
<td>Excellent overall</td>
</tr>
<tr>
<td></td>
<td>comfortable</td>
<td>majority of campus should be here</td>
<td></td>
</tr>
<tr>
<td>Positive approach avoided the blame game</td>
<td>Getting to know team</td>
<td>More time</td>
<td>Tables for work</td>
</tr>
<tr>
<td></td>
<td>better, exposed to new</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 persons, to 4 person group, to 6 person group</td>
<td>Calm, comfortable,</td>
<td>Done well!</td>
<td>Done well</td>
</tr>
<tr>
<td></td>
<td>focused setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside stakeholders present</td>
<td>Off campus</td>
<td>Invite different stakeholders</td>
<td>Uncomfortable, more room to spread out, need comfortable chairs</td>
</tr>
<tr>
<td>Concrete ideas at end of day participating</td>
<td>Very pretty</td>
<td>Tie the morning to the afternoon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quiet, peaceful</td>
<td>Do it again</td>
<td>No changes</td>
</tr>
</tbody>
</table>

1 = Strongly Disagree  2 = Disagree  3 = Agree  4 = Strongly Agree  5 = Couldn’t agree more!

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>All members contributed equally to the project.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Our group worked well together.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Our group met deadlines and did not procrastinate.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>I felt encouraged by my group members to work on the project.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>I would like to work with this group again.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>
APPENDIX L

NOTES FROM STUDENT AIDE OBSERVATIONS
### Observations

<table>
<thead>
<tr>
<th><strong>Pair 1 (H)</strong></th>
<th><strong>Pair 1 (K)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Looks up to think, no emotion</td>
<td>Both serious, awkward silence</td>
</tr>
<tr>
<td>Surprised at partner’s statement</td>
<td>Plays with coffee cup</td>
</tr>
<tr>
<td>Shakes head while partner talking, hands in lap</td>
<td>Worried that I am writing</td>
</tr>
<tr>
<td>Pops gum while partner talks</td>
<td></td>
</tr>
<tr>
<td>Talks to observer</td>
<td></td>
</tr>
<tr>
<td>Finish early, tired and worried about next group</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Pair 2 (F)</strong></th>
<th><strong>Pair 2 (I)</strong></th>
<th><strong>Pair 3 (J)</strong></th>
<th><strong>Pair 3 (E)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Filled out green sheet</td>
<td>Active listening, eye contact</td>
<td>Had something in his hand to play with</td>
<td>Makes points, asks questions with his hands</td>
</tr>
<tr>
<td>Went from hands folded at first, hand movements</td>
<td>Little comments to prove she was listening, along with head nods</td>
<td>Both talked with legs crossed</td>
<td></td>
</tr>
<tr>
<td>Little nervous</td>
<td>Little bit of laughter</td>
<td>Looks at person he is talking to</td>
<td>Doesn’t always look at person</td>
</tr>
<tr>
<td>Eye contact short periods of time, more as story goes on</td>
<td>Hand motions, eye contact</td>
<td>Looks away when thinking, then back at partner when talking</td>
<td>Pushes partner for details</td>
</tr>
<tr>
<td>Attentive listener, ‘hmmm’ with head nods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lots of hand gestures</td>
<td>Very expressive, brows, eyes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments on partner’s story to make more conversation</td>
<td>Not as nervous as partner was at beginning</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Glances down every once in a while</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lots more eye contact at end of conversation, more comfortable with each other</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Good at keeping conversation going</td>
<td>Added to conversation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Good at flowing in conversation at end of session</td>
<td></td>
</tr>
<tr>
<td>Observations (15 minutes)</td>
<td>Pair 4 (A)</td>
<td>Pair 4 (B)</td>
<td>Pair 5 (C)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Both talk with hands, sat face to face, constant eye contact, both sat upright, attentive</td>
<td></td>
<td></td>
<td>Spoke first, legs crossed, eating.</td>
</tr>
<tr>
<td>Folded hands when not talking</td>
<td></td>
<td>Good job of thoroughly explaining</td>
<td></td>
</tr>
<tr>
<td>Made comments to show he understood what partner said</td>
<td>nods head a lot, ...and nodding</td>
<td>hands clasped or taking notes, moves hands when talking</td>
<td></td>
</tr>
<tr>
<td>Both very polite and business-like</td>
<td></td>
<td></td>
<td>Seems pretty happy</td>
</tr>
<tr>
<td>Constantly taking with hands, uses hand gestures a lot, jitters with hands a lot, playing with fingers, very animated with hands</td>
<td>Normally had hands in lap</td>
<td>Both willing to participate, getting along very well</td>
<td></td>
</tr>
<tr>
<td>Doesn’t always make eye contact while talking, looks around doesn’t always make eye contact</td>
<td>Folds hands when listening, folding hands</td>
<td>Tells story to show she understands partner’s story</td>
<td>(...) moves legs when talking, uses one hand to talk, kinda’ getting stuff off her chest</td>
</tr>
<tr>
<td>Looks down at paper and up a lot</td>
<td>Tends to make nervous movements, i.e., touch face, drink water</td>
<td>Both start talking about issues at LEC, conversation flows pretty well, both engaged, ends early’ but talk continues as they walk back....sit next to each other in big group</td>
<td></td>
</tr>
<tr>
<td>Smiles while telling story</td>
<td>Asks questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talking about beautiful place off task</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both talk about 2 people that did not attend - upset</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Touches and taps table a lot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leans in when talking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious face, no smiles</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX M

RANGE OF SCORES ON MSCEIT PRE-TEST AND POST-TEST
Range of scores on MSCEIT pre-test and post-test

Table 2.

*Table of Range of Scores on Pre-Test and Post-Test Branch Perceiving Emotion*

<table>
<thead>
<tr>
<th>Range of scores</th>
<th>Participants’ pre-test</th>
<th>Participants’ post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤69 - consider development</td>
<td>n/a^a</td>
<td>n/a^a</td>
</tr>
<tr>
<td>70-89 - consider improvement</td>
<td>79, 87</td>
<td>73, 81</td>
</tr>
<tr>
<td>90-99 - low average score</td>
<td>90, 95, 97, 98</td>
<td>91, 92, 93, 96, 96, 96, 98</td>
</tr>
<tr>
<td>100-109 - high average score</td>
<td>100, 100, 101, 102, 103, 104</td>
<td>101, 102, 102, 102</td>
</tr>
<tr>
<td>110-119 - competent</td>
<td>110</td>
<td>n/a^a</td>
</tr>
<tr>
<td>120-129 - strength</td>
<td>n/a^a</td>
<td>n/a^a</td>
</tr>
<tr>
<td>≥130 - significant strength</td>
<td>130</td>
<td>n/a^a</td>
</tr>
</tbody>
</table>


^aNone of the participants scored in this range, therefore (n/a).
Table 3.

*Table of Range of Scores on Pre-Test and Post-Test Branch Facilitating Thought*

<table>
<thead>
<tr>
<th>Range of scores</th>
<th>Participants’ pre-test</th>
<th>Participants’ post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤69 - consider development</td>
<td>n/a&lt;sup&gt;a&lt;/sup&gt;</td>
<td>n/a&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>70-89 - consider improvement</td>
<td>87</td>
<td>76</td>
</tr>
<tr>
<td>90-99 - low average score</td>
<td>90, 93</td>
<td>95, 96</td>
</tr>
<tr>
<td>100-109 - high average score</td>
<td>101, 102, 103, 104, 106, 109</td>
<td>102, 102, 105, 105, 108</td>
</tr>
<tr>
<td>110-119 - competent</td>
<td>110, 110, 113</td>
<td>110</td>
</tr>
<tr>
<td>120-129 - strength</td>
<td>121</td>
<td>120, 121, 122, 123</td>
</tr>
<tr>
<td>≥130 - significant strength</td>
<td>144</td>
<td>n/a&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>


<sup>a</sup> None of the participants scored in this range, therefore (n/a).
Table 4.

Table of Range of Scores on Pre-Test and Post-Test Branch Understanding Emotion

<table>
<thead>
<tr>
<th>Range of scores</th>
<th>Participants’ pre-test</th>
<th>Participants’ post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤69 - consider development</td>
<td>n/a&lt;sup&gt;a&lt;/sup&gt;</td>
<td>n/a&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>70-89 - consider improvement</td>
<td>81</td>
<td>73</td>
</tr>
<tr>
<td>90-99 - low average score</td>
<td>91, 94</td>
<td>92, 94</td>
</tr>
<tr>
<td>100-109 - high average score</td>
<td>100, 102, 103, 106, 109, 110</td>
<td>100, 100, 101, 105, 109</td>
</tr>
<tr>
<td>110-119 - competent</td>
<td>113, 114, 117</td>
<td>112, 112, 113, 115</td>
</tr>
<tr>
<td>120-129 - strength</td>
<td>124,</td>
<td>n/a&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>≥130 - significant strength</td>
<td>136</td>
<td>130</td>
</tr>
</tbody>
</table>


<sup>a</sup> None of the participants scored in this range, therefore (n/a).
Table 5.

*Table of Range of Scores on Pre-Test and Post-Test Branch Managing Emotion*

<table>
<thead>
<tr>
<th>Range of scores</th>
<th>Participants’ pre-test</th>
<th>Participants’ post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤69 - consider development</td>
<td>n/a^a</td>
<td>n/a^a</td>
</tr>
<tr>
<td>70-89 - consider improvement</td>
<td>80</td>
<td>85</td>
</tr>
<tr>
<td>90-99 - low average score</td>
<td>91, 93, 94, 97, 97, 99</td>
<td>92, 96</td>
</tr>
<tr>
<td>100-109 - high average score</td>
<td>100, 100, 108, 108</td>
<td>100, 100, 102, 106, 106, 107, 107, 108</td>
</tr>
<tr>
<td>110-119 - competent</td>
<td>117</td>
<td>116, 118</td>
</tr>
<tr>
<td>102-129 - strength</td>
<td>125</td>
<td>n/a^a</td>
</tr>
<tr>
<td>≥130 - significant strength</td>
<td>n/a^a</td>
<td>n/a^a</td>
</tr>
</tbody>
</table>


^a None of the participants scored in this range, therefore (n/a).
APPENDIX N

DIAGRAM OF TRIANGULATION BETWEEN METHODS
This diagram illustrates the triangulation of the data by using shapes and arrows to depict specific data relationships.

- Group test data of the *Total Emotional Intelligence* scores is illustrated in the center of the diagram.

- The two areas of highest pre-test and post-test branch scores are illustrated on the left.

- All three themes/patterns generated from data are illustrated on the right.

- Double arrows depict a triangulation of the data between the quantitative and qualitative methods.
APPENDIX O

PAIRED T-TEST OF THE MEANS OF THE EMOTIONAL INTELLIGENCE

PRE-TEST AND POST-TEST
Paired $t$-test of the Means of the Emotional Intelligence Pre-test and Post-test

**T-Test TOTAL EI**

### Paired Samples Statistics

<table>
<thead>
<tr>
<th>Pair</th>
<th>MSCET pretest</th>
<th>MSCET posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std Deviation</td>
</tr>
<tr>
<td>1</td>
<td>102.0080</td>
<td>10.81504</td>
</tr>
<tr>
<td></td>
<td>100.9551</td>
<td>10.02207</td>
</tr>
</tbody>
</table>

### Paired Samples Correlations

<table>
<thead>
<tr>
<th>Pair</th>
<th>MSCET pretest &amp; MSCET posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Correlation</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Paired Samples Test

<table>
<thead>
<tr>
<th>Pair</th>
<th>MSCET pretest - MSCET posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>1</td>
<td>1.05089</td>
</tr>
</tbody>
</table>