

2015

# The Relationship between Senior Healthcare Executives' Emotional Intelligence and Employee Satisfaction

Carmen McDonald  
*Walden University*

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# Walden University

College of Health Sciences

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Carmen McDonald

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Walden University

2015

Abstract

The Relationship between Senior Healthcare Executives'

Emotional Intelligence and Employee Satisfaction

by

Carmen McDonald

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Services

Walden University

October 2015

## Abstract

The healthcare industry evolved on March 23, 2010, when the Affordable Care Act (ACA) was signed into law. The general problem prompting the need for this study was that healthcare workers are affected by patient and family anxiety, evolving evidence-based practices and treatments, and regulatory complexities. Outdated managerial skills with leaders lacking emotional intelligence may produce employee dissatisfaction, and satisfied workers may influence the quality of care and patient satisfaction. The purpose of this study was to examine the relationship between senior healthcare leaders' EI and employee satisfaction. EI theory was the conceptual foundation for this research. This quantitative study used a survey to collect EI scores from 25 senior healthcare executives using the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and employee satisfaction scores from the Press Ganey Employee Voice Solution Survey collected by their organizations. Data were analysed using Pearson correlations, independent sample *t* tests, and ANOVAs to test the variables of EI and employee satisfaction. Assumptions of the *t* test and ANOVA were met to ensure the sample size was sufficient. The results of the Pearson correlation indicated that employee satisfaction percentile and score were not related to EI within the sample. No differences were found in EI by age, gender, years of experience, or educational level. The changes in healthcare require focusing on social change as it relates to service behaviors by all individuals who have any impact on the patient-care experience.

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## Chapter 1: Introduction to the Study

On March 23, 2010, the Patient Protection and Affordable Care Act (commonly known as the ACA) was signed into law, changing the nature of healthcare in the United States. The goal of the ACA is to improve quality and efficiency, especially for patients enrolled in Medicaid and Medicare (Mayer & Cates, 2014). To implement the Act successfully, new patient-care models are necessary (Mayer & Cates, 2014). Investments to improve quality have focused on numerous ACA features, including payment-accuracy improvements (U.S. Department of Health and Human Services, n.d.).

Medicare payments to hospitals have been linked to quality performance in relation to common, high-cost conditions such as heart failure, pneumonia, and surgical infections (Mayer & Cates, 2014). In fact, for the first time, quality-of-care metrics have been linked to reimbursement (Stempniak, 2013). Further, with the development of the Internet, patients are typically more educated than before on diagnoses and treatments, with consequent higher expectations and demands. Experienced healthcare leaders should seek insight and advanced knowledge of the traits they will need to lead in this continuously evolving environment. Emotionally intelligent leaders whose skills transcend traditional managerial skills are needed.

In Chapter 1, I discuss the background, purpose, and nature of the study. In addition, I examine the theoretical framework of emotional intelligence, provide the research questions and hypotheses, and address the study's scope and limitations. I include a discussion of the assumptions critical to the meaningfulness of the research. The chapter closes with a summary.

## **Background of the Study**

As background for the study, I explain the theoretical framework of emotional intelligence (EI), as presented in the literature. First, I introduce the four-branch model of EI, followed by a review of leadership theories related to EI. In addition, I briefly mention studies in which researchers assessed associations between EI and components of healthcare entities in the context of conflict management and job performance.

Much of the EI literature focuses on the four-branch model of EI, which consists of self-awareness, self-management, social awareness, and relationship management (Goleman, 2011). However, an interesting discussion of 123 nurses' EI, as reported by their patients, related six dimensions of EI to caring behaviors (Rego, Godinho, McQueen, & Cunha, 2010). The key point of interest indicating a need for further research was the impact of the EI dimension of empathy on caring behaviors; thus, empathy could be examined when researching the dimensions of EI in a healthcare leadership context.

A substantial amount of literature supports a positive correlation between successful leadership outcomes and high EI scores among many types of leaders. Antonakis, Ashkanasy, and Dasborough (2009) claimed that much research has highlighted the importance of EI in social relationships, but not enough focus has been devoted to its relationship with leadership. Antonakis et al. noted the significance of intelligence in allowing leaders to perform the necessary functions of identifying weakness and the status quo, formulating strategic plans, and communicating vision; however, they did not correlate EI with successful leadership.

Many researchers, in contrast, support the notion that EI is a valuable asset to leaders. In addition, some have related EI scores to other leadership constructs such as transformational leadership (TFL, Goleman, 2011). In fact, EI is frequently described as an antecedent of TFL, and several empirical studies have shown a positive relationship between the two (Lindebaum & Cartwright, 2010). The four components of EI—self-awareness, self-management, social awareness, and relationship management—are similar to those of TFL (Goleman, 2011). The transformational leader uses the following characteristics of influence: (a) idealized influence, (b) inspirational influence, (c) intellectual stimulation, and (d) individualized consideration. Thus, the EI traits easily interface with the characteristics of influence in the successful leader (Lindebaum & Cartwright, 2010).

In the debate concerning the need for leaders with strong EI, the meaningfulness of this form of intelligence is a recurrent theme. A number of researchers have cited the moderate but mixed relationship between empathy and outcome measures of task- and cognitive-oriented conceptions of health leadership (Skinner & Spurgeon, 2005). Further, there is a strong correlation between adaptive ability and EI; the basic processes show some evidence of validity (Goroshit & Hen, 2012).

In a study of medical students, Fletcher, Leadbetter, Curran, and O'Sullivan (2009) found that EI developmental training led to improvements in EI scores. The possibility that EI could benefit the operations and culture of a healthcare system, as suggested by these and other researchers, raises a question concerning the development of this characteristic. This interesting prospect is an additional reason for new research.



## **Emotional Intelligence and Conflict Management**

Conflict management is often addressed in research on EI, with good reason: The effective leader must be able to manage conflict well. A meta-analytical review of the relationship between EI and leaders' constructive conflict management consisted of 20 studies and involved 5,175 participants (Schlaerth, Ensari, & Christian, 2013). EI was positively associated with constructive conflict management, although the correlation was stronger among subordinates than among leaders (Schlaerth et al., 2013). This gap in literature indicates a need for further review of the relationship of specific leadership traits with EI.

EI as a component of competitive advantage is on the agenda for many world-leading organizations, including American Express, Federal Express, the U.S. Air Force, and Sheraton (Fiedeldey-Van Dijk & Freedman, 2007). Interestingly, Google displays an estimated 1.3 million links when the keywords *leadership* and *emotional intelligence* are entered into the search area (Fiedeldey-Van Dijk & Freedman, 2007).

## **Emotional Intelligence and Employee Satisfaction**

A pleasant workplace supports satisfied, productive employees (Carmeli, 2003). Staff who are exposed to an emotionally intelligent atmosphere may have less stress at work (Carmeli, 2003). In addition, encountering emotions that support assurance and commitment may lead to increased job satisfaction and productivity. In contrast, when people are under stress in the workplace, their emotions may override their mental performance. By developing EI, employees learn to study their reactions and control their emotional patterns (Hosseinian, Yazdi, Zahraie, & Fathi-Ashtiani, 2008).

Jordan and Troth (2011) concluded that EI positively predicted team performance and enhanced workplace relationships, essential elements in effective leadership. The healthcare environment needs employees who are emotionally stable and have the ability to focus on patients (Dulewicz & Higgs, 2003). The concept of teamwork driven by an emotionally intelligent leadership group is gaining recognition and acceptance across the country (Dulewicz & Higgs, 2003).

### **Problem Statement**

In the reformed, rapidly changing world of U.S. healthcare, all organizations must strategize to remain competitive and sustainable (Burns, 2013). Only organizations with impressive quality-of-care metrics and patient satisfaction scores will survive in a new patient-centered environment. For instance, value-based purchasing has forced organizations to compete for reimbursement from Medicare and other third-party payers (Burns, 2013). Reimbursement will only be offered to healthcare organizations that achieve a low incidence of postoperative surgical infections and offer patient-safe environments with low rates of patient falls and medication administration errors (Brunges & Foley-Brinza, 2014). The general problem that prompted the need for this study was that healthcare organizations must determine which leadership best practices are critical to achieving the ACA goal of providing high-quality care to satisfy consumers.

Results of the Hospital Consumer Assessment of Healthcare Providers (HCAHPS), which measures patient satisfaction with the hospital care they received (Healthcare Research & Educational Trust, 2013), are evaluated by the Centers for

Medicare and Medicaid Services (Burns, 2013). From 2014 to 2017, approximately 30% of an organization's reimbursement will be dependent on HCAHPS results (Healthcare Research & Educational Trust, 2013). Currently, the Medicare program serves 48 million Americans and has an estimated \$560 billion expense budget (Burns, 2013). In addition, 10,000 U.S. baby boomers turn 65 years old every day and become Medicare-eligible, presenting fiscal challenges to the program (Burns, 2013). The new patient-centered care model requires more transparency and accountability for hospitals to achieve service excellence and satisfy consumers. To address the challenges of the current healthcare environment, the industry needs emotionally intelligent leaders who possess more than just the classic managerial skills of the past.

Healthcare workers are affected by patient and family anxiety, evolving evidence-based practices and treatments, and regulatory complexities. However, outdated managerial skills may produce employee dissatisfaction. For example, when employees are not satisfied with their work, burnout and work-related stress can exacerbate an already fiscally challenged healthcare environment (Mosadeghrad, Ferlie, Rosenberg, 2008). Workers facing stress from lack of emotional support from management may become low performers who lack the much-needed characteristics of empathy and caring (Mosadeghrad et al, 2008). Leaders who possess strong emotional intelligence (EI) may be critical to success for all members of the healthcare team, from caregivers to executives.

The four components of EI are self-awareness, self-management, relationship management, and social awareness all of which are relevant to the healthcare field

(Goleman, 2011). Healthcare leaders and workers in an environment supportive of EI seem to benefit the organization in many ways. For example, Faguy (2012) noted that researchers measuring healthcare staff commitment, retention, and performance found a positive correlation between performance and retention.

The specific problem addressed in this study was to determine if emotionally intelligent (EI) leaders are more successful in creating satisfied staff who is engaged in their organization's mission and values. To address this problem, I sought to discover whether a relationship exists between senior healthcare executives' EI and employee satisfaction scores within their organizations. Although a significant amount of research has involved exploration of EI and leadership theories, minimal research has investigated the effect of senior healthcare executives' EI on the employee satisfaction. This study was designed to fill this gap in the literature. Understanding the link between healthcare senior executives' EI and employee satisfaction scores within their organizations could help healthcare organizations identify leadership best practices to achieve the goals of high-quality patient care and consumer satisfaction.

### **Purpose of the Study**

The purpose of this quantitative, explanatory correlational research study was to determine if emotionally intelligent (EI) leaders are more successful in creating satisfied staff who are engaged in their organization's mission and values. To accomplish this purpose, I sought to discover whether a relationship exists between senior healthcare executives' EI and employee satisfaction scores within their organizations. The

independent variable was the EI of senior healthcare executives, and the dependent variable was employee satisfaction within each executive's organization.

### **Social Change**

This study has the potential to effect social change in the reformed patient-centered U.S. healthcare system. Reimagining the care model with the patient in the center may seem like a simple task; however, it is not simple in any way. In what some have called the "provider-centered care environment" of the past few decades, third-party payers in many cases have determined the nature of the relationship between patient and caregiver and the extent of their interaction with each other (Frampton & Charmel, 2009, p. #46).

Entering a caring profession such as medicine or nursing has traditionally been a calling to provide care to the ill or dying; however, nurses and doctors have encountered barriers to their ability to care for patients in the way they had intended . Many healthcare professionals who are immersed in bureaucracies in which care plans are created based on diagnoses, and patients are referred to by their room numbers or conditions, would likely agree that authentic caring must be brought back into the center of the profession. Communication with patients and families must be considered essential to providing care, not simply an optional extra to be performed if time allows. An important objective of the ACA is to provide information to help patients and those who care for them to make more informed healthcare decisions (Stempniak, 2013).

Emotionally intelligent caregivers possess key characteristics such as self-awareness and self-motivation in addition to a keen awareness of the emotions of those

around them. Because the patient-centered care model is mandated by the new law, more progress toward achieving patient-centered care must be made with the most valuable resource of any healthcare organization—the staff (Frampton & Charmel, 2009).

If the central alternative research hypothesis of my study is accepted, the finding would indicate that potential exists to increase the awareness of the need for emotionally intelligent people in the field. Further, with such increased awareness, healthcare workers may be less disenchanted with an industry that has historically put profits before human needs, creating burnout of nurses, physicians, and other healthcare workers (Frampton & Charmel, 2009). This vision for the future of healthcare can become a reality with commitment, effort, and dedication. Exploration of the relationship between executives' EI and employee satisfaction is a solid start in the right direction toward social change.

### **Research Questions**

The following research questions guided the study:

1. What is the relationship between senior healthcare executives' emotional intelligence scores and employee satisfaction scores?
2. What is the effect of age on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?
3. What is the effect of gender on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?

4. What is the effect of years of experience on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?
5. What is the effect of educational level on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?

### **Hypotheses**

The following hypotheses guided the study:

#### **Hypothesis 1**

H<sub>0</sub>1: There is no relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a</sub>1: There is a relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

#### **Hypothesis 2**

H<sub>0</sub>2: There is no effect of age on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a</sub>2: There is an effect of age on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

#### **Hypothesis 3**

H<sub>0</sub>3: There is no effect of gender on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a3</sub>: There is an effect of gender on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

#### **Hypothesis 4**

H<sub>04</sub>: There is no effect of years of experience on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a4</sub>: There is an effect of years of experience on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

#### **Hypothesis 5**

H<sub>05</sub>: There is no effect of educational level on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a5</sub>: There is an effect of educational level on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

### **Theoretical Framework**

Emotional intelligence (EI) theory formed the theoretical framework for this study. The theory of EI originated in the 1970s and 1980s from the work of psychologists Mayer and Salovey as a debate on whether intelligence quotient (IQ) was a result of genetic inheritance or life experience (Goleman, 1995). Knowledge and beliefs about EI continue to evolve, building on what is already known. As the concept of EI has evolved, research with mixed results has emerged ranging from EI's significance surpassing IQ to the converse opinion that EI cannot be granted scientific viability (Keele & Bell, 2008).



Critics have noted that EI is an elusive concept with characteristics more representative of a myth than of a science (Mayer et al., 2004). Additionally, debate exists on whether EI should be measured as a set of personality traits or as an expression of cognitive ability, resulting in questions about how the concept should be tested and measured (MacCann & Roberts, 2008).

The most consistent and resounding theme in conceptualizations of EI is that EI is a set of skills related to behavior and character elements, most notably awareness, control of one's emotions, and understanding of the emotions of others (Goleman, 2011). The phenomenon involves the set of interrelated skills that enable people to process emotionally relevant information efficiently and accurately (Salovey & Grewal, 2005).

The EI competency framework is composed of self-awareness, social awareness, self-management, and relationship management (Goleman, 2011). In the theoretical EI model, *self-awareness* is defined as an acute knowledge of one's strengths and weaknesses and consequent reflective ability to learn from all experiences for enrichment and personal development (Goleman, 1995). *Self-management* encompasses self-control, trustworthiness, adaptability, and conscientiousness (Goleman, 1995).

Social awareness and relationship management are essential leadership success skills and include collaboration and cooperation, team capabilities, conflict management, and empathy (Goleman, 1995). Additionally, optimal productivity and overall success of the organization are more likely in a workplace environment in which comprehending and managing emotions are commonplace. Consequently, many healthcare organizations have recognized EI as an important human-resource element for recruitment, staff

development, interviewing, and selection, as well as for leadership training programs inside and outside the company (Love, Revere, & Black, 2008). According to EI theory, senior healthcare executives' EI traits affect middle managers, and ultimately, these traits extrapolate to the frontline staff members who care for patients in the organization (Goleman, 2011).

### **Nature of the Study**

In this study, I analyzed the relationship between senior healthcare executives' EI and employee satisfaction scores within their organizations. I used a quantitative research method because I was exploring a relationship between two variables. A descriptive correlational design was the best way to test the null and alternative (research) hypotheses (Boswell & Cannon, 2014). The purpose of relationship exploration in this type of design is to explain and describe the nature and magnitude of the relationship, without interpretation of underlying causal factors (Fain, 2013).

Field (2013) discussed the significance of using a linear model to compare means, specifically the ANOVA (the  $f$  test) and a regression model to look at the relationship between several means (ANOVA) and at the relationship between variables (regression). Additionally, I employed a correlational design; thus, several correlation coefficients were used, including Pearson's  $r$ , which shows how correlations can illustrate a linear relationship between two variables (Connelly, 2012). Correlation coefficients range from  $-1.00$  to  $+1.00$ , representing a positive or negative correlation and consequently indicating strength of the linear relationship (Connelly, 2012). Pearson's  $r$  test was a valuable tool for this research.

### **Types and Sources of Information or Data**

Three data-collection components were necessary to complete the research for this study. First, a survey method was used to collect data on the EI scores of healthcare executives who agreed to take the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). This test was chosen based on its high reliability and factorial validity, as noted in multiple analysis studies. For example, Brannick, Wahi, and Goldin (2011) reported Cronbach's alpha of .79 for the total scores of the scale.

Participants in this study were recruited through the Internet, accessing the EI questionnaire through a web-based design. The web-based approach for recruitment of subjects was appropriate and assisted in providing a nationwide pool of participants (Ahern, 2005). Thus, comparison of healthcare executives' scores across the United States was feasible because of the Internet.

The second component of the research was the completion of a demographic survey that accompanied the MSCEIT. The individuals in the sample comprised senior healthcare executives from the United States in non-federal, general medical or surgical, short-term hospitals that had at least 100 licensed beds.

The third component of the research was evaluation of the Press Ganey employee satisfaction scores, which are gathered annually at many healthcare organizations and are obtainable from the database of the testing organization or from the human resources department of the organization. To be included in the sample, the organizations in which these executives worked were required to have used Press Ganey Employee Voice Solutions surveys or the Society for Human Resource Management (SHRM) survey

questions to measure employee satisfaction scores. The senior leaders self-reported the overall employee satisfaction scores as part of the demographic survey for the study.

### **Definitions of Variables**

#### **Independent Variable**

The independent variable for this study was the EI score of senior healthcare executives as measured by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). The theoretical model for EI, introduced by Goleman (1995), was the foundation for the study, as noted in the literature review. Salovey and Mayer introduced the original concept of EI (Skinner & Spurgeon, 2005). Goleman (1995) described the emotionally intelligent in healthcare as those with an ability to help patients better manage their upset feelings, thereby releasing the toxins of negativity typical of persons afflicted with illness.

In what could be termed *humane medicine*, patients cared for by emotionally intelligent caregivers can measurably benefit when their psychological needs are addressed (Goleman, 1995). Many writers have characterized this mode of caring as essential for leaders in healthcare, because the characteristics of EI are synonymous with compassionate care (Carmeli, 2003). Theoretical perspectives and empirical studies on the specific abilities of the emotionally intelligent are not conclusive and differ somewhat (Rego et al., 2010). Goleman conceptualized self-awareness, self-regulation, self-motivation, empathy, and social skills as the prominent characteristics of EI (as cited in Fletcher et al., 2009). Healthcare leaders not only must apply knowledge and efforts to task outcomes and rational processes, but also must display understanding and

communicate with a wide variety of individuals in diverse types of situations (Buchbinder & Shanks, 2012).

Some authors have stressed the importance of empathetic listening and resonance, viewing these traits as essential to perceiving and influencing the flow of emotions between leaders and those who work for them (Fiedeldey-Van Dijk & Freedman, 2007). The purpose of this quantitative, explanatory correlational research study was to determine if emotionally intelligent (EI) leaders are more successful in creating satisfied staff who are engaged in their organization's mission and values. To date, the concept has not been thoroughly analyzed, according to the available literature.

### **Dependent Variable**

The dependent variable for this research was employee satisfaction scores. Jordan and Troth (2011) extensively discussed claims made about the initial development of the construct of EI and its contribution to work success and employee contentment in organizations.

### **Definitions of Terms**

*Emotional intelligence.* Emotional intelligence (EI) is the ability to perceive, appraise, and express emotion while accessing and generating feelings (Faguy, 2012).

Although research has generated a variety of theories about EI, the commonalities surrounding the concept are consistent with Salovey and Mayer's (2000) definition.

Appraising one's own emotions and those of others requires a keen ability to evaluate and interpret a variety of verbal and nonverbal data (Faguy, 2012).

*Emotional Quotient Inventory (EQ-i).* EQ-I is a specific data collection tool for the measurement of EI (Bar-On & Parker, 2000).

*Cronbach's alpha.* Similar to test-retest reliability, the Cronbach's test determines whether the results of a measurement are the same at two different points in time (Hill & Lewicki, 2006). This test captures the true score estimate by comparing the item variance and the variance of the sum scale (Hill & Lewicki, 2006).

*ANOVA (the f test).* ANOVA is a test or statistical method used to determine the relationship between two variables (Trochim, 2006).

*Correlation coefficient.* This statistical measure is used to determine which changes in the value of one study variable predict a change in the value of another (Fain, 2013).

*Descriptive correlational design.* This design is used to describe and explain the nature and level of existing relationships between two or more variables (Fain, 2013).

### **Assumptions and Limitations**

Several assumptions and limitations affected this study. One assumption for this study was that a positive correlation exists between successful leadership and EI score. It was further assumed that emotionally intelligent senior executives of a healthcare system can influence the employee satisfaction scores of their organization. Additionally, I assumed that executives' responses to the MSCEIT were honest. The fourth assumption was that employees answered the employee opinion surveys with honesty and integrity.

The samples of both the senior executives and employees were not representative of the total population of the respective groups in healthcare organizations across the

country. Additionally, I assumed that the employee population taking the satisfaction surveys did so voluntarily and anonymously, making it challenging to determine whether their views were reflective of employees in all organizations. However, the statistical method used to obtain the correct sample number provided some assurance of the significance of any relationships discovered in the study.

This research was significant and important despite the limitations noted. It is important to seek missing answers regarding employee engagement in healthcare organizations. Healthcare is a people-oriented business, and service excellence has become important in health. This study may offer insight into the impact of top healthcare leaders' EI on employees' satisfaction.

### **Scope and Delimitations**

Boundaries for the current study included the type of healthcare leadership examined, which was limited to senior healthcare leaders in nonfederal, general medical or surgical, short-term hospitals in the United States with at least 100 licensed beds. The organizations represented needed to have used Press Ganey Employee Voice Solutions surveys or Society for Human Resource Management (SHRM) survey questions to measure employee satisfaction scores. Middle management was excluded, and middle managers' influence on employee satisfaction scores was not considered as a factor in the results. The variable of EI was limited to the results of the MSCEIT only, without consideration of any other measurements of EI. The employee satisfaction survey was not mandatory in most organizations, and the surveys were the only measurement of the satisfaction level of the staff.

## Summary

The Affordable Patient Protection and Affordable Care Act of 2010 has shifted healthcare toward a patient-centered focus (Burns, 2013). Chapter 1 provided an introduction to this study of the relationship between senior healthcare executives' EI and employee satisfaction scores within their organizations. In this chapter, I presented the premise of a positive correlation of high EI scores among leadership and successful outcomes. Further, I described how exposure to a workplace that promotes less stress and an environment with the elements of the EI theoretical framework may increase job satisfaction and productivity. Employees' commitment and engagement in healthcare organizations are critical to success. By using one particular sample of senior healthcare executives, I attempted to determine whether high management EI scores affected staff satisfaction scores. Chapter 2 includes a review of the theoretical propositions of EI, the literature review strategy, a review of EI studies, and details about EI measurement.



## Chapter 2: Literature Review

This chapter provides a review of the literature on the theoretical construct of EI, the significance of exploring a relationship between the EI of senior healthcare leaders and employee satisfaction, background on healthcare reform and challenges, and what has been studied and remains to be studied in this area. In Chapter 2, I explore other studies related to the chosen methodology of descriptive correlational design and compare these with the current study's methodology.

Healthcare organizations must strive to remain viable and competitive and to create and sustain an environment of satisfied employees who are engaged in the missions and visions of their organizations (Mayer & Cates, 2014). The new patient-centered care model requires more transparency and accountability of hospitals to achieve the goals of service excellence and satisfied consumers (Mayer & Cates, 2014). The general problem that prompted the need for this study was that healthcare organizations must determine which leadership best practices are critical to achieving the ACA goal of providing high-quality care to satisfy consumers. The specific problem addressed in this study was to determine if emotionally intelligent (EI) leaders are more successful in creating satisfied staff who are engaged in their organization's mission and values. Therefore, the purpose of this quantitative, explanatory correlational research study was to relate senior healthcare executives' EI scores to employee satisfaction scores to determine if emotionally intelligent (EI) leaders are more successful in creating satisfied staff who are engaged in their organization's mission and values.

### **Literature Search Strategy**

The search for literature was accomplished by using the keywords *emotional intelligence, healthcare, employee satisfaction, patient satisfaction, and leadership theories*. I obtained only peer-reviewed articles and book reviews using the following databases: PsycARTICLES, ProQuest, Sage Journals Online, PubMed, CINAHL, PsycINFO, Science Direct, and Health & Medical Complete. I searched for literature from 2007 to 2014 in an effort to find scholarly articles published within the last 5 to 7 years. Theoretical information on EI was retrieved as far back as the late 1990s, when the concept was introduced.

### **Theory of Emotional Intelligence**

Emotional intelligence (EI) theory formed the theoretical framework for this study. The theory of EI originated in the 1970s and 1980s from the work of psychologists Mayer and Salovey as a debate on whether IQ was a result of genetic inheritance or life experience (Goleman, 1995). Knowledge and beliefs continue to evolve about EI, building on what is already known. Bar-On (1997, 2000) defined EI as the ability to understand oneself and others effectively, to relate to people well, and to adapt successfully to environmental demands (Jorfi, Jorfi, & Moghadam, 2010).

As the concept of EI has evolved, researchers have found mixed results. Some researchers have claimed EI is more significant than IQ (Lucas, Laschinger & Wong, 2008); others, in contrast, have claimed that EI cannot be granted scientific viability (Locke, 2005). Critics note that EI is an elusive concept that has characteristics more representative of a myth than of a science (Mayer et al., 2004). Some express the

argument that the concept of EI is vague as it relates to self-actualization and insist that being empathetic and self-aware has nothing to do with intelligence (Goleman, 2011). Additionally, debate exists concerning whether EI should be measured as a set of personality traits or as an expression of cognitive ability, resulting in questions of how the concept should be tested and measured (MacCann & Roberts, 2008).

The most consistent and resounding theme in conceptualizations of EI is that EI is a set of skills related to behavior and character elements, most notably awareness, control of one's emotions, and understanding of the emotions of others. The phenomenon involves the set of interrelated skills that enable people to process emotionally relevant information efficiently and accurately (Salovey & Grewal, 2005).

The EI competency framework is composed of self-awareness, social awareness, self-management, and relationship management (Goleman, 2011). In the theoretical EI model, *self-awareness* is defined as an acute knowledge of one's strengths and weaknesses and consequent reflective ability to learn from all experiences for enrichment and personal development (Goleman, 1995). *Self-management* encompasses self-control, trustworthiness, adaptability, and conscientiousness (Goleman, 1995).

Social awareness and relationship management are essential leadership success skills that include collaboration and cooperation, team capabilities, conflict management, and empathy (Goleman, 1995). Additionally, optimal productivity and overall success of the organization are more likely in a workplace environment in which comprehending and managing emotions are commonplace. Consequently, many healthcare organizations have recognized EI as an important human-resource element for recruitment, staff

development, interviewing, and selection, as well as for leadership training programs inside and outside the company (Mayer & Cates, 2014). According to EI theory, senior healthcare executives' EI traits affect middle managers, and ultimately, these traits extrapolate to the frontline staff members who care for patients in the organization (Mayer & Cates, 2014).

In summary, I chose this theory because of its relevance to characteristics of leadership that have been identified in some leadership models, such as transformational and transactional leadership (Mandell & Pherwani, 2003). Goleman (2011) used the theory of EI as a framework to highlight the field of affective neuroscience and focused on actionable findings; I used a similar approach for my research.

### **Theoretical Propositions**

Conceptually, EI is a person's abilities to perceive, assimilate, and understand emotions (Mayer, Salovey, & Caruso, 2000). Conversely, *general intelligence* is composed of mental abilities and logical information processing (Mayer et al., 2000). Because the cognitive aspect of EI had been less emphasized in research, Mayer and Salovey created the *ability* EI model in 1997. The ability model is different from a mixed-model theory, which incorporates cognitive characteristics correlating with one's ability to process and assimilate information (Petrides & Furnham, 2000).

The difference between the mixed model and the ability model of EI is based on personality variables in the former and information processing in the latter (Mayer, Salovey, & Caruso, 2008). Further, the difference between what is known as *trait* EI and *information-processing* EI is noteworthy (Mayer et al, 2008). As the term indicates, trait

EI is best measured by self-report of behaviors such as empathy, optimism, or aggressiveness (Petrides & Furnham, 2000). Conversely, information-processing EI more closely correlates to traditional intelligence, best measured by the Multi-factor Emotional Intelligence Scale (MEIS) to determine an individual's maximum performance; the MEIS is embodied in the psychometric intelligence structure (Petrides & Furnham, 2000).

The theoretical EI model introduced by Goleman (1995) is the foundation noted repeatedly in the literature. Goleman claimed that cognitive intelligence is less a predictor and influencer of social outcomes than is emotional intelligence (Newsome, Day, & Catano, 2000). In 1920, Thorndike proposed the construct of social intelligence, defined as an ability to understand and manage people (Newsome et al., 2000).

Goleman's conceptual definition of EI can be categorized as a dimension of social intelligence, or vice versa (Goleman, 2011). This definition is further supported in the relationship and comparison of social intelligence in Mayer and Salovey's (1993) explanation that social intelligence is more a global construct while EI comprises a group of abilities that are distinctly different from traditional verbal and predispositional dimensions of intelligence (Newsome et al., 2000).

Salovey and Mayer introduced the original concept of EI (Skinner & Spurgeon, 2005). Goleman (1995) cited the emotionally intelligent in healthcare as those with an ability to help patients better manage their upset feelings, releasing their sense of negativity typical of the person inflicted with illness. In what can be termed *humane medicine*, patients cared for by emotionally intelligent caregivers can benefit measurably

when their psychological needs are attended (Goleman, 1995). Many writers have found this mode of caring is essential for leaders in healthcare, because the characteristics of EI are synonymous with compassionate care.

Theoretical perspectives and empirical studies on the specific abilities of the emotionally intelligent are not conclusive and differ somewhat (Rego et al., 2010). Goleman conceptualized self-awareness, self-regulation, self-motivation, empathy, and social skills as the prominent characteristics of EI (as cited in Fletcher et al., 2009). Healthcare leaders must apply knowledge and efforts to task outcomes and rational processes and facilitate communication and understanding with a wide variety of individuals in diverse situations.

Empathetic listening and resonance are essential to perceiving and influencing the flow of emotions between leaders and those who work for them (Fiedeldey-Van Dijk & Freedman, 2007). The study of EI traits as they relate to healthcare leadership and employee satisfaction in the respective organizations was the purpose of this quantitative study.

### **Questionable Validity of EI**

Critics of the concept of EI defend their arguments against the definition and scientific validity of the construct. For example, Locke (2005) described several problems with the definition, explaining that the ability to monitor one's own emotions is a process of consciousness; assessing others' emotions comes from the ability to pay attention to and empathize with others. EI has been defined as the ability to reason with emotion in areas of perception, integration, understanding, and management (Locke,

2005). Locke claimed that reason is separate from emotion, and both are separate cognitive processes. Locke noted that one cannot reason with emotion, one can only reason about it.

Applying EI theory in the realm of leadership has invoked skepticism. Goleman, Boyatzis, and McKee (2013) claimed the six EI leadership styles include visionary, coaching, affiliative, democratic, pacesetter, and commanding (p.72). Critics have noted that an important component of effective leadership is actual intelligence, measured as intelligence quotient (Looke,2005). In addition, leaders must be able to accomplish more than making employees feel good: Locke (2005) explained that meeting long-term profitability goals cannot be accomplished when leaders focus solely on employee morale and exclude business and organizational success.

Presenting a similar argument, Antonakis (2004) asserted that leaders should not be too sensitive and allow the emotional states of followers to influence them. Social and emotional gauging ability is like learning any concept: Antonakis (2004) contended there is no logical reason why learning meanings associated with emotions would require anyone to have a high EI. Further, in research supporting EI as a necessary leadership trait, Prati et al. (2003) noted leadership skills are culturally defined, based on the social and cultural environment in which they are performed. Antonakis (2004) argued that, because effective leadership styles may differ between cultures, Prati et al.'s (2003) position was inconsistent with the position that EI is an individual-difference variable—group membership and not leaders' traits determine their EI skills.

Leaders' emotional control and how emotional control relates to effective management are other aspects of the EI controversy (Matthews, Roberts & Zeidner, 2012). Positive emotions in particular may be synonymous with good leader-subordinate relationships and positive outcomes in the workplace. Prati et al. (2003) cautioned leaders against displays of anger or sadness, asserting that this behavior is detrimental to organizational effectiveness. Similarly, opponents of EI theory have claimed that agreeableness and overt positive behaviors are not traits of an effective manager. Charismatic leader traits, for example, are classically associated with emotional appeals, including anger and anxiety, which are congruent with leadership status (Antonakis, 2004).

Scientifically, EI is challenging to validate. Scholars have noted much skepticism about not only the conceptual framework, but also about how to measure EI psychometrically and scientifically. Landy (2005) questioned how EI specifically relates to work-related behavior and noted that the EI research community had not adequately explained the behavioral variances caused by general intelligence or personality. Enthusiasm and popular interest have overcome scientific validation: Thus far, published studies on the relationship between work-related behavior and EI influence are few (Landy, 2005).

The U.S. business community may find reason for optimism when presented with studies showing positive correlations between leadership ability and high EI. Goleman (2011) cited EI as the crucial characteristic separating the most effective leaders from all others. Over the past several years, commercial EI training companies have emerged,



offering employee testing and training using a variety of tools and EI testing methodologies. The business concept of EI has been praised for increasing awareness of the social skills and traits necessary for success, such as personality testing, goal setting, and competency models (Nikolaou & Tsaousis, 2002). The debatable aspect of the commercial EI sector is that its tools and methods differ significantly from traditional test publishers (Landy, 2005). The commercial data on EI are held in proprietary databases, unavailable for researchers' reanalysis or verification (Landy, 2005).

Publishers of peer-reviewed empirical journals that provide research on work-related behaviors and EI have claimed a database of approximately 1,300 studies (Landy, 2005). However, Hay Associates and consulting company MHS have claimed a supporting database of over 60,000 cases using the MSCEIT, EQ-i, and ECI instruments (Landy, 2005). This discrepancy in the number of databases defines the border between scientific knowledge and nonscientific support (Landy, 2005).

From an organizational and psychological standpoint, much of the conceptual framework of EI remains debatable. Locke (2005) contended (a) the definition of EI is constantly changing; (b) definitions are all-inclusive, making the concept unintelligible; and (c) intelligence can be applied to emotions, but EI does not exist (p. 430).

Additionally, applicability to work-related behaviors, leadership ability, and success remains questionable. More research is needed to examine the relationship among these variables. In the current study, I aimed to do this by relating senior healthcare leaders' EI to employee satisfaction.

## **Emotional Intelligence and Healthcare**

Before a discussion of previous research on the existence of a relationship between senior healthcare leaders' EI and employee satisfaction with healthcare in their organizations, the theoretical framework for EI as noted in the literature must be explained. Additionally, it is beneficial to review leadership theories related to EI, especially studies in which researchers assessed associations between EI and components of healthcare entities. The four-branch model of EI is presented in much of the literature, and a strong correlation between adaptive ability and the basic processes shows some evidence of validity (Goroshit & Hen, 2012).

A number of researchers have cited the moderate but mixed relationship between empathy and outcome measures of task- and cognitive-oriented conceptions of health leadership (Skinner & Spurgeon, 2005). In the debate concerning the need for leaders with strong EI, the meaningfulness of this form of intelligence is a recurrent theme. A discussion of 123 nurses' EI, as reported by their patients, related six dimensions of EI to caring behaviors (Rego et al., 2010).

The key point of interest indicating a need for further research was the impact of the EI dimension of empathy on caring behaviors; thus, empathy could be examined when researching the dimensions of EI in a healthcare leadership context. If EI can benefit the operations and culture of a healthcare system, as concluded by Fletcher et al. (2009), who showed that EI developmental training led to improvements in scores, the question then becomes how to develop this characteristic. This interesting prospect is an additional rationalization for further research.

### **Emotional Intelligence and Leader Competency**

Many researchers have found positive correlations between successful leadership outcomes and high EI scores among a variety of leaders (Goleman et al, 2013), although some controversy surrounding the EI effect on leadership exists (Locke, 2005).

Antonakis, Ashkanasy, and Dasborough (2009) noted that much research has highlighted the importance of EI in social relationships but not enough focus has been placed on the relationship of EI and leadership. Antonakis et al. defined what leadership skills should be and claimed emotional intelligence was not a necessary characteristic. Antonakis et al. noted the importance of leaders' intelligence in performing the necessary functions of identifying weakness and the status quo, formulating strategic plans, and communicating vision; they did not correlate EI with the successful leader.

Many researchers, in contrast, have supported the notion that EI is a valuable asset to leaders (Freshman & Rubino, 2002). In addition, some have related EI scores to other leadership constructs such as transformational leadership (Lindebaum et al, 2010). EI is frequently described as an antecedent of transformational leadership (TFL), and empirical studies have shown a positive relationship between the two (Lindebaum & Cartwright, 2010).

Conflict management is often cited in research of EI; the effective leader must be able to manage conflict well. A meta-analytical review of the relationship between EI and leaders' constructive conflict management consisted of 20 studies involving 5,175 participants and 280 effect sizes (Schlaerth, Ensari, & Christian, 2013). EI was positively associated with constructive conflict management, although the correlation was stronger

among subordinates than among leaders (Schlaerth et al., 2013). This differences in findings indicated a need for further review of the relationship of specific leadership traits with EI.

EI as a component of competitive advantage is on the agenda for many world-leading corporations, including American Express, Federal Express, the U.S. Air Force, and Sheraton (Fiedeldey-Van Dijk & Freedman, 2007). Interestingly, Google displays an estimated 1.3 million links when keywords *leadership* and *emotional intelligence* is entered into the search area (Fiedeldey-Van Dijk & Freedman, 2007). The four components of EI—self-awareness, self-management, social awareness, and relationship management—are similar to those of TFL (Lindebaum et al, 2010). The transformational leader uses the following characteristics of influence: (a) idealized influence, (b) inspirational influence, (c) intellectual stimulation, and (d) individualized consideration. Thus, the EI traits easily interface with the characteristics of influence in the successful leader (Lindebaum & Cartwright, 2010).

Many organizational leaders seek an understanding of the relationship of the dimensions of EI and performance of managers. In a study of 358 managers, Cavallo and Brienza (2006) found a strong relationship between high performing leaders with performance ratings of 4.1 or higher on a 5-point scale with the four EI components of self-awareness, self-management, social awareness, and social skills. Although the importance of overall performance of leaders should not be dismissed, the majority of empirical work does not focus on relationships between managers' EI and effective attitudes, behavior, and outcomes .

Carmeli (2003) found a positive relationship between EI and job satisfaction of senior managers. The study showed that senior managers with high EI developed highly affective commitment to their organizations and their careers (Carmeli, 2003). Leaders who were highly committed to their jobs were more likely to attempt to positively motivate a similar loyalty in their followers (Lashinger et al, 2004). Further, senior managers with high EI scores were more likely to effectively control work–family conflict typically related to high job demands (Carmeli, 2003). Carmeli sent a direct-mail questionnaire to 262 senior managers identified as chief financial officers in Israel (Carmeli, 2003). The questionnaire was intended to assess career commitment, job involvement, affective commitment, and continuance commitment (Carmeli, 2003).

### **Correlation Studies of EI and Leadership**

Antonakis, Ashkanasy, and Dasborough (2009) questioned the meaningfulness of the concept of EI and the validity of the construct used to represent an individual's EI. Further, the various EI testing methods have been challenged. For example, EI scores on the Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT) were influenced by IQ and gender (Codier, Kamikawa, & Kooker, 2011). Additionally, EI research has highlighted the importance of EI in social relationships; however, not enough focus has been on the relationship between EI and leadership (Codier, Kamikawa, & Kooker, 2011). Further, the questionable validity of the EI measurement tools contributed to the need for the current research.

Codier et al. (2011) asked participants to self-report EI, management skill, and burnout variables and to identify one or two emotional skills they wished to develop

during the study. Peer-coaching sessions commenced, followed by a post-test to measure any changes in the initial EI scores (Codier et al., 2011). The findings showed positive effects of coaching and age on EI and management abilities (Codier et al., 2011).

Feather (2009) identified an apparent gap in knowledge related to EI and nursing leadership, referring to the limited data collected in the healthcare field. Feather noted the need for leaders who can influence subordinates through awareness of their emotions, indicating support for further research on healthcare leaders' EI influence on employees.

In a related study, Freshman and Rubino (2002) pointed out that healthcare leaders have not embraced EI as fully as have leaders in other industries and argued that many tasks associated with the daily routines of healthcare administrator were derived from the components of EI. Freshman and Rubino recommended studying the measurement of EI before and after training to evaluate the value of EI to healthcare leaders. Further, a variety of different instruments were discussed, including the 360-item Emotional Competence Inventory; which requires assessment administrators to be accredited (Freshman & Rubino, 2002).

Lindenbaum and Cartwright (2010) critically examined the relationship between EI and transformational leadership. Lindenbaum and Cartwright found no relationship between EI and transformational leadership (TFL) using a multiple regression analysis. The relationship between EI and TFL relationship has been examined in multiple studies (Lindebaum et al, 2010) and remains under intense scrutiny, indicating the need for a closer review of the instruments used to test EI, as well as the need to control concurrently for personality factors when testing subjects.

Rego et al. (2010) found nurses' EI (as reported by their patients) related six dimensions of EI with caring behaviors. Rego et al. created their own instruments for EI measurements of nurses and for patients' assessment of the nurses' caring behaviors. The key points of interest for further research included the impact of the EI dimension of empathy on caring behaviors, which was applied to the current study of healthcare leaders' EI (Rego et al., 2010).

In a concentrated focus on the empathy component of EI, Skinner and Spurgeon (2005) claimed the relationship between outcomes and empathy illustrated leadership behavior as the mediator. After conducting two pilot studies and one confirmatory validation study, Skinner and Spurgeon devised four instruments of EI measurement, which I considered for the dissertation research.

Finally, in an observational study conducted with 110 physicians and over 2,800 patients in face-to-face interviews, Weng et al. (2011) identified EI as a significant factor related to physician burnout. Additionally Weng et al. found that patient satisfaction was higher when burnout was absent (Weng et al., 2011). This information was valuable for the dissertation research, leading to a deeper understanding of EI from a different perspective.

### **Leadership Influence on Job Satisfaction**

A recurrent theme in reviewed literature is the role of EI in the work environment. According to EI theory, the ability to evaluate and regulate one's own emotions and understand the emotions of others is the core of EI; these capabilities directly correlate to relationship management. Relationship management is a two-way exchange between

employees and managers; researchers have suggested that leaders' traits have an effect on subordinates' job satisfaction (Lashinger et al, 1999).

In an intensive 20-year research study that included 60,000 interviews, researchers at the Saratoga Institute reported that 80% of job turnover is related to unsatisfactory relationships between employees and employers (Kenneth, 2010). How workers perceive their managers and how aligned workers are with the mission and vision of their organizations is important—human capital, also known as human resources, is considered critical to the success or failure of any organization (Johar, Shah, & Bakar, 2011). Leaders should consider employee satisfaction significant. Kenneth (2010) cited a Gallup study in which researchers concluded that poorly managed workers are approximately 50% less productive and consequently 44% less profitable than are effectively managed workers.

The influence of leadership as it relates to employee psychological well-being is a well-researched concept. Much evidence has indicated that workplace conditions and perceptions of employees influence their well-being. Johar, Shah, and Bakar (2011) studied dimensions of leaders' psychoticism and the effects the trait had on employee self-esteem. A leader's personality type, such as egocentric, nonempathetic, or aggressive, can affect employees' self-esteem and the work climate and environment (Johar, Shah, & Bakar, 2011). Employee psychological factors are as important to consider in the workplace as the physical environment (Martins, Coetzee, Melinde, 2007).



Research on the influence of supervisors' behaviors on employees dates from the 1970s. For example, Gavin and Kelly (1978) reported that workers' well-being was significantly influenced by their perceptions of supervisors' interpersonal behaviors. Sy, Tram, and O'Hara (2006) hypothesized that employees' EI would be predictable by their managers' EI—the higher each EI score, the greater the employees' job satisfaction. Of particular interest and significance in the Sy et al. (2006) study was the multicultural diversity of the study sample, which included African Americans, Asian Americans, Latinos, and Caucasians.

The EI literature indicates limited research conducted on cultural variables in the assessment of overall job satisfaction. In the Sy et al. (2006) study, the average age of participants was 21, which prevented the conclusion that EI can be developed over time with maturity and work experience. Further, the study was limited by participants' self-reporting, as well as by the subjective performance measurement of manager assessment instead of objective measurements such as work output (Sy et al., 2006).

Many organizational leaders seek an understanding of the relationship of the dimensions of EI and performance of managers. Cavallo and Brienza (2006) found in their study of 358 managers a strong relationship of high performing leaders with performance ratings of 4.1 or higher on a 5-point scale in the four EI components of self-awareness, self-management, social awareness, and social skills. Although the importance of overall performance of leaders should not be dismissed, the majority of empirical work does not focus on relationships between managers' EI and effective attitudes, behavior, and outcomes .

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### **Supervisor Behavior Correlation to Employee Well-Being**

Gilbreath and Benson (2004) searched for any contribution supervisors' behavior made toward predicting employees' psychiatric disturbances beyond the contribution of other variables. This discussion was relevant to the current study because the work environment can have both physical as well as psychosocial effects on employees. Further, the characteristics of a leader with high EI traits of self-awareness, self-management, social awareness, and relationship management have a significant impact on subordinates. Employee ailments such as hypertension, depression, and other conditions contribute to burnout, excessive absenteeism, and poor work performance and are predictive of healthcare costs (Manning, Jackson, & Fusilier, 1996).

Gilbreath and Benson (2004) used psychological well-being as the dependent variable and supervisor behavior as the independent variable. Measurement was done

using the 28-item version of the General Health Questionnaire (GHQ), which uses subscales to measure somatic symptoms such as anxiety, depression, and social dysfunction (Gilbreath & Benson, 2004). Supervisor behavior was found to be a statistically significant ( $p = .001$ ) influence on employees' well-being (Gilbreath & Benson, 2004). Remarkably, the social support behaviors of the 63 supervisors had the most significant influence on their subordinates' well-being (Gilbreath & Benson, 2004). Improving the psychological work environment to enhance employee well-being was supported by the findings of this study; further research should focus on characteristics of supervisory personnel.

### **EI and Leader–Member Exchange**

The possible contribution to organization effectiveness and self-care management by managers with strong EI abilities has been a dramatic claim (Goleman, 1998). Some evidence exists supporting a link between managers' EI and their ability to prevent employees' negative attitudes and stress-related behavior that might otherwise result in resignation (Lyons & Schneider, 2005). Jordan and Troth (2011) focused on the EI skills of leaders and their need for quality relationships with their direct reports. Jordan and Troth hypothesized that higher levels of EI were related to lower turnover and higher employee engagement. In this longitudinal design, Jordan and Troth collected survey data from 579 employees and examined the effect of leader–member exchange (LMX) on followers' EI and measurable outcomes of turnover and job satisfaction, revealing that LMX did mediate the relationship.

The dependent variables of turnover intention and job satisfaction were measured using a 5-point Likert scale, resulting in Cronbach's alpha of .90 and .81, respectively (Jordan & Troth, 2011). The independent variable of EI was operationalized using the Workgroup Emotional Intelligence Profile (WEIP) to measure employees' emotional awareness (Cronbach's alpha = .65); the mediating variable of LMX was assessed using a 12-item scale (Cronbach alpha = .93; Jordan & Troth, 2011). This study's findings supported the hypothesis that EI positively correlated with job satisfaction and negatively correlated with most components of turnover intentions (Jordan & Troth, 2011). Further, this model of leadership represents the transactional leader, described as one who prefers a LMX relationship and fulfills the needs of followers when their performance meets basic expectations (Gardner & Stough, 2002).

Barling, Slater, and Kelloway (2000) proposed that leaders with the ability to understand and manage their emotions and emulate self-control would be respected and trusted by their followers. Additionally, this leader would be able to perceive the extent to which their followers' expectations could be raised, to understand their followers' needs, and to act accordingly (Barling et al., 2000). Barling et al. (2000) examined the leadership styles and EI of 49 managers and concluded that EI was positively related to three components of transformational leadership: idealized influence, inspirational motivation, and individualized consideration. The highest correlations were between EI and inspirational motivation, showing that effective leaders were able to understand their followers' emotions (Gardner & Stough, 2002). Barling et al. (2000) acknowledged there

was a perception by subordinates that leaders who were higher in EI displayed more leadership behaviors.

### **EI and Leadership in Senior-Level Managers**

Gardner and Stough (2002) used the Swinburne University Emotional Intelligence Test (SUEIT). Comprising 65 items, the average EI level in general was 226.75 ( $\alpha = .88$ ) and in senior level leaders 234.6 ( $\alpha = .91$ ). The average executive scores of the SUEIT were reported as:

- Emotional recognition and expression:  $M = 39.72$ ,  $\alpha = 0.91$
- Emotions direct cognition:  $M = 38.34$ ,  $\alpha = 0.70$
- Understanding of emotions external:  $M = 78.80$ ,  $\alpha = 0.89$
- Emotional management:  $M = 44.00$ ,  $\alpha = 0.83$
- Emotional control:  $M = 33.75$ ,  $\alpha = 0.77$  (Gardner & Stough, 2002, p. #74)

In addition to the SUEIT, Gardner and Stough (2002) used the Multifactor Leadership Questionnaire (MLQ) to assess the five subscales of transformational, transactional, and laissez-faire leadership behavior in addition to three outcomes of leadership. Results showed a strong positive correlation between transformational leadership and total EI scores ( $r = .675$ ,  $p < .01$ ) and outcomes of leadership as a whole ( $r = .572$ ,  $p < .01$ ; Garner & Stough, 2002).

Engagement of staff is arguably pivotal in the success of any leader, from senior to middle-management level. When followers feel that their voices have been heard and that extra efforts have been made by their leaders to meet their needs, their job satisfaction increases (Harter, Schmidt & Hayes, 2002). Leaders who demonstrate

emotional management by identifying and processing their own positive and negative emotions typically articulate the vision for the future of their organizations with optimism while simultaneously empowering staff (Gardner & Stough, 2002).

### **EI and Staff Empowerment**

A key principle of transformational leadership and other leadership styles is staff empowerment. Laschinger et al. (1999) concluded that when nursing managers were able to lower overall job stress and tension, greater productivity occurred. Increasing nursing shortages in healthcare organizations, occurring concurrently with budget cuts and fiscal constraints, has threatened sustainability of operation. The Institute of Medicine (IOM; 2004) noted the critical significance of trust between managers and their subordinates for the attainment and maintenance of a positive work environment. Recent hospital downsizing and restructuring resulted in many nursing jobs lost (IOM, 2004), and an additional group of nurses left the profession during the beginning of the new millennium; this loss of nurses continues as of this writing. Creating an environment that manifests trust, justice, and respect is the responsibility of management and an important component of recruiting newcomers to the profession, as well as retaining those currently practicing (Laschinger & Finegan, 2005).

Testing a model of Kanter's theory of structural empowerment, Lucas, Laschinger, and Wong (2008) hypothesized that nurses' perceptions of their managers' EI were positively correlated to nurses' structural empowerment. Lucas et al. used the Conditions of Work Effectiveness-II (CWEQ-II) questionnaire to test nurses' empowerment perceptions of 19 items rated on a 5-point Likert scale with Cronbach's

alpha of .86. Nurses' rated their managers' EI using the Emotional Competence Inventory Version 2 (ECI 2.0), consisting of 72 items and 18 competency categories within the four clusters of EI behaviors (Lucas et al., 2008). The items were summed and averaged to achieve an overall EI score (Lucas et al., 2008). Cronbach's alpha coefficients for the subscales ranged from .68 to .87 (Lucas et al., 2008). The work environment was perceived as only moderately empowering ( $M = 18.24$ ,  $SD = 3.18$ ); the perception of managers' EI was also moderate ( $M = 3.36$ ,  $SD = 0.82$ ), rating highest on social awareness ( $M = 3.42$ ,  $SD = 0.89$ ) and weakest on relationship management ( $M = 3.23$ ,  $SD = 0.84$ ), similar to two comparative studies that used the ECI 2.0 (Lucas et al., 2008).

Lucas et al. (2008) presented significant findings which benefit the current study. Kanter's theory was supported, in addition to the researchers' hypotheses that (a) empowering work structures influenced work experiences and employee work life, and (b) empowered employees were more likely to report that their managers' leadership styles were congruent with EI (Lucas et al., 2008).

The current study included an additional component of employees' work life, satisfaction with their work environment, as determined by employee opinion surveys. The effectiveness of the EI of senior leaders and their followers' perception of their work structures was explored in the current study as well.

### **Employees' Perception of Leaders' EI**

Retention of current employees is a goal for organizations that aim to build on the invested talents of their human capital. Research has revealed growing evidence of the

relevance of leadership personality traits, EI, and leadership style on organizational productivity and employee satisfaction with their quality of work life (Carmeli, 2003). Additionally, researchers have suggested a notable relationship between EI and employees' intention to leave organizations, thus emphasizing the significance of the managers' role in retaining valuable members of the team (Higgs, 2001). For example, Martins and Coetzee (2007) investigated employees' experiences of their organizations' culture and satisfaction style and explored the relationships between perceived emotional competency, the personality types of senior leaders, and employees' satisfaction levels. The Martins and Coetzee study may be useful for understanding a different variable of personality type as it relates to employee satisfaction. Using a survey design, Martins and Coetzee administered an organizational culture survey to 181 employees from a South African company; after eight months, 170 took an employee satisfaction survey (Martins & Coetzee, 2005). Emotional competency of managers was measured by administering the 360° Emotional Competency Profiler to 88 employees, and all nine senior managers completed the Myers-Briggs Type Indicator (MBTI; Martins & Coetzee, 2005). Significantly fewer positive experiences and lower job satisfaction were reported by females, Whites, production staff, and those under age 35 (Martins & Coetzee, 2005). Directors and associates had lower scores comparatively; work-life balance issues and motivational aspects indicated a fast-paced environment was conducive to stress and ultimately diminished job satisfaction and work-life quality (Martins & Coetzee, 2005).

The MBTI results, in particular, the *thinking-judging* components, indicated the senior managers were highly task-focused and used logic and structure in the



organization, typical of thinking-judging types who are characteristically detached and put the emotional needs of others aside (Martins & Coetzee, 2005). Further, South African managers who preferred the thinking-judging component of the MBTI were predominant in a wide variety of other similar studies, indicating a probable explanation of the females' and support staff members' responses and the negative work–life balance scores for directors and associates (Martins & Coetzee, 2005).

The findings of the Martins and Coetzee study indicated a need to seek more knowledge about the relationship of leaders' EI to employees' perception of managers' leadership abilities and employee satisfaction. The current study benefited from the research results and the framework of Martin and Coetzee (2005).

### **EI and Nursing Staff Turnover Intentions**

Nurses who care for patients in hospitals and other healthcare organizations and witness the emotional events of patients' lives can experience increases their own stress, which can lead to the well-documented problem of burnout (Trivellas & Procedia, 2013). Job-related duties can lead to dissatisfaction and turnover in the workplace (Trivellas & Procedia, 2013). Staff turnover has negative ramifications both financially and operationally, and it is prudent to implement ways to keep employees committed and engaged. Trivellas and Procedia (2013) described employees with higher EI as more satisfied with their jobs because of their ability to regulate and direct their feelings of disappointment or frustration. Trivellas and Procedia studied five private general hospitals in Greece. A sample of 145 nurses reported their EI using the WLEIS tool (Trivellas & Procedia, 2013). Questions regarding personal development, physical

environment, and job characteristics were part of the Melia and Peiro questionnaire used to measure job satisfaction (Trivellas & Procedia, 2013). Data analysis was done using partial least squares (PLS) with SmartPLS software prior to create a composite reliability (CR) and Cronbach's alpha calculation for scale reliability determination (Trivellas & Procedia, 2013). The findings of the study revealed that only self-emotion appraisal (SEA) and use of emotion (UOE) were consistent with the hypothesis that EI was positively related to job satisfaction (Trivellas & Procedia, 2013). These findings are significant for managerial implications and staff awareness, because staff with high EI component of SEA and UOE typically have uninterrupted positive moods and can use their emotions to overcome obstacles. Similarly, Wong and Law (2002) reported that the higher the EI in any particular job, the greater the strength of a negative relationship between EI and job turnover. Further, the EI of leadership affected employee satisfaction (Wong & Law, 2002).

### **EI, Occupational Stress, and Organizational Commitment**

EI and work-related stress has been well studied; the strongest connections have been in the occupational environment (Nikolaou & Tsaousis, 2002). Stress and the workplace do not blend well—stress occurs more frequently than organization leaders might desire. Nikolaou and Tsaousis (2002) studied the effects of EI on occupational stress and organizational commitment and found a positive correlation for both variables. Stress has many different definitions, categorized into three types: (a) stimulus-based, (b) response-based, and (c) the stressor-strain approach (Nikolaou & Tsaousis, 2002). Stress was defined as both a stimulus and a response (Nikolaou & Tsaousis, 2002).

Stress in any setting is a response to one's environment and can vary according to demographic variables. A population of 212 mental health professionals participated in the Nikolaou and Tsaousis (2002) study, which used questionnaires to assess EI and occupational stress. The Emotional Intelligence Questionnaire (EIQ) was used to assess EI, measuring four independent dimensions of the concept according to the theoretical model by Mayer, Caruso, and Salovey (Nikolaou & Tsaousis, 2002). The Organizational Stress Screening Tool (ASSET) was used to measure the participants' level of occupational stress, specifically focusing on stress indicators related to the workplace (Nikolaou & Tsaousis, 2002). Occupational stress affected the workers' overall physical and psychological well-being while simultaneously producing an effect on employee commitment to the organization (Nikolaou & Tsaousis, 2002).

The employees who scored high on the EIQ assessment scored lower on the ASSET test and higher on organizational commitment of employee to organization and organization to employee (Nikolaou & Tsaousis, 2002). Further, employees' commitment to their organizations was related to their perceived stress level, which was related to their EI levels (Nikolaou & Tsaousis, 2002). With an increased awareness of the necessity of workplace physical and psychological health and wellness, the argument can be made that EI is a pivotal factor in stress management in organizations. In recognition of these findings, EI training programs are now used in many organizations as part of executive leadership programs (Freshman & Rubino, 2002); however, Nikolaou and Tsaousis (2002) suggested implementation of an organized stress-management program for work-life balance for all employees, including leaders. A final

recommendation emerging from the Nikolaou and Tsaousis research was for human resources to use EI testing in the recruitment of employees in highly stressful positions because employees with high EI may be able to deal with work stress more effectively.

### **EI Contribution to Social and Stress Management Skills**

Cha, Cichy, and Kim (2007) developed a new model of EI measurement. The new model is shorter than the MSCEIT (141 items) and the Bar-On (133 items). The newly developed tool was designed to be more practical to administer in an organizational setting, especially among leaders of organizations. The test objective was to capture all constructs of EI; the tool accomplished this while decreasing the total items from 37 to 20 and modifying the former dimensions to three: *in*, *out*, and *relationships*. The *in* dimension was designed to assess one's ability to sense and lead one's own emotions, thus capturing the self and self-leadership sections of the traditional EI tests (Cha et al., 2007). The *out* dimension focused on awareness of the emotions of others, capturing the empathy and awareness of others traits. *Relationships* represented integration of one's emotional experiences with one's interactions with others (Cha et al., 2007).

The three dimensions of EI were used by Cha et al. (2009) to validate the scales of social skills and stress management skills of the executive leaders of a large association in the beverage service and foodservice management industry (Cha et al., 2009). The researchers clarified the differences between social skill and emotional intelligence (Cha et al., 2009). While both concepts relate to the ability to cooperate with others, social skill involves behavioral adjustment to different situational demands; individuals with high EI

are more likely to induce cooperation in others than are individuals with low EI (Cha et al., 2009).

Statistical analysis of social skills between low and high EI groups was completed using a *t* test (Cha et al, 2009). Results showed the high EI group had higher scores in social skills than did the low EI group, with differences statistically significant at  $p < .01$  (Cha et al., 2009). The higher EI group also had higher stress-management scores than did the low EI group on all items, with the same statistical significance of  $p < .01$  (Cha et al., 2009). The researchers concluded that leaders with abilities to understand and manage their own emotions are able to act professionally and effectively in stressful circumstances while managing highly demanding workplaces (Cha et al., 2009).

### **Influence of EI on Performance**

The current study focused on the relationship between leaders' EI and their employees' satisfaction. The assumption was that content employees would be high performing and loyal to their organizations. Lyons and Schneider (2005) examined the relationships between the ability-based EI components of perception, integration, comprehension, and management of emotions and performance under stressful circumstances. The purpose of the Lyons and Schneider study was to assess the four ability-based EI dimensions on the stress and performance levels of 126 undergraduate psychology students attending a Midwestern university by having them attempt a challenging arithmetic and speech task. Lyons and Schneider used the MSCEIT V2.0 to measure EI, in addition to administering the mental arithmetic task and the verbal challenge of videotaping a speech. What was remarkably different about this

correlational study was that an ability-based measure of EI was used instead of self-reported EI measures (Lyon & Schneider, 2005). The results showed that specific dimensions of ability-based EI predicted appraisals and academic performance with notable gender differences (Lyons & Schneider, 2005). Lyons and Schneider (2005) demonstrated that emotional perception and emotional understanding were two components of EI related to performance for both sexes.

In a similar study, the relationship of EI on team performance of 15 teams from higher education was examined (Naseer, Chishti, Rahman, & Jumani, 2011). The researchers tested several variables, including self-emotion appraisal (SEA), other-emotion appraisal (OEA), using emotions (UE), and regulation of emotions (RE; Naseer et al., 2011). EI was measured using the Wong and Law Emotional Intelligence Scale (WLEIS), and team performance was measured by a 32-item questionnaire (Naseer et al., 2011). A linear regression was performed on the data (Naseer et al., 2011). The regression result revealed a positive correlation between EI and high team performance, with high EI work teams performing at a higher level than lower EI teams (Naseer et al., 2011).

### **EI Measurement**

Any construct in research must be measurable in order to make any conclusions or recommendations about it (Boswell & Cannon, 2014). With a theory as abstract as EI, the tests must be deemed reliable, valid, subject to research, and assessed for strengths and weaknesses (Boswell & Cannon, 2014). As previously mentioned, various and conflicting views exist about EI, and scholars have presented arguments on both sides .

Some critical questions and views on the concept, theory, and method of assessment linger, and additional research is necessary (Conte, 2005). Without scientific investigation of the measurement of EI, claims for its significance cannot be validated or taken seriously. While some proponents have supported the conceptual coherence of the concept and its measurable quality, others have pointed out the shortcomings and barriers preventing the prospect of an eventual science of EI (Matthews, Roberts, & Zeidner, 2004). The following review of four commonly used EI assessments represents the most current research on validity, reliability, and psychometric properties, and all of these tests were considered for EI measurement for the current study. The four assessments are the Emotional Quotient Inventory (EQ-i), the Emotional Competence Inventory (ECI), the Mayer-Salovey-Caruso Emotional Intelligence Test V.2 (MSCEIT V.2), and the Wong and Law Emotional Intelligence Scale (WLEIS). After discussion of the assessments, the rationale for choosing the test used in the current study is presented.

### **Emotional Quotient Inventory (EQ-i)**

In 1997, Bar-On published the Emotional Quotient Inventory (EQ-i), the first known test for EI, classified as one of several self-report measurement tests. Bar-On defined EI as “an array of non-cognitive capabilities, competences, and skills that influence one’s ability to succeed in coping with environmental demands and pressures” (p. 14). This mixed model differs significantly from other ability-based models, such as Mayer and Salovey, in the way it incorporates noncognitive structures and dimensions (Grubb & McDaniel, 2007). The EQ-i is a 133-item measure that takes approximately 30 minutes to complete and measures an overall EI score with additional composite scales

encompassing the five main elements of EI: (a) intrapersonal, (b) interpersonal, (c) adaptability, (d) general mood, and (e) stress management (Conte, 2005). Bar-On (2000) reported a Cronbach's internal consistency reliability of .76 to .97, with differences among populations studied, and an adequate test-retest reliability of .85 after one month and .75 after four months. Mayer et al., (2000) found the correlation between the EQ-i and the MEIS was .36. Slaski and Cartwright (2002) concluded in their study of EI and retail managers that the criterion validity of EQ-i was significantly correlated with morale (.55), stress (-.41), general health (-.50), and supervisor rating of performance (.22).

The noncognitive domain of the EQ-i has been the subject of some skepticism from critics who have argued that the measurable constructs are primarily covered by personality tests and in several studies have been shown to illustrate correlations with personality measures (Dawda & Hart, 2000; Newsome et al., 2000). The personality traits this test measures include independence, assertiveness, happiness, and optimism (Dawda & Hart, 2000; Newsome et al., 2000). Concern about inauthentic measurement is one reason this test was not used to measure EI in the current study. Further, Grubb and McDaniel (2007) reported that when respondents faked their responses, the scores improved on the EQ-i: S by .83 *SD*. Thus, the problem-solving and reality-testing components of this assessment indicated EI was a composite of many different characteristics, making the tool helpful in a predictive sense, but possibly problematic in terms of divergent validity (MacCann, Matthews, Zeidner, & Roberts, 2003).



### **Emotional Competence Inventory (ECI)**

The Emotional Competence Inventory (ECI) is similar to EQ-i as a mixed-model assessment of EI. The ECI comprises 110 self-report items covering 12 competencies organized into four clusters of self-awareness, self-management, social awareness, and social skills (MacCann et al, 2003). This test, developed by Goleman et al. (2013), incorporates evaluation of positive social behaviors such as self-confidence and empathy. Reported internal consistency reliability of the self-assessment ECI scales ranged from .61 to .85, and supervisor rating scales varied from .80 to .95 (Conte, 2005). As with the EQ-i, the mixed models of EI measurement are broad and capture a greater scope of traits and characteristics. MacCann et al. (2003) explained that the test is not limited to an assessment of new abilities but rather includes a combination of existing person-specific characteristics. This model was deemed useful for predicting success of those with EI; however, the test would be problematic with divergent validity (MacCann et al, 2003). Few researchers have presented valid assessments of the reliability and validity of the ECI. Because discriminate and predictive validity evidence in peer-reviewed empirical studies is lacking (Conte, 2005), the tool was not considered for the current study.

### **Mayer-Salovey-Caruso Emotional Intelligence Test V.2 (MSCEIT)**

The Mayer-Salovey-Caruso Emotional Intelligence Test V.2 (MSCEIT) test is revised from the previous Multi-factor Emotional Intelligence Scale (MEIS) created by Mayer, Salovey, and Caruso (2000). This 141-item assessment is most typically computer-administered and is arguably one of the most well-known EI tests (Mayer et al, 2000). Mayer et al. (2000) defined EI as the capacity or ability to reason with and

comprehend emotions. Thus, the tests they created are modeled in the intelligence-testing tradition. Considered an ability model, MSCEIT provides an overall EI score and four domain scores involving (a) emotion perception, (b) integration and assimilation of emotion, (c) knowledge about emotions, and (d) management of emotions (Conte, 2005). Research has shown the tests allow for objectivity in scoring and construct validity (Mayer et al., 2004). Reliability scores reported by Mayer et al. (2003) ranged from  $r = .91$  to  $r = .93$ , with the subscales ranging from  $r = .81$  to  $r = .83$  for emotion perception,  $r = .65$  to  $r = .71$  for emotional facilitation of thought,  $r = .66$  to  $r = .70$  for understanding emotions, and  $r = .67$  to  $r = .69$  for managing emotions. Rossen and Kranzler (2009) studied the MSCEIT for incremental validity, controlling for personality and intelligence, and found that overall EI accounted for a statistically significant portion of variance in two criterion measures: positive relations with others and alcohol use. The findings were consistent with previous research supporting the hypothesis that EI is related to both social adaptive and maladaptive behaviors (Rossen & Kranzler, 2009).

MacCann et al. (2003) noted that the MSCEIT did not correlate with the “Big Five” measures of personality, identifying EI as a separate concept. Brackett and Mayer (2003) reported test-retest reliability testing for MSCEIT as  $r = .86$ . However, Brody (2004) argued that Mayer et al. had failed to provide “enough empirical support and convincing evidence that MSCEIT provided incremental predictive validity over and above the standard measures of intelligence and personality for socially relevant outcomes” (p. 237). Keele and Bell (2008) recommended closing the gap between the trait measures and ability measures of EI by reducing theoretical models and the data to

improve the reliability of the MSCEIT. Proponents of assessment have supported the concept of EI as a type of intelligence in its own right and consequently have supported the MSCEIT as a reliable test (Mayer et al, 2003). Thingujam (2004) stated that the MSCEIT is psychometrically sound based on the theoretical construct of EI and the published literature solidly supporting its use for measurement of this branch of intelligence.

### **Wong and Law Emotional Intelligence Scale (WLEIS)**

The Wong and Law Emotional Intelligence Scale (WLEIS) is a self-report EI assessment and therefore is subject to the same limitations as the other self-report assessments in which participants can falsify the test answers. Another potential problem for the WLEIS is that self-report EI measures are more likely to reflect the test taker's perception rather than the actual performance measure (Libbrecht, Lievens, & Schollaert, 2010). The WLEIS includes 360-degree assessment techniques that can be completed by peers, supervisors, and others (Libbrecht et al, 2010). The test consists of 16 items with four subscales including (a) self-emotion appraisal, (b) others' emotion appraisal, (c) use of emotion, and (d) regulation of emotion (Libbrecht et al, 2010). Libbrecht et al. (2010) tested the WLEIS using multiple-group confirmatory factorial analysis (CFA) by conducting a sequence of increasingly more restrictive tests of equivalence across other self-report tests.

Libbrecht et al. (2010) found evidence of configurable invariance and did not find a difference between the interpersonal and intrapersonal dimensions of the four items of the WLEIS. Self-raters used a narrower range of response intervals than did other raters

(Libbrecht et al., 2010). Robust results were found across two separate peer-rater groups, indicating that use of the WLEIS as both a self-rating and peer-rating might have biased responses from the self-raters, thus making a viable EI assessment challenging (Libbrecht et al., 2010). For the above-mentioned reasons, and in anticipation of challenges with establishing peer-raters in addition to self-raters for the test, the current study did not use WLEIS for the EI testing.

### **Discussion, Analysis, and Conclusion**

Exploration and critical review of existing literature revealed a plethora of studies related to the EI of leaders and the effects of EI on their subordinates. According to the findings in research studies from the last decade, the four components of EI—self-awareness, self-management, social awareness, and relationship management—are characteristically synonymous with the transformational leader and with successful leadership. The literature reviewed in Chapter 2 showed that empirical findings on the phenomenon of manager behavior date back to the 1970s. How workers perceive their managers and how workers' perceptions relate to their organizational commitment are significant (Mosadeghrad et al, 2008). Some evidence exists supporting the correlation of leaders' EI and their followers' negative attitudes and stress-related behaviors, which can enhance or impede employee engagement. Empowerment of workers was a theme discovered in the literature review: Researchers studying managers who supported the shared governance model reported outcomes that were congruent with EI (Lucas et al., 2008).

Although much of the evidence has supported the theoretical construct of EI, ongoing debate continues as researchers question the validity of the concept (Locke, 2005). Many have argued that EI is not separate as an intelligence entity (Locke, 2005); others have defined the components of EI as personality traits. Theoretical perspectives and characteristics of EI differ, and empirical studies on specific abilities of the emotionally intelligent leader in the healthcare environment are not conclusive. The gap in the reviewed literature was the focus of the current study. As the world of healthcare continues to evolve, the leadership models warrant review and criticism as leaders' relationships with their subordinates becomes more critical to success than in years past. Dissatisfied workers with work-related stress issues are detrimental to the current trend of patient-centered care. Any negative influences can jeopardize patient satisfaction. Any insight into leadership practices intended to create a positive healthcare work environment would be welcomed by the industry.

### **Summary**

To summarize, in the foregoing literature review, I presented an intensive theoretical evaluation of what is understood about the relationship of EI and leadership ability as it relates to the relationship between variables in the current study. The current evidence discussed in this chapter supports further review of senior healthcare executives' EI as related to employee satisfaction. Additionally, the research design and methodologies used in the studies described in this chapter provided insight into how to proceed with the current study.

Chapter 3 contains the detailed description of the current study's methodology, design, variables, and participants. Chapter 4 is a thorough review of the data collection procedure, including the statistical analyses of the sample and tests of hypotheses. Chapter 5 summarizes the findings, implications for social change, and recommendations for future research, grounded in the strengths and limitations of the current study.

### Chapter 3: Research Method

This chapter focuses on the research design and methodology of the current study and includes the approach used to explore the research questions and hypotheses, the method of inquiry, the population and sample, the data collection method, and instrumentation, followed by descriptions of validity, reliability, and data analysis procedures.

#### **Research Design**

The general problem that prompted the need for this study was that healthcare organizations must determine which leadership best practices are critical to achieving the ACA goal of providing high-quality care to satisfy consumers. The specific problem addressed in this study was to determine if emotionally intelligent (EI) leaders are more successful in creating satisfied staff who are engaged in their organization's mission and values. To accomplish this purpose, I sought to discover whether a relationship exists between senior healthcare executives' EI and employee satisfaction scores within their organizations.

This quantitative study used a descriptive correlational design because the goal was to examine the relationship between two variables. The study was descriptive in the sense that the objective was to examine the characteristics of just one sample population, and this type of design can be comparative, time-dimensional, cross-sectional, and correlational (Boswell & Cannon, 2014). The correlational design is based on an assumption that the variables under scrutiny are related, and the main objective is to explain that relationship, because it may also be predictive in nature (Boswell & Cannon,

2014). The independent variable in the current study was senior healthcare executives' EI, and the dependent variable was employee satisfaction scores within their organizations.

### **Restatement of Research Questions and Hypotheses**

The following research questions guided the study:

1. What is the relationship between senior healthcare executives' emotional intelligence scores and employee satisfaction scores?
2. What is the effect of age on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?
3. What is the effect of gender on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?
4. What is the effect of years of experience on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?
5. What is the effect of educational level on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?

The following hypotheses guided the study:

H<sub>0</sub>1: There is no relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a</sub>1: There is a relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.



H<sub>0</sub>2: There is no effect of age on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a</sub>2: There is an effect of age on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>0</sub>3: There is no effect of gender on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a</sub>3: There is an effect of gender on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>0</sub>4: There is no effect of years of experience on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a</sub>4: There is an effect of years of experience on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>0</sub>5: There is no effect of educational level on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a</sub>5: There is an effect of educational level on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

### **Design Choice**

In this section, I justify the choice of research design and discuss its appropriateness for the study's research questions and hypotheses. The main objective of the current study was to describe the relationship between senior healthcare executives' EI and employees' satisfaction scores, rather than to comprehend causal pathways of the relationship. Quantitative designs are used to illustrate quantifiable numeric data on

trends, attitudes, or opinions of a predetermined population by studying a sample of that population (Creswell, 2009). This type of design allows a researcher to test objective theories by examining the relationship among variables, which are measured using instruments and analyzed using statistical procedures (Creswell, 2009). There are two quantitative strategies to choose from: survey research and experimental research (Creswell, 2009). The current study used the survey method with the MSCEIT questionnaire and the employee opinion scores from the surveys used in the respective organizations. The survey method is effective for providing a numeric description of trends, attitudes, or opinions of a population (Creswell, 2009).

A quantitative descriptive correlational design was determined to be appropriate for the current study after a review of earlier studies. A descriptive study is designed to observe, describe, and document naturally occurring phenomena and can serve as a starting point for the generation of hypotheses or theory development (Polit & Beck, 2012). Relationships between EI and other variables have been researched, and the correlations have been typically described without inferences of causality (Polit & Beck, 2012). The goal of the current study was to describe any relationship between healthcare leaders' EI and employee satisfaction.

### **Employee Satisfaction**

Employees of healthcare organizations are pivotal, because they are the key providers of care to patients. Workers who are satisfied with their work environment may be able to influence patient satisfaction positively. Healthcare, as a service-based industry not unlike food service and retail, provides multiple opportunities during routine

operational processes for employees to influence organizational performance and success (Mayer & Cates, 2014). The relationship between healthcare administration and employee issues such as recruitment and retention must remain stable in a world of nursing shortages and low retention rates . Nurses and the care they provide are arguably the most memorable experiences for patients, and satisfied patients are considered key drivers in overall healthcare organizational success. For example, Al-Mailam (2005) found a positive correlation ( $r = .31, p = .01$ ) between patients' experiences with the care they received from nurses and their reported overall satisfaction with the organization. The objective of healthcare organizational leaders should be to strategize ways to achieve and sustain a workforce whose members are satisfied with their organizations.

As some hospitals restructure in response to healthcare reform, nurses and other patient caregivers have faced increased responsibilities and fewer support staff to assist with patients who are presenting sicker than ever (Laschinger, Finegan, Shamian, & Wilk, 2004). Added to the troubling situation is pressure from management and third-party payers to attain and sustain quality performance measures while maintaining fiscal boundaries (Burns, 2013). Laschinger et al. (2004) performed a longitudinal analysis of the impact that workplace empowerment had on satisfaction of employees and suggested that an environment that fosters empowered staff can have enduring positive effects.

### **Target Population**

This section contains a detailed description of the target population and sample used for the current study. The subjects for this research were senior healthcare executives from throughout the United States working in nonfederal, general medical or

surgical, short-term hospitals that had at least 100 licensed beds. Their organizations must have used Press Ganey Employee Voice Solutions surveys or Society for Human Resource Management (SHRM) survey questions to measure employee satisfaction.

For the purpose of this study, *senior healthcare executive* was defined in accordance with the Joint Commission Standards for Leadership Groups and the American Hospital Association (AHA; 2011, 2013). The Joint Commission identified two groups of leaders in healthcare organizations: the governing body and the chief executive officer (CEO) and other senior managers, referred to as the “C-suite” (Schyve, 2009, p. 2). The governing body, often referred to as the *board of directors*, typically chooses the CEO, and the CEO selects other senior leaders (Schyve, 2009). The defining factors for the *senior executive leaders* who were eligible to be participants in this study were based on the AHA (2013) Leadership Survey, which examined the roles typically involved in the organizational decision-making process. This study was limited to leaders with the following titles: (a) vice president, (b) senior vice president, (c) chief executive officer, (d) president, (e) chief medical officer, (f) chief financial officer, (g) chief nursing officer, (h) chief operating officer, (i) chief information officer, (j) chief strategy officer, (k) chief integration officer, and (l) chief patient experience officer.

Recruitment for the study consisted of a web-based approach operationalized with a database from the American College of Healthcare Executives (ACHE), which had a total membership of 45,258 as of January 1, 2014 (ACHE, 2014). Additionally, the American Organization of Nurse Executives (AONE), of which I am an active member, advertised the study in the *AONE eNews* and *AONE Working for You* newsletters for as

long as the data collection process was active. If the sample had not been obtained after eight weeks, the next step would have been to use e-mail, phone, or Internet recruitment from one or more healthcare conglomerates such as Baptist Health, Healthcare Corporation of America (HCA), Voluntary Hospitals of America (VHA), or Tenet Healthcare. The participants were required to complete the MSCEIT V.2 online and submit the latest employee satisfaction scores from their organizations.

I determined the sample size required for this study by using the G-Power data analysis tool. Power analysis allows a researcher to detect differences or relationships that exist within the population (Burns & Grove, 2007). The effect size is the numerical strength between the two variables measured and is essentially the extent to which the null hypothesis is rejected (Burns & Grove, 2007). The likeliness of detection of the relationship between the variables increases as the effect size decreases and as sample size increases (Burns & Grove, 2007). I conducted a power analysis for the multiple linear regression test using an alpha significance of .05, a medium effect size of .15, and a power of .80 with six predictors. The calculated sample size needed for this study was 98 participants.

The potential barrier to obtaining 98 respondents was the cost: Each individual test averaged \$10 to \$15. Because there was no funding for the current study, I incurred the costs of the tests. A further deterrent to obtaining the full 98 participants could have related to the MSCEIT test itself: The MSCEIT assessment takes 40 minutes on average to complete, which may have been a barrier for members of the C-Suite who had already demanding schedules that allowed little time to participate in an optional research study.

### **Informed Consent and Confidentiality**

The informed consent letter (Appendix A) for the current study served as an invitation for subjects to participate in the research and provided an explanation of the procedures and intent of the study in addition to any potential risks. The demographic survey (Appendix B) was included in the same e-mail with the informed consent and instructions for completion of both forms, which were a preliminary requirement for participation in the study. The data collected in this survey included participants' gender, age group, senior management position, years of experience as a senior healthcare leader, and education level, which were all variables needed for the current study.

When the participants signed the informed consent letter and returned it with an accompanying demographic survey, they were given a link to information containing the navigation instructions on how to access the MSCEIT online assessment. Additional information on the required password and how the results would be presented to them was included, along with an assurance of the confidentiality protection of their information and a reminder that their participation was strictly voluntary. Their voluntary status was explained. Participants were told that they could withdraw at any time and that their personal identities were secure and confidential.

In an effort to secure the participant information, I maintained the informed consent and all data from the study in a password-protected file accessible only by me. After the completion of the study, the results will be maintained in this file for a minimum of five years. An additional effort to maintain confidentiality of the data

collection results involved coding the results during information processing and using nonexplicit language when referencing the organization and the executives.

## **Instrumentation**

### **Administration**

After the recruiting process, the participants gained access to the MSCEIT v.2 online assessment. A company called Multi-Health Systems (MHS) hosted the test and processed and reported the results. For third-party sponsorship of test administration, participant confidentiality was required from the company; MHS distributed a mandatory disclosure statement that participants were required to read prior to test administration. The link to the MSCEIT was e-mailed to each participant for completion with the Survey Monkey tool.

A crucial component of the study included the agreement for the participants to provide access to the most recent results of employee satisfaction scores of their organizations, reported as the latest mean scores on the appropriate section of the Survey Monkey tool. This request was clearly articulated in the informed consent letter (Appendix A). As previously mentioned, the Press Ganey Employee Voice Solution survey was selected as the measurement tool for this assessment.

### **Reliability**

The MSCEIT, created by Mayer, Salovey, and Caruso (2003) was chosen to assess EI for the current study after review of several other test options. Cherniss (2010) found this test to be one of the most theoretically sound and well-researched, with high reliability and comprehensive content. A unique strength of the test was the focus on the

evaluation of mental ability rather than on personality, as measured by actual performance on a range of tasks (Cherniss, 2010). The 141-item questionnaire yields a total cumulative score, four branch scores, and eight task scores (Mayer, Caruso, Salovey, Sitarenios, 2003). EI is a separate entity from traditional intelligence, correlating to problem solving and reasoning in the domain of emotions. Ability tests such as the MSCEIT are based on the assumption that EI is a cognitive ability not measurable by traditional intelligence tests (Mayer et al, 2003). EI test results have shown positive correlations with intelligence test scores and low correlations with the major five-factor personality dimensions (Austin, 2010).

Substantial evidence supports the MSCEIT as a sound and comprehensive assessment of EI with solid reliability and validity. Mayer et al. (2003) noted two sets of reliabilities that varied with general or expert scoring criteria. Results of a full-test split-reliability were  $r = .93$  and  $r = .91$  for expert consensus scoring (Mayer et al, 2003). Four branch scores of perceiving, facilitating, understanding, and managing were reported as  $r = .91$  for both types of reliability (Mayer et al., 2003). Iliescu, Ilie, Ispas, and Ion (2013) found overall internal consistency reliability of the MSCEIT as  $r = .92$  for consensus scoring and  $r = .91$  for expert scoring. In the same study, the reliability ranged from .78 to .90 at the branch level (Iliescu et al., 2013).

### **Validity**

When a researcher seeks information on instrument validity, he or she seeks not only to determine whether the tool is valid or invalid but also to understand the accuracy of what it measures and for whom (Fain, 2013). Mayer and Salovey (1993) clarified the



definition of EI as a true intelligence possessing the ability to (a) perceive emotion, (b) integrate emotion to facilitate thought, (c) understand emotions, and (d) regulate emotions to promote personal growth. Brackett and Mayer (2003) argued that if EI theory is valid, the MSCEIT was the EI test with the greatest discriminant validity: They found it distinguishable from well-studied measures of personality and well-being.

Iliescu (2013) found the strongest discriminant validity compared to measures of cognitive ability ( $r$ 's between .05 and .36), personality ( $r$ 's between .00 and .33), and empathy ( $r$ 's between .33 and .43). Brackett and Mayer (2003) reported evidence of incremental validity; in contrast, Conte (2005) found virtually no overlap with the Big Five personality assessments, supporting the construct validity of the test. Predictive validity would require further study of the MSCEIT (Brackett & Mayer, 2003; Mayer, et al, 2003). The content validity of this assessment, however, was solid and arguably made the MSCEIT the strongest of all EI tests (Cherniss, 2010). Most experts have agreed that the MSCEIT not only conformed the closest to the definition of EI, but also resembled the IQ test in which the participant takes multiple-choice questions for which there is only one correct answer (Cherniss, 2010).

## **Threats to Validity**

### **Internal Validity**

Threats to internal validity in an experimental design compromise the confidence in the description of the relationship between two variables (Polit & Beck, 2012). Successful evaluation of these threats to validity required citations of the evidence from the accumulated sources (Zeider, Matthews, & Roberts, 2009). A foreseeable threat to

validity for the current study was the predictive validity of the MSCEIT assessment. The measures of EI should be predictive of how the participant will practically function in life activities and relationships. The importance of predicting relevant criteria is significant not only for this test, but also for the current study.

In addition, the construct validity of the MSCEIT was a potential threat to the ability to substantiate that the test scores actually measured what they were designed to measure. The construct validity of any ability-based EI test, such as the instrument used for this study, could be considered a cognitive trait. Zeider et al. (2009) pointed out that the relationship between emotional intelligence and ability is as similar as perceiving an old wine (i.e., intelligence) in a new bottle (i.e., emotional intelligence). The challenge was to distinguish EI from personality traits such as the five-factor model of neuroticism, extraversion, openness, agreeableness, and conscientiousness (Zeider, 2009).

Experimental mortality is an additional internal validity threat that occurs when participants drop out of a study, making the outcomes unknown for those individuals (Creswell, 2009). The best way to address this potential issue is to recruit a larger than required sample size to account for unforeseen loss of any members of the study sample (Creswell, 2009).

### **External Validity**

Creswell (2009) defined external validity as the generalizability of the results to and across individuals, settings, and times. Population validity was a type of external validity that represented a threat for the current study. The degree of representativeness of the participants used in the study determined the extent to which I could generalize the

results. I used multiple sites for selection of the subjects to generate more confidence in the results and thereby enhance generalizability. Polit and Beck (2012) explained that studies with variation in the sample from different dimensions such as location and skill set can test whether results were replicated for subgroups. The demographic survey tool was required for all participants to assure that they were senior executives of the organizations and not middle-level managers. The definition of senior leadership has variability, and the questions on the tool were designed to address that issue.

### **Summary**

This chapter provided a review on the objective of this study, which was to determine if a relationship existed between the emotional intelligence scores of senior healthcare executives and the satisfaction of the employees of their organizations. The quantitative descriptive correlation design was discussed, and the rationale for its appropriateness to the current study was explained. The target population of this study comprised senior healthcare leaders representative of larger healthcare organizations in the United States. Members of this population were recruited using a web-based approach, which was operationalized with the database from American College of Healthcare Executives (ACHE), a group with a substantial membership base of over 45,000 members. The MSCEIT v.2 was the instrumentation used to assess EI scores for the study. The validity and reliability results from research and the detailed description of the assessment was included in the MSCEIT, in addition to permission to use the tool. Employee satisfaction scores of each participant's organizations were required in addition to executives' completion of the 144-question MSCEIT. Threats to internal and external

validity were explored in this chapter. Chapter 4 provides a detailed description of the study participants and an extensive synopsis of the data collection results and statistical analyses. Chapter 5 contains discussion and closing remarks, implications for social change, and indications for future research.

## Chapter 4: Results

Walden's IRB approval number for this study is 02-20-15-0225084, with an expiration date of February 19, 2016. The Patient Protection and Affordable Care Act of 2010 prompted a transition in healthcare toward a focus on patient-centered care, changing the nature of healthcare in the United States. The goal of the ACA is to improve quality and efficiency, especially for patients enrolled in Medicaid and Medicare (Burns, 2013). To implement the Act successfully, new patient-care models are necessary. Investments to improve quality have focused on numerous ACA features, including payment-accuracy improvements (U.S. Department of Health and Human Services, n.d.).

Medicare payments to hospitals have been linked to quality performance in relation to common, high-cost conditions such as heart failure, pneumonia, and surgical infections (Burns, 2013). In fact, for the first time, quality-of-care metrics have been linked to reimbursement. Further, with the development of the Internet, patients are typically more educated than before on diagnoses and treatments, with consequent higher expectations and demands. Experienced healthcare leaders should seek insight and advanced knowledge of the traits they will need to lead in this continuously evolving environment. Emotionally intelligent leaders whose skills transcend traditional managerial skills are needed.

The discussion in Chapter 4 includes a description of the preliminary data management steps conducted to prepare for the statistical analyses used to characterize the nature of the relationship between senior healthcare executives' EI and employee

satisfaction. Descriptive statistics detailing the sample and the salient demographic information are provided. A summary of the results is included, followed by a detailed presentation of findings. The chapter concludes with a synopsis of the results and a description of the information in Chapter 5.

### **Restatement of Research Questions and Hypotheses**

The following research questions guided the study:

1. What is the relationship between senior healthcare executives' emotional intelligence scores and employee satisfaction scores?
2. What is the effect of age on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?
3. What is the effect of gender on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?
4. What is the effect of years of experience on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?
5. What is the effect of educational level on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?

The following hypotheses guided the study:

H<sub>01</sub>: There is no relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a1</sub>: There is a relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>02</sub>: There is no effect of age on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a2</sub>: There is an effect of age on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>03</sub>: There is no effect of gender on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a3</sub>: There is an effect of gender on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>04</sub>: There is no effect of years of experience on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a4</sub>: There is an effect of years of experience on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>05</sub>: There is no effect of educational level on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

H<sub>a5</sub>: There is an effect of educational level on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores.

### **Data Collection**

To give participants access to the survey, I created a Survey Monkey link through the Survey Monkey website. Access to the informed consent, demographic survey, and MSCEIT assessment was provided on the Survey Monkey website. A general power

analysis (G-Power), described in Chapter 3, was used to calculate a sample size of 98 participants. The survey was open for 87 days and was accessed by 61 respondents. For reasons unknown, approximately 50% of the participants did not complete the entire survey; thus, 31 completed surveys were collected. The participation level in this research study was disappointing, especially because the data collection period was extended to 12 weeks and used all of the recruitment methods discussed in Chapter 3. In addition, I was faced with unexpected costs exceeding several thousand dollars, involving purchasing e-mail lists, advertising, and scoring the MSCEIT assessments. It was fiscally impossible to continue recruitment efforts without facing financial hardship. Therefore, data analysis was conducted as planned with the 31 completed surveys.

### **Preliminary Data Management**

Data were entered into SPSS version 22. Prior to conducting analyses, I screened the data for inaccuracies, missing information, and outliers. Ranges, minimums, and maximums were calculated for the variables of interest. These values were reviewed to ensure that all data points were within the range of feasible values. No inaccuracies were noted in the dataset. From the original dataset, 22 entries were removed for significant portions of the data and salient variables. EI and employee satisfaction scores were examined for outliers. Stevens (2009) defined univariate outliers as values greater than  $\pm 3.29$  standard deviations from the mean. No outliers were removed from the dataset. The final dataset contained demographic information, EI scores, and employee satisfaction scores for 25 participants.



Respondents were asked to provide employee satisfaction scores for their organizations. These individuals provided information related to their employees' level of satisfaction with the organization and its policies. Percentiles and scores for Press Ganey employee satisfaction and engagement assessments were reported. Because both percentiles and scores were provided, I conducted analyses for each research question for both of these data types. In reporting results of the analyses, I present results related to the percentiles and then the raw scores.

### **Descriptive Statistics**

#### **Frequencies and Percentages**

The majority of participants were female (17 of 25, 68%) and White (18 of 25, 72%). Within the sample, many participants were chief nursing officers (8 of 25, 32%). Slightly more than half of the participants had been in senior healthcare leadership positions for more than 10 years (14 of 25, 56%). The majority of participants indicated master's degree as their highest degree attained (18 of 25, 72%). More than half of the participants in the sample were 55 to 64 years of age (13 of 24, 54%). Frequencies and percentages for nominal and ordinal variables are presented in Table 1.

Table 1

*Frequencies and Percentages for Gender, Senior Leadership Title, Years in Senior Leadership, Educational Level, Ethnicity, and Age*

| Variables   | <i>N</i> | %  |
|---|----------|----|
| <b>Gender</b>   |          |    |
| Female  | 17       | 68 |
| Male  | 8        | 32 |
| <b>Senior management title</b>                          |          |    |
| Chief executive officer                                 | 2        | 8  |
| Chief financial officer                                 | 1        | 4  |
| Chief information officer                               | 1        | 4  |
| Chief medical officer                                   | 2        | 8  |
| Chief nursing officer                                   | 8        | 32 |
| Chief operating officer                                 | 1        | 4  |
| Other (please specify)                                  | 2        | 8  |
| Senior vice president                                   | 7        | 28 |
| Vice president  | 1        | 4  |
| <b>Years of senior healthcare leadership experience</b> |          |    |
| 1 to 5  | 5        | 20 |
| 5 to 10   | 6        | 24 |
| More than 10  | 14       | 56 |
| <b>Educational level</b>                                |          |    |
| Bachelor's  | 1        | 4  |
| Graduate  | 6        | 24 |
| Master's  | 18       | 72 |
| <b>Ethnicity</b>  |          |    |
| Asian   | 1        | 4  |
| Black/African-American                                  | 6        | 24 |
| White   | 18       | 72 |
| <b>Age</b>  |          |    |
| 45 to 54  | 8        | 33 |
| 55 to 64  | 13       | 54 |
| 65 to 74  | 3        | 13 |

*Note:* Due to rounding, percentages may not add up to 100.

### Means and Standard Deviations

For employee satisfaction score percentiles, observations ranged from 40.00 to 94.00, with an average observation of 74.36 ( $SD = 18.22$ ). For employee satisfaction scores, response options spanned from 1 to 5; observations ranged from 3.24 to 5.00, with an average observation of 4.16 ( $SD = 0.48$ ). Raw scores for the MSCEIT ranged from 0.39 to 0.60, with an average observation of 0.53 ( $SD = 0.05$ ). Percentiles for the MSCEIT ranged from 3.97 to 90.22, with an average observation of 48.76 ( $SD = 22.19$ ). Standard scores for the MSCEIT ranged from 73.69 to 119.41, with an average observation of 98.92 ( $SD = 10.60$ ). Within the current study, the researcher used the standardized MSCEIT scores in all analyses. Means and standard deviations for employee satisfaction and MSCEIT scores are presented in Table 2.

Table 2

#### *Means and Standard Deviations for Continuous Variables*

| Variable              | <i>M</i> | <i>SD</i> |
|-----------------------|----------|-----------|
| Employee satisfaction |          |           |
| Percentile            | 74.36    | 18.22     |
| Press Ganey scores    | 4.16     | 0.48      |
| MSCEIT                |          |           |
| Raw score             | 0.53     | 0.05      |
| Percentile            | 48.76    | 22.19     |
| Standardized scores   | 98.92    | 10.60     |

## Summary of Results

To address the research questions guiding this study, I conducted Pearson correlations, independent sample *t* tests, and analysis of variance (ANOVA). The results of the Pearson correlation indicated that neither employee satisfaction percentile nor score were related to emotional intelligence. There were no differences in emotional intelligence by age,  $F(2, 22) = 1.24, p = .309$ , partial  $\eta^2 = .10$ , nor by gender,  $t(22) = -1.77, p = .090$ . Finally, within the sample, emotional intelligence was neither influenced by years of experience,  $F(2, 22) = 0.44, p = .649$ , partial  $\eta^2 = .04$ , nor highest level of education,  $F(2, 22) = 0.17, p = .848$ , partial  $\eta^2 = .01$ . A detailed description of the results of the analyses follows.

## Detailed Analyses

**RQ1:** What is the relationship between senior healthcare executives' emotional intelligence scores and employee satisfaction scores?

A Pearson correlation matrix was created among employee satisfaction percentiles, employee satisfaction scores, and emotional intelligence scores. Because each variable was used 2 times, a Bonferroni correction to the alpha level was applied; thus, the new alpha level was .025 (.050/2). Results indicated that neither employee satisfaction percentile nor employee satisfaction score were significantly correlated to MSCEIT score. Table 3 shows the full correlation matrix.

Table 3

*Correlation Matrix Among Employee Satisfaction Percentile, Employee Satisfaction Score, and MSCEIT Scores*

|               | Employee satisfaction percentile | Employee satisfaction score |
|---------------|----------------------------------|-----------------------------|
| MSCEIT scores | .25                              | .46                         |

*Note.* \*  $p \leq .025$ .

**RQ2:** What is the effect of age on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?

To examine the research question, an analysis of variance (ANOVA) was conducted to assess if there were differences in emotional intelligence score by age. In the preliminary analysis, the assumption of normality was assessed with a Shapiro-Wilk test. The results of the test were not significant,  $p = .055$ , indicating the assumption was met. The assumption of equality of variance was assessed with Levene's test. Results of the test were not significant,  $p = .886$ , indicating the assumption was met. The results of the ANOVA were not significant,  $F(2, 22) = 1.24$ ,  $p = .309$ , partial  $\eta^2 = .10$ , indicating there was no difference in emotional intelligence score by age.

Results of the ANOVA are presented in Table 4. Means and standard deviations are presented in Table 5. Figure 1 shows emotional intelligence mean scores by age.

Table 4

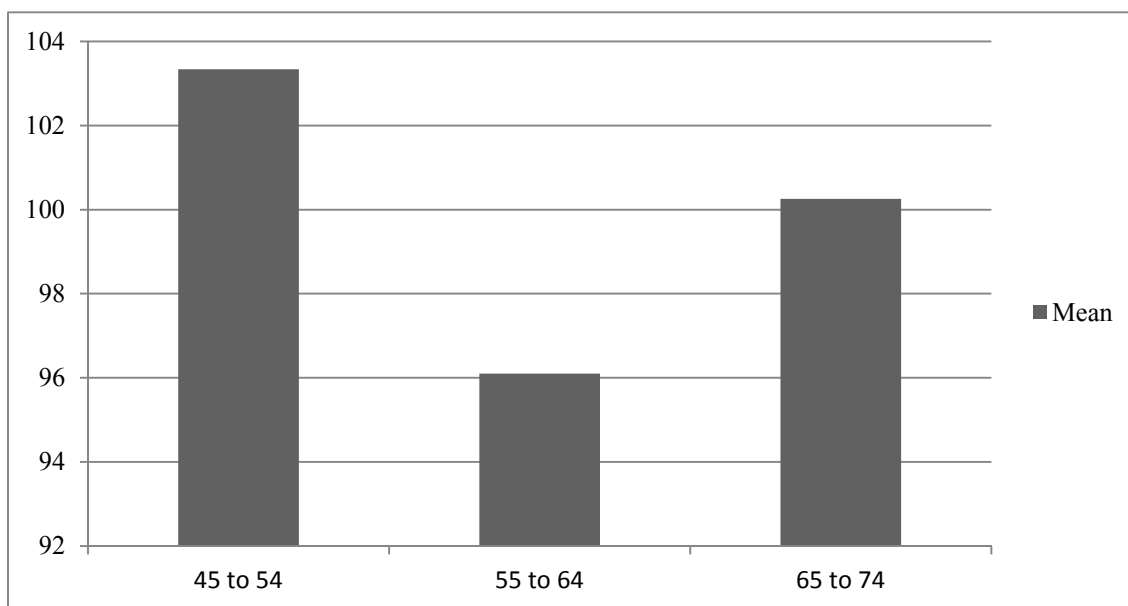
*Results of ANOVA for Emotional Intelligence by Age*

| Source | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> | Partial $\eta^2$ |
|--------|-----------|-----------|-----------|----------|----------|------------------|
| Age    | 273.03    | 2         | 136.52    | 1.24     | .309     | .10              |
| Error  | 2,423.71  | 22        | 110.17    |          |          |                  |

Table 5

*Means and Standard Deviations for Emotional Intelligence by Age*

| Age      | <i>M</i> | <i>SD</i> |
|----------|----------|-----------|
| 45 to 54 | 103.34   | 9.03      |
| 55 to 64 | 96.10    | 10.64     |
| 65 to 74 | 100.26   | 13.82     |

*Figure 1.* Emotional intelligence mean score by age.

**RQ3:** What is the effect of gender on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?

An independent sample  $t$  test was conducted to assess if there were differences in emotional intelligence scores by gender. Prior to analysis, the assumption of normality was assessed using a Shapiro-Wilk test. The result of the test was not significant,  $p = .055$ , validating the assumption of normality. The assumption of equality of variance was assessed using Levene's test. The result of the test was significant,  $p = .028$ , violating the assumption of equality of variance; therefore, the Welch  $t$  statistic, which does not assume equality of variance, was used (Stevens, 1999).

The results of the independent sample  $t$  test were not significant,  $t(22) = -1.77$ ,  $p = .090$ , indicating that there was not a difference in emotional intelligence by gender. Results of the independent sample  $t$  test are presented in Table 6. Figure 2 shows the averages of emotional intelligence by gender.

Table 6

*Independent Sample  $t$  Test for Emotional Intelligence by Gender*

| Variable               | $t(22)$ | $p$  | Cohen's $d$ | Female |       | Male   |      |
|------------------------|---------|------|-------------|--------|-------|--------|------|
|                        |         |      |             | $M$    | $SD$  | $M$    | $SD$ |
| Emotional intelligence | -1.77   | .198 | 0.65        | 97.02  | 12.15 | 102.96 | 4.51 |

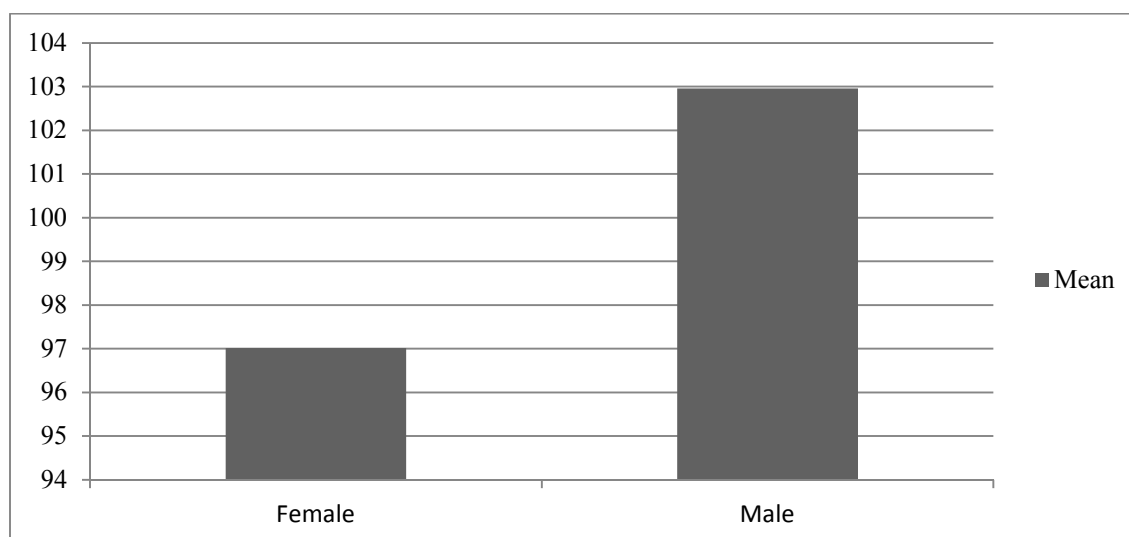


Figure 2. Emotional intelligence by gender.

**RQ4:** What is the effect of years of experience on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?

To examine the research question, an analysis of variance (ANOVA) was conducted to assess if there were differences in emotional intelligence by years of senior healthcare leadership experience. In preliminary analysis, the assumption of normality was assessed with a Shapiro-Wilk test. The results of the test were not significant,  $p = .055$ , indicating the assumption was met. The assumption of equality of variance was assessed with Levene's test. Results of the test were not significant,  $p = .128$ , indicating the assumption was met. The results of the ANOVA were not significant,  $F(2, 22) = 0.44$ ,  $p = .649$ , partial  $\eta^2 = .04$ , indicating there was no difference in emotional intelligence by years of senior healthcare leadership experience.



Results of the ANOVA are presented in Table 7. Means and standard deviations are presented in Table 8. Figure 3 shows emotional intelligence means by years of senior healthcare leadership experience.

Table 7

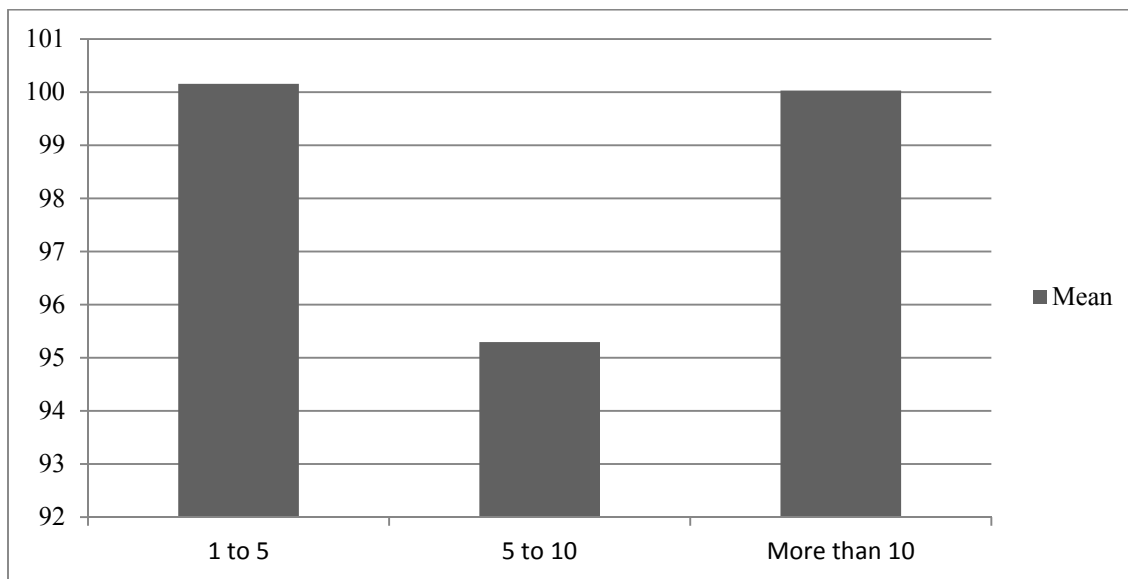
*Results of ANOVA for Emotional Intelligence by Years of Senior Healthcare Leadership Experience*

| Source                                | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> | Partial $\eta^2$ |
|---------------------------------------|-----------|-----------|-----------|----------|----------|------------------|
| Years of senior healthcare leadership | 103.78    | 2         | 51.89     | 0.44     | .649     | .04              |
| Error                                 | 2,592.97  | 22        | 117.86    |          |          |                  |

Table 8

*Means and Standard Deviations for Emotional Intelligence by Years of Senior Healthcare Leadership*

| Years of senior healthcare leadership | <i>M</i> | <i>SD</i> |
|---------------------------------------|----------|-----------|
| 1 to 5                                | 100.15   | 9.13      |
| 5 to 10                               | 95.29    | 16.06     |
| More than 10                          | 100.03   | 8.64      |



*Figure 3.* Emotional intelligence by years of senior healthcare leadership.

**RQ5:** What is the effect of educational level on the relationship between senior healthcare executives' emotional intelligence and employee satisfaction scores?

In preliminary analysis, the assumption of normality was assessed with a Shapiro-Wilk test. The results of the test were not significant,  $p = .055$ , indicating the assumption was met. The assumption of equality of variance was assessed with Levene's test. Results of the test were not significant,  $p = .635$ , indicating the assumption was met. The results of the ANOVA were not significant,  $F(2, 22) = 0.17$ ,  $p = .848$ , partial  $\eta^2 = .01$ , indicating there was no difference in emotional intelligence by highest level of education completed.

Results of the ANOVA are presented in Table 9. Means and standard deviations are presented in Table 10. Figure 4 shows emotional intelligence means by highest level of education completed.

Table 9

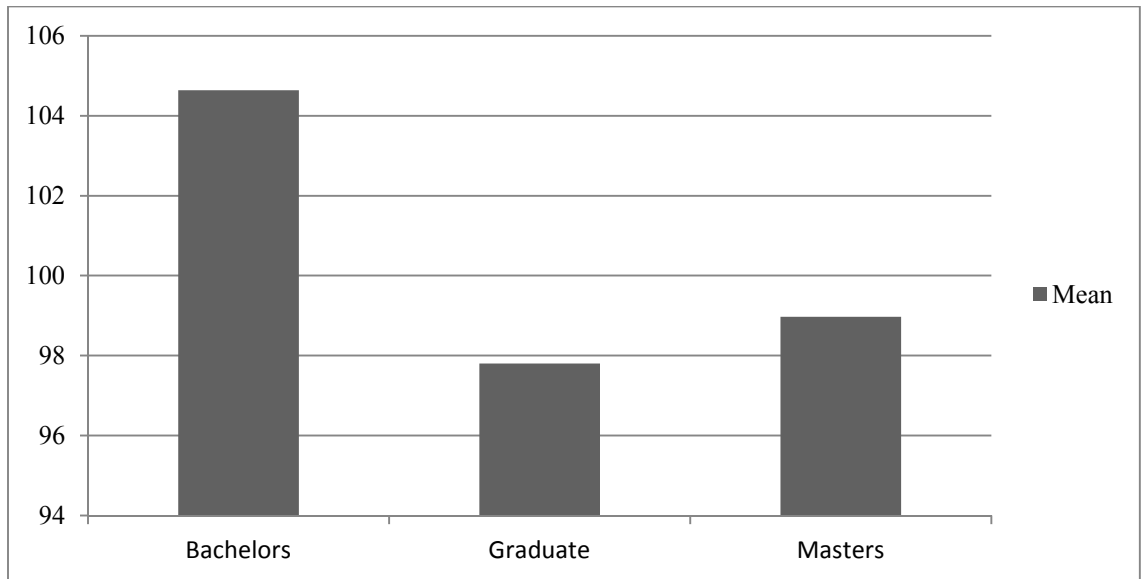
*Results of ANOVA for Emotional Intelligence by «factorXvariable»*

| Source                               | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>p</i> | Partial $\eta^2$ |
|--------------------------------------|-----------|-----------|-----------|----------|----------|------------------|
| Highest level of education completed | 40.20     | 2         | 20.10     | 0.17     | .848     | .01              |
| Error                                | 2,656.55  | 22        | 120.75    |          |          |                  |

Table 10

*Means and Standard Deviations for Emotional Intelligence by «factorXvariable»*

| Highest level of education completed | <i>M</i> | <i>SD</i> |
|--------------------------------------|----------|-----------|
| Bachelor's                           | 104.64   | -         |
| Graduate                             | 97.80    | 11.30     |
| Master's                             | 98.97    | 10.90     |



*Figure 4.* Emotional intelligence by highest level of education completed.

### **Conclusion**

The findings of the current study indicated that emotional intelligence was not related to employee satisfaction scores. Additionally, emotional intelligence was not influenced by age, gender, years of experience, or highest level of education. In this chapter, I presented the preliminary data management steps conducted in preparing to conduct the statistical analyses. Descriptive statistics detailing the sample and the salient demographic information were provided. A summary of the results was included, followed by a detailed presentation of findings. Chapter 5 is a discussion of the results and future implications for research and practice.

## Chapter 5: Conclusion and Recommendations

The purpose of this research study was to determine if emotionally intelligent (EI) leaders are more successful in creating satisfied staff who are engaged in their organization's mission and values. To accomplish this purpose, I sought to discover whether a relationship exists between senior healthcare executives' EI and employee satisfaction scores within their organizations. The correlation assessment between these two variables was measured using data collected from the MSCEIT and Press Ganey Employee Voice instruments. Demographic data included age, gender, years of experience as a senior executive, and educational level. These data were captured from a Survey Monkey questionnaire that was made available to participants through a Web link.

The MSCEIT measured the EI model using four levels of emotional ability: (a) perception of emotion by recognizing facial expressions in others, (b) ability to use emotion to facilitate thought, (c) understanding emotions by labeling them and comprehending relationships surrounding shifts, and (d) ability to manage one's emotions and feelings (Sadri, 2012). Employee satisfaction was a self-report measure of the most recent scores of participants' organizations, collected with a question on the Survey Monkey survey, along with the demographic information. Some participants reported the satisfaction score as a percentage; others reported employee satisfaction as a numerical score. Results from the statistical analysis of the data indicated that neither employee satisfaction percentile nor satisfaction score was significantly correlated to the MSCEIT score (Table 3). No statistically significant relationship existed among EI and age

(Tables 4 and 5) or gender (Table 6) or years of experience or education level of senior healthcare executives (Tables 6, 7, and 9). In Chapter 5, I present a conclusion concerning the statistical results presented in Chapter 4, followed by a discussion of the study's significance, limitations, and recommendations for future research. Additionally, implications for social change and recommendations for practice are offered.

### **Interpretation of Findings**

The analysis of the data focused on accepting or rejecting five hypotheses in an attempt to find answers to the research questions. The findings did not support the alternative hypotheses, and all the null hypotheses were consequently accepted. In contrast to these findings, the literature review for this study provided substantial support of the value that EI traits can have for nurses, physicians, and leaders. Further, researchers have clearly illustrated the positive effects of EI on hospital performance in virtually every measurable category when employees exhibit engagement with and commitment to their work (Brunges & Foley-Brinza, 2014).

Healthcare organizations have focused as much attention on employee satisfaction as they have on patient satisfaction in the past decade or more (Burns, 2013), and initiatives have been pursued to create workplace environments where staff come to work to make a difference for the better. Mayer and Cates (2014) described the concept of “owners” versus “renters” and noted that the difference between the two is that owners are fully engaged in organizational excellence, whereas renters simply show up, expecting to be solidly compensated for “time served” (p. 89). The resounding theme in the literature on leaders' influence on job satisfaction addressed the significance of EI in

the work environment (Mayer & Cates, 2014, Rego et al, 2010, Skinner & Spurgeon, 2005). Because EI involves the ability to evaluate and understand one's own emotions and the emotions of others, it is theorized that relationship management performed by leaders toward subordinates has an effect on employees' satisfaction and engagement in the workplace environment (Mayer & Cates, 2014). The gap in the literature that prompted the current study on EI in management was the limited amount of research done on the effect of senior healthcare executives' EI on employee satisfaction. As discussed in Chapter 2, despite the evidence supporting the theoretical construct of EI, the ongoing debate about EI focuses on differences in EI theoretical perspectives and the specific abilities of the emotionally intelligent leader in healthcare (Skinner & Spurgeon, 2005).

### **Null Hypothesis 1**

The first null hypothesis stated that there is no relationship between senior healthcare executives' EI and employee satisfaction scores. The findings were not as expected, and thus the null hypothesis was supported. As illustrated in Chapter 4, a Pearson correlation matrix was created showing the relationship between employee satisfaction percentiles and scores and EI results. The findings revealed no significance for both employee satisfaction scores and the MSCEIT scores.

Goleman (1995) explained the EI framework of self-awareness, social awareness, self-management, and relationship management. Because researchers have correlated the high team EI scores with organizational success, many healthcare organizations have considered EI in recruitment and staff development (Lucas et al, 2008). The significance

of nursing and medical staff having high EI scores is well documented in the literature, in addition to the importance of high EI in management (Love et al, 2008). For example, Cavallo and Brienza (2006) studied over 300 managers and found the four components of EI positively correlated with high performance ratings in organizations. Additionally, a positive relationship was found between EI and job satisfaction in a study of over 200 chief financial officers, who were shown to develop high affective commitment to their organizations and to their careers (Carmeli, 2003). The current study used a much smaller sample size, so it could be argued that comparison to the two studies for congruency of findings would not be logical.

### **Null Hypotheses 2 and 3**

The second and third hypotheses stated that there is no influence by age or gender on senior healthcare executives' EI and employee satisfaction scores. As reviewed in Chapter 4, the results of the ANOVA were not significant for the EI score by age or gender. The null hypotheses were again supported with these unexpected findings. The literature review for the current study did not present any correlations of these variables and EI. The purpose of exploring age and gender and their relationship to senior healthcare executives' EI was to gain further insight. The current study likely lacked a large enough sample size to make any inferences regarding this inquiry. The small sample was a very homogenous group, which posed a problem with a statistical test such as ANOVA (Field, 2013). The largest percentage of the sample was female, Caucasian, master's-prepared, and held positions as chief nursing officers. It would have been preferable to have equal representation among different groups for comparison (Field,



2013). A phenomenon such as EI is not as much a learned trait as it is experiential.

Because it was impossible to assess the influence of age and gender on EI from a sample of such similarity, the ANOVA results should be considered invalid.

Goleman's (1995) theoretical model of EI was the most cited in the literature review. Mayer et al. (2000) explained the conceptual framework of EI in terms of an individual's perception, comprehension, and assimilation of emotions. Mental and cognitive abilities are more closely representative of general intelligence and processing information. The two concepts were conjoined in the ability model of EI, which was presented as a separate entity by Mayer and Salovey in the late 1990s (Mayer & Salovey, 2000). Petrides and Furnham (2000) explained the difference between the mixed model of EI and the ability model of EI as an interface of cognition and personality components. Further, one could state that the mixed model is a combination of trait EI and information-processing EI. The MSCEIT was chosen for the assessment of EI for the current study because it is considered an ability model (Rosen & Kranzler, 2009). In sum, although age and gender were not found to be significant influences on EI in this small sample, age and gender could have revealed interesting findings using the MSCEIT, indicating future research with a larger sample may be valuable.

#### **Null Hypotheses 4 and 5**

The fourth and fifth hypotheses stated that there is there is no influence by years of experience or education level on senior healthcare executives' EI and employee satisfaction scores. The findings of the ANOVA supported the null hypotheses, which was an unexpected result. I chose this comparison of the variables of education and

leadership experience to gain more knowledge because there was an obvious gap in the literature regarding their effects. As noted in Chapter 2, EI and leadership practice and effectiveness have been extensively studied, making the exploration of professional and educational experiences worthwhile. From the perspective of theorists who have conceptualized EI as a blend of skills and traits, the potential of discovering a positive correlation between EI and a leader's years of experience and academic preparedness could be valuable. Transformational leadership theories have focused on the managerial talents crucial to obtaining high-performing behaviors from subordinates, and EI has been a common denominator in much of this research (Barbuto & Burbach, 2006). For example, Anand (2010) evaluated transformational leadership and EI and found that executives did not differ in their leadership practices based on their age; however, those over 45 years of age had higher EI scores than did their younger counterparts. Interestingly, Anand revealed that executives with higher professional degrees and experience had more effective stress management, empathy, and ability to manage work-life balance at optimal levels than did others. An assumption can be made that age can be a factor in the EI score of senior leaders based on previous research, which had greater response rates than the current study. Further, the influence of leaders' experience and education is worth further exploration with a larger sample.

### **Limitations of the Study**

Several limitations affected the current study. Possibly the greatest limitation was the small number of participants. Further, the sample obtained for both senior healthcare executives and employees was likely not representative of the total population of all

healthcare organizations. Employees taking the survey in organizations are guaranteed anonymity and optional participation; therefore, it cannot be affirmed that the results are truly reflective of all employees in the company. Four assumptions listed in Chapter 1 related to possible limitations of the current study. The first assumption was that a positive correlation between senior healthcare leaders' EI and employee satisfaction scores exists. Also, it was assumed that the same leaders have the influence to increase satisfaction of employees. The third and fourth assumptions involved the assurance that both the MSCEIT and the Press Ganey employee satisfaction surveys were answered with honesty and integrity.

As predicted in Chapter 1, the boundaries for the current study delimited the sample group to senior leaders with specific titles as noted, and included the position of vice president and higher. Further delimitations for the sample included restricting participation to those in leadership positions in nonfederal, general medical or surgical, short-term U.S. hospitals with at least 100 licensed beds. The restrictive nature of the definition of the senior leaders was necessary for generalizability of the findings. Use of only one method of assessment of both EI and employee satisfaction was also necessary for generalizability and became significant when gaining permission to use each one during the Walden IRB process.

### **External Validity**

As noted in Chapter 3, external validity, in particular population validity, was identified as an area of concern for the current study. Boswell and Cannon (2014) encouraged researchers to question to whom and under what circumstances a study's

findings might be applied. In this study, the specificity of the definition of eligible senior leaders was an effort to assure external validity. Consequently, the homogeneity of the participants threatened this principle significantly, reducing generalizability. Thus, I was unable to compare the results of the current study to previous research that showed a correlation between EI and other disciplines in healthcare.

### **Employee Satisfaction Data**

A final and significant limitation of the current study was the employee satisfaction scores and percentages self-reported by the participants in the demographic survey. In Chapter 1, the research components were clearly articulated into three parts, a third of which included the employee satisfaction scores in the final section of the demographic survey prior to completion of the MSCEIT. After review of the variability of the data, the complexity of this method of reporting the scores became evident. Despite the 1 to 5 Likert scale reporting structure of the Press Ganey Employee Voice tool, some results were reported on the 1 to 5 scale, but several were reported as overall percentage scores. To add to further questionability of the integrity of the data, others reported in nonquantifiable language, such as “Good but could be better.” The variety in the responses not only made some data unusable, but also indicated the senior leaders’ lack of clarity or knowledge regarding the employee satisfaction scores of their organizations.

An additional unexpected finding included the significance of how reflective the employee satisfaction scores were of the total population. Saari and Judge (2004) noted the importance of numerical accuracy and appropriate comparisons when using survey

data for employee satisfaction. For example, low numbers of participants globally within an organization or departments participants' variance must be considered when reporting or reviewing the data (Polit & Beck, 2012). Thus, it is important when reviewing staff satisfaction survey results to understand that the lower the number of participants, the greater the chance of random error in the data (Saari & Judge, 2004). The significance of this phenomenon for the current study prompted me to consider the validity of the data behind the reported score of employee satisfaction of the organization. Because it cannot be known if there was a sufficient number of staff participating in the data collection, it is not possible to know if the scores reported by the healthcare executives were truly representative of employees' attitudes.

### **Interesting Findings**

While the current study did not reveal strong statistical significance between the MSCEIT scores of senior leaders and employee satisfaction scores, the  $p$  values noted in the correlation matrix in Table 3 of .25 and .46 are positive and not negative values. It can be argued that the weak statistical significance of the small sample size is noteworthy and could warrant efforts to explore the research question with a larger number of participants. Further, the mean score and standard deviation of EI as noted in Table 6 is higher in male senior healthcare leaders than the female sample and is a finding that this researcher feels should be recognized. Tables 4 illustrates the findings of the variances of EI scores among age groups with highest mean score and standard deviation within the 45 to 54 year old participants and noticeably lower EI scores in the 55 to 64 year old executives. While the specific findings of age and gender differences in EI noted here are

not answers to the research questions of the current study, the research has found a sense of justification for further exploration of the facets and concept of EI.

### **Recommendations for Future Research**

Recommendations for future research are from the findings of the current study, grounded in the study's strengths and limitations, and are offered in the context of the literature review presented in Chapter 2. Despite the low response rate to the current study, there were many lessons learned that provide insight for future examinations of possible relationships between the EI and employee satisfaction. The small sample size prevented the possibility of making inferences or logical judgments in answering the research questions. However, the limitations discussed represent potentially valuable strategies for continued exploration pertaining to emotional intelligence, leadership practices, and satisfaction of employees. Leadership includes the ability to influence and motivate employees, thereby creating an engaged workforce performing with the best interests of their organizations in mind (Anand, 2010). Future studies can explore the relationship of senior leaders and front line staff by using a qualitative design in which staff is queried about whether or not they have ever met the members of the top level leadership team of the organization. Additional potential research possibilities include an exploration of with the same research questions but changing the target population to the direct supervisors of employees. Retention of employees within an organization is another variable which could be beneficial to analyze in future research. The complexity of the healthcare environment requires leaders who understand the significance of the skills required for successful outcomes (Gilbreath & Benson, 2004). A substantial

number of the researchers reviewed in Chapter 2 identified EI as an important characteristic synonymous with effective leadership. Another recommendation emerging from the current study is based on hindsight from the outcome of the recruitment strategy: Future researchers should consider offering administration of the MSCEIT or other valid and reliable EI assessment at a national or local senior leadership conference. Potential participants could be allotted time to complete the assessment as part of the professional development program, alleviating the barrier of time constraints, which may have been an obstacle for the current study.

### **Employee Satisfaction versus Engagement**

During the literature review, I found a significant current trend differentiating between employee satisfaction and engagement measures in organizations. Distinguishing between the two has become an important theme founded on the premise that a satisfied employee is not necessarily an engaged member of the team (Harter et al, 2002). This concept becomes important when designing the strategic approaches organizations use to move toward engagement (Harter et al, 2002); for example, satisfied employees may like their work environment and compensation, but may not necessarily be engaged enough to facilitate the mission and vision of the company (Harter et al, 2002). In fact, researchers have shown that employees' satisfaction is directly affected and predicted by employees' engagement and intentions to remain in the organization (Wagner, 2006). Changing a healthcare culture to a more engaged workforce, rather than simply seeking to satisfy employees, requires leaders with appropriate management tools,

which may include EI (Brunges & Foley-Brinza, 2014). Future researchers should measure engagement of employees instead of reviewing employee satisfaction surveys.

### **Implications for Social Change**

The current study results were not as anticipated; I was unable to show a correlation between senior healthcare leaders' EI and employee satisfaction. In fact, the low participation rate made it impossible to make inferences based on this work. Based on the research reviewed for this study, however, a rationale to do further research on this concept still exists. The potential for discovering what elements affect social change in the complex healthcare environment is a greater task than addressing the hypotheses that were accepted or rejected in the current study. This critical time in the world of healthcare includes a shift toward a more patient-centered environment, replacing what some have argued was previously more provider-centered (Clancy, 2014). Therefore, the changes in healthcare require focusing on social change as it relates to service behaviors by all individuals who have any impact on the patient-care experience.

Clinical bedside care may be more challenging than ever, and with life expectancy and technological advances increasing every decade, there is justification for believing the situation may become even more challenging. Now it becomes more important than ever to operationalize management plans and processes as less vague and more reflective of service excellence. Mayer and Cates (2014) encouraged listening to the "voice of the customer" (p. 49). Patients have said, "We want healthcare to be more responsive to our needs, more efficient, more nimble" (p. 49). Hence, healthcare leaders' roles are more critical than ever. Senior leaders, in particular, are involved in the



decisions that will drive success or failure and must be connected not only to logistics and processes, but also to the people delivering care. One hospital CEO admitted that healthcare became personal for him when his aging mother received care: “I realized that leading a hospital isn’t just about protecting margins; it’s about working really, really hard to provide awesome quality and excellent service to those who put trust in you for their care” (as cited in Wagner, 2015, p. 11).

### **Leadership and Transformational Change**

The substantial research on leadership and EI provides solid arguments supporting the value of an emotionally intelligent leadership team (Day & Carroll, 2004, Faguy, 2012). Members of the healthcare clinical team who interact directly with the patients are led and motivated by middle management. Senior leaders are not a separate entity, but are the foundation for middle- and upper-level leaders—thus, seamless congruency is possible from the top to the lower levels of the team. Sadri (2012) noted the transformational influence all emotionally intelligent leaders have on their teams. A study of the relationship between EI and leadership effectiveness of 41 senior executives showed that EI was associated with higher levels of leadership effectiveness (Sadri, 2012). The characteristics of EI included self-awareness and self-motivation in addition to the ability to assess the emotions of those around them accurately (Sadri, 2012).

Hospital systems with consistently high patient satisfaction have committed to providing a patient-centered healthcare delivery transformation. For example, in the Iowa Specialty Hospitals and Clinics, a best practice model was implemented that included senior leaders, other leaders, and staff committed to moving from providing

“just average” to “best of class” patient care and experiences (Wagner, 2015). The CEO developed each member of his 9-member senior leadership team through a leadership development program that included leading with intention using evidence-based best practice leadership models (Wagner, 2015). The overall organization ranked higher than average on state and national patient-experience scores, and one of its hospitals was recently awarded a five-star ranking from CMS, placing them in the top 7% of hospitals in the nation (Wagner, 2015). Perhaps most noteworthy about this organization were the impressive employee and physician satisfaction scores. Instead of scenery, high salaries, and generous benefits, the organization simply offered the kind of culture that motivated team members to enter the healthcare field in the first place (Wagner, 2015). An obvious congruence with the characteristics of EI with the components found in this type of atmosphere indicates further exploration into the benefits of having an emotionally intelligent team is warranted.

### **Recommendations for Practice**

Recommendations based on the results of this study include further research on EI and healthcare leadership and leadership development possibilities. Future researchers could expand the scope of the participants to include all leaders in healthcare, including middle managers. Prior to the patient-centered healthcare model, much emphasis was placed on a more provider-focused methodology, with decisions made by the care providers without much input from patients and families. In this bureaucratic environment, emotions of any kind were not always considered conducive to healing in a therapeutic provider–patient setting (Mayer & Cates, 2014). Much empirical research

has shown that EI is a separate entity from general intelligence, and that emotions can be constructive by contributing to enhanced performance, especially in a caring environment like healthcare. Goleman (2011) found that emotional competencies are better predictors of workplace success and should be considered as much or more than intellectual ability scores. Further, leaders with high EI can significantly contribute to creation of a workplace environment that fosters employee commitment and engagement. Mayer and Cates (2014) described the importance of putting the patient first and always doing the right thing for them. Another component of that equation is to “do the right thing for those who care for the patient” (Mayer & Cates, 2014, p.98). Leaders have the obligation to take care of the caregivers now more than ever, from the C-Suite to middle management. All are responsible for working collaboratively to create a healthy work environment.

Another recommendation is for healthcare organizations to consider EI assessments on new hires and existing members of the team. Opinions are mixed in the debate over whether EI is an innate human trait or a competency that can be introduced and reinforced over time with training (Bar-On & Parker, 2000). Most recently, researchers have defined EI as the ability or potential to feel, recognize, communicate, learn from, and manage emotions (Mayer et al., 2004). With a substantial amount of research supporting the concept that EI is a predictor of leadership and successful interactions with their subordinates, there could be value in EI assessment and training programs for leadership and employees of healthcare organizations.

## Conclusion

In conclusion, in the current study, I was not able to show a relationship between senior healthcare executives' EI and employee satisfaction. EI was not influenced by age, gender, years of experience, or level of education among the sample. As mentioned, the response rate for the study was low despite intense efforts and strategies for recruitment. I speculated on possible causes for the low number of participants. Sixty healthcare leaders responded to the initial Survey Monkey tool; only half completed the research survey. This outcome could be attributable to a number of reasons. It was certainly known that recruitment efforts were directed at quite possibly the busiest group of professionals currently working in the healthcare field: the C-Suite leaders who are ultimately held the most accountable for both failures and triumphs. These leaders endure long hours, excessive travel, and many meetings. It is possible the leaders, inundated with pressures to increase quality measures, patient experience scores, and employee satisfaction within the organization, were not willing to reveal employee satisfaction scores despite the assurances of anonymity and confidentiality that I provided. As noted in the Problem Statement in Chapter 1, despite the outcome of this research study, there was still value in exploring a concept that could address the challenges faced in the current healthcare environment.

Over the past decade or more, the focus of hospital administrators has been the quality of the clinical care the patients received. The ACA has required organizations to link clinical quality inextricably with service quality (Health Research & Educational Trust, 2014). The healthcare industry is required to meet the challenges of the new

environment focused on value-based purchasing, HCAHPS, and the patient experience of care (Mayer & Cates, 2014). While some organizational leaders continue to explore methods to be successful in the current environment as they struggle to understand the low results of their HCAHPS scores, others seem to have found new approaches (Burns, 2013).

Patients who may be in one of the most vulnerable periods in their lives can certainly benefit from employees who are able to understand their needs and concerns. Employees with high EI are able to manage emotions, communicate clearly, and embody genuine empathy and compassion at times when their patients need these qualities the most (Clancy, 2014). Leaders should consider the significance of having the right staff to help create the best possible patient experience. In addition, organizational executives can benefit from gaining EI skills, which allow for cordial relationships with subordinates and support the development of a compelling vision for their teams (Anand, 2010). Emotionally intelligent leaders are more likely to understand the significance of self-awareness, thus enhancing relationships with customers and staff. Leaders with high EI are committed to making a positive difference for employees and a memorably positive patient experience for every patient, every time.

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## Appendix A: Informed Consent

You are invited to take part in a research study of the relationship of emotional intelligence of senior healthcare executives and employee satisfaction scores of their organizations. The researcher is inviting senior healthcare executives who have held the title of vice president or higher in healthcare systems with at least 100 licensed beds to be in the study.

This study is being conducted by Carmen McDonald, who is a doctoral candidate at Walden University. The purpose of this study is to understand if there is a relationship between emotionally intelligent leaders and the satisfaction of employees. For the first time in history, the unique strategy of linking quality of care metrics to reimbursement has become the reality. Engaged employees focus on the mission and vision of the organization and contribute to its success. The industry lends itself to the necessity of an emotionally intelligent leadership with additional skills to their classic managerial skills of the past. Experienced healthcare leaders should be intent on the objective to search for insight and advance their knowledge of what traits will be needed for this continuously evolving environment.

Participants will be asked to complete the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and complete a short demographic survey. Additionally, the most recent Press Ganey employee satisfaction scores of your organization will need to be reported.

Your participation in this survey is voluntary. If you chose not to participate or withdraw from the study at any time, you can do so without penalty or loss of benefit to you. I will not use your personal information for any purposes outside of the scope of this study. Your name or any information which could identify you in the study reports is strictly withheld. The research results may be published but your name will not be used and your test results will be maintained in confidence with the researchers only. Data will be kept for a period of at least 5 years as mandated by the university.

If you have any questions you may contact me at xxx-xxx-xxxx or [carmen.mcdonald2@waldenu.edu](mailto:carmen.mcdonald2@waldenu.edu). If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott, the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's IRB approval number for this study is **02-20-15-0225084** and it expires on February 19, 2016.

Please print or save this consent form for your records.

### Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By returning a completed survey, I understand that I am agreeing to the terms described above.

## Appendix B: Demographic Survey

## Demographic Data

Gender: M \_\_\_ F \_\_\_

Age: 20-30 \_\_\_ 30-39 \_\_\_ 40-49 \_\_\_ 50-59 \_\_\_ 60-69 \_\_\_ 70 and over \_\_\_

Management title (Check all that apply): \_\_\_ Vice President \_\_\_ Senior Vice

President \_\_\_ Chief Executive Officer \_\_\_ Chief Nursing Officer \_\_\_ Chief Medical  
Officer

\_\_\_ Chief Financial Officer \_\_\_ President \_\_\_ Chief Operating Officer \_\_\_ Chief

Information Officer \_\_\_ Chief Strategy Officer \_\_\_ Chief Integration Officer

\_\_\_ Chief Patient Experience Officer

\_\_\_ Other (Specify) \_\_\_\_\_

Years of senior healthcare leadership experience: \_\_\_\_\_

Educational Level (Check only highest degree held):

\_\_\_ Bachelors \_\_\_ Masters \_\_\_ PhD

\_\_\_ Other Doctoral Degree (Specify) \_\_\_\_\_

*Note:* Participation in this study is strictly voluntary and you may withdraw at any time without any punitive actions or negative consequences. Publication of the results of this study may be published, however reported results do not include participants names or any mention of their organizations. The results of the data collection will remain confidentially secured and available only to the researcher.

## Appendix C: Permission to Use MSCEIT Assessment



Multi-Health Systems Inc.

*Publishers and Distributors of Professional Assessment Materials*[www.mhs.com](http://www.mhs.com)

October 17, 2014

To Whom It May Concern,

This letter is to confirm that Carmen McDonald has been granted permission by Multi-Health Systems Inc, (MHS) to use the MSCEIT™ for her dissertation at Walden University.

Eric Oestmann, Ph.D., has agreed to supervise Carmen McDonald's use of the MSCEIT™. Eric Oestmann, Ph.D., has met our Qualifications, which are in accordance with the ethical and professional standards of the American Psychological Association and the Standards for Education and Psychological Testing, to administer this instrument.

Thank you,

Shawna Ortiz,  
Multi Health Systems, Inc.

**MHS**

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VISIT OUR WEBSITE AT <http://www.mhs.com>

## Appendix D: Permission to Cite Items From MSCEIT Assessment



Multi-Health Systems Inc.

*Publishers and Distributors of Professional Assessment Materials*[www.mhs.com](http://www.mhs.com)

December 9, 2014

To Whom it May Concern,

This letter is to confirm that Carmen McDonald has been approved by Multi-Health Systems Inc. (MHS) to use the Mayer-Salovey-Caruso Emotional Intelligence Test™ - MSCEIT™ for her dissertation at Walden University.

Carmen has been granted Permission by MHS to cite 6 items form the MSCEIT test in her dissertation. These items are: Section A-Page 3, Section B- Page 7,

Section C- page 11, Section E –page 16, Section G-page 23, and Section H – page 25.

Carmen has also met our Qualifications, which are in accordance with the ethical and professional standards of the American Psychological Association and the Standards for Education and Psychological Testing, to use the MSCEIT

Thank you,

Betty Mangos  
Multi Health Systems, Inc.

## Appendix E: E-Mail Invitation to Participate in Study

Greetings <Participant's first name>

I am doing research study to determine if a relationship between the emotional intelligence (EI) of Senior Healthcare Executives and employee satisfaction exists. Your participation will assist me in my dissertation while benefiting you with an opportunity to do an EI assessment for your own insight. This will be a completely anonymous study and no outside organizations have any interest if you participate in this study.

To be eligible to participate, you must be a senior health care executive from the United States in a non-federal, general medical/surgical, short-term hospital which has at least 100 licensed beds. The organization must have used Press Ganey Employee Voice Solutions surveys or the Society for Human Resource Management (SHRM) survey questions to measure the employee satisfaction scores.

For the purpose of this study, the senior leader must have one of the following titles: (1) Vice President, (2) Senior Vice President, (3) Chief Executive Officer, (4) President, (5) Chief Medical Officer, (6) Chief Financial Officer, (7) Chief Nursing Officer, (8) Chief Operating Officer, (9) Chief Information Officer, (10) Chief Strategy Officer, (11) Chief Integration Officer, and (12) Chief Patient Experience Officer.

As a participant meeting all the requirements, you will need to complete four steps:

Step 1: Review of Informed Consent form.

Step 2: Completion of the online MSCEIT emotional intelligence assessment, which should take about 40 minutes.

Step 2: Completion of a Demographic Survey, which should take about 5 minutes.

Step 4: Submission of the most recent employee satisfaction surveys.

I want to emphasize the confidentiality of your participation. Names and subject identifiers are not collected since this is an anonymous study. While the results of this research may be published, your confidentiality will continue to be maintained, and your name or organization will not be mentioned as it is not known. Your participation is voluntary, and you may withdraw at any time without penalty or loss of benefit to yourself.

Sincerely,

Carmen McDonald

609-319-8340

email: [carmen.mcdonald2@waldenu.edu](mailto:carmen.mcdonald2@waldenu.edu).

*<Placeholder for link to Survey Monkey>*

## Appendix F: Permission to Use Press Ganey Survey



January 16, 2015

Carmen McDonald MSN, MHA, RN, NEA-BC  
4 Draco Drive  
Sewell, New Jersey 08080

Dear Ms. McDonald,

In response to your request, we are pleased to grant permission to reproduce a copy of the *Press Ganey Employee Voice Solution* questionnaire in your proposal and dissertation documents. This permission is granted under the conditions you specified to me in your letter of December 19, 2014. I wish you every success in the pursuit of your research agenda.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Kaldenberg".

Dennis O. Kaldenberg, Ph.D.

Chief Scientist and Senior Vice President  
404 Columbia Place  
South Bend, Indiana 46601

[dkaldenberg@pressganey.com](mailto:dkaldenberg@pressganey.com)

## Appendix G: Permission Request Letter to Press Ganey

Carmen McDonald MSN, MHA, RN, NEA-BC  
4 Draco Drive  
Sewell, New Jersey 08080

December 19, 2014

Dr. Dennis Kaldenberg  
Research and Development  
Press Ganey Associates  
404 Columbia Place  
South Bend, Indiana 46601

Dear Dr. Kaldenberg:

I am a doctoral student at Walden University. My dissertation will explore the relationship between the emotional intelligence (EI) of senior healthcare executives and the employee satisfaction of their organizations. I have limited the inclusion criteria of the participants to senior health care executives from throughout the United States in a non-federal, general medical/surgical, short-term hospital which has at least 100 licensed beds. Additionally, the organization must use Press Ganey Employee Voice Solution assessment for their evaluation of employee engagement. I chose this tool because of the high reliability and credibility from robust benchmarking and design.

As I prepare for Walden IRB approval and then data collection, I am writing to request permission to use this instrument for my research. The rights I will need will be to review the results of the participants' organizations. The participants must complete the MSCEIT online for assessment of their emotional intelligence score and report the latest overall employee satisfaction score from their organizations. If I am granted permission, I will keep the copyright of the Press Ganey instrument and reference that copyright in any presentation of data that results from the research project. Additionally, I agree to provide Press Ganey with a copy of my dissertation when completed in an effort to share the data analysis and findings from my research.

I also confirm that no monetary or commercial benefit will come to me from the use of the Press Ganey Employee Voice Solution tool. Further, if permission is granted for my study, it would be granted for this study only, and any additional studies will require separate permission rights.

Sincerely,  
Carmen McDonald  
609-319-8340  
[carmen.mcdonald2@waldenu.edu](mailto:carmen.mcdonald2@waldenu.edu).

## Appendix H: Permission to Use Survey Monkey Tool



SurveyMonkey Inc.  
www.surveymonkey.com

For questions, visit our Help Center  
help.surveymonkey.com

### Re: Permission to Conduct Research Using SurveyMonkey

To whom it may concern:

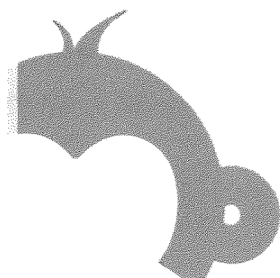
This letter is being produced in response to a request by a student at your institution who wishes to conduct a survey using SurveyMonkey in order to support their research. The student has indicated that they require a letter from SurveyMonkey granting them permission to do this. Please accept this letter as evidence of such permission. Students are permitted to conduct research via the SurveyMonkey platform provided that they abide by our Terms of Use, a copy of which is available on our website.

SurveyMonkey is a self-serve survey platform on which our users can, by themselves, create, deploy and analyze surveys through an online interface. We have users in many different industries who use surveys for many different purposes. One of our most common use cases is students and other types of researchers using our online tools to conduct academic research.

If you have any questions about this letter, please contact us through our Help Center at [help.surveymonkey.com](http://help.surveymonkey.com).

Sincerely,

SurveyMonkey Inc.





Appendix I: Mayer-Salovey-Caruso Emotional Intelligence (MSCEIT) Assessment—

Online Version

Multi-Health Systems, Inc. granted permission to the researcher to cite 6 specific items from the MSCEIT assessment. These examples are found on the following pages. Further information about the MSCEIT can be found at [www.mhs.com](http://www.mhs.com).



**INSTRUCTIONS:** How much is each feeling below expressed by this face?

(Please select a response for each item.)

|   |               |                         |                         |                         |                         |                         |                    |
|---|---------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------|
| 1 | No happiness  | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 | Extreme happiness  |
| 2 | No fear       | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 | Extreme fear       |
| 3 | No surprise   | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 | Extreme surprise   |
| 4 | No disgust    | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 | Extreme disgust    |
| 5 | No excitement | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 | Extreme excitement |

**Next Item >>**

**INSTRUCTIONS:** Please select a response for each item.

1. What mood(s) might be helpful to feel when creating new, exciting decorations for a birthday party?

|              | Not Useful              |                         | Useful                  |                         |                         |
|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| a. annoyance | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| b. boredom   | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| c. joy       | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |

2. What mood(s) might be helpful to feel when composing an inspiring military march?

|                | Not Useful              |                         | Useful                  |                         |                         |
|----------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| a. anger       | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| b. excitement  | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| c. frustration | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |

<< Previous Item

Next Item >>

**INSTRUCTIONS:** Select the best alternative for each of these questions.

- 1 . Marjorie felt more and more ashamed, and began to feel worthless. She then felt \_\_\_\_\_.

|                         |                   |
|-------------------------|-------------------|
| <input type="radio"/> 1 | a. overwhelmed    |
| <input type="radio"/> 2 | b. depressed      |
| <input type="radio"/> 3 | c. ashamed        |
| <input type="radio"/> 4 | d. self-conscious |
| <input type="radio"/> 5 | e. jittery        |

- 2 . Kenji felt content as he thought of his life, and the more he thought about the good things he had done and the joy his acts had brought to others, the more he felt \_\_\_\_\_.

|                         |               |
|-------------------------|---------------|
| <input type="radio"/> 1 | a. surprised  |
| <input type="radio"/> 2 | b. depressed  |
| <input type="radio"/> 3 | c. acceptance |
| <input type="radio"/> 4 | d. happiness  |
| <input type="radio"/> 5 | e. amazement  |

<< Previous Item

Next Item >>



**INSTRUCTIONS:** How much is each feeling below expressed by this picture?  
(Please select a response for each item.)

1.

|           |                       |                       |                       |                       |                       |
|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Happiness | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
|           |                       |                       |                       |                       |                       |

2.

|         |                       |                       |                       |                       |                       |
|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sadness | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
|         |                       |                       |                       |                       |                       |

&lt;&lt; Previous Item

Next Item &gt;&gt;

**INSTRUCTIONS:** Select the best alternative for each of these questions.

1 . A feeling of concern most closely combines the emotions of \_\_\_\_\_.

|                         |  |
|-------------------------|--|
| <input type="radio"/> 1 | a. love, anxiety, surprise, anger          |
| <input type="radio"/> 2 | b. surprise, pride, anger, fear            |
| <input type="radio"/> 3 | c. acceptance, anxiety, fear, anticipation |
| <input type="radio"/> 4 | d. fear, joy, surprise, embarrassment      |
| <input type="radio"/> 5 | e. anxiety, caring, anticipation           |

2 . Another word for "consistently anticipating pleasure" is \_\_\_\_\_.

|                         |                |
|-------------------------|----------------|
| <input type="radio"/> 1 | a. optimism    |
| <input type="radio"/> 2 | b. happiness   |
| <input type="radio"/> 3 | c. contentment |
| <input type="radio"/> 4 | d. joy         |
| <input type="radio"/> 5 | e. surprise    |

<< Previous Item

Next Item >>

**INSTRUCTIONS:** Please select an answer for every response.

1 . John developed a close friend at work over the last year. Today, that friend completely surprised him by saying he had taken a job at another company and would be moving out of the area. He had not mentioned he was looking for other jobs. How effective would John be in maintaining a good relationship, if he chose to respond in each of the following ways?

**Response 1: John felt good for him and told his friend that he was glad he got the new job. Over the next few weeks, John made arrangements to ensure they stayed in touch.**

|                         |                         |
|-------------------------|-------------------------|
| <input type="radio"/> 1 | a. Very ineffective     |
| <input type="radio"/> 2 | b. Somewhat ineffective |
| <input type="radio"/> 3 | c. Neutral              |
| <input type="radio"/> 4 | d. Somewhat effective   |
| <input type="radio"/> 5 | e. Very effective       |

**Response 2: John felt sad that his friend was leaving, but he considered what happened as an indication that the friend did not much care for him. After all, the friend said nothing about his job search. Given that his friend was leaving anyway, John did not mention it, but instead went looking for other friends at work.**

|                         |                         |
|-------------------------|-------------------------|
| <input type="radio"/> 1 | a. Very ineffective     |
| <input type="radio"/> 2 | b. Somewhat ineffective |
| <input type="radio"/> 3 | c. Neutral              |
| <input type="radio"/> 4 | d. Somewhat effective   |
| <input type="radio"/> 5 | e. Very effective       |

<< Previous Item

Next Item >>