

Pepperdine University
Pepperdine Digital Commons

Theses and Dissertations

2010

A study of the emotional quotient of nursing managers compared to the outcome of an employee opinion survey

Beverley Turner

Follow this and additional works at: https://digitalcommons.pepperdine.edu/etd

Recommended Citation

Turner, Beverley, "A study of the emotional quotient of nursing managers compared to the outcome of an employee opinion survey" (2010). *Theses and Dissertations*. 76. https://digitalcommons.pepperdine.edu/etd/76

This Dissertation is brought to you for free and open access by Pepperdine Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Pepperdine Digital Commons. For more information, please contact bailey.berry@pepperdine.edu.

Pepperdine University

Graduate School of Education and Psychology

A STUDY OF THE EMOTIONAL QUOTIENT OF NURSING MANAGERS COMPARED TO THE OUTCOME OF AN EMPLOYEE OPINION SURVEY

A dissertation proposal presented in partial satisfaction

of the requirements for the degree of

Doctor of Education in Organizational Leadership

by

Beverley Turner

November, 2010

Margaret Weber, Ph.D. - Dissertation Chairperson

This dissertation, written by

Beverley D. Turner

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

aret J./Weber, Ph.D. Chairperson

Farzin Madjidi, Ed.D.

Kent Rhodes, Ed.D.

Eric R. Hamilton, Ph.D Associate Dean

Margaret J. Weber, Ph.D. Dean

TABLE OF CONTENTS

LIST OF TABLES	
VITAvii	
ABSTRACTx	
Chapter 1: The Problem1	
Introduction1	
Statement of the Problem	
Statement of the Purpose4	
Research Questions	ŀ
Significance of the Study5	,
Assumptions of the Study)
Limitations of the Study	5
Definitions of Terms)
Summary	8
Chapter 2: Review of Literature9	
Emotional Quotient	9
Emotional Quotient Elements1	3
Studies Related to Emotional Quotient)
Common Trends in Nursing Leadership22)
. Studies Related to Nursing Leadership	5
Summary)
Chapter 3: Research Methodology	

Introduction
Nature of the Study
Research Questions
Variables measured32
Measurement Instruments
Participants
Ethical Considerations
Data Collection
Validity of the Instrument41
Data Analysis42
Summary
Chapter 4: Findings45
Introduction45
Analysis of Data47
Research Question One47
Research Question Two48
Research Question Three55
Research Question Four
Research Question Five60
Research Question Six66
Research Question Seven70
Chapter 5: Discussion
Restatement of the Problem

Restatement of the Purpose
Summary of the Findings80
Conclusions of the Study84
Conclusion One84
Conclusion Two84
Conclusion Three
Conclusion Four85
Conclusion Five85
Conclusion Six85
Conclusion Seven
Conclusion Summary86
Authors Recommendations and Observations
Recommendations for Further Study
REFERENCES
Appendix A: Emotional Intelligence Appraisal Questions
Appendix B: 2008 Employee Opinion Survey Results
Appendix C: 2009 Employee Opinion Survey Selected Questions results
Appendix D: Emotional Quotient in Nursing Managers survey letter

LIST OF TABLES

Table 1. The Five Components of Emotional Intelligence at work
Table 2. Salovey-Mayer Model
Table 3. Relationship of EQ Research Questions to Variables measured33
Table 4. Relationship of Leaders/Managers to Entity X Sites and Staff
Table 5. Relationship between Research Questions and Analysis Methods used
Table 6. Survey Participant Totals
Table 7. Nurse Manager's EQ scores results
Table 8. Breakdown of Descriptive Statistics by site groupings
Table 9. F-Ratio and p-Values from GLM ANOVA
Table 10. Descriptive Statistics for Employee Opinion Survey Scores
Table 11.Correlation analysis report comparing the Nurse Manager EQresponses as indicated by the Nurse Managers and Clinical Staff, andthe Employee Opinion Survey
Table 12. Correlation report showing Nursing Manager EQ results comparedto the Employee Opinion Survey results
Table 13. Correlation between the Average Perceived EQ of Staff and Employee Opinion Survey

VITA BEVERLEY D. TURNER

EDUCATION:

Diploma of Nursing, February 1974, from Tauranga School of Nursing, Tauranga, New Zealand.

Diploma of Midwifery, June 1975, from St. Helen's School of Midwifery, Auckland, New Zealand.

Master of Arts in Theological Studies, emphasis in counseling. Graduated May 1996 from Bethel Seminary West, San Diego, CA.

Community College Teaching Certificate, University of California, San Diego, 2003

Doctor of Education in Organizational Leadership, Pepperdine University, Los Angeles, June 2010

EXPERIENCE:

January 2008 to present

Senior Staff Development Specialist, Sharp Rees-Stealy (SRS) Medical Centers Responsible for developing the Staff Development department into a functioning and dynamic unit.

Responsible for instituting and managing a Vocational Nursing Education program for staff in conjunction with a local Vocational School.

Specific outcomes include: Developed Precepting Medical Assistants course and Intravenous Therapy and Blood Withdrawal Certification course; management of the process to organize all the Competency Skills into Power Points for computer based training for all clinical staff; management of the annual competency skill requirements for each Clinic site; oversight of student opportunities at clinics; investigation of Educational enhancement opportunities for Nurses and Clinical staff at SRS; write competency training courses. Committees include: chairperson for SRS Nursing Policy and Procedure Committee; SRS Steering Policy and Procedure Committee; Sharp General Nursing Policy and Procedure Committee; Diabetes Steering Committee; Pay 4 Performance initiative - Hypertension in Diabetes committee; Sharp Educators Forum, NetLearning Committee; Urgent Care Supervisors, Patient Care leadership Team, Patient Care Managers.

November 2004 – December 2007 Director of Education, Desert Career College, Palm Springs Director of Vocational Nursing Program Director of Nurse Assistant Training Program As Director of Education responsibilities include: day to day functioning of a Vocational School, management of both administrative and educational staff, supervision of curriculum and syllabi updating, supervision of record keeping, communication with the Company President, staff and faculty meetings, supervision of extern and placement, management of school budget, goal planning, feasibility studies, preparing for new courses, teaching theory and in clinical/labs. Also, communication with State regulatory Boards, such as Department of Health Services (DHS), Bureau for Private Postsecondary Vocational Education (BPPVE) until July 2007, Committee for Dental Axillaries COMDA), and Board of Vocational Nursing and Psychiatric Technicians (BVNPT). During this employment, planned and obtained approval from BPPVE and DHS and accreditation from BVNPT for courses in Medical Assisting, Nurse Assisting, Vocational Nursing and Crime Scene Investigation, and instituted them into the College.

As Vocational Nursing Program Director and Nurse Assistant Training Program Director, planned an approved curriculum, obtained clinical sites, prepared the teaching environment with lectures and teaching media/aids, designed and instituted a fully equipped Nursing Skills Laboratory, and managed the programs with hiring staff and student instruction in preparation for State examinations. NCLEX-PN pass rate of 100% and Nurse Assistant Training Program Certificate pass rate of 100%. Participated in both classroom and clinical teaching environments. Clinical environments included Skilled Nursing Facilities and Acute Medical Surgical floors. Obtained approval for Nurse Assistant Training program examinations on Campus site. Planned, and obtained BVNPT approval for Intravenous Therapy and Blood Withdrawal Course.

Responsible for obtaining Accreditation from the Board of Vocational Nursing and Psychiatric Technicians for the Vocational Nursing Program and Intravenous Therapy and Blood Withdrawal Program. Also responsible for obtaining approval from the Department of Health for, Nurse Assistant Training Program, Home Health Aide Training Program, preparing the curriculum and overseeing the management of the programs.

Prepared a Nurse Refresher and Reentry Program course.

December 2003 – November 2004

Director of Vocational Nursing Program, Maric College, San Diego Responsibilities included interviewing prospective faculty, orienting new faculty, overall visionary for the VN program, implementing leadership and faculty meetings, creating and managing the VN budget, selection of students for the Vocational Nursing Program, transcript analysis for credit granting, Board of Vocational Nursing and Psychiatric Technicians relicensure requirements, overall responsibility and answerability to Board of Vocational Nursing and Psychiatric Technicians for the VN Program, overall responsibility and answerability to Maric College Campus Executive Director and Director of Education, Advisory Board meetings, Public relations within the Health Care community, involvement in obtaining Clinical sites, leadership, team building, feasibility studies, creating and implementing a Lab committee for continuity in the Lab setting among all Nursing programs, counseling faculty and students, graduation Leadership, Maric College Leadership responsibilities.

June 2003 – December 2003

Assistant Program Director of Vocational Nursing Program, Maric College Responsibilities included assuming the role of Interim Program Director for six months. Included interviewing prospective staff and students, transcript analysis for credit granting, administration, VN Board correspondence, VN Board Reaccreditation requirements, Program Director's meetings, Advisory Board meetings, decision making, availability when the Program Director was on leave, involvement with budget making, curriculum review.

November 1998 – December 2003

Lead Instructor for Vocational Nursing at Maric College Responsibility included overall administration of the first semester, staff mentoring and training, interviewing prospective students, management of the VN budget, counseling students regarding personal issues and career opportunities, counseling staff, and teaching. Subjects taught included VN level Anatomy and Physiology, Nutrition, Lifecycle Development, Psychology, Nursing Skills, Pharmacology, Obstetrics and Pediatrics. Overall supervision of faculty and students in long-term care settings during the clinical component of the first semester.

July 1997 – December 1998 Kaiser Permanente, Zion Way San Diego Staff Nurse float on Medical Surgical, Orthopedic, and Prenatal/Gynecology floors.

LICENSES AND CERTIFICATES:

Lean Six Sigma Crucial Confrontations Just Culture Microsoft Advanced Power Point Microsoft Advanced Excel Current CA RN License BLS and ACLS Certificate

MEMBERSHIPS: Awarded "Who's Who among American Teachers" 2004 Phi Delta Kappan National Nursing Staff Development Organization

ABSTRACT

Effective personnel management creates a ripple effect of employee satisfaction or dissatisfaction from the top tiers of leadership through the levels of management, reaching to staff and finally to the client. If staff enjoy their work, colleagues, expectations, experiences and tasks and they have the tools and support needed from their managers and leaders to perform their tasks, they will wish to retain their employment and will also pass on positive attitudes to their clients.

The purpose of this study was to determine the Emotional Quotient of a group of nursing managers at Entity X and to compare the results with an Employee Opinion Survey. The Emotional Quotient survey consisted of a nurse manager self evaluation, and a multi-rater evaluation performed by randomly selected direct report nursing staff.

Emotional Quotient is a concept which is used to describe the ability of an individual to be aware of their feelings, moods and emotions, and to be able to manage them in a positive way. It also includes the ability to be aware of the feelings and emotions of others, and the ability to provide empathy, and skill in managing relationships and building foundations for rapport and communication. The tool used for the survey categorized the Emotional Quotient Competencies into the following groupings: Self Awareness, Self Management, Social Awareness and Relationship Management.

The study showed that the nurse managers at Entity X evaluated themselves at a similar level as each other, with Self Management being the Emotional Quotient competency of most variation. Results from the rater portion of the survey indicated that the direct report staff were in agreement with the nurse manager results and they too

Х

reported a wide variation in the Self Management competency. The results from the Employee Opinion survey comparison indicated that the nurse managers were rated with low scores in the following sections: Encourage Involvement, Staff Recognition and Caring scores.

The study identified that nurse managers at Entity X showed deficiencies in the Emotional Quotient competency of Relationship management. It also identified that in most circumstances, nurse managers effectively exhibit Self Awareness, Self Management and Social Awareness.

Chapter 1

The Problem

Introduction

In today's competitive climate, many healthcare organizations are striving for field excellence. Of great importance to these organizations is the quality measure of employee satisfaction. Satisfied employees will stay at the job for as long as possible. Not only will they stay, but they will recommend their organization to friends and family members needing employment. Staff recruitment and retention is good for business.

Nursing is a huge segment of the healthcare delivery system, participating in large numbers, and is therefore a major contributor to employee satisfaction scores. As with any leader, nursing leaders and managers play a pivotal role in creating and maintaining nursing employee satisfaction. Sturder's (2003) assumption of employee satisfaction is as follows: "When you have the critical mass on board, something magical happens. You have created an organization that is a great place for patients to get care, for physicians to practice medicine, and employees to work" (p. 163).

There is much literature on the qualities nursing managers need to succeed and influence employee satisfaction. Johnson (2008) writes about Emotional Quotient (EQ) and Intelligence Quotient (IQ) referring to nursing managers. She states that EQ is a better "predictor of managerial success than IQ (p.10). Johnson continues, "EQ improves managerial performance by helping the manager create effective relationships, build teams, motivate people, communicate, promote change, and make sound decisions" (p.10). Each of these performances is part of the nursing manager's job description. The nursing manager has a peer team to communicate with and be accountable to and a team

to lead, work alongside, motivate, and be responsible for. Hence, if the manager possesses EQ, Johnson suggests he or she is more likely to be successful in management.

Goleman's (2000) concept of EQ is described as the ability to be aware of and manage feelings that are effectively and appropriately expressed in a personal and social setting. This ability in turn enables people to work together cohesively and smoothly in order to achieve a realistic and common goal.

The present nursing shortage in healthcare delivery systems compounds the need for nurse employee satisfaction. The nursing deficit is predicted to double by 2010 and quadruple by 2015 (Health Resource and Services Administration [HRSA], 2002). This shortage is largely due to a) baby boomer nurses embarking on retirement, b) too few nursing graduates entering the profession, and c) the emergence of alternate job opportunities for nurses. Because of these factors, nursing executives and recruiters are motivated to recruit and retain nurses for the available occupational positions in their facilities. Therefore, it behooves healthcare facilities to ensure their leaders create environments where employees want to pursue individual career goals and enjoy their working assignments and teams. Employee satisfaction leads to employee longevity and low employee turnover, and leaders desire to see both of these factors under their watch because they also lead to patient satisfaction. With these facts in mind, it is imperative that healthcare organizations create an environment that is conducive to retention of staff, particularly nurses.

Statement of the Problem

The healthcare organization that serves as the focus of this study, contracts with a consulting company to conduct and provide annual Employee Opinion Surveys. This

consulting company gathers survey data from employees, interprets the information, and provides feedback to the healthcare organization and its entities. The feedback highlights employee satisfaction or dissatisfaction for particular job codes at each of the organization's sites. Employees are notified annually by mail that the satisfaction surveys are due, and they are encouraged to take part in the survey. The survey is located online for participant convenience.

Improvement plans are required from managers if employee satisfaction scores are low. If the scores are high, reward and recognition are provided to the managers and staff for their successful and positive services and the interactions they have within their work environment.

Under the umbrella of the healthcare organization for this study are numerous entities which include hospitals and medical clinic sites. For the purpose of this study, data was collected from Entity X. This study focused on the EQ of site Nursing Managers as perceived by themselves and by registered nurses and licensed vocational nurses who report directly or indirectly to the site managers. The resultant EQ data was compared to the results of the management and engagement questions of the 2009 Employee Opinion Survey for that specific manager site.

The research focus for this study was formulated from the following questions: If a nursing manager perceives levels of EQ in his or her leadership or management style, do the registered nurses and licensed vocational nurse employees, who are their direct or indirect reports, perceive those levels of EQ in their nursing managers? Could the level of EQ that nursing managers possess influence the result of an employee opinion survey?

Statement of the Purpose

The purpose of this study was three-fold. Firstly, to determine and compare the EQ scores of nurse managers at Entity X as reported by nurse managers and their direct and indirect reports. Secondly, to determine the "Employee Opinion Survey" scores of nurse managers at Entity X from the 2009 Employee Opinion Survey and evaluate if those scores are related to the differences in EQ scores of nurse managers as perceived by nurse managers and their direct and indirect reports. Thirdly, to determine if there is a relationship between "Employee Opinion Survey" scores and the EQ scores of nurse managers at Entity X as perceived by nurse managers and their direct and indirect reports.

Effective personnel management creates a ripple effect of employee satisfaction or dissatisfaction from the top tiers of leadership through the levels of management, reaching to clinic staff and finally, to the client. If clinic staffs are enjoying their work, colleagues, expectations, experiences, and tasks and they have the tools and support needed from managers and leaders to perform their tasks, they will wish to retain their employment and will also pass on positive attitudes to their patients. It follows then that when the annual survey is distributed, the employees should grade the specific questions about their Entity X clinic sites positively, which will result in high employee satisfaction scores.

Research Questions

The data gathered from this study was used to identify the overall level of EQ evidenced in Entity X's nursing manager leadership. The information was gathered by a survey and measured against the survey evaluation tool. Once the data was collected, it

was compared with the results of the 2009 Employee Opinion Survey. The following seven research questions inform this study:

- *Research Question 1:* What are the EQ scores of nurse managers at Entity X?
- *Research Question 2*: What are the EQ scores of nurse managers at Entity X as perceived by their clinical staff reports?
- *Research Question 3*: Is there a difference in EQ scores of nurse managers as perceived by their clinical staff reports?
- *Research Question 4:* What are the "Employee Opinion Survey" scores of nurse managers at Entity X as perceived by their clinical staff reports?
- *Research Question 5:* Is there a relationship between the differences in EQ scores of nurse managers as perceived by nurse managers and their clinical staff reports and the "Employee Opinion Survey" scores of nurse managers?
- *Research Question 6:* Is there a relationship between the manager EQ scores and the "Employee Opinion Survey" scores at Entity X?
- *Research Question 7:* Is there a relationship between EQ scores as perceived by their clinical staff reports and the "Employee Opinion Survey" scores of nurse of nurse managers at Entity X?

Significance of the Study

By identifying the level of EQ in the nursing managers, the nursing leadership will be able to evaluate whether further leadership training and instruction are necessary at this level of performance. Additional training would focus on improvement of employee satisfaction scores and maintenance of higher levels of employee retention and acceptable professional work attitudes.

Assumptions of the Study

Three basic assumptions guide the execution of this study:

- *Assumption 1*: It is assumed that the participants are willing to participate in this study.
- *Assumption 2*: It is assumed that the participants are part of Entity X's nursing leadership structure.
- *Assumption 3:* It is assumed that the participants will be honest as they complete the survey questions on the instrument.

Limitations of the Study

The following five factors were determined to be limitations:

- *Limitation 1*: The study is limited to Entity X's 2009 licensed nurse team.
- *Limitation 2*: The study is limited to the opinions of each member of the licensed nurse team who participated in the study.
- *Limitation 3*: The study is limited to individual participants' varied backgrounds of experience; for example, participants have been registered nurses or licensed vocational nurses for between 5 to 40 years.
- *Limitation 4*: Given that most of the participants are women, there may be a gender bias.
- *Limitation 5:* Given that there are several ethnic backgrounds of the participants, there may be an ethnic bias.

Definition of Terms

For the purpose of this study, the terms *clinical staff reports* refers to registered nurses, and licensed vocational nurses who report directly or

indirectly to the manager being evaluated.

For the purposes of this study, the terms *emotional intelligence* and *emotional quotient* have the same meaning; thus, the term *emotional quotient* will be used. Goleman (1998b) states the following definitions:

Goleman (1998b) defines *self awareness* as, "Knowing one's internal states, preferences, resources, and intuitions. Recognizing one's emotions and their effects; knowing one's strengths and limits; a strong sense of one's self-worth and capabilities" (p. 26).

Goleman (1998b) believes *self regulation* to include "Managing one's internal states, impulses, and resources. Keeping disruptive emotions and impulses in check; maintaining standards of honesty and integrity; taking responsibility for personal performance; flexibility in handling change; being comfortable with novel ideas, approaches, and new information" (p. 26).

According to Goleman (1998b), *motivation* derives from "Emotional tendencies that guide or facilitate reaching goals. Striving to improve or meet a standard of excellence; aligning with goals of the group or organization; readiness to act on opportunities, persistence in pursuing goals despite obstacles and setbacks" (p. 26).

Empathy can be understood as an:

Awareness of other's feelings, needs, and concerns. Sensing others' feelings and perspectives, and taking an active interest in their concerns; sensing others' development needs and bolstering their abilities; anticipating, recognizing and meeting customers' needs; cultivating opportunities through different kinds of

people, reading a group's emotional currents and power relationships (Goleman, 1998b, p. 27).

Finally, the author interprets *social perception* as:

Adeptness at inducing desirable responses in others. Wielding effective tactics for persuasion; listening openly and sending convincing messages; negotiating and resolving disagreements; inspiring and guiding individuals and groups; initiating or managing change; nurturing instrumental relationships; working with others toward shared goals; creating group synergy in pursuing collective goals (Goleman, 1998b, p. 27).

Summary

This chapter defined the problem of a nursing shortage and the opportunity for healthcare organizations to identify the level(s) of EQ in their nursing management, which has an impact on the nursing employee satisfaction scores. Study assumptions, limitations, and term definitions were also discussed.

Chapter 2

Review of Literature

"Great leaders move us. They ignite passion and inspire the best in us. When we try to explain why they are so effective, we speak of strategy, vision and powerful ideas. But the reality is much more primal: Great leadership works through the emotions."(Goleman, Boyartzis & McKee, 2002, p. 3)

Schwartz (2000), contributing editor for Fast Company and author suggested that the development of *emotional competence* is a personal quality of utmost importance that helps enable a person to effectively manage his or her emotions. He also suggested that a person who is able to manage emotions will be better equipped to do so when under pressure.

Emotional Quotient

According to Kooker, Shoultz, and Codier (2007), EQ is "emerging as an influential framework in a wide range of professional arenas, including psychology; neuroscience; health psychology; developmental cognition; primary, secondary, and advanced education; clinical health practice; counseling; industrial and organizational psychology; organizational development; and business management" (p.31). EQ has been and continues to be a studied topic in areas such as "leadership, performance, workforce issues, healthcare industry, gender differences, and nursing" (Kooker et al., 2007, p.31)

Over time, experts have written much about the aspect of leadership that does not depend on academic learning but instead on awareness of the emotional attributes built within the human organism. Goleman (1998a) calls these emotional attributes the *emotional quotient* and suggests the attributes include self awareness, self management,

motivation, empathy, and social skill (p. 84). Bar-On (2007), and Salovey and Mayer (2004) are other experts in the field who have followed the concept of emotional quotient and added an array of meanings. Their meanings are also described briefly further in this study.

Although recently penned as terminology, the concept of EQ has long been studied. Early work in this field of discovery includes the findings of McGregor (1985), a social psychologist who identified two differing motivational domains, labeled Theory X and Theory Y. McGregor describes Theory X in terms of a leader/manager that does not form relationships with his or her workers but instead coerces, controls, or threatens them with punishment in order to get the work done. Theory Y, however, describes a leader/manager that builds relationships with their workers and creates an atmosphere of communication, which leads to greater productivity in the workplace. McGregor's Theory Y leader is one that evidences attributes of emotional quotient such as self awareness, empathy, social awareness, and management.

McGregor's (1985) assumptions for Theory X were as follows:

- The average human being has an inherent dislike of work and will avoid it if he can (p. 33);
- Because of this human proclivity to dislike work, most people must be coerced, controlled, directed, or threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives (p. 34); and
- The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, and wants security above all (p. 34).

McGregor identified the following assumptions for Theory Y:

- The expenditure of physical and mental effort in work is as natural as in play or rest (p. 47);
- External control and the threat of punishment are not the only means of motivating effort toward organizational objectives. Man will exercise selfdirection and self-control in the service of objectives to which he is committed (p. 47);
- Commitment to objectives is a function of the rewards associated with their achievement (p. 47);
- The average human being learns, under proper conditions, not only to accept but to seek responsibility (p. 48);
- The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population (p. 47); and
- Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized (p. 47).

By observing the differences between Theory X and Theory Y, it is clear that Theory X is essentially negative and Theory Y is essentially positive. Robbins (2005) suggested that McGregor held to the assumption that Theory Y ideals were more valid than those of Theory X. Robbins stated that Theory Y "proposed ideas such as participation in decision making, responsible and challenging jobs, and good group relations as approaches that would maximize an employee's job motivation" (p.50).

Emotional Quotient Elements

A variety of foundational elements for emotional quotient have been proposed by numerous experts in the field. This study will discuss descriptions of emotional quotient elements and functioning determined by Goleman (1998a), Salovey and Mayer (2004), and Bar-On (2007).

For Goleman, (1998b) EQ comprises emotional components that are integral to professional advancement: "In the new workplace, with its emphasis on flexibility, teams, and a strong customer orientation, this crucial set of emotional competencies is becoming increasingly essential for excellence in every job and in every part of the world" (p. 29). EQ includes the management of feelings that are effectively and appropriately expressed and enable people to work together smoothly in order to achieve a realistic and common goal.

Goleman (1998b) describes the five domains of EQ as self-awareness, selfregulation, motivation, empathy, and social skills – with specific competencies. Table 1 itemizes these domains with their accompanying competencies.

Goleman's (1998a) description of the Self Awareness domain includes the notion that a person has understanding of their emotions, strengths, weaknesses, needs, and drives. He thus concluded that this type of person is "neither overly critical nor unrealistically hopeful. Rather, they are honest – with themselves and with others" (p.84) and can "recognize how their feelings affect them, other people, and their job performance" (Goleman, 1998a, p.84).

Table 1

Competency	Definition	Hallmarks
SELF- AWARENESS	The ability to recognize and understand your moods, emotions, and drives, as well as their effect on others	 Self confidence Realistic self- assessment Self-deprecating sense of humor.
SELF- REGULATION	The ability to control or redirect disruptive impulses and moods. The propensity to suspend judgment – to think before acting.	 Trustworthiness and integrity Comfort with ambiguity Openness to change
MOTIVATION	A passion to work for reasons that go beyond money or status. A propensity to pursue goals with energy and persistence.	 Strong drive to achieve Optimism, even in the face of failure. Organizational commitment
EMPATHY	The ability to understand the emotional makeup of other people. Skill in treating people according to their emotional reactions.	 Expertise in building and retaining talent. Cross cultural sensitivity. Service to clients and customers.
SOCIAL SKILL	Proficiency in managing relationships and building networks. An ability to find common ground and build rapport.	 Effectiveness in leading change. Persuasiveness Expertise in building and leading teams.

The Five Components of Emotional Intelligence at work. (Goleman, 1998a, p.88)

Goleman (1998a) identifies self awareness as "candor and an ability to assess oneself realistically" (p.85) and he suggests that higher self awareness allows people to "speak accurately and openly – although not necessarily effusively or confessionally – about their emotions and the impact they have on their work…a hallmark of self awareness is a self deprecating sense of humor" (p. 85). He posits that self awareness can also be identified during performance reviews, in that a self aware person knows his or her strengths and weaknesses and desires constructive criticism in order to make adjustments to improve their performance and relationships.

According to Goleman (1998a), self awareness can be recognized by self confidence. He describes a self aware person as one who understands their capabilities and is more likely to ask for help if overstretched on assignments. When a self aware person takes a risk on the job, it is a calculated risk.

While we cannot do away with the biological impulses that drive our emotions, we can do much to manage them. Self-regulation, which Goleman (1998a) described as "an ongoing inner conversation, is the component of EQ that frees us from being prisoners of our feelings" (Goleman, 1998a, p.85). Signs of emotional self-regulation include "a propensity for reflection and thoughtfulness; comfort with ambiguity and change; and integrity – an ability to say no to impulsive urges." (Goleman, 1998a, p.86) Dealing with this domain, Goleman (p. 86) asks, "Why does self regulation matter so much for leaders?" He answers this question with two ideas:

People who are in control of their feelings and impulses – that is, people who are reasonable – are able to create an environment of trust and fairness. In such an environment, politics and infighting are sharply reduced and productivity is high. Talented people flock to the organization and aren't tempted to leave. And self-regulation has a trickledown effect. No one wants to be known as a hothead when the boss is known for her calm approach. Fewer bad moods at the top mean fewer throughout the organization. (p.86)

Secondly, "self regulation is important for competitive reasons... it enhances integrity, which is not only a personal virtue but also an organizational strength" Goleman (1998a, p.86).

Motivation is described as being the "trait that virtually all effective leaders have." Goleman (1998a, p.88) While achievement is the outcome of motivation, creativeness, passion, energy, love for life are the forces which drive the motivation.

In discussing the domain of empathy, Goleman (1998a) suggests this is the easiest emotion to recognize because it involves "thoughtfully considering employees' feelings – along with other factors – in the process of making intelligent decisions" (p.89). He further discusses empathy as a component of leadership because of the "increasing use of teams; the rapid pace of globalization; and the growing need to retain talent" (p.89).

Considering the leader's need for empathy, Goleman (1998a) suggests that it is of great value in the retention of staff, which is a particular concern in today's information economy:

Leaders have always needed empathy to develop and keep good people, but today the stakes are higher. When good people leave, they take the company's knowledge with them. That's where coaching and mentoring come in. It has repeatedly been shown that coaching and mentoring pay off not just in better performance but also in increased job satisfaction and decreased turnover. (p.90)

Goleman (1998a) proposes that the first three components of EQ are self management skills. The last two, which are empathy and social skill, concern a person's ability to manage relationships with others. Social awareness is not just a matter of friendliness, but a matter of friendliness with a purpose: moving people in the direction

the leader or manager desires. Goleman (1998a) reasons, "socially skilled people tend to have a wide circle of acquaintances, and they have a knack for finding common ground with people of all kinds...such people have a network in place when the time for action comes" (p.90).

To Goleman (1998a), social skill is "the culmination of the other dimensions of EQ" (p.90). He concludes this after observing that when people are effective at managing their own emotions and can empathize with the feelings of others, they can effectively manage relationships. He suggests that achievers tend to be optimistic even when they succumb to setbacks or failures: "When people are upbeat, their 'glow' is cast upon conversations and other social encounters. They are popular, and for good reason" (p.90).

When asked whether empathy is innate or learned, Goleman at al. (2002) answered:

both... [there is] a genetic component to EQ, to be sure, but nurture plays a major role as well. Although people may differ in the initial level of their natural abilities, everyone can learn to improve, no matter where he or she starts out (p. 97).

The authors cite research showing that great leaders are made as they gradually acquire, in the course of their lives and careers, the competencies that make them so effective:

We find that over the course of a career, people tend naturally to develop more strength in EQ competencies – they get better with age. This shows up not just in better self evaluations as people get older, but – more convincingly – in others' evaluations of them, which also improve over time (p.101).

To measure EQ using Goldman's model, a number of survey tools have been created. Two examples of survey tools include the Emotion Social Competency Inventory (ESCI) from the Hay Group, and the Emotional Intelligence Appraisal[™] from TalentSmart[®]. Measurement findings are similarly categorized as Self-awareness, Selfmanagement, social awareness and relationship management.

Salovey and Mayer (2004) contend that EQ is "the ability to perceive and express emotions, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in the self and others" (Salovey, 1997, p. 11). They suggest that by monitoring feelings and emotions, a person can use this information to guide his or her thinking and actions.

The authors include reasoning, self control, zeal, persistence and the ability to motivate oneself in the concept of emotional quotient, along with rational and logical thinking and action within the person's environment. They discuss their view of emotions as a group of responses (psychological, physiological, cognitive, motivational and experimental) that interconnect and cross over neurological pathways. This view includes the expected positive or negative response to an event as well as a response that has the potential to transform personal and/or social connections into a positive, valuable, experience.

Salovey (1997) notes that since the eighteenth century, psychologists have recognized an influential three-part division of the mind into cognition (thought), affect (including emotions), and motivation (conation). The cognitive sphere houses such functions as human memory, reasoning, judgment, and abstract thought. EQ is typically

used by psychologists (and those who came before) to characterize how well the

cognitive sphere functions.

To measure EQ using the Salovey-Mayer model, the Mayer, Salovey, Caruso

Emotional Intelligence Test (MSCEIT) has been created. This tool measures emotional

skills in "an objective way through the use of ability, performance, or knowledge tests."

(Caruso & Salovey, 2004. p. 74)

Table 2

Salovey-Mayer Model (Salovey, Brackett & Mayer, 2004, p.88)

Perception and Expression of Emotion

- * Identifying and expressing emotions in one's physical states, feelings, and thoughts.
- * Identifying and expressing emotions in other people, artwork, language, etc.

Assimilating Emotion in Thought

* Emotions prioritize thinking in productive ways.

* Emotions generated as aids to judgment and memory.

Understanding and Analyzing Emotion

- * Ability to label emotions, including complex emotions and simultaneous feelings.
- * Ability to understand relationships associated with shifts of emotion.

Reflective Regulation of Emotion

- * Ability to stay open to feelings.
- * Ability to reflectively monitor and regulate emotions to promote emotional and intellectual growth.

Bar-On (2007) describes emotional quotient as an "array of noncognitive

capabilities, competencies, and skills that influence one's ability to succeed in coping

with environmental demands and pressures." (p.1) Bar-On's model of emotional

quotient was designed to determine why some individuals are more able to succeed in

management and/or life situations than others. He reviewed psychological literature of

personality characteristics that tend to be present with personal success, and then he proceeded to identify five areas of functioning that are related to personal success: intrapersonal, interpersonal, stress management, adaptability, and general mood (p.1). Within these areas of functioning are 15 competencies, skills, and facilitators:

- *Intrapersonal Skills:* emotional self-awareness, assertiveness, self regard, self actualization and independence;
- Interpersonal Skills: interpersonal relationships, social responsibility and empathy;
- Adaptability Skills: problem solving, reality testing and flexibility;
- Stress Management: stress tolerance and impulse control; and
- *General Mood:* happiness and optimism (p.2).

Considering the elements described, it is clear that there are common threads of consensus in each of the definitions. The consensus suggests that the concept of EQ includes knowledge of self, regulation or management of self, social adeptness, and perception of others' needs and/or feelings.

Bar-on (2007) uses the Emotional Quotient Inventory (EQi) survey tool to measure EQ for his model. This survey tool has been developed to measure each of the competencies, skills and facilitators described in the Bar-On EQ model.

Studies Related To Emotional Quotient

In South Africa, following the cessation of the apartheid movement, for survival, businesses were forced to "break away from their apartheid environment and respond to globalization suddenly rather than gradually." (Vrba, n/d, p. 3) Naturally, there became a need for leaders who could survive in this demanding, challenging and changing

environment. Vrba performed an exploratory study to investigate EQ and Transformational leadership behaviors in a group of first-line managers who were enrolled in a business management course at a certain university.

Both the Multifactor Leadership Questionnaire (MLQ) and the Emotional Intelligence AppraisalTM (EIA) survey tools were used. Fifty-three managers and 303 multi-rater respondents participated. The MLQ measured Transformational leadership behaviors, and the EIA measured EQ characteristics. Demographic information was also identified and compared with the MLQ and EIA results.

Vrba (n/d) reported that the resultant data provided discussion in all areas of the EQ model which the EIA identifies, and all areas of Transformational, Transactional and Laissez-faire leadership which the MLQ identifies. The overall results confirmed the following information, "the higher the first-line manager scored on emotional intelligence subscales, the higher they scored on the transformational leadership subscales." (Vrba, p. 21) A 'cautious' suggestion was noted from the conclusion indicating that the EQ skills "exhibited by would-be managers may be an indication of their potential to exhibit transformation leadership behavior once they have been promoted to leadership positions." (Vrba, p. 21)

Ralph Larsen, CEO of Johnson and Johnson, initiated a study to identify EQ competencies in the corporate world. It was designed for high-potential midcareer executives of the Johnson & Johnson company. These executives were managers who had demonstrated early success in the company; in all, 358 employees were evaluated. The sample was fairly balanced, including 45% women, and the cultural mix was global, representing all continents. Researchers evaluated these managers using leadership

competencies established in the Emotional Competency Inventory (ECI), a 360-degree measure of emotional intelligence in leadership (Goleman et al., 2002, p. 37). The outcome data showed that not all of the executives surveyed exhibited the competencies of EQ; however, the high-potential group did exhibit most of them. The researchers concluded that cross-cultural differences made no impact on EQ in leadership.

Professors Dulewicz and Higgs (2003) performed a study the United Kingdom to evaluate EQ competency at the typical top level of organizations, the board of directors. The study focused on the input, process, and output tasks that board members are expected to carry out. Seventy-four "change leaders" were assessed using a Change Leadership Competency Questionnaire and the Emotional Quotient Inventory. Participants were grouped into the categories Chairman, CEO, Executive, and Non-Executive Directors (NED). The Emotional Quotient Inventory assessed the areas of self awareness, emotional resilience, motivation, interpersonal sensitivity, influence, intuitiveness, and conscientiousness. The resulting data listed the Chairman as having the highest level of EQ, followed by the CEO, the NEDs, and lastly, the Executives. CEOs evidenced the highest level for motivating others, while the NEDs showed the lowest level. The results seemed to prove a greater need for those in positions of Chairman and CEO to evidence EQ characteristics. For CEOs, the results confirmed the importance of all the EQ competencies for this role (Dulewicz & Higgs).

Bradberry and Su (2004) performed a study to evaluate if each aspect of EQ as measured by the Emotional Intelligence Appraisal[™] (EIA) would indicate any variance in predicting management performance (p.9). Leaders from three differing vocational groups were recruited to participate in the survey. Altogether 212 mid-level and

executive level leaders participated. The MR Edition[™] (MR) raters were supervisors, peers and subordinates. The leaders also took the MSCEIT and EIA-MR self tests.

Resultant information showed that the EIA-MR data corresponded to the leader's job performance, whereas the MSCEIT was not. Of the four elements of EQ in the TalentSmart® model, relationship awareness was not related to job performance, however, relationship management was the most important element for job performance. The surveyors concluded that there was not much difference between EIA and MSCEIT which could mean that both tests measure different variables. Also, the surveyors concluded that managing relationships is the social skill which impacts performance and probably the most important skill of a leader.

These studies identify the concepts of EQ and are in agreement with the work and conclusions of Goleman (1998a), Salovey and Mayer, (2004) Bar-On (2007) and other researchers in this field.

Common Trends In Nursing Leadership

Leadership is an essential part of any organization, whether it is for profit, not for profit, or in a business context, a caring community context, or any organization. Leadership is the ability to encourage, motivate, and influence others to work together and achieve a common goal. Basic functions of a leader include organization, delegation, communication, coaching, direction, dreaming, directing vision, and being a role model: Blanchard and Player (2008) argued that "Leadership is the activity of influencing people to strive willingly for group objectives" (p.90).

Within a hospital setting, nursing leadership encompasses a vast array of situations and opportunities from administration of sites or departments to leading

studies, teams, or focus groups. Outside of a hospital setting nurse leaders are found in schools, public health, healthcare clinics, the Armed Forces, educational facilities, and more.

Individual healthcare organizations have chosen leadership models to suit their particular nursing leadership philosophies; hence, a variety of models have been adopted, including transformational leadership, transactional leadership, situational leadership. A brief explanation of these leadership styles follows.

Northouse (2004) suggests that transformational leadership is the most productive end of the leadership continuum, with transactional leadership in the middle and *laissezfaire* leadership at the least productive end. Transformational leadership is based on the premise that the motivating forces for leadership are: idealized influence charisma, inspirational motivation, intellectual stimulation, and individualized consideration. "While transactional leadership results in expected outcomes, transformational leadership results in performance that goes well beyond what is expected" (p. 177). The focus of transformational leadership is on the performance and development of the followers to their fullest potential.

In transactional leadership, the leader has control over the resources and "makes a deal" or "exchange things of value" (Northouse, 2004, p. 178) with the followers in order to see the transaction through to the expected end or goal. Conversely, laissez-faire leadership (passive/avoidance behavior) has a "hands-off and let-things-ride" premise (Northouse, 2004, p. 179) and is seen as the misapplication of delegation. The leader "abdicates responsibility, delays decisions, gives no feedback, and makes little effort to help followers satisfy their needs" (Northouse, 2004, p. 179).

Within the situational leadership model, Hersey, Blanchard, and Johnson (1996) use four levels of leadership behaviors and four levels of team readiness to lead and evaluate team growth and effectiveness. The four behavioral levels in the situational leadership model are authoritative, consultative, facilitative, and delegative. The model also includes levels of team readiness, which describes the extent to which team members are "Unable and unwilling or insecure, unable but willing and confident, able but unwilling and insecure, or able and willing or confident" (Hershey, et. al., p. 439). The *authorative* level leader "makes the decisions and provides specific instructions" (p. 439). In this situation, the leader guides a team that is not taking initiative to think for themselves. Often the team is unwilling and unable or willing and unable. The *consultative* leader "makes and explains decisions and provides opportunity for dialogue and clarification" (p. 439). In this situation, the leader guides a team that is often willing and unable, willing and able or unwilling and able. The *facilitative* leader "shares the problem and mutually makes decision with followers" (p. 439). Here, the leader guides a team that is often willing and unable or willing and able. Finally, the delegative leader "turns the responsibility for the decision over to the follower(s)" (p. 439). This situation involves a team that is willing and able.

No matter what style is chosen, the motivating and essential feature of leadership is the effectiveness and ability of a leader to create a working milieu where staff members/employees are productive and satisfied in their jobs and positively contribute to the mission of the organization.

Studies Related To Nursing Leadership

Failla & Stichler, (2008) performed a descriptive study to discover the effect of transformational leadership style of nursing managers' job satisfaction. The researchers expected to find higher employee satisfaction as a result of transformational leadership style than as a result of transitional or laissez-faire leadership style.

The study included 92 participants - 15 managers and their staff. The managers surveyed had been in their positions for at least 6 months and had at least three direct reports. The results of the study indicated that the managers rated themselves on a higher level of transformational leadership style than the followers or direct reports; however, the data demonstrated that there were "significant correlations between transformational leadership style and autonomy, professional status and organizational policies" (Failla & Stichler, 2008, p.485). The results indicated that "leadership styles positively affect nurse/employee job satisfaction" (Failla & Stichler, p.485). The researchers noted that these results agreed with other studies performed previously, and the new data suggested that the "nurse managers perceived themselves to be transformational when in fact their subordinates [followers] did not have the same perception" (Failla & Stichler, p.485).

Raup (2008) performed a nursing leadership study, researchers examined leadership styles of Emergency Department (ED) nurse managers and their impact on nurse turnover and patient satisfaction. Nurse managers were asked to complete a Multifactor Leadership Questionnaire along with another research questionnaire that identified the nurse managers' roles and practices. In all, 15 managers and 30 staff nurses were surveyed. This sample represented 15 out of a possible 98 identified health centers that asked to be involved.

The questionnaire results showed attributes of transformational leadership in a high percentage of the nurse managers who were older, had more years of nursing experience, and had held the management position for a lengthy time. The younger managers with fewer years of nursing or nurse management experience exhibited attributes of transitional leadership. There was also a trend for lower staff turnover with the transformational leaders than for the transitional leaders; however, patient satisfaction was not affected by either of the leadership styles (Raup, 2008).

In a qualitative study, Kooker et al., (2007) conducted research on a variety of stories nurses had written for a previous study. The researchers selected 16 of the nurses' stories and asked, "Is there evidence in the stories of professional practice that reflect the competencies of emotional intelligence as it relates to improved process and outcomes for patients/clients and nurses?" (Kooker et al., pp.30-31). Their study utilized Goleman's (1998a) EQ domains, which are explained further in this writing. According to the results of the study, the nurses' stories established that "social awareness was the most commonly demonstrated domain" (Kooker, et al., p.33). The study showed that the nurses were aware of their strengths and weaknesses and had a sense of their self worth. Their stories showed evidence of "empathy, recognizing patient/client needs," (Kooker, et al., p.22) which demonstrated the social awareness domain. The self-management domain was demonstrated through "self-control, adaptability, initiative and conscientiousness" (Kooker, et al., p.33), and the social/relationship management domain was demonstrated by evidencing that the nurse "nurtured relationships, used personal influence, and acted as change agencies" (Kooker, et al., p.34). One conclusions of this

study was that emotional competence screening should be part of a pre employment practice for employment situations and preadmission practice for educational situations.

Vitello-Cuccui (2003) performed a study on 50 nurse leaders, examining EQ and leadership practices of eleven nurse leaders who scored high and three who scored low, so the researchers interviewed both groups in order to identify their habits, which developed their levels of EQ. They did not interview the 36 respondents who scored in the middle of the data statistics. The researchers found that those who scored high enjoyed reading "self-help books (90%) and engaged in meditative practices (72%) as methods of managing their emotions" (Vitello-Ciccui, p.30). The high performers' scores also suggested that they chose to not take things personally, employed stress management techniques, and expressed empathy often. Additionally, researchers found that the high performers "maintained heightened awareness of self and others in comparison to those who scored lower" (p.30). The results indicated that higher levels of EQ enable leaders to "analyze the emotional side of issues, anticipating how people will react and creating programs that will assist staff with the emotional impact of work-related issues" (p.31).

Another descriptive study was performed at a Magnet status hospital in Florida, for the purpose of evaluating nurses' views on the characteristics of an effective leader. Four project nurses (out of a total 40) were selected to conduct one-on-one interviews. During the interview, the researchers paid specific attention to the use of key words from a list of characteristics they had developed through literature review and brainstorming. The researchers also asked the interviewees to rank the list of characteristics in order of importance, and according to their responses, the key words related to the characteristics of an effective leader include: "Communication, Delegation, Flexibility, Knowledge,

Motivation, Participative partnership, Proactive, Role model, Sets objectives" (Feltner, Mitchell, Norris, & Wolfe, 2008, p.364).

The overall conclusion of the project team was that the data collection was of a subjective means. Therefore, the researchers decided to implement another stage to the study and collect objective information. For this stage, the project team created a list of characteristics based on the data collected from the first study and asked 70 registered nurses to rank the characteristics in order of importance.

Thirty-seven completed surveys were returned and the data were analyzed to show the following ranking from highest to least importance: "communication skills, fairness, job knowledge, role model, dependable/participative partnership, confidence/positive attitude, motivating, delegation/flexibility, compassionate/employee loyal/sets objectives" (Feltner et al., 2008, p.367). The overall outcome of the study was that "most participants found it difficult to rank the listed characteristics because a good leader ideally should possess all the identified characteristics or, at the least, a majority of them" (Feltner et al., p. 371).

Researchers at a healthcare institution in Sweden focused on identifying the relationship of nursing managers and staff turnover with respect to the intervening variables work climate and job satisfaction. The sample population included 77 nurse managers who were responsible for a budget, had more than ten direct reports, had managed the unit for at least 6 months, and had not given a resignation notice to HR. The total number of survey participants was 426 registered nurses, nurse assistants, and administrative staff. The survey questionnaires evaluated leadership behavior, work climate, and job satisfaction. Some of the surveys had been prepared by the study's co-

authors. Results indicated that turnover rates differed between units; however, the overall correlated results showed no statistical evidence of a relationship between leadership dimensions and staff turnover (Sellgren, Ekvall, & Tomson, 2007).

Gunther, Evans, Mefford, and Coe (2007) studied the "relationship between leadership styles and empathy among student nurses" (p.196). Their concern was about the future of nursing leadership and the lack of interest observed in student nurses regarding leadership. The researchers sampled junior- and senior-level nursing students in a Bachelor of Science in Nursing program. Students were evaluated with the Hogan Empathy Scale (HES), Emotional Empathy Tendency Scale (EETS), and the Multifactoral Leadership Questionnaire (MLQ). All told, 92 junior student nurses and 86 senior student nurses took part in the survey. The resulting data evidenced from the HES and MLQ showed that the junior student nurses demonstrated weak positive measurements for "transformational components of inspirational motivation, intellectual stimulation," (p. 199) with a weak component in laissez-faire leadership. From the resulting data evidenced from the HES and EETS scores, the senior student nurses demonstrated a weak positive with transformational leadership in both surveys. The seniors preferred the transformational leadership style and "scored higher in the cognitive empathy than the junior year students" (p. 200).

The prevalent result threads of these studies indicate the following:

• In some cases nurse managers' perceptions of their leadership style was transformational, but their followers did not agree;

- Older nurse managers with more experience in leadership and management were more apt to exhibit transformational leadership styles than the younger, less experienced nurse managers, who exhibited transactional leadership styles;
- Patient satisfaction results were not affected by the transformational or transactional leadership styles; the satisfaction levels stayed the same;
- Nurses possess emotional quotient domains;
- One study outcome indicated the potential benefit of evaluating all new employees for EQ levels prior to hiring them;
- High performers chose not to take "things" personally, choosing to use stress management and express empathy regularly; and
- The higher EQ leader analyzes the emotional facet of issues and anticipates how to manage them.

Summary

The literature review began with a description of the Emotional Quotient, describing early concepts suggested by McGregor (1985). Emotional Quotient elements were discussed through the eyes of Goleman (19981&b), Salovey and Mayer (2004), and Rueven Bar-On (2007). A brief description was made from studies which are related to Emotional Quotient, with the use of various evaluation tools, including ESCI 3.0. Building further, common trends in nursing leadership were discussed with focus on studies related to nursing leadership. The chapter concluded with a review of relevant nursing management studies and a discussion of how EQ looks in a leadership role.

Chapter 3

Research Methodology

Introduction

The purpose of this chapter is to describe the design of the study and the specific methods that were used for data collection and data analysis. The chapter includes a description of the nature of the study, research questions, measurement instrument, participants, ethical considerations, data collection, validity of the instrument, data analysis, and concludes with an overall summary of the process.

Nature of the Study

This study was descriptive and comparative in nature. In a descriptive study, data are gathered from subjects and organized into a set of numbers. The numbers are used to measure and analyze the data to create statistics such as the mean, standard deviation, skewed results and more. In a comparative study, an investigation is made and the resultant data compares the relationships between two or more groups of data. These two designs were chosen for this study because they best manage the purposes and goals of the study. The data was gathered and compiled to evaluate the results of each Entity X-participating site and compared with the healthcare organization's 2009 Employee Opinion Survey results for those sites.

Research Questions

As previously stated in Chapter 1, the research questions for the study were:

- *Research Question 1:* What are the EQ scores of nurse managers at Entity X?
- *Research Question 2*: What are the EQ scores of nurse managers at Entity X as perceived by their clinical staff reports?

- *Research Question 3*: Is there a difference in EQ scores of nurse managers as perceived by their clinical staff reports?
- *Research Question 4:* What are the "Employee Opinion Survey" scores of nurse managers at Entity X?
- *Research Question 5:* What are the "Employee Opinion Survey" scores of nurse managers at Entity X as perceived by their clinical staff reports?
- *Research Question 6:* Is there a relationship between the differences in EQ scores of nurse managers as perceived by nurse managers and their clinical staff reports and the "Employee Opinion Survey" scores of nurse managers?
- *Research Question 7:* Is there a relationship between EQ scores and the "Employee Opinion Survey" scores of the nurse manager at Entity X?
- *Research Question 8:* Is there a relationship between EQ scores as perceived by their clinical staff reports and the "Employee Opinion Survey" scores of nurse managers at Entity X?

Variables Measured

The research questions and survey tools were designed and chosen to measure the following variables:

- The nursing manager's self-awareness, self-management, social awareness and relationship management as perceived by themselves and also as perceived by their clinical staff reports.
- The differences between the scores reported by the nursing managers and clinical staff reports regarding the nursing manager's self-awareness, self-management, social awareness and relationship management.

- The "Employee Opinion Surveys" for Entity X, which include communication, commitment, timely response, best performance, decision involvement, excellence in service, recognition and caring scores.
- The difference between the "Employee Opinion Surveys" and actual management behaviors as perceived by the clinical staff reports.

Table 3

elationship of EQ Research Questions t	o Variables measured
Research Questions:	Variables Measured:
Research Question 1: What are the EQ scores of nurse managers at Entity X? Research Question 2:	 Nursing manager's self awareness. Nursing manager's self management. Nursing manager's social awareness. Nursing manager's relationship management.
What are the EQ scores of nurse managers at Entity X as perceived by their clinical staff reports?	 Nursing manager's self awareness score as perceived by their clinical staff reports. Nursing manager's self management as perceived by their clinical staff reports. Nursing manager's social awareness as perceived by their clinical staff reports. Nursing manager's relationship management as perceived by their clinical staff reports.
Research Question 3: Is there a difference in EQ scores of nurse managers as perceived by their clinical staff reports	 Difference in self awareness between scores reported by nursing managers and their clinical staff reports. Difference in self management between scores reported by nursing managers and their clinical staff reports. Difference in social awareness between scores reported by nursing managers and their clinical staff reports. Difference in relationship management between scores reported by nursing managers and their clinical staff reports.

Relationship of EQ Research Questions to Variables measured

(table continues)

Research Questions	Variables Measured
Research Question 4: What are the "Employee Opinion Survey" scores of nurse managers at Entity X?	 Communication score. Commitment score. Timely response score. Best performance score. Decision involvement score. Excellence in service score. Recognition score. Caring score.
Research Question 5: What are the "Employee Opinion Survey" scores of nurse managers at Entity X as perceived by their clinical staff reports?	 Communication score. Commitment score. Timely response score. Best performance score. Decision involvement score. Excellence in service score. Recognition score. Caring score
Research Question 6: Is there a relationship between the differences in EQ scores of nurse managers as perceived by nurse managers and their clinical staff reports and the "Employee Opinion Survey" scores of nurse managers?	 Communication score. Commitment score. Timely response score. Best performance score. Decision involvement score. Excellence in service score. Recognition score. Caring score.

(table continues)

Research Question	Variable Measured
Research Question 7:	1. Difference in self awareness between
Is there a relationship between EQ	scores reported by nursing managers and
scores and the "Employee Opinion	their clinical staff reports.
Survey" scores of the nurse manager	2. Difference in self management between
at Entity X?	scores reported by nursing managers and
	their clinical staff reports.
	3. Difference in social awareness between
	scores reported by nursing managers and
	their clinical staff reports.
	4. Difference in relationship management
	between scores reported by nursing
	managers and their clinical staff reports.
	And as reported by the Employee Opinion
	Survey:
	1. Communication score.
	2. Commitment score.
	3. Timely response score.
	4. Best performance score.
	5. Decision involvement score.
	6. Excellence in service score.
	7. Recognition score.
	8. Caring score.
Research Question 8:	
Is there a relationship between EQ	1. Nurse manager's self awareness
scores as perceived by their by their	score.
clinical staff reports and the	2. Nurse manager's self-management
"Employee Opinion Survey" scores	score.
of nurse managers at Entity X?	3. Nurse manager's social awareness
	score.
	4. Nurse managers relationship
	management score.
	And, as reported by clinical staff reports:
	1. Communication score.
	2. Commitment score.
	3. Timely response score.
	 Best performance score. Decision involvement score.
	 Decision involvement score. Excellence in service score.
	7. Recognition score.
	8. Caring score.

Measurement Instruments

The two tools which were used in this study are the Emotional Intelligence Appraisal[™] designed by TalentSmart[®], and the Employee Opinion Survey designed by Morehead Associates.

A TalentSmart[®] Demo video for the MR Edition[™] states that Emotional Intelligence Appraisal[™] survey tool is used by 75% Fortune 500 companies. Bradberry and Greaves, (2001 – 2007) who are the founders of TalentSmart[©] designed this tool.

The Emotional Intelligence Appraisal[™] MR Edition[™] tool has been designed for the use of self evaluators to assess their perception of the questions asked, and also for those who see the evaluated person in action. It has been designed to include 26 evaluators to go online and "anonymously and constructively" (TalentSmart®, 2001) rate their perception of the EQ skills of the person they are evaluating. The self evaluation data and multi rater data are gathered for future analysis and comparison. This evaluation tool is available online, and will be used online for the purpose of this study. Altogether, the tool consists of 28 questions with evaluation score ratings to include 6 choices. The choices are never, rarely, sometime, usually, almost always, and always. Estimated time for test taking is 7 minutes. See Appendix A for TalentSmart® survey questions.

The Emotional Intelligence Appraisal[™] MR Edition[™] tool evaluated four EQ competencies. These competencies included Self Awareness, Self Management, Social Awareness and Relationship management. The inventories included in each of the competencies are: Self Awareness – emotional awareness, accurate self assessment and self confidence; Self Management – emotional self control, transparency, adaptability, achievement, initiative and optimism; Social Awareness – empathy, organizational

awareness and service orientation; and, Relationship Management – developing others, inspirational leadership, change catalyst, influence, conflict management, teamwork and collaboration.

Morehead Associates is a company which individually designs employee opinion survey tools for each client. Their consultants are advisors to "organizations's senior leaders, Human Resource professionals, and Organization Development practitioners." (Morehead, n/d) The consultants customized the surveys by "integrating multiple sources of data; understanding business context; identifying key drivers of desired outcomes; providing industry context through extensive norms."(Morehead, p.1) Morehead Associates have been chosen for Healthcare specific surveys by many leading organizations since 1979 and quote themselves as serving "many of the nation's largest and most respected healthcare organizations." (Morehead, p.1)

Morehead designed a survey for Entity X to include cluster groups to evaluate performance responses from employees about managers and the organization. For the purpose of this study, the resultant information relating to the performance of the managers has been identified and used.

The employee opinion survey designed by Morehead for Entity X, was performed on line in October, 2009, with the results being released to staff in December 2009. See Appendix B for the survey instrument.

Participants

The population surveyed were nursing managers and their registered nurse and licensed vocational nurse staff who are their direct or indirect reports. Seventy-seven registered nurse and licensed vocational nurse employees from Entity X, a non-profit

healthcare organization, volunteered to complete the Emotional Intelligence Appraisal[™] MR Edition[™] survey. Seven of the registered nurses were nurse managers of separate clinic sites at Entity X. This group participated in the self survey. Seventy of the registered nurses or licensed vocational nurses are the nurse manager direct or indirect clinical reports. Each site surveyed consisted of one nurse manager and ten direct or indirect clinical reports. The relationship of the leaders and managers to the sites and employees are indicated in figure 3 below:

Table 4

<i>:</i> 11	monship of Leaders/Managers to Entity A Sites and Staff.								
	Total	Total number of registered nurses and	Overall total of						
	number of	licensed vocational nurses who evaluated	participants						
	managers	the manager per site							
F	7	10 per site which equals 70 altogether	77 which includes 7						
			managers and 70						
			registered nurses and						
			licensed vocational						
			nurses						

Relationship of Leaders/Managers to Entity X Sites and Staff.

All the participants have been employed at Entity X for 1 to 20 years. Each participant from the population group is a registered nurse or licensed vocational nurse with 5 to 50 years of experience in a healthcare setting. Each participant was informed that the participation in the survey was voluntary and anonymous, and there was no penalty for not participating. The participants were given the option to not participate. This option was written in an explanatory letter, (see Appendix C).

Ethical Considerations

An Institutional Review Board [IRB] request was submitted to Pepperdine University to ensure that human subject privacy protection will be maintained and the study will be compliant with regulations. The author received approval from Pepperdine University on August 26th, 2009 asserting this study proposal met the requirements of Pepperdine Institutional Review Board (IRB). Since the Pepperdine University IRB approval was obtained, Entity X did not require IRB approval from their healthcare organization.

All completed surveys were directed from and to an online collection point administrator. TalentSmart® was the administrator with the responsibility of sending and collecting the surveys, arranging surveys into Entity X site cluster groups, removing names of the participants, and labeling each site with an alphabetical letter. Following this process, the data was emailed to the surveyor.

Data Collection

Seven nursing managers were invited to participate. Ten registered nurses and/or licensed vocational nurses that are the nursing managers direct or indirect reports, were selected to evaluate their manager. Site specific registered nurses were selected to participate first, and then licensed vocational nurses were selected to complete the required 10 multi-rater participants. Selection of the licensed vocational nurse category was a random selection from an employee list. Random selection means that they were not selected in any particular order or preference. Altogether, the total number of staff who were invited to participate were seventy seven. The personal email addresses of all the participants were obtained by the surveyor and submitted to the TalentSmart® administrator. Information and instructions was submitted to each participant at the time the personal email request will be made. The TalentSmart® administrator sent the Emotional Intelligence AppraisalTM to each participant via email. The seven site

managers received the Emotional Intelligence[™] MR Edition[™] and a questionnaire requesting the 2009 Employee Opinion survey results for their specific site. They returned the 2009 Employee Opinion survey results to TalentSmart® along with their completed survey. All participants were asked to complete the survey and submit it to the TalentSmart® administrator for clustering of the raw data into site specific cluster groups.

The TalentSmart® administrator collected the raw data from the Emotional Intelligence AppraisalTM MR EditionTM, and the Employee Opinion Survey and organized the data into site specific clusters. They categorized the data clusters with letters of the alphabet. Each site was assigned a different alphabetical letter. The relationship between the alphabetical clusters and the site is not known by the surveyor. Following the gathering and categorization of data into group clusters, the e-files were transferred to the surveyor via e-mail. Each cluster included the raw data results from the Emotional Intelligence AppraisalTM MR EditionTM and the data from the 2009 Employee Opinion Survey.

Permission to survey the nursing managers was obtained from Entity X's Chief Nursing Officer on June 16, 2009. After permission was granted, and with the support of the Chief Nursing Officer, the project was presented at a monthly leadership team (which comprised of the Entity CEO, the Chief Nursing Officer, directors of each department, and each site's managers, supervisors, and lead nurses) and the leadership team was encouraged to participate.

Data collection began on September 15th, 2009. The Chief Nursing Officer of Entity X required the survey to be completed by September 30th, 2009.

Validity of the Instrument

The Emotional Intelligence Appraisal[™] instrument has been used to evaluate job performance on large-scale studies with thousands of participants and a variety of industries. "...the Multi-Rater Edition (scores from others) explains a highly significant amount of job performance (nearly 60%) for individuals in middle management through senior leadership positions" (TalentSmart©, 2008, p.8). It has been compared with the MSCEIT and traditional 360° assessments and rates higher for both. Compared with the MSCEIT it rates with a regression z score of 6.1 and traditional 360° assessments it rates with a higher leadership job performance.

Morehead (n/d) states that the content validity of their Employee Opinion Survey questionnaire items are "founded on extensive research... conducted over a period of twenty-five years, of employee attitudes in the workplace." (Morehead, p.1) They also state that since the items have been tested on a large number of employees from an assortment of industries, they "guarantee clarity and consistency of interpretation as well as psychometric robustness." (Morehead, p.1)

With reference to construct validity, Morehead (n/d) states that they:

perform factor analyses on the responses of thousands of randomly selected employees to items drawn from our items bank. The factor analysis consistently yields three clear dimensions (Eigen value >2) supporting the constructs of items related to organization, manager and employee imperatives. (Morehead, p.1)

Their measure of internal consistency is measured by inter-item reliability. Their "alpha coefficient for all standard items is 0.93. Other analyses have shown that the alpha

coefficients for thematic sections that were derived from factor analysis display a high degree of reliability, ranging from 0.85 to 0.97" (Morehead, p.1).

Data Analysis

TalentSmart® online tools provides a computerized analysis of the Emotional Intelligence Appraisal[™] MR Edition[™]. For the purpose of this study TalentSmart® will administer the on-line survey, cluster the self study results, multi-rater results and Employee Opinion Survey results together and email them to the surveyor.

Each research question will be applied to site specific cluster group data. Descriptive analysis will be used to evaluate the mean, mode, median, standard deviation and range was used for research questions one, two, four and five.

The manager self evaluation and clinical staff evaluation resultant data from the Emotional Intelligence Appraisal[™] questionnaire will provide information for research questions three. The data will be compared using the General Linea Model Analysis of Variance (GLM ANOVA) method. GLM ANOVA uses the "the variance of the groups and not the means to calculate a value that reflects the degree of difference in the means." (McMillan &Schumacher, 2006, p. 301)

Research questions six, seven and eight were measured with Correlation analysis reporting r, R-squared and p-value for each variable measured.

Table 5

Relationship Between Research Questions and Analysis Methods used

Research Questions:	Analysis Method:
Research Question 1: What are the EQ scores of nurse managers at Entity X?	Descriptive Statistics, with mean, mode, median, standard deviation and range.
Research Question 2: What are the EQ scores of nurse managers at Entity X as perceived by their clinical staff reports?	Descriptive Statistics, with mean, mode, median, standard deviation and range.
Research Question 3: Is there a difference in EQ scores of nurse managers as perceived by their clinical staff reports	Repeated measure GLM ANOVA
Research Question 4: What are the "Employee Opinion Survey" scores of nurse managers at Entity X?	Descriptive Statistics with mean, mode, median, standard deviation and range
Research Question 5: What are the "Employee Opinion Survey" scores of nurse managers at Entity X as perceived by their clinical staff reports?	Descriptive Statistics with mean, mode, median, standard deviation and range
Research Question 6: Is there a relationship between the differences in EQ scores of nurse managers as perceived by nurse managers and their clinical staff reports and the "Employee Opinion Survey" scores of nurse managers?	Correlation Analysis: reporting r, R-squared and p-value.
Research Question 7: Is there a relationship between EQ scores and the "Employee Opinion Survey" scores of the nurse manager at Entity X?	Correlation Analysis: reporting r, R-squared and p-value.
<i>Research Question 8:</i> Is there a relationship between EQ scores between EQ scores as perceived by their clinical staff reports and the "Employee Opinion Survey" scores of nurse managers at Entity X?	Correlation Analysis: reporting r, R-squared and p-value.

The resultant information obtained from the study will serve a dual purpose: it identify areas of nursing management which may need EQ coaching, and, provide information for this dissertation. Regarding the nurse management EQ deficiencies which could be identified, a recommendation of training/coaching in nurse management and EQ awareness will be made to the Chief Nursing Officer. With the opportunity for increased EQ levels within nurse managers should be the propensity to increase job satisfaction levels for staff, which would lead to patient satisfaction for clients and an overall increased dedication to uphold and maintain the mission of the company.

Summary

This study is designed to collect data from a total of 77 registered nurses and licensed vocational nurses from Entity X to determine the existence of a perceived relationship between the EQ levels of nursing managers and employee satisfaction levels reported on Entity X's 2009 Employee Opinion Survey.

Chapter 4

Findings

Introduction

This chapter discusses the findings of the research. First, data collection results are reported followed by statistical analysis of each research question. Findings are summarized and reported after each analysis.

The TalentSmart® EmotionalIntelligence Appraisal[™] MR Edition[™] survey began on September 16th and was completed on September 30th. TalentSmart® administered the survey, gathered the raw data and submitted the resultant raw data to the surveyor on October 3rd, 2009. A total of 77 surveys were sent to participants, with 66 returned completed. This was an 86% return rate for the survey. Participants included seven managers, each manager completed the survey giving 100% return rate for the managers category. Seventy surveys were sent to the manager's direct and indirect reports with 59 being returned, giving an 84% return rate for this category. Each nurse manager groupings were identified with an alphabetical letter, from A through G.

At the outset of this dissertation proposal, the 2008 Employee Opinion Survey from Kenexa was to be used for the individual site data. When the research was under way, the researcher discovered that the Kenexa individual site data was not available to the nurse managers. However, a 2009 Employee Opinion Survey was scheduled to take place in October, 2009, so it was decided by the Dissertation Chair and the researcher to use the site specific information from the 2009 Employee Opinion Survey. The 2009 Employee Opinion Survey was managed by Morehead Associates. Since there was a change in survey provider, some of the questions needed to be edited, (see Appendix C). The Morehead Associates Employee Opinion Survey began on October 1st and was completed on October 31st. For the purpose of this study the responses of registered nurses and licensed vocational nurses associated with the seven nurse managers was gathered. The total of registered nurse responses was 140, and the total of licensed vocational nurse responses was 136.

Table 6

Survey	А	В	C	D	Е	F	G	Managers
TalentSmart®								
EmotionalIntelli	7	8	10	9	8	8	9	7
gence								
Appraisal [™]								
MR Edition TM								
survey								
Morehead	n=38	n=69	n=52	n=27	n=43	n=22	n=44	
Associates	38	69	47	19	43	18	42	7
Employee								
Opinion Survey								
Note: $N = total$								
number of								
nurses at the								
entity site.								

Survey Participant Totals

Through the dissertation process, eight research questions and the analysis for each question was discussed. During the process of gathering and assimilating the data, it was decided that one question was redundant and it should be eliminated. This changed the total of research questions from eight to seven. The question which was eliminated was: "What are the "Employee Opinion Survey" scores of nurse managers at Entity X?" Also, since the Morehead Associates Employee Opinion Survey had similar variables to the Kenexa Employee Opinion Survey, but they were worded differently, the wording of the research questions was altered to reflect the Morehead Associates Employee Opinion Survey, (see appendix C).

Analysis of Data

Research Question One

• What are the EQ scores of nurse managers at Entity X?

Each nurse manager performed a self analysis of the following measurements: Self awareness, self management, social awareness and relationship management. Descriptive Analysis was performed on the average total scores for each category. The descriptive statistic methods, identified the mean, mode, median, standard deviation, standard error and range. The analysis was conducted on the results of the TalentSmart® EmotionalIntelligence AppraisalTM MR EditionTM survey This questions identifies the results of the self survey for the nurse managers. See Table 7 for analysis of Nurse Manager's EQ scores.

The Self Awareness data resulted in a mean of 85.7, the mode was 85, the median was 85, a standard deviation of 2.92, the minimum score was 82 with the maximum score being 90, and the range was 8, with an interquartile range of 6. The Self Management data resulted in a mean of 79, the mode was 62, the median was 83, a standard deviation of 12.96. The minimum score was 62 and the maximum score was 94, with a range of 32 and an interquartile range of 29. The Social Awareness data resulted in a mean of 87.4, the mode was 84, the median was 88, a standard deviation of 4.54, the minimum score was 81 and the maximum score was 93 with a range of 12 and an interquartile range of 8. The Relation Management data resulted in a mean of 87.2, the mode was 100, the median was 87, a standard deviation of 4.42, the minimum score was 81 and the maximum score was 93, a range of 12 and an interquartile range of 9.

0	Self	Self	Social	Relationship
	Awareness	Management	Awareness	Management
Mean	85.7	79	87.4	87.2
Mode	85	62	84	100
Median	85	83	88	87
Standard Deviation	2.92	12.96	4.54	4.42
Minimum to Maximum score	82-90	62-94	81-93	81-93
Interquartile Range	6	29	8	9
Range	8	32	12	12

Table 7 Nurse Manager's EQ score results

Summary of research question one. The nurse managers rated themselves similarly, with the lowest mean at 79 and the highest mean at 87.4. The mode for each EQ category varied from 62 to 100 and the median score for each of the EQ categories ranging between 83 and 87.

Research Question Two

• What are the EQ scores of nurse managers at Entity X as perceived by their clinical staff reports?

This question was analyzed with Descriptive Statistic methods, identifying the mean, mode, median, standard deviation and range. The analysis was conducted on the results of the TalentSmart® EmotionalIntelligence Appraisal[™] MR Edition[™] survey. This analysis identifies the EQ of the nurse manager as perceived by their clinical staff reports. Some values reported with a mode of "0" and were included in the analysis. See Table 8, for a breakdown of Descriptive Statistics by site groupings.

Group A. A total of seven clinical staff participated in the survey. The Self Awareness data resulted in a mean of 87, the mode was 100, the median was 82, a standard deviation of 11.70, the minimum score was 74 with the maximum score being 100, and the range was 26, with an interquartile range of 23. The Self Management data resulted in a mean of 81, the mode was 62, the median was 85, a standard deviation of 19.32, the minimum score was 58 and the maximum score was 100, with a range of 42 and an interquartile range of 37. The Social Awareness data resulted in a mean of 82, the mode was 72, the median was 84, a standard deviation of 15.39, the minimum score was 58 and the maximum score was 58 and the maximum score was 58 and the maximum score was 100, the median was 87, a standard deviation of 23.83, the minimum score was 45 and the maximum score was 100 with a range of 55, and an interquartile range of 50.

Group B. A total of eight clinical staff participated in the survey. The Self Awareness data resulted in a mean of 88. , the mode was 85, the median was 85, a standard deviation of 8.70, the minimum score was 79 with the maximum score being 100, and the range was 21, with an interquartile range of 17.5. The Self Management data resulted in a mean of 83.8, the mode was 79, the median was 83, a standard deviation of 12.19, the minimum score was 62 and the maximum score was 97, with a range of 35 and an interquartile range of 19. The Social Awareness data resulted in a mean of 86.9, the mode was 84, the median was 84, a standard deviation of 10.55, the minimum score was 72 and the maximum score was 100 with a range of 28 and an interquartile range of 20.25. The Relation Management data resulted in a mean of 90.3, the mode was 100, the median was 88, a standard deviation of 8.76, the minimum score

was 79 and the maximum score was 100, with a range of 21 and an interquartile range of 18.25.

Group C. A total of ten clinical staff participated in the survey. The Self Awareness data resulted in a mean of 90.8, the mode was 89, the median was 90, a standard deviation of 3.22, the minimum score was 85 with the maximum score being 96, and the range was 11, with an interquartile range of 5. The Self Management data resulted in a mean of 93.5, the mode was 92/93, the median was 93, a standard deviation of 1.43, the minimum score was 92 and the maximum score was 96, with a range of 4 and an interquartile range of 3. The Social Awareness data resulted in a mean of 91.3, the mode was 88, the median was 91, a standard deviation of 3.05, the minimum score was 88 and the maximum score was 96 with a range of 8 and an interquartile range of 5.75. The Relation Management data resulted in a mean of 91.2, the mode was 89, the median was 90, a standard deviation of 3.12, the minimum score was 87 and the maximum score was 96, with a range of 9 and an interquartile range of 4.75.

Group D. A total of nine clinical staff participated in the survey. The Self Awareness data resulted in a mean of 87.9, the mode was 89, the median was 89, a standard deviation of 6.31, the minimum score was 76 with the maximum score being 98, and the range was 22, with an interquartile range of 7.5. The Self Management data resulted in a mean of 91, the mode was 91, the median was 91, a standard deviation of 8.34, the minimum score was 72 and the maximum score was 98, with a range of 26 and an interquartile range of 9.5. The Social Awareness data resulted in a mean of 89, the mode was 84, the median was 92, a standard deviation of 6.84, the minimum score was 78 and the maximum score was 100 with a range of 22 and an interquartile range of 9.

The Relation Management data resulted in a mean of 87.9, the mode was 87/91, the median was 89, a standard deviation of 8.48, the minimum score was 67 and the maximum score was 96, with a range of 29 and an interquartile range of 6.

Group E. A total of eight clinical staff participated in the survey. The Self Awareness data resulted in a mean of 87.8 the mode was 0, the median was 88, a standard deviation of 6.80, the minimum score was 77 with the maximum score being 100, and the range was 23, with an interquartile range of 8. The Self Management data resulted in a mean of 88.9, the mode was 96, the median was 93, a standard deviation of 9.89, the minimum score was 73 and the maximum score was 100, with a range of 27 and an interquartile range of 17.75. The Social Awareness data resulted in a mean of 86.3, the mode was 100, the median was 83, a standard deviation of 9.38, the minimum score was 77 and the maximum score was 100 with a range of 23 and an interquartile range of 18.5. The Relation Management data resulted in a mean of 88.8, the mode was 95, the median was 91, a standard deviation of 8.21, the minimum score was 79 and the maximum score was 100, with a range of 21 and an interquartile range of 15.

Group F. A total of eight clinical staff participated in the survey. The Self Awareness data resulted in a mean of 83.5, the mode was 89, the median was 87, a standard deviation of 9.40, the minimum score was 70 with the maximum score being 96, and the range was 26, with an interquartile range of 16.5. The Self Management data resulted in a mean of 68, the mode was 0, the median was 72, a standard deviation of 18.09, the minimum score was 37 with the maximum score being 94, with a range of 57 and an interquartile range of 26. The Social Awareness data resulted in a mean of 81.9,

the mode was 88, the median was 86, a standard deviation of 13.14, the minimum score was 58 and the maximum score was 100 with a range of 42 and an interquartile range of 16.75. The Relation Management data resulted in a mean of 75.3, the mode was 0, the median was 82, a standard deviation of 19.83, the minimum score was 39 and the maximum score was 96, with a range of 57 and an interquartile range of 29.25.

Table 8:

Breakdown of Descriptive Statistics by site groupings								
Test	Group	Self	Self	Social	Relationship			
		Awareness	Management	Awareness	Management			
Mean	А	87	81	82	79			
	B 88		83.8	86.9	90.3			
	С	90.8	93.5	91.3	91.2			
	D	87.9	91	89	87.9			
	E	87.8	88.9	86.3	88.8			
	F	83.5	68	81.9	75.3			
	G	87	89	90.4	88.9			
	Total	87.6	85.5	87.2	86.3			
Mode	А	100	62	72	100			
	В	85	79	84	100			
	С	89	92/93	88	89			
	D	89	91	84	87/91			
	Е	0	96	100	95			
	F	89	0	88	0			
	G	83	0	100	89			
	Total	89	89	100	100			
Median	А	82	85	84	87			
	В	85	83	84	88			
	С	90	93	91	90			
	D	89	91	92	89			
	Е	88	93	83	91			
	F	87	72	86	82			
	G	86	93	92	89			
	Total	89	92	88	89			

Breakdown of Descriptive Statistics by site arounings

(table continues)

Test	Group	Self	Self	Social	Relationship	
	-	Awareness	Management	Awareness	Management	
Standard	ndard A 11.70		19.32	15.39	23.83	
Deviation	В	8.70	12.19	10.55	8.76	
	С	3.22	1.43	3.05	3.12	
	D	6.31	8.34	6.84	8.48	
	Е	6.80	9.89	9.38	8.21	
	F	9.40	18.09	13.14	19.83	
	G	7.83	11.02	7.70	7.50	
	Total	7.70	14.12	9.88	13.18	
Minimum to	А	74-100	58-100	58-100	45-100	
Maximum	В	79-100	62-97	72-100	79-100	
scores	С	85-96	92-96 88-96		87-96	
	D	76-98	72-98	78-100	67-96	
	Е	77-100	73-100	77-100	79-100	
	F	70-96	37-94	58-100	39-96	
	G	74-100	70-99	77-100	76-100	
	Total	70-100	37-100	58-100	39-100	
Interquartile	А	23	37	24	50	
scores	В	17.5	19	20.25	18.25	
	С	5	3	4.75	9	
	D	7.5	9.5	9	29	
	Е	8	17.75	18.5	15	
	F	16.5	26	16.75	29.25	
	G	10.5	19	12	12	
	Total	11	20	12	14	

Group G. A total of nine clinical staff participated in the survey.

maximum score was 96, with a range of 57 and an interquartile range of 29.25. The Self Awareness data resulted in a mean of 87, the mode was 83, the median was 86, a standard deviation of 7.83, the minimum score was 74 with the maximum score being 100, and the range was 26, with an interquartile range of 10.5. The Self Management data resulted in a mean of 89, the mode was 0, the median was 93, a standard deviation of 11.02, the minimum score was 70 and the maximum score was 99, with a range of 29 and an

interquartile range of 19. The Social Awareness data resulted in a mean of 90.4, the mode was 100, the median was 92, a standard deviation of 7.70, the minimum score was 77 and the maximum score was 100 with a range of 23 and an interquartile range of 12. The Relation Management data resulted in a mean of 88.9, the mode was 89, the median was 89, a standard deviation of 7.50, the minimum score was 76 and the maximum score was 100, with a range of 24 and an interquartile range of 12.

Total of groups A, B, C, D, E, F, G. A total of 59 clinical staff, other than nurse managers, participated in the survey. The Self Awareness data resulted in a mean of 87.6, the mode was 89, the median was 89, a standard deviation of 7.70, the minimum score was 70 with the maximum score being 100, and the range was 30, with an interquartile range of 11. The Self Management data resulted in a mean of 85.5, the mode was 89, the median was 92, a standard deviation of 14.12, the minimum score was 37 and the maximum score was 100, with a range of 63 and an interquartile range of 20. The Social Awareness data resulted in a mean of 87.2, the mode was 100, the median was 88, a standard deviation of 9.88, the minimum score was 58 and the maximum score was 100 with a range of 42 and an interquartile range of 12. The Relation Management data resulted in a mean of 86.3, the mode was 100, the median was 89, a standard deviation of 13.18, the minimum score was 39 and the maximum score was 100, with a range of 61 and an interquartile range of 14.

Summary of Research Question Two. The overall Self Awareness mean was 83.5 to 90.8, Self management was 68 to 93.5, Social Awareness was 83.5 to 91.3 and Relationship Management was 75.3 to 91.2. The overall most common score range was 83 to 100, Self Management was 62 to 96, Social Awareness was 88 to 100 and

Relationship Management was 89 to 100. The overall medial range for Self Awareness was 85 to 90, Self Management was 72 to 93, Social Awareness was 83 to 92, and Relationship Management was 82 to 90. The highest Standard Deviation for Self Awareness was 10.81, Self Management was 18.50, Social Awareness was 14.75 and Relationship Management was 22.57. The overall minimum to maximum scores for Self Awareness was 70 to 100, Self Management was 37 to 100, Social Awareness was 58 to 100 and Relationship Management was 39 to 100.

Research Question Three

• Is there a difference in EQ scores of nurse managers as perceived by their clinical staff reports and themselves?

Data were analyzed using General Linea Model Analysis of Variance (GLM ANOVA). F-Ratio and p-value were calculated for each of the four aspects of EQ, in order to conclude if there is or is not a difference in each of the scores between the nurse managers and the clinical staff reports. A total of seven nurse manager scores were measured against a total of 59 clinical staff reports scores. See Table 9 for analysis of F-Ratio and p-values from GLM ANOVA.

Analysis of variance report for the self awareness scores. The resultant data reports a F-ratio of 0.43 and a p-value of 0.51 for self awareness. Since the p-value is greater than alpha of 0.05, we would not reject the null hypothesis and conclude that there is no difference in the self awareness score between nurse managers and their clinical staff reports.

Analysis of variance report for the self management scores. The resultant data reports an F-Ratio of 1.35 and a p-value of 0.24 for self management. Since the p-value

is greater than alpha of 0.05, we would not reject the null hypothesis and conclude that there is no difference in the self management score between nurse managers and their clinical staff reports.

Analysis of variance report for the social awareness scores. The resultant data reports a F-Ratio of 0.00 and a p-value of 0.94 for social awareness. Since the p-value is greater than alpha of 0.05, we would not reject the null hypothesis and conclude that there is no difference in the social awareness score between nurse managers and their clinical staff reports.

Table 9*F-Ratio and p-values from GLM ANOVA.*

Ť	F-Ratio	p-value
Self	0.43	0.51
Awareness		
Self	1.35	0.24
Management		
Social	0.00	0.94
Awareness		
Relationship	0.04	0.84
Management		

GLM Analysis of variance report for the relationship management scores. The

resultant data reports a F-Ratio of 0.04 and a p-value of 0.84 for relationship management. Since the p-value is greater than alpha of 0.05, we would not reject the null hypothesis and conclude that there is no difference in the relationship management score between nurse managers and their clinical staff reports.

Summary for Research Question Three. The overall GLM ANOVA analysis indicates that in each EQ category the p-value is greater than alpha, indicating that the null hypothesis would not be rejected and there is no difference in the EQ scores between the nurse managers and their clinical staff reports.

Research Question Four

• What are the "Employee Opinion Survey" scores of nurse managers as

perceived by their and their clinical staff reports at Entity X?

This question was analyzed with descriptive statistic methods, identifying the mean, mode, median, standard deviation and range. The analysis was conducted on the results of the Morehead Associates Employee Opinion Survey. This analysis identifies the Employee Opinion Survey of the nurse manager as perceived by their clinical staff reports. The Employee Opinion Survey variables include the following manager EQ aspects: team player, staff recognition, caring attitude, provision of feedback, respect toward staff, encourage involvement, timely response, staff satisfaction with Entity X, staff satisfaction with the overall healthcare organization. See Table 10 for Descriptive statistics for Employee Opinion Survey Scores.

Team player. A total of seven nurse manager staff groupings participated in the survey. The team player data resulted in a mean of 83.4, the mode was 88, the median was 88, a standard deviation of 17.15, the minimum score was 58.5 with the maximum score being 100, and the range was 41.5, with an interquartile range of 38.

Staff recognition. A total of seven nurse manager staff groupings participated in the survey. The staff recognition data resulted in a mean of 67.9, the mode was 72, the median was 70, a standard deviation of 11.23, the minimum score was 44 with the maximum score being 80, and the range was 36, with an interquartile range of 3.5.

Caring score. A total of seven nurse manager staff groupings participated in the survey. The caring attitude data resulted in a mean of 80.5, the mode was 82, the median

was 82, a standard deviation of 11.07, the minimum score was 59 with the maximum score being 94, and the range was 35, with an interquartile range of 11.5.

Provision of feedback. A total of seven nurse manager staff groupings participated in the survey. The provision of feedback data resulted in a mean of 80.9, the mode was 82, the median was 82.5, a standard deviation of 7.96, the minimum score was 66 with the maximum score being 89, and the range was 23, with an interquartile range of 12. *Respect toward staff.* A total of seven nurse manager staff groupings participated in the survey. The respect toward staff data resulted in a mean of 87.8, the mode was 89.5, the median was 89.5, a standard deviation of 7.17, the minimum score was 73 with the maximum score being 94, and the range was 21, with an interquartile range of 8.

Table 10

	TP	SR	CA	PF	R	E	TR	SE	SH	
									Ο	
Mean	83.4	67.9	80.5	80.9	87.8	67.2	86.5	90.8	89.3	
Mode	88	72	82	82	89.5	69	69	92.5	92.5	
Median	88	70	82	82.5	89.5	66.5	85	92	90.5	
Standard	17.15	11.23	11.07	7.96	7.17	7.16	8.66	5.01	5.27	
Deviation										
Min-Max	58.5-	44-80	59-94	66-89	73-	59-81	74-100	83-	78-	
Range	100				94			98.5	93	
Inter-	38	3.5	11.5	12	8	8	13.5	6.5	4	
quartile										
range										
Range	41.5	36	35	23	21	22	26	15.5	15	
Legend:				R – Respect toward staff						
TP – Team	Player			EI – Encourage Involvement						
SR – Staff Recognition				TR – Timely Response						
CA – Caring Attitude				SE – Satisfaction toward Entity X						
PF – Provisi	PF – Provision of Feedback				SHO – Satisfaction toward Healthcare					
				Organization						

Descriptive statistics for Employee Opinion Survey Scores.

Encourage involvement. A total of seven nurse manager staff groupings participated in the survey. The encourage involvement data resulted in a mean of 67.2, the mode was 69, the median was 66.5, a standard deviation of 7.16, the minimum score was 59 with the maximum score being 81, and the range was 22, with an interquartile range of 8.

Timely response. A total of seven nurse manager staff groupings participated in the survey. The timely response data resulted in a mean of 86.5, the mode was 69, the median was 85, a standard deviation of 8.66, the minimum score was 74 with the maximum score being 100, a range of 26, with an interquartile range of 13.5.

Staff satisfaction toward Entity X. A total of seven nurse manager staff groupings participated in the survey. The staff satisfaction toward Entity X data resulted in a mean of 90.8, the mode was 92.5, the median was 92, a standard deviation of 5.01, the minimum score was 83 with the maximum score being 98.5, and the range was 15.5, with an interquartile range of 6.5.

Staff satisfaction toward overall healthcare organization. A total of seven nurse manager staff groupings participated in the survey. The staff satisfaction toward overall healthcare organization data resulted in a mean of 89.3, the mode was 92.5, the median was 90.5, a standard deviation of 5.27, the minimum score was 78 with the maximum score being 93, and the range was 15, with an interquartile range of 4.

Summary of Research Question Four. The overall mean scores ranged from 67.2 for Encourage Involvement to 90.8 for Satisfaction toward Entity X. The lowest most common score was 69 for Encourage Involvement and Timely Response, and the highest most common score was 92.5 for Satisfaction toward Entity X and Satisfaction toward Healthcare Organization. The overall median score range was from 66.5 for Encourage Involvement to 92 for Satisfaction toward Entity X. The highest Standard Deviation was 17.15 which was for Team Player. The lowest minimum/maximum range was 44-80 for Staff Recognition and the highest minimum/maximum range was 74-100 for Timely Response. The total overall lowest range for scores was 15 for Satisfaction toward Healthcare Organization and the highest was 41.5 for Team Player.

Research Question Five

• Is there a relationship between the differences in EQ scores of nurse managers as Perceived by the nurse managers and the average EQ scores for Nurse manages as perceived by their clinical staff reports and the "Employee Opinion Survey" scores of nurse managers?

This question was analyzed with Correlation analysis: reporting r, R-squared and p-value. See Table 11 for the Correlation analysis report comparing the nurse manager EQ responses as indicated by the nurse managers and clinical staff, and the Employee Opinion Survey.

Total Employee Opinion Survey Score. The correlation coefficient for self awareness was 0.38, R-squared was 0.14 and p-value was 0.39; for self management the correlation coefficient was 0.48, R-squared was 0.23 and p-value was 0.28; for social awareness the correlation coefficient was 0.12, R-squared was 0.01 and p-value was 0.79; for relationship management the correlation coefficient was 0.30, R-squared was 0.09 and p-value was 0.51; the EQ score coefficient was 0.38, R-squared was 0.14 and pvalue was 0.41; and the employee opinion survey correlation coefficient was 1.00, Rsquared 1.00 and p-value of 0.00.

Team Score. The correlation coefficient for self awareness was 0.53, R-squared was 0.28, and p-value was 0.22; for self management the correlation coefficient was 0.43, R-squared was 0.18 and p-value was 0.33; for social awareness the correlation coefficient was 0.47, R-squared was 0.22 and p-value was 0.28; for relationship management the correlation coefficient was 0.45, R-squared was 0.20 and p-value was 0.31; the EQ score coefficient was 0.48, R-squared was 0.23 and p-value was 0.28; and the employee opinion survey correlation coefficient was 0.34, R-squared 0.12 and p-value of 0.46.

Recognition Score. The correlation coefficient for self awareness was 0.70, R-squared was 0.49, and p-value was 0.08; for self management the correlation coefficient was 0.76, R-squared was 0.56 and p-value was 0.05; for social awareness the correlation coefficient was 0.34, R-squared was 0.12 and p-value was 0.45; for relationship management the correlation coefficient was 0.57, R-squared was 0.32 and p-value was 0.18; the EQ score coefficient was 0.65, R-squared was 0.42 and p-value was 0.11; and the employee opinion survey correlation coefficient was 0.87, R-squared 0.76 and p-value of 0.01.

Caring Score. The correlation coefficient for self awareness was 0.77, R-squared was 0.59, and p-value was 0.04; for self management the correlation coefficient was 0.69, R-squared was 0.49 and p-value was 0.08; for social awareness the correlation coefficient was 0.53, R-squared was 0.28 and p-value was 0.22; for relationship management the correlation coefficient was 0.80, R-squared was 0.64 and p-value was 0.03; the EQ score coefficient was 0.75, R-squared was 0.56 and p-value was 0.05; and the employee opinion survey correlation coefficient was 0.66, R-squared 0.44 and p-value of 0.11.

Feedback Score. The correlation coefficient for self awareness was 0.60, R-

squared was 0.36, and p-value was 0.16; for self management the correlation coefficient

was 0.65, R-squared was 0.42 and p-value was 0.12; for social awareness the correlation

coefficient was 0.54, R-squared was 0.29 and p-value was 0.22; for relationship

management the correlation coefficient was 0.61, R-squared was 0.37 and p-value was

0.15; the EQ score coefficient was 0.65, R-squared was 0.42 and p-value was 0.11; and

the employee opinion survey correlation coefficient was 0.86, R-squared 0.74 and p-

value of 0.01.

Table 11

Correlation analysis report comparing the Nurse Manager EQ resultss as Indicated by the Nurse Managers and Clinical Staff, and the Employee Opinion Survey.

EOS		Self	Self	Social	Relationship	EQ	EOS
Resu		Aware	Manage	Aware	Manage	Score	total
lts		ness	ment	ness	ment		
EOS	R	0.38	0.48	0.12	0.30	0.38	1.00
total	R ²	0.14	0.23	0.01	0.09	0.14	1.00
	р	0.39	0.28	0.79	0.51	0.41	0.00
EOS	R	0.53	0.43	0.47	0.45	0.48	0.34
Q1	R ²	0.28	0.18	0.22	0.20	0.23	0.12
	р	0.22	0.33	0.28	0.31	0.28	0.46
EOS	R	0.70	0.76	0.34	0.57	0.65	0.87
Q2	R ²	0.49	0.56	0.12	0.32	0.42	0.76
	р	0.08	0.05	0.45	0.18	0.11	0.01*
EOS	R	0.77	0.69	0.53	0.80	0.75	0.66
Q3	R ²	0.59	0.49	0.28	0.64	0.56	0.44
	р	0.04*	0.08	0.22	0.03*	0.05	0.11
EOS	R	0.60	0.65	0.54	0.61	0.65	0.86
Q4	R ²	0.36	0.42	0.29	0.37	0.42	0.74
	р	0.16	0.12	0.22	0.15	0.11	0.01*
EOS	R	0.85	0.80	0.61	0.84	0.83	0.70
Q5	R ²	0.72	0.62	0.37	0.69	0.69	0.49
	р	0.02*	0.03*	0.14	0.02*	0.02*	0.08
EOS	R	0.23	0.54	0.77	0.47	0.57	0.34
Q6	R ²	0.05	0.29	0.59	0.22	0.32	0.11
	р	0.63	0.21	0.04*	0.29	0.19	0.46

EOS		Self	Self	Social	Relationship	EQ	EOS
Resu		Aware	Manage	Aware	Manage	Score	total
lts		ness	ment	ness	ment		
EOS	R	0.41	0.43	0.31	0.61	0.49	0.50
Q7	R ²	0.17	0.18	0.10	0.37	0.24	0.25
	р	0.36	0.34	0.49	0.15	0.27	0.26
EOS	R	0.12	0.33	0.13	-0.04	0.17	0.70
Q8	R ²	0.01	0.11	0.01	-1.60	0.02	0.49
	р	0.79	0.47	0.79	0.93	0.71	0.08
EOS	R	-0.12	0.12	0.25	-0.15	0.05	0.23
Q9	R ²	-0.01	0.01	0.06	-0.02	1.60	0.05
	р	0.80	0.80	0.59	0.75	0.92	0.61
EOS Q	21 = T	eam Score			EOS $Q2 =$	Recognition S	Score
EOS Q	EOS Q3 = Caring Score EOS Q4 = Feedback Score						
EOS Q	EOS Q5 = Respect Score EOS Q6 = Involvement Score						
EOS Q7 = Timely Response Score EOS Q8 = Satisfaction – Entity							
Score							
EOS Q9 = Satisfaction – Healthcare organization score							
* indicates a p-value of less than 0.05 which is significant							

Respect Score. The correlation coefficient for self awareness was 0.85, R-squared was 0.72, and p-value was 0.02; for self management the correlation coefficient was 0.80, R-squared was 0.62 and p-value was 0.03; for social awareness the correlation coefficient was 0.61, R-squared was 0.37 and p-value was 0.14; for relationship management the correlation coefficient was 0.84, R-squared was 0.69 and p-value was 0.02; the EQ score coefficient was 0.83, R-squared was 0.69 and p-value was 0.02; and the employee opinion survey correlation coefficient was 0.70, R-squared 0.49 and p-value of 0.08.

Involvement Score. The correlation coefficient for self awareness was 0.23, R-squared was 0.05, and p-value was 0.63; for self management the correlation coefficient was 0.54, R-squared was 0.29 and p-value was 0.21; for social awareness the correlation coefficient was 0.77, R-squared was 0.59 and p-value was 0.04; for relationship

management the correlation coefficient was 0.47, R-squared was 0.22 and p-value was 0.29; the EQ score coefficient was 0.57, R-squared was 0.32 and p-value was 0.19; and the employee opinion survey correlation coefficient was 0.34, R-squared 0.11 and p-value of 0.46.

Timely Response Score. The correlation coefficient for self awareness was 0.41, R-squared was 0.17, and p-value was 0.36; for self management the correlation coefficient was 0.43, R-squared was 0.18 and p-value was 0.34; for social awareness the correlation coefficient was 0.31, R-squared was 0.10 and p-value was 0.49; for relationship management the correlation coefficient was 62, R-squared was 0.37 and pvalue was 0.15; the EQ score coefficient was 0.49, R-squared was 0.24 and p-value was 0.27; and the employee opinion survey correlation coefficient was 0.50, R-squared 0.25 and p-value of 0.26.

Satisfaction – Entity Score. The correlation coefficient for self awareness was 0.12, R-squared was 0.01, and p-value was 0.79; for self management the correlation coefficient was 0.33, R-squared was 0.11 and p-value was 0.47; for social awareness the correlation coefficient was 0.13, R-squared was 0.01 and p-value was 0.79; for relationship management the correlation coefficient was -0.04, R-squared was -1.60 and p-value was 0.93; the EQ score coefficient was 0.17, R-squared was 0.02 and p-value was 0.71; and the employee opinion survey correlation coefficient was 0.70, R-squared 0.49 and p-value of 0.08.

Satisfaction – Healthcare Organization Score. The correlation coefficient for self awareness was -0.12, R-squared was -0.01, and p-value was 0.80; for self management the correlation coefficient was 0.12, R-squared was 0.01 and p-value was 0.80; for social awareness the correlation coefficient was 0.25, R-squared was 0.06 and p-value was 0.59; for relationship management the correlation coefficient was -0.15, R-squared was - 0.02 and p-value was 0.75; the EQ score coefficient was 0.05, R-squared was 1.60 and p-value was 0.92; and the employee opinion survey correlation coefficient was 0.23, R-squared 0.05 and p-value of 0.61.

Summary of Research Question Five. The r scores over 0.8 which indicate a positive relationship between the variables are reported in the following categories: the Recognition score compared to the Employee Opinion Score, the Caring score and the Relationship Management score, the Feedback score compared with the Employee Opinion Survey score, and the Respect score compared with Self Awareness, Self Management, Relationship Management and EQ scores. A positive relationship indicates that as one score increases so does the other score in the relationship.

The r scores between 0.5 and 0.8 which indicate some relationship between the variables are reported in the following categories: the Team score compared with Self Awareness, the Recognition score compared with Self Awareness, Self Management, Relationship awareness and EQ, the Caring score compared to Self Awareness, Self Management, Social Awareness, EQ and total Employee Opinion Survey scores, the Feedback score compared to Self Awareness, Self Management, Social Awareness, Relationship Management, and EQ, the Respect score compared to Social Awareness, the Involvement score compared with Self Management, Social Awareness and EQ, the Timely Response score compared with Relationship Management and total Employee Opinion survey and Satisfaction – Entity score compared with the total Employee

Opinion survey. All other r scores were under 0.5 which indicates a negative relationship between the variables, meaning that as one score decreases so does the other.

The R² scores which state that there is a variance between the two variables are reported over 0.50 or 50% in the following categories: Recognition score and Self Management at 0.56 and total Employee Opinion Survey at 0.76, the Caring score and Self Awareness at 0.59, Relationship Management at 0.64 and EQ at 0.56, the Feedback score and total Employee Opinion survey at 0.74, the Respect score and Self Awareness at 0.72, Self Management at 0.64, Relationship Management at 0.69 and EQ at 0.69, and the Involvement score and Social Awareness at 0.59. The remainder R² scores were less than 50% indicating that there is minimal variance shared between the remaining variables.

The p-value less than 0.05 rejects the null for the following scores: Recognition score and Total Employee Opinion Survey score at 0.01, the Caring score and Self Awareness at 0.04 and Relationship Management 0.03, the Respect score and Self Awareness at 0.02, Self Management at 0.03, Relationship Management at 0.02 and EQ at 0.02, and the Involvement score and Social Awareness at 0.04.

Research Question Six

• Is there a relationship between EQ scores of nurse managers and the "Desired Management Behavior" scores at Entity X?

This question was analyzed with Correlation analysis: reporting r, R-squared and p-value. Seven nurse managers EQ scores which included the four aspects of EQ and the total EQ average score, were evaluated against the 2010 Employee Opinion Survey using the

Pearson Correlation. See Table 12 for Correlation report showing nursing manager EQ results compared to the Employee Opinion Survey results.

Self Awareness score. The correlation coefficient for self awareness was 1.00, R-squared was 1.00, and p-value was 0.00; for self management the correlation coefficient was 0.59, R-squared was 0.35 and p-value was 0.16; for social awareness the correlation coefficient was -0.49, R-squared was -0.24 and p-value was 0.26; for relationship management the correlation coefficient was -0.13, R-squared was -0.02 and p-value was 0.77; the EQ score coefficient was 0.47, R-squared was 0.22, p-value was 0.28; and the employee opinion survey correlation coefficient was 0.17, R-squared 0.03 and p-value 0.72.

Self management score. The correlation coefficient for self awareness was 0.59, R-squared was 0.35, and p-value was 0.16; for self management the correlation coefficient was 1.00, R-squared was 1.00 and p-value was 0.00; for social awareness the correlation coefficient was -0.33, R-squared was -0.11 and p-value was 0.48; for relationship management the correlation coefficient was 0.05, R-squared was 2.74 and pvalue was 0.91; the EQ score coefficient was 0.85, R-squared was 0.72, p-value was 0.02; and the employee opinion survey correlation coefficient was 0.31, R-squared 0.10 and pvalue of 0.50.

Social awareness score. The correlation coefficient for self awareness was -0.49, R-squared was 0.24, and p-value was 0.26; for self management the correlation coefficient was -0.31, R-squared was 0.23 and p-value was 0.48; for social awareness the correlation coefficient was 1.00, R-squared was 1.00 and p-value was 0.00; for relationship management the correlation coefficient was -0.49, R-squared was 0.24 and p-

value was 0.26; the EQ score coefficient was 0.12, R-squared was 0.01 and p-value was 0.80; and the employee opinion survey correlation coefficient was 0.66, R-squared 0.44 and p-value of 0.11.

Relationship management score. The correlation coefficient for self awareness was -0.13, R-squared was 0.09, and p-value was 0.77; for self management the correlation coefficient was 0.05, R-squared was 2.74 and p-value was 0.91; for social awareness the correlation coefficient was 0.49, R-squared was 0.24 and p-value was 0.27; for relationship management the correlation coefficient was 1.00, R-squared was 1.00 and p-value was 0.00; the EQ score coefficient was 0.52, R-squared was 0.27 and p-value was 0.23; and the employee opinion survey correlation coefficient was 0.44, R-squared 0.20 and p-value of 0.32

EQ score. The correlation coefficient for self awareness was 0.47, R-squared was 0.22, and p-value was 0.28; for self management the correlation coefficient was 0.85, R-squared was 0.72 and p-value was 0.02; for social awareness the correlation coefficient was 0.12, R-squared was 0.01 and p-value was 0.80; for relationship management the correlation coefficient was 0.52, R-squared was 0.27 and p-value was 0.23; the EQ score coefficient was 1.00, R-squared was 1.00 and p-value was 0.00; and the employee opinion survey correlation coefficient was 0.63, R-squared 0.39 and p-value of 0.13.

Employee Opinion Survey total. The correlation coefficient for self awareness was 0.17, R-squared was 0.03, and p-value was 0.72; for self management the correlation coefficient was 0.31, R-squared was 0.10 and p-value was 0.50; for social awareness the correlation coefficient was 0.66, R-squared was 0.44 and p-value was 0.11; for relationship management the correlation coefficient was 0.44, R-squared was 0.20 and p-

value was 0.32; the EQ score coefficient was 0.63, R-squared was 0.39, p-value was 0.13;

and the employee opinion survey correlation coefficient was 1.00, R-squared 1.00 and p-

value of 0.0.

Table 12

Correlation report showing Nursing Manager EQ results compared to the Employee
Opinion Survey results

Self/Rater		Self	Self Self	Self	Self	Self	EOS
		Self	Manage	Social	Relationship	EQ	Total
		Aware	ment	Aware	Management	Score	
		ness		ness			
Rater Self	r	1.00	0.59	0.49	-0.13	0.47	0.17
Awareness	R ²	1.00	0.35	-0.24	-0.02	0.22	0.03
	р	0.00	0.16	0.26	0.77	0.28	0.72
Rater Self	r	0.59	1.00	-0.33	0.05	0.85	0.31
Management	R ²	0.35	1.00	-0.11	2.74	0.72	0.10
	р	0.16	0.00	0.48	0.91	0.02*	0.50
Rater Social	r	-0.49	-0.31	1.00	-0.49	0.12	0.66
Awareness	R ²	0.24	0.23	1.00	0.24	0.01	0.44
	р	0.26	0.48	0.00	0.26	0.80	0.11
Rater	r	-0.13	0.05	0.49	1.00	0.52	0.44
Relationship	R ²	0.09	2.74	0.24	1.00	0.27	0.20
Management	р	0.77	0.91	0.27	0.00	0.23	0.32
Rater EQ	r	0.47	0.85	0.12	0.52	1.00	0.63
Score	R ²	0.22	0.72	0.01	0.27	1.00	0.39
	р	0.28	0.02*	0.80	0.23	0.00	0.13
EOS	r	0.17	0.31	0.66	0.44	0.63	1.00
Total	R ²	0.03	0.10	0.44	0.20	0.39	1.00
	Р	0.72	0.50	0.11	0.32	0.13	0.00
* indicates a p-value of less than 0.05 which is significant							

Summary of Research Question Six. The r scores over 0.8 which indicate a positive relationship between the variables are reported in the following categories: Self EQ and rater Self Management, and rater EQ and self Self Management. A positive relationship indicates that as one score increases so does the other score in the relationship.

The r scores between 0.5 and 0.8 which indicate some relationship between the variables are reported in the following categories: rater Self Awareness and self Self Management, rater Self Management and self Self Awareness, rater Social Awareness and EOS total, rater Relationship Management and self EQ, rater EQ and self Relationship Management, rater EQ and EOS total, EOS total and self Social Awareness and EOS and self EQ.

All other r scores were under 0.5 which indicates a negative relationship between the variables. A negative relationship indicates that as one score decreases so does the other score in the relationship.

The R² scores which state that there is a variance between the two variables are reported in the following categories: self and rater Relationship Management at 2.74, self EQ and rater Self Management at 0.72, and Self Management and rater EQ at 0.72. The remainder R² scores were less than 50% indicating that there is minimal variance shared between the remaining variables.

The p-value less than 0.05 rejects the null for both self EQ and rater self management stating that there is a relationship between the EQ scores of the nurse manager and the Employee Opinion Survey scores.

Research Question Seven

Is there a relationship between the EQ scores as perceived by their clinical staff reports and the "Employee Opinion Survey" scores?

This question was analyzed with Correlational Analysis reporting r, R-squared and p-value. See Table 13 for Correlation between the average perceived EQ of Staff and Employee Opinion Survey.

		Self	Self	Social	Relationship	EQ	EOS
		Awareness	Management	Awareness	Management	Score	total
EOS	R	0.38	0.40	0.02	0.25	0.30	1.00
total	R ²	0.14	0.16	4.00	0.06	0.09	1.00
	р	0.40	0.37	0.96	0.59	0.51	0.00
EOS	R	0.54	0.43	0.44	0.45	0.47	0.40
Q1	R ²	0.29	0.18	0.19	0.20	0.21	0.16
	р	0.22	0.33	0.32	0.31	0.29	0.46
EOS	R	0.68	0.67	0.28	0.53	0.58	0.87
Q2	R ²	0.46	0.45	0.08	0.28	0.34	0.76
	р	0.09	0.10	0.54	0.22	0.18	0.01*
EOS	R	0.76	0.66	0.52	0.77	0.71	0.66
Q3	R ²	0.58	0.43	0.27	0.59	0.50	0.44
	р	0.05	0.11	0.23	0.04*	0.07	0.11
EOS	R	0.63	0.64	0.44	0.56	0.61	0.86
Q4	R ²	0.40	0.41	0.19	0.31	0.37	0.74
	р	0.13	0.12	0.32	0.19	0.15	0.01*
EOS	R	0.85	0.76	0.58	0.80	0.79	0.70
Q5	R ²	0.72	0.58	0.34	0.64	0.62	0.49
	р	0.02*	0.05	0.17	0.03*	0.04*	0.08
EOS	R	0.28	0.63	0.70	0.49	0.60	0.34
Q6	R ²	0.08	0.40	0.48	0.24	0.36	0.12
	р	0.54	0.13	0.08	0.27	0.15	0.46
EOS	R	0.37	0.39	0.34	0.61	0.47	0.50
Q7	R ²	0.14	0.15	0.12	0.37	0.22	0.25
	р	0.41	0.39	0.46	0.14	0.29	0.26
EOS	R	0.16	0.31	-0.01	-0.09	0.12	0.70
Q8	R ²	0.03	0.10	-1.00	-8.10	0.01	0.49
	р	0.73	0.50	0.98	0.85	0.80	0.08
EOS	R	-0.36	0.19	0.12	-0.17	0.05	0.23
Q9	R ²	-0.13	0.04	0.01	-0.03	2.50	0.05
	р	0.94	0.68	0.79	0.71	0.91	0.61
		~					
-		eam Score		-	= Recognition So		
-		aring Score		-	= Feedback Scor		
-		espect Score	_	-	= Involvement S		
-		imely Respons		-	= Satisfaction -1	Entity Sco	ore
			ealthcare organiz				
* indicates a p-value of less than 0.05 which is significant							

Table 13Correlation between the average perceived EQ of Staff and Employee Opinion Survey.

Total Employee Opinion Survey Score. The correlation coefficient for self awareness was 0.38, R-squared was 0.14, and p-value was 0.40; for self management the correlation coefficient was 0.40, R-squared was 0.16 and p-value was 0.37; for social awareness the correlation coefficient was 0.02, R-squared was 4.00 and p-value was 0.96; for relationship management the correlation coefficient was 0.25, R-squared was 0.06 and p-value was 0.59; the EQ score coefficient was 0.30, R-squared was 0.09 and pvalue was 0.51; and the employee opinion survey correlation coefficient was 1.00, Rsquared 1.00 and p-value of 0.00.

Team Score. The correlation coefficient for self awareness was 0.54, R-squared was 0.29, and p-value was 0.22; for self management the correlation coefficient was 0.43, R-squared was 0.18 and p-value was 0.33; for social awareness the correlation coefficient was 0.44, R-squared was 0.19 and p-value was 0.32; for relationship management the correlation coefficient was 0.45, R-squared was 0.20 and p-value was 0.31; the EQ score coefficient was 0.47, R-squared was 0.21 and p-value was 0.29; and the employee opinion survey correlation coefficient was 0.40, R-squared 0.16 and p-value of 0.46.

Recognition Score. The correlation coefficient for self awareness was 0.68, R-squared was 0.46, and p-value was 0.09; for self management the correlation coefficient was 0.67, R-squared was 0.45 and p-value was 0.10; for social awareness the correlation coefficient was 0.28, R-squared was 0.08 and p-value was 0.54; for relationship management the correlation coefficient was 0.53, R-squared was 0.28 and p-value was 0.28; the EQ score coefficient was 0.58, R-squared was 0.34 and p-value was 0.18; and

the employee opinion survey correlation coefficient was 0.87, R-squared 0.76 and p-value of 0.01.

Caring Score. The correlation coefficient for self awareness was 0.76, R-squared was 0.58, and p-value was 0.05; for self management the correlation coefficient was 0.66, R-squared was 0.43 and p-value was 0.11; for social awareness the correlation coefficient was 0.52, R-squared was 0.27 and p-value was 0.23; for relationship management the correlation coefficient was 0.77, R-squared was 0.59 and p-value was 0.04; the EQ score coefficient was 0.71, R-squared was 0.50 and p-value was 0.07; and the employee opinion survey correlation coefficient was 0.66, R-squared 0.44 and p-value of 0.11.

Feedback Score. The correlation coefficient for self awareness was 0.63, R-squared was 0.40, and p-value was 0.13; for self management the correlation coefficient was 0.64, R-squared was 0.41 and p-value was 0.12; for social awareness the correlation coefficient was 0.44, R-squared was 0.19 and p-value was 0.32; for relationship management the correlation coefficient was 0.56, R-squared was 0.31 and p-value was 0.19; the EQ score coefficient was 0.61, R-squared was 0.37 and p-value was 0.15; and the employee opinion survey correlation coefficient was 0.86, R-squared 0.74 and p-value of 0.01.

Respect Score. The correlation coefficient for self awareness was 0.85, R-squared was 0.72, and p-value was 0.02; for self management the correlation coefficient was 0.76, R-squared was 0.58 and p-value was 0.05; for social awareness the correlation coefficient was 0.58, R-squared was 0.34 and p-value was 0.17; for relationship management the correlation coefficient was 0.80, R-squared was 0.64 and p-value was

0.03; the EQ score coefficient was 0.79, R-squared was 0.62 and p-value was 0.04; and the employee opinion survey correlation coefficient was 0.70, R-squared 0.49 and p-value of 0.08.

Involvement Score. The correlation coefficient for self awareness was 0.28, R-squared was 0.08, and p-value was 0.54; for self management the correlation coefficient was 0.63, R-squared was 0.40 and p-value was 0.13; for social awareness the correlation coefficient was 0.70, R-squared was 0.48 and p-value was 0.08; for relationship management the correlation coefficient was 0.49, R-squared was 0.24 and p-value was 0.27; the EQ score coefficient was 0.60, R-squared was 0.36 and p-value was 0.15; and the employee opinion survey correlation coefficient was 0.34, R-squared 0.12 and p-value of 0.46.

Timely Response Score. The correlation coefficient for self awareness was 0.37, R-squared was 0.14, and p-value was 0.41; for self management the correlation coefficient was 0.39, R-squared was 0.15 and p-value was 0.39; for social awareness the correlation coefficient was 0.34, R-squared was 0.12 and p-value was 0.46; for relationship management the correlation coefficient was 61, R-squared was 0.37 and pvalue was 0.14; the EQ score coefficient was 0.47, R-squared was 0.22 and p-value was 0.29; and the employee opinion survey correlation coefficient was 0.50, R-squared 0.25 and p-value of 0.26.

Satisfaction – Entity Score. The correlation coefficient for self awareness was 0.16, R-squared was 0.03, and p-value was 0.73; for self management the correlation coefficient was 0.31, R-squared was 0.10 and p-value was 0.50; for social awareness the correlation coefficient was -0.01, R-squared was -1.00 and p-value was 0.98; for

relationship management the correlation coefficient was -0.09, R-squared was -8.10 and p-value was 0.85; the EQ score coefficient was 0.12, R-squared was 0.01 and p-value was 0.80; and the employee opinion survey correlation coefficient was 0.70, R-squared 0.49 and p-value of 0.08.

Satisfaction – Healthcare Organization Score. The correlation coefficient for self awareness was -0.36, R-squared was -0.13, and p-value was 0.94; for self management the correlation coefficient was 0.19, R-squared was 0.04 and p-value was 0.68; for social awareness the correlation coefficient was 0.12, R-squared was 0.01 and p-value was 0.79; for relationship management the correlation coefficient was -0.17, R-squared was 0.03 and p-value was 0.71; the EQ score coefficient was 0.05, R-squared was 2.50 and pvalue was 0.91; and the employee opinion survey correlation coefficient was 0.23, Rsquared 0.05 and p-value of 0.61.

Summary of Research Question seven. The r scores over 0.8 which indicate a positive relationship between the variables are reported in the following categories: the Recognition score compared to the Employee Opinion Score at 0.87; the Feedback score compared with the Employee Opinion Survey score at 0.86; and the Respect score compared with Self Awareness at 0.85 and Relationship Management scores at 0.80. A positive relationship indicates that as one score increases so does the other score in the relationship.

The r scores between 0.5 and 0.8 which indicate some relationship between the variables are reported in the following categories: the Team score compared to Self Awareness at 0.54, the Recognition score compared to Self Awareness at 0.54, Self Management at 0.67, Relationship Management at 0.53 and EQ at 0.58; the Caring score

compared to Self Awareness at 0.75, Self Management at 0.66, Social Awareness at 0.52, Relationship Management at 0.77, EQ at 0.71; the Feedback score compared to Self Awareness at 0.63, Self Management at 0.64, Relationship Management at 0.56, EQ at 0.61; the Respect score compared to Self Management at 0.76, Social Awareness at 0.58, EQ at 0.78 and total Employee Opinion Survey at 0.70; the Involvement score compared to Self Management at 0.63, Social Awareness at 0.69 and EQ at 0.60; Timely Response compared to Relationship Management at 0.61 and total Employee Opinion Survey at 0.50.

The rest of the scores were under 0.50 indicating a negative relationship. A negative relationship indicates that as one score decreases so does the other score in the relationship.

The R² scores which state that there is a variance between the two variables are reported over 0.50 or 50% in the following categories: the Employee Opinion Survey and Social Awareness at 4.00; the Recognition score and total Employee Opinion Survey at 0.76; the Caring score and Self Awareness at 0.58, Relationship Management at 0.59 and EQ at 0.50; the Feedback score compared to the total Employee Opinion survey at 0.74; the respect score compared to Self Awareness at 0.72, Self Management at 0.58, Relationship Management at 0.64 and EQ at 0.62; the Satisfaction – Entity score compared to Social Awareness at -1.00 and Relationship Management at -8.10; and Satisfaction – Healthcare Organization score compared to EQ at 2.50. The remainder R² scores were less than 50% indicating that there is minimal variance shared between the remaining variables.

The p-value less than 0.05 rejects the null for the following scores: Recognition score and Total Employee Opinion Survey score at 0.01; the Caring score and Relationship Management 0.04; the Feedback score and total Employee Opinion survey at 0.01; the Respect score and Self Awareness at 0.02, Relationship Management at 0.03, and EQ at 0.04.

Chapter 5

Discussion

This chapter restates the overall problem, reviews the purpose of the research, summarizes the research findings, proposes conclusions and offers suggestions for future studies. Educational recommendations are made for the Entity to assist the nurse managers develop EQ and aspects of EQ, to give them tools to enhance their management abilities.

Restatement of the Problem

The healthcare organization that serves as the focus of this study, contracts with a consulting company to conduct and provide annual Employee Opinion Surveys. This consulting company gathers survey data from employees, interprets the information, and provides feedback to the healthcare organization and its entities. The feedback highlights employee satisfaction or dissatisfaction for particular job codes at each of the organization's sites. Employees are notified annually by mail that the satisfaction surveys are due, and they are encouraged to take part in the survey. The survey is located online for participant convenience.

Improvement plans are required from select managers if employee satisfaction scores are low. If the scores are high, reward and recognition are provided to the managers and staff for their successful and positive services and the interactions they have within their work environment.

Under the umbrella of the healthcare organization for this study are numerous entities which include hospitals and medical clinic sites. For the purpose of this study, data was collected from Entity X. This study focused on the EQ of site Nursing Managers

as perceived themselves and by registered nurses and licensed vocational nurses who report directly or indirectly to the site managers. Then the resultant EQ data was compared to the results of the leadership question portion of the 2009 Employee Opinion Survey for that specific site manager.

The research focus for this study was formulated from the following questions: If a nursing manager perceives levels of EQ in his or her leadership or management style, do the registered nurses and licensed vocational nurse employees, who are their direct or indirect reports, perceive those levels of EQ in their nursing managers? Could the level of EQ that nursing managers possess influence the result of an employee opinion survey?

Restatement of the Purpose

The purpose of this study was three-fold. Firstly, to determine and compare the EQ scores of nurse managers at Entity X as reported by nurse managers and their direct and indirect reports. Secondly, to determine the "Employee Opinion Survey" scores of nurse managers at Entity X from the 2009 Employee Opinion Survey and evaluate if those scores are related to the differences in EQ scores of nurse managers as perceived by nurse managers and their direct and indirect reports. Thirdly, to determine if there is a relationship between "Employee Opinion Survey" scores and the EQ scores of nurse managers at Entity X as perceived by nurse managers and their direct reports.

Effective personnel management creates a ripple effect of employee satisfaction or dissatisfaction from the top tiers of leadership through the levels of management, reaching to clinic staff and finally, to the client. If clinic staff are enjoying their work, colleagues, expectations, experiences, and tasks and they have the tools and support

needed from managers and leaders to perform their tasks, they will wish to retain their employment and will also pass on positive attitudes to their patients. It follows then that when the annual survey is distributed, the employees should grade the specific questions about their Entity X clinic sites positively, which will result in high employee satisfaction scores.

Summary of the Findings

The results of the analysis for research question one indicated that the nurse managers rated their EQ similarly to each other. The lowest mean was rated at 79 and the highest mean was rated at 87.4. A variation of 62 to 100 was identified between the mode and the average score for each of the EQ categories ranged between 83 and 87. The greatest standard deviation was for Self Management which also had the highest range of scores.

These results suggest that the nurse managers rated very similar to each other, in the EQ competencies, though Self Management was identified as the area of most variation.

The results of the analysis for research question two indicated that the clinical staff rated their managers overall Self Awareness mean between 83.5 to 90.8, the Self management mean was 68 to 93.5, the Social Awareness mean was 83.5 to 91.3 and the Relationship Management mean was 75.3 to 91.2. The overall most common score range was 83 to 100, with Self Management ranging from 62 to 96, Social Awareness ranging from 88 to 100 and Relationship Management ranging from 89 to 100. The overall median range for Self Awareness was 85 to 90, Self Management was 72 to 93, Social Awareness was 83 to 92, and Relationship Management was 82 to 90. The highest

Standard Deviation was for Relationship Management which was 22.57 with the remaining EQ competency Standard Deviations being Self Awareness at 10.81, Self Management at 18.50 and Social Awareness at 14.75. The overall minimum to maximum scores for Self Awareness was 70 to 100, Self Management was 37 to 100, Social Awareness was 58 to 100 and Relationship Management was 39 to 100.

These results suggest that the clinical staff were in agreement that the nurse managers exhibited attributes of Self Awareness, Social Awareness and Relation Management but there was a wide variation in the mean for the Self Management competency.

The results of the analysis of research question three indicated that in each EQ category the p-value is greater than alpha, indicating that the null hypothesis would not be rejected and there is no difference in the EQ scores between the nurse managers and their clinical staff reports.

The results of the analysis of research question four indicated that mean scores ranged from 67.2 for Encourage Involvement to 90.8 for Satisfaction toward Entity X. The lowest most common score was 69 for Encourage Involvement and Timely Response, and the highest most common score was 92.5 for Satisfaction toward Entity X and Satisfaction toward Healthcare Organization. The overall median score range was from 66.5 for Encourage Involvement to 92 for Satisfaction toward Entity X. The highest Standard Deviation was 17.15 which was for Team Player. The lowest minimum/maximum range was 44-80 for Staff Recognition and the highest

range for scores was 15 for Satisfaction toward Healthcare Organization and the highest was 41.5 for Team Player.

These results state that the lowest average scores were for Staff Recognition and Encourage Involvement and the highest average score was for Satisfaction – Entity. The lowest most common score was for Encourage Involvement and Timely Response with the highest most common score which was for Satisfaction – Entity and Satisfaction – Healthcare Organization. The lowest median score was for Encourage Involvement and the highest median score was for Satisfaction – Entity. The highest Standard Deviation was for Team Player and the lowest was for Satisfaction – Entity. The widest range of scores was for Team Player and the narrowest range of scores was for Satisfaction – Entity and Healthcare Organization.

A summary of the results of research question four suggest that Encourage Involvement scored lowest with Staff Recognition scoring next to lowest. The highest scoring questions were Satisfaction – Entity and Satisfaction – Healthcare Organization.

The results of the analysis of research question five indicated that R² scores which state that there is a positive difference between the two variables are reported in the following categories: Self Management and Recognition at 0.56, Self Awareness and Caring score at 0.59, Relationship Management and Caring score at 0.64, EQ score and Caring score at 0.56, Feedback score and Employee Opinion Survey at 0.74, Respect score and Self Awareness at 0.72, Respect score and Self Management at 0.64, Respect score and Relationship Management at 0.69 and Respect score and EQ at 0.69 and Involvement score and Social Awareness at 0.59. The remainder R² scores were less than 50% indicating that there is a negative difference between the remaining variables. The p-

value below 0.05 indicates there is a probable relationship between the following variables. Recognition score and Employee Opinion survey at 0.01, the Caring score and Self Awareness at 0.04, the Caring score and Relationship Management at 0.03, the Respect Score and Self Awareness at 0.02, the Respect score and Self Management at 0.03, the Respect score and Relationship Management at 0.02, the Respect score and EQ at 0.02, and the Involvement score and Social Awareness at 0.04.

The results of the analysis of research question six indicated that R² scores which state that there is a positive difference between the two variables are reported in the following categories: self and rater Relationship Management at 2.74, self EQ and rater Self Management at 0.72, and self Self Management and rater EQ at 0.72. The remainder R² scores were less than 50% indicating that there is a negative difference between the remaining variables. The p-value below 0.05 is suggests there is a probable relationship between self EQ and rater Self Management stating that there is a relationship between the EQ scores of the nurse manager and the Employee Opinion Survey scores.

The results of the analysis of research question seven indicated that R² scores which state that there is a positive difference between the two variables are reported in the following categories: Employee Opinion Survey and Social Awareness at 4.00, Recognition score and Employee Opinion Survey at 0.76, Caring score and Self Awareness at 0.58, Caring score and Relationship Management at 0.59, Caring score and EQ at 0.50, Respect score and Self Awareness at 0.72, Respect score and Self Management at 0.58, Respect score and Relationship Management at 0.64, Respect score and EQ at 0.62, Satisfaction – Entity and Social Awareness at -1.00, Satisfaction – Entity at -8.10 and Satisfaction – Heathcare Organization at 2.50. The remainder R² scores were less than 50% indicating that there is a negative difference between the remaining variables. The p-value below 0.05 indicates that there is a probable relationship between the Recognition score and Employee Opinion Survey at 0.01, the Caring Score and Relationship Management at 0.04, the Respect score and Self Awareness at 0.02, the respect score and Relationship management at 0.03, the Respect score and EQ at 0.04.

Conclusions of the Study

The conclusions of this study are based upon the research data collected by the TalentSmart® EmotionalIntelligence AppraisalTM MR EditionTM survey and the Morehead Associates Employee Opinion Survey, both being administered at Entity X from the middle of September, 2009 to the end of October, 2009.

Conclusion One

The nurse managers rated their Self Management competency the lowest at 79%. Conclusion Two

There was a consensus between the nurse managers and the clinical staff reports rating of the nurse manager's Self Awareness, Social Awareness and Relationship Management with Relationship Management being the most often competency with low scores.. The managers rated themselves equally, and their clinical staff reports rated their managers equally in those competencies.

Conclusion Three

The null hypothesis was not rejected as there was no difference in the EQ scores between the nurse managers and their clinical staff reports.

Conclusion Four

The Employee Opinion survey results indicated that the staff rated the nursing managers low in the questions for Encourage Involvement and Staff Recognition. They rated the nursing managers high for Satisfaction – Entity and Satisfaction – Healthcare Organization.

Conclusion Five

There was a difference in the relationship between the Recognition scores and Self Management and Employee Opinion survey, the Caring scores and Self Awareness, Relationship Management and EQ, the Respect scores and Self Awareness, Self Management, Relationship Management and EQ, and the Involvement score and Social Awareness. These results indicate that these are the areas of differences in EQ as perceived by nurse managers and their clinical staff reports and the Employee Opinion Survey.

Conclusion Six

There was a difference in relationship between rater rater Self Management and self Relationship Management, rater Self Management and self Self EQ, Rater Relationship Management and self Self Management and rater EQ and self Self Management. These results indicate that there is a higher percentage of difference in these shared variables.

Conclusion Seven

There was a difference in the relationship between the Employee Opinion survey and Social Awareness, the Recognition score and the Employee Opinion survey, the Caring score and Self Awareness, Relationship Management and EQ, the Feedback score

and the Employee Opinion survey and the Respect score and Self Awareness, Self Management, Relationship Management and EQ, the Satisfaction – entity score and Social Awareness and Relationship Management and the Satisfaction – Healthcare Organization score and the EQ score. These results indicate that there is a higher percentage of difference in these shared variables.

Conclusion Summary

This study showed that the nurse managers at Entity X evaluated themselves at a similar level as each other with Self Management being the EQ competency with most variation. Results from the rater portion of the survey indicated that the direct report staff were in agreement with the nurse manager results and they too reported a wide variation in the Self Management and low scores for Self Awareness and Relationship Management.

The results from the Employee Opinion survey comparison indicated that the nurse managers were rated with low scores in respect, encourage involvement, staff recognition and caring scores.

Authors Recommendations and Observations

The following recommendations are based upon the conclusions of the study, the EQ model of Goldman and the four EQ competencies used in the survey tool .The recommendation will be presented to the nursing leadership at Entity X at the completion of this research study.

EQ competencies which were identified by both nursing managers and their nurse reports as deficient were Self Management and Relationship Management, though aspects of the Self Awareness and Social Awareness deficiencies were evidenced in the

study. Self Management includes the ability to "use awareness of your emotions to stay flexible and positively direct your behavior. This means managing your emotional reactions to all situations and people." (Talentsmart®, 2001 - 2008) The competencies included in Self Management are emotional self control, transparency, adaptability, achievement, initiative and optimism. Relationship Management includes the ability to "get along well with others, handling conflict effectively, clearly expressing ideas/information, and using sensitivity to another person's feelings to manage interactions successfully." (Talentsmart®, 2001 - 2008) The competencies included in Relationship Management are developing others, inspirational leadership, change catalyst, influence, conflict management, teamwork and collaboration.

The Employee Opinion Survey outlier scores indicating that there were deficiencies, were Encourage Involvement, Caring, Respect and Staff Recognition. These particular variables are integrated inside the concept of Self Management and Relationship Management EQ competencies. They could also be managed individually.

The nurse managers would benefit from advanced leadership education focusing on developing their EQ competencies to enhance their management skills, and to increase and maintain a higher level of staff satisfaction. Advanced leadership education would include interpreting the individual results of a multi-rater EQ survey for each participant and informative instruction on developing EQ attributes within their management styles. The education would include instruction on the enhancement of each of the four competencies of the EQ model, Self Awareness, Self Management, Social Awareness and Relationship Management, with particular the competencies which were evidenced as deficient as per the result of the survey. Such courses are available through organizations

who will train mentors and coaches to manage the training and the follow up, or, the author could undergo the intensive EQ training course to become a certified trainer and manage the advanced leadership classes at Entity X.

Encourage Involvement, Caring, Respect and Staff Recognition can be managed through awareness and purposeful effort on the part of the manager to include each of the deficient attributes in their management style. A suggestion would be to gather input from the nurse reports for their feedback and ideas. Once the feedback and ideas are gathered, the nursing manager would incorporate them into their management repertoire and use them in meetings, events or wherever appropriate.

The author observed that the results of the Entity X Employee Opinion Survey mirrored the results of the Healthcare Organization Employee Opinion Survey as a whole. This means that the deficiencies identified in this study and the Employee Opinion survey are not Entity specific but are evidenced in the overall Healthcare Organization.

Recommendations for Further Study

- EQ survey the balance of leaders at Entity X, this includes the medical staff and ancillary staff.
- Increase the survey population to include supervisors and leads.
- Increase survey population to other Entities within the Healthcare organization.
- Study and apply the EQ aspects of Entity X leadership with reference to the Six Leadership styles as suggested by the Hay Group – Coercive Leadership,
 Democratic Leadership, Affiliative Leadership, Pacesetting Leadership, Coaching Leadership and Authorative Leadership. (Goleman, 2000)

REFERENCES

- Bar-On, R. (2007). *The 5 meta-factors and 15 sub-factors of the Bar-On model*. Retrieved August 11, 2008, from http://www.reuvenbaron.org/bar-on -model/essay.php?i=3.
- Blanchard, K., & Player, K. (2008). Nursing leadership can be taught. *Nurse Leader*, 2, pp. 28–29.
- Bradberry, T., & Su, L. D., (2004). *Ability versus skill based assessment of emotional quotient*. San Diego, TalentSmart
- Bradberry, T., & Greaves, J., (2001-2007). *EmotionaliIntelligence appraisal®: There is more than IQ*. San Diego: TalentSmart
- Caruso, D. R., & Salovey, P. (2004). The emotionally intelligent manager: How to Develop and use the four key emotional skills of leadership. San Francisco. Jossey-Bass
- Dulewicz, V., & Higgs, M. (2003). Leadership at the top: The need for emotional intelligence in organizations. *The International Journal of Organizational Analysis*, 11(3), 193-210.
- Failla, K. R., & Stichler, J. F. (2008). Manager and staff perceptions of the manager's leadership style. *Journal of Nursing Administration*, 38(11), 480–487.
- Feltner, A., Mitchell, B., Norris, E., & Wolfle, C. (2008). Nurses' views on the characteristics of an effective leader. *AORN Journal*, 87(2), 363–372.
- Goleman, D. (1998a). What makes a leader. *Harvard Business Review*, (November), pp. 8–16.

Goleman, D. (1998b). Working with emotional intelligence. New York: Bantam.

- Goleman, D. (2000). Leadership that gets results. *Harvard business review*. 78(2) 19–35.
- Goleman, D., Boyartzis, R., & McKee, A. (2002). *Primal leadership: Learning to lead with emotional intelligence*. Boston: Harvard Business School Press.
- Gunther, M., Evans, G., Mefford, L., & Coe, T. (2007). The relationship between leadership styles and empathy among student nurses. *Nursing Outlook*, 55 (4), 196-201.
- Health Resources and Services Administration. (2002). New HRSA report predicts deepening nursing shortage. Retrieved March 21, 2009, from http://archive.hrsa.gov/newsroom/NewsBriefs/2002/nursieshortagerepor...
- Hersey, P., Blanchard, K. H., & Johnson, D. E.(1996). Management of organizational behavior: Utilizing human resources. (7th ed.). Upper Saddle River, NJ:
 Prentice-Hall.
- Johnson, L. G. (2008). "The high EQ nurse manager." Advance for Nurses, 5 (19), 10.
- Kooker, G. M., Shoultz, J., & Codier, E. E. (2007). Identifying emotional intelligence in professional nursing practice. *Journal of Professional Nursing*, *23*(1), 30-36.
- McGregor, D. (1985). The human side of enterprise. New York: McGraw-Hill.
- McMillan, J. H., & Schumacher, S., (2006). *Research in education: Evidence-based inquiry*. (6th ed.). New York: Pearson Education, Inc.
- Morehead Associates (n.d.) *Workforce commitment survey reliability and validity*. Unpublished technical report.

- Morehead Associates. (2009) Employee Opinion Surveys, Employee Satisfaction Survey. Retrieved January 10, 2010 from http://moreheadassociates.com/goto .asp?pg=EXPLORE_HEALTHCARE
- Northouse, P. (2004) *Leadership: Theory and practice*. (3rd ed.) Thousand Oaks, CA: Sage.
- Raup, G. (2008). The impact of ED nurse manager leadership style on staff nurse turnover and patient satisfaction in academic health center hospitals. *Journal of Emergency Nursing*, 10, 403–409.
- Robbins, S. P. (2005). *Essentials of organizational behavior*. New Jersey: Pearson-Prentice Hall.
- Salovey, P. (1997). Emotional development and emotional intelligence: Educational implications, New York: Basic Books
- Salovey, P., & Mayer, J. D (2004). Emotional intelligence, imagination, cognition and personality: Key readings on the Mayer and Salovey model, New York: Dude Publishing.
- Salovey, P., Brackett, M. A., & Mayer, J. D. (2004). *Emotional intelligence: Key readingson the Mayer and Salovey model*. New York: Dude Publishing.

Schwartz, T. (2000). How do you feel? Fast Company, 6, 297-312.

- Sellgren, S., Ekvall, G., & Tomson, G. (2007). Nursing staff turnover: Does leadership matter? *Leadership in Health Services*, 20 (3), pp. 169-183.
- Sturder, Q. (2003). *Hardwiring excellence: Purpose, worthwhile work, making a difference.* Gulf Breeze, Florida: Fire Starting Publishing

- TalentSmart®. (2001-2008). *Emtional intelligence appraisal*TM factsheet. Retrieved on July 2, 2009 from http://www.talentsmart.com
- Vitello-Cicciu, J. M. (2003). Innovative leadership through emotional intelligence. *Nursing management*, 34(10). 29–32.
- Vrba, M., (n/d). *Emotional intelligence skills and transformational leadership behavior in a sample of first-line managers: An exploratory study*. San Diego: TalentSmart

Appendix A

Emotional Intelligence Appraisal Questions (Bradberry & Greaves, 2001 – 2007, p.1)

For each question, check a box according to how often you... (Never, Rarely, Sometimes, Usually, Almost Always, Always)

- 1. Are confident in your abilities.
- 2. Admit your shortcomings.
- 3. Understand your emotions as they happen.
- 4. Recognize the impact your behavior has upon others.
- 5. Realize when others influence your emotional state.
- 6. Play a part in creating the difficult circumstances you encounter.
- 7. Can be counted on.
- 8. Handle stress well.

9. Embrace change early on.

10. Tolerate frustration without getting upset.

- 11. Consider many options before making a decision.
- 12. Strive to make the most out of situations whether good or bad.
- 13. Resist the desire to act or speak when it will not help the situation.
- 14. Do things you regret when upset.
- 15. Brush people off when something is bothering you.
- 16. Are open to feedback.
- 17. Recognize other people's feelings.
- 18. Accurately pick up on the mood in the room.
- 19. Hear what the other person is "really" saying.
- 20. Are withdrawn in social situations.
- 21. Directly address people in difficult situations.
- 22. Get along well with others.
- 23. Communicate clearly and effectively.
- 24. Show others you care what they are going through.
- 25. Handle conflict effectively.
- 26. Use sensitivity to another person's feelings to manage interactions effectively.
- 27. Learn about others in order to get along better with them.
- 28. Explain yourself to others.

Appendix B

2008 EMPLOYEE OPINION SURVEY RESULTS

Directions: Please indicate the overall percentage result for the following questions from the 2008 Employee Opinion survey for your site.

	QUESTION	% RESULT
1	In my department there is an open, honest two-way communication.	
2	My immediate supervisor keeps his/her commitments.	
3	My supervisor cares about me.	
4	I regularly receive recognition and reward.	
5	Management provides excellent service.	
6	I am involved with decisions that affect my work.	
7	My immediate supervisor responds in a timely manner.	
8	The people I work with do their very best.	

Appendix C

2009 Employee Opinion Survey selected questions results

Name of site:_____

Unfavorable %	Neutral %	Favorable %

	Unfavorable	Neutral	Favorable
1. The person I report to encourages teamwork. (Q12)			
2. I regularly receive appropriate recognition for the work I do. (Q23)			
3. The person I report to cares about my job satisfaction. (Q26)			
4. The person I report to gives me useful feedback. (Q27)			
5. The person I report to treats me with respect. (Q29)			
6. I am involved in decisions that affect my work. (Q32)			
7. The person I report to responds in a timely manner to my questions or concerns. (Q33)			
8. Overall, I am extremely satisfied with my Entity as a place to work. (Q42)			
9. Overall, I am extremely satisfied with "S" as a place to work. (Q43)			

Please insert the Performance % in the appropriate column

Appendix D

EMOTIONAL QUOTIENT IN NURSING MANAGERS Survey Letter

Dear Friend,

Would you be interested in participating in the study I am embarking on to evaluate the *Emotional Quotient* of our site managers.

Emotional Quotient refers to self-awareness, self management, social awareness, and relationship management. It is based on the model researched and presented by Daniel Goleman in his book, *Primal Leadership: Learning to Lead with Emotional Intelligence*.

The survey is called Emotional Intelligence Appraisal[™]. This is a peer review questionnaire survey that evaluates the level of Emotional Quotient of your manager. If you are the manager, you will be evaluating yourself.

The survey is completely anonymous; it has been organized so that no person can be identified. Participation is voluntary. The following are directions to manage the survey:

- 1. The survey consists of 28 questions and should take about seven minutes to complete. The general idea is to not deliberate over your selections; usually your first impression is the most correct.
- 2. The survey will be sent to your personal email address from TalentSmart®,
- 3. Please have the survey completed and returned to TalentSmart® by September 30th, 2009.

Thank you for your input and support.

Yours sincerely,

Beverley D. Turner, M.A., R.N. Doctor of Education in Organizational Leadership, Pepperdine University Doctoral Student