Leadership training and emotional intelligence in school nurses

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LEADERSHIP TRAINING AND EMOTIONAL INTELLIGENCE
IN SCHOOL NURSES

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ABSTRACT

Leadership Training and Emotional Intelligence
in School Nurses

by

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Now more than ever, nurses need to be leaders. However, most studies of leadership, whether in nursing, business, or the military, have focused on individuals in administrative positions. School nurses practice in primarily autonomous circumstances, where they need to possess substantial leadership skills and the ability to identify and manage emotions to ensure an optimal educational learning environment for the students under their care.

Three leadership theories were combined to form the Emotionally Intelligent Leadership Model as the framework for a leadership training program. This two group before and after quasi-experimental study investigated the effects of a leadership training program on the emotional intelligence and perceptions of leadership skills of school nurses.

A sample of 60 school nurses in Southern Nevada were recruited and randomly assigned to either the control or experimental group. The experimental group
received a leadership training program totaling 18 hours. The following hypotheses were tested:

1. School nurses who receive leadership training will show significantly higher overall emotional intelligence scores as measured on the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) than school nurses who do not receive the leadership training.

2. School nurses who receive leadership training will show significantly higher overall scores as measured on the Leadership Practices Inventory (LPI) than school nurses who do not receive the leadership training.

3. School nurses who receive leadership training will show significantly higher overall scores as measured on the Grossman and Valiga Leadership Characteristics and Skills Assessment (GVLA) than school nurses who do not receive the leadership training.

4. School nurses who receive leadership training will show significantly higher overall scores as measured on the Grossman and Valiga Leadership Skills: Rate Yourself Questionnaire (GVQ) than school nurses who do not receive the leadership training.

Data were analyzed using descriptive statistics, and both parametric and nonparametric analyses. The data demonstrated that the leadership training did significantly impact the experimental group’s self perception of leadership as measured by the LPI. The training did not, however, have a significant impact on their emotional intelligence as measured by the MSCEIT.
# TABLE OF CONTENTS

ABSTRACT .................................................................................................................................. iii

ACKNOWLEDGEMENTS ....................................................................................................... vii

CHAPTER 1 INTRODUCTION ............................................................................................... 1
  Background and significance of the study ................................................................. 1
  Statement of the problem ............................................................................................ 3
  Statement of the purpose ............................................................................................ 5

CHAPTER 2 REVIEW OF RELATED LITERATURE ....................................................... 6
  School Nursing ................................................................................................................. 6
  Difference between leadership and management ..................................................... 10
  Leadership ....................................................................................................................... 12
    Servant Leadership ..................................................................................................... 13
    Transformational Leadership .................................................................................... 18
    Situational Leadership .............................................................................................. 22
  Emotional Intelligence ................................................................................................... 30
  Summary ......................................................................................................................... 40

CHAPTER 3 CONCEPTUAL FRAMEWORK ................................................................... 42
  Research questions and hypotheses ............................................................................ 48
  Conceptual and Operational Definitions ...................................................................... 49

CHAPTER 4 METHODOLOGY ........................................................................................... 51
  Description of research design .................................................................................... 51
  Identification of population and sample ...................................................................... 51
  Measurement Methods ................................................................................................ 52
  Description of pilot study ............................................................................................ 58
  Description of the leadership classes .......................................................................... 59
  Ethical considerations ................................................................................................. 64
  Data collection procedures ......................................................................................... 65
  Statistical Analyses ...................................................................................................... 66
CHAPTER 5  FINDINGS OF THE STUDY ................................................................. 68
Analysis of Data ............................................................................................................. 68
Statistical Analysis of Research Hypotheses ................................................................. 70

CHAPTER6  SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS .......... 75
Discussion of Results ........................................................................................................ 75
Limitations .......................................................................................................................... 79
Recommendations for Further Study ............................................................................... 81
Conclusions .......................................................................................................................... 85

APPENDIX A ...................................................................................................................... 86
Emotionally Intelligent Leadership Model .......................................................................... 86
Table 1: Descriptive Demographic Data ........................................................................... 87
Table 2: Comparison of RN and SN Experience ............................................................... 87
Table 3: T tests or Mann-Whitney Scores for MSCEIT ..................................................... 88
Table 4: Correlation Analysis of the GVLA, GVQ, and LPI .............................................. 89
Table 5: Correlations among Area Scores and Total Emotional Intelligence ............... 90

APPENDIX B ...................................................................................................................... 91
Demographic Data Sheet ................................................................................................. 91
Grossman and Valiga Leadership Characteristics and Skills Assessment (GVLA) ........ 92
Grossman and Valiga Leadership Skills: Rate Yourself Questionnaire (GVQ) .............. 94
Permission to use Grossman and Valiga Assessment Tools ........................................... 95
Leadership Practices Inventory Invoice ........................................................................ 96
Permission to Use Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) .......... 97

APPENDIX C ...................................................................................................................... 98
Leadership Classes: Outline ............................................................................................ 98
Leadership Class Evaluation ........................................................................................... 100

APPENDIX D .................................................................................................................... 102
Letter of Explanation ....................................................................................................... 102
Letter of Assent (Pilot Study) .......................................................................................... 104
Letter of Consent (Dissertation Study) .......................................................................... 105

BIBLIOGRAPHY ............................................................................................................. 108

VITA ................................................................................................................................... 133
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CHAPTER 1

INTRODUCTION

Background and Significance of the Study

Now more than ever nurses need to be leaders. Much of the literature surrounding leadership discusses this topic in terms of those skills and attributes necessary to create and develop managers, whether in nursing (i.e. Grossman & Valiga, 2005; Milstead & Furlong, 2006; Porter-O’Grady & Mallock, 2007), the business world (i.e. Northouse, 2007; Brown & Barker, 2001; Sternberg, 2007), or the military (Vecchio, Bullis & Brazil, 2006; Yeakey, 2002). Leadership and management are often used synonymously, thus making it difficult to differentiate between the two. Besides the muddle caused by confusing the concepts of leadership and management, a clear definition of leadership has yet to be presented (Bass, 1990). Yet as attempts to define leadership have continued, some core concepts have emerged, namely, the intrapersonal aspects of the leader, the situational context, the emotional aspects of interpersonal relationships, and the vision of a goal (Northouse, 2007; Sternberg, 2007; Zaccaro, 2007).

Avolio (2007) states that leadership “theory and research has reached a point in its development at which it needs to move to the next level of integration” (p.25). Avolio et al (2004) have attempted to include some of the above mentioned elements in their
authentic leadership theory, which integrates the leader, the followers, and the context of the situation. However, they do not incorporate the visionary portion of leadership.

Leadership is needed at the point of patient care and should not be reserved for those in management positions (Canadian Nurses Association, 2002; Porter-O'Grady, 2003a; Practice Nurse, 2006). Grossman and Valiga (2005) concur as they emphasize that leadership is, in reality, an action and possible for any nurse, no matter the position he or she holds. The more autonomous the work environment, the more this statement is true (Flowers, Sweeney, & Whitefield, 2004).

School nursing is a unique subspecialty. Most of these nurses enter this specialty from acute care facilities and are often surprised and discomfited by the level of autonomy and isolation (D. Taylor, personal communication, September 28, 2005; Guttu, 2004). Meeting the health needs of students is particularly challenging within the educational system due to the increased number and complexity of individual student health needs. This is further complicated by high nurse-to-student ratios. Although the recommended student to school nurse ration is 750:1 (NASN, 2007), 59% of states are above that average, with the worst state having a ratio of 4,952:1 (Zaslow, 2006). School nurses also work with a lack of dedicated funding and must merge the missions of education and health (NASN, 2002). Thus, school nursing challenges its members to work largely autonomously within a power structure upon which they may have little personal authority.

Of the seven components of the role of the school nurse outlined by the National Association of School Nurses (NASN), two specifically directs him or her to “provide leadership for the provision of health services” and to “serve in a leadership role for
health policies and programs" (p. 2). However, no empirical studies have been done regarding the leadership or interpersonal skills these nurses either need or already possess.

Statement of the Problem

School nurses are usually the sole health care professionals in their school communities. If they do not, in some way, provide health care leadership, the students, families, and the staff may not have an optimally healthy educational environment in which to interact. Thus, a coherent theoretical model of leadership is needed to connect the philosophy held by the school nurses with the situations they face, the interactions they have, and their visions for improvement. If school nurses are not clear of the “why”, it is difficult to make the “how” and “what” congruent. This conscience “introduces us into the world of relationships. It moves us from an independent to an interdependent state...Conscience often provides the why, vision identifies what we are trying to accomplish, discipline represents the how we are going to accomplish it” (Covey, 2002, p.9).

To be successful, school nurses must be influential leaders in their schools to maintain a safe, healthy academic environment for the students. Further, they need both assertive and negotiation skills to obtain much needed equipment and personnel assistance, and to communicate effectively with their patients and families. School nurses need also to act as agents of change as they assist the students to incorporate healthier lifestyle choices. Currently, however, school nurses must acquire these necessary leadership skills through experience on the job (D. Taylor, personal communication,
August, 8, 2007). These leadership skills are difficult to acquire in light of the demands of this position.

Further, formal leadership training is usually reserved for those who wish to enter administrative positions, no matter what the health care setting (Jasper & Jumaa, 2005). Therefore, leadership training designed specifically for school nurses seems to be needed, not only for skill acquisition, but to enable these nurses to reflect about their own behaviors and grow from within. Leadership training could help school nurses to improve their ability to assess and react to interpersonal situations, and to gain the knowledge they need to begin to formalize and share their visions for the future. Learning to influence others through leadership training could lead to better communication between the school nurses and those with whom they interact on a daily basis: students, families, staff, and administration.

Lastly, Kerfoot (2006) emphasizes that nursing leadership is seldom evidence-based. She asks “how much harm has been done to patients because leaders have not held themselves accountable to practice evidence-based leadership rather than opinion-based leadership” (p. 373)? Although two articles described leadership training with school nurses (Neighbors & Barta, 2004; Tourangeau et al, 2003)), neither offered empirical data for support. Further, a possible interrelationship between leadership and emotional intelligence in school nurses as a function of a specific leadership course was not addressed.
Statement of Purpose

The first purpose of this quasi-experimental study was to investigate the effects of a leadership training program on the emotional intelligence and the perceptions of leadership skills of school nurses. Secondly, this study tested a conceptual model, the Emotionally Intelligent Leadership Model, developed by the author, as a basis for this leadership training program.
CHAPTER 2

REVIEW OF RELATED LITERATURE

School Nursing

According to the National Association of School Nurses (NASN, 2005), school nursing is

a specialized practice of professional nursing that advances the well being, academic success, and life-long achievement of students. To that end, school nurses provide case management services; and actively collaborate with others to build student and family capacity for adaptation, self management, self advocacy, and learning (p. 1).

To fulfill the broad scope of these expectations, school nurses most often work autonomously, guided by their individual state’s Nurse Practice Act (Guttu, Engelke, & Swanson, 2004). However, they also must follow federal educational mandates and the policies of the school district and their school communities. According to Rice, Biordi, and Zeller (2005), the role of the school nurse is constantly expanding and becoming more complex. They surveyed 345 school nurses in Ohio regarding their knowledge of the standards of practice for school nurses. Some of the comments of the participants were enlightening. One nurse, for example, cited “multiple examples of being forced to
'cut corners due to lack of time, energy, and supplies’”, while several others concurred that “each year there are more kids with bigger problems” (p. 297).

Unlike acute care nurses, the advocacy of school nurses for their patients, the students, involves not only health issues familiar to any nurse, but also those impacting the students’ education specifically, such as the need for glasses, appropriate management of medications at school, assessment of mental health issues, and a safe educational environment. This added focus on education often can complicate the role of the school nurse. For example, in the acute care setting, lack of glasses is not viewed as a health care need. However, in the school setting, inadequate vision can severely impact the student’s ability to learn.

To be successful at these tasks, school nurses interact with many different groups of people within both the school and district communities who may not agree with the school nurse’s assessment of either the problem or the solution. For example, school nurses are bound by physicians’ orders, just like nurses who work in other health care settings. However, in the schools, these nurses are often faced with parents who desire care which is contrary to the written orders. Communicating with these parents in such a way that the nurse practices safely and legally, yet obtains the cooperation of the parent/guardian is often difficult, but vital for the health and continued educational success of the student.

Often the people with whom they must interact have the perceived power and monetary control. Thus, school nurses frequently find themselves struggling to obtain needed supplies and personnel assistance from principals who are struggling to balance budgets and thus may not see the importance of these requests (Duncan & Igoe, 1998).
Further, often the public does not realize or understand the role of the school nurse or the impact his or her presence has on student health (Gutti, Engelke, & Swanson, 2004). Sullivan (2004) agrees, commenting that nurses still lack influence, due in part, to the public’s ignorance of what a nurse does: “People are seldom aware of the level of skill or knowledge required to be a knowledgeable and competent nurse unless they have experienced extensive nursing care or observed such care given to a family member” (p.6). Sullivan continues by emphasizing that leadership skills can be “taught, learned and used to create a better future for health and nursing” (p.23). Thus, learning to influence others gives nurses the power to act as “influence is more important than authority” (Sullivan, 2004, p. 3).

Developing leadership skills to improve both the nurses’ ability to influence and the public’s knowledge of their role seems especially true in school nursing, as much of the work of the school nurse is focused on prevention, rather than direct care. For example, the school nurse communicates information related to the health care problems and their related care actions to teachers, develop care plans for medically involved students, and follow up on the need for glasses, medications, and needed equipment without which diminish the student’s ability to learn. Unless the school nurses’ actions obviously impacted a student’s well being, the scope of their work often goes unnoticed.

Although nursing leadership is one of the visible issues in nursing today, research on the implications of leadership training in the school nurse population has only recently begun. Only two articles could be found that described leadership training of school nurses. Neither was empirical, but rather descriptive in nature. Gutti (2007) described the North Carolina School Nurse Leadership Institute, a program developed to provide
leadership training for school nurse leaders. This training was aimed at experienced school nurses, but emphasized management skills, with much less time spent on interpersonal relationship training or leadership skills. The evaluation of the program was based on the 20 nurse participants’ subjective responses.

Neighbors and Barta (2004) also describe a School Nurse Summer Institute as a model for professional development. This training program, although aimed at school nurses, focused on coalition building as a method to enhance the ability of its participants to influence others in their school communities. No empirical data were collected, as the article was merely descriptive. The NASN (2004) does include leadership in three of its seven components of the school nurse’s role, yet there are no studies providing empirical evidence for these statements.

In actuality, there are very few studies regarding the effects of leadership training in general in the nursing literature. One study, on a sample of nurse practitioners in Texas, studied the effects of leadership training in conflict resolution and negotiation. This study showed positive correlations between training and improvement in leadership skills (Lipley, 2003) However, no statistical information was provided, merely general comments from the nurses involved.

One empirical study was conducted on leadership training, but in an acute care setting. Krejci and Malin (1997) conducted a study on 80 participants from a large medical center. The majority (61) of the participants were nurses in managerial roles, while the remainder was non-nursing personnel. They offered leadership training, measuring perceived leadership competency prior to and three months after the training. These competencies centered on systems thinking, group dynamics and interpersonal
relationships, influence and personal power, and the effect of leadership on patient outcomes. Significant increases were found between before and after scores for total understanding and total ability, and between individual competencies. Further, these significant increases continued to be seen three months post training.

Although Krejci and Malin (1997) stated that leadership development “is critically important for all practicing nurses, specifically those who have influence at the point of service” (p. 240), all the participants were in some type of supervisory role: no bedside nurses were included. They did conclude that the findings support the need for leadership training for nurses at all levels of nursing, stating that “offering leadership and development training could raise all potential leaders to new levels of knowledge and skills: (p. 240).

Other studies have been conducted in the acute care setting, but predominantly focus on the effect of leadership style or type of management of the nurse manager on the staff nurses, rather on the development of leadership in the staff nurses per se (Kleinman, 2004; Manojilovich, 2005; Upenieks, V.V., 2003; Hendel, Fish, & Galon, 2004). Although several authors (Woods, 2003; Porter-O’Grady, 2003; Porter-O’Grady & Mallock 2007) remind nursing that the leadership skills of the staff nurses are underestimated and need to be addressed, there is a dearth of research in this area.

Difference between Leadership and Management

It is important to be clear, at this point, about the difference between leadership and management. Bennis (2003) outlines some contrasting conceptual characteristics between leadership and management. For example, “the manager administers; the leader
innovates... The manager maintains; the leader develops... The manager asks how and when; the leader asks what and why... The manager does things right; the leader does the right thing” (p.8-9). He further emphasizes the importance of authenticity. Authenticity is knowing who you are and what you believe, and then acting upon this foundation.

Developing leadership skills is based, in large part, on learning from the past, including the feelings or emotions which are attached to those previous experiences (Bennis and Goldsmith, 2003).

Marquis and Huston (2006) also speak about several key characteristics of leadership, but from a more organizational stance. They contend that leaders often do not have delegated authority, but obtain their power through the use of influence instead. Further, leadership is a wider role than management, which is focused much more on the day-to-day tasks and concerns. Leadership is relational, emphasizing interpersonal relationships and the empowerment of others, while management can be authoritative in nature. Followers willingly follow leaders, while followers do what managers dictate.

Thus, an important distinction between leadership and management is the former can and is found everywhere, while the latter is usually attached to a particular designated organizational position. In other words, “only a person’s behavior determines if he or she occupies a leadership position” (Marquis & Huston, 2006, p. 47). This is not to say that managers cannot or should not be leaders. Whitehead, Weiss, & Tappen (2007) emphasize that leadership is one of three core qualities necessary to be an effective manager.
Leadership

Leadership is a confounding term, one difficult to define. Bennis (2007), and Vroom and Jago (2007) both point out that there are no generally accepted definitions of leadership. It has been described as trait-based, behavioral, situational, and transformational, to name a few (Marquis & Huston, 2006). Evolving rapidly over the last century, the early theories of leadership were based on Aristotelian philosophy. These leadership traits were viewed as innate and unchanging, and were referred to in general as the “Big Man Theory” (Marquis & Huston, 2006). The idea here was that the leader or “big man” was born a leader and thus was genetically predisposed to lead. Bass and Stogdill (1990) described trait leadership as an “approach [that] tended to treat personality variables in an atomistic fashion, suggesting that each trait acts singly to determine the effects of leadership” (p. 87). Although these trait-based theories have fallen out of favor among many researchers, Zaccaro et al. (2004) refined the idea of leader traits as “relatively coherent and integrated patterns of personal characteristics” (p. 104), which although innate, could be enhanced through experience and organizational support.

Wieck, Prydun, & Walsh (2002) conducted a study in which they had novice and experienced nurses rank order a list of 56 characteristics that had previously been found desirable in leaders. A comparison of the rankings between these two groups of nurses showed remarkable congruence, with both groups selecting the same seven traits as desirable, including good people skills, receptive to people, good communicator, honest, and supportive. However, many of these “traits” could also be viewed as characteristics of emotional intelligence and servant leadership, both of which will be discussed later.
Zaccaro (2007) also encouraged a re-evaluation of the trait theories so that the key elements could be incorporated into broader theoretical frameworks which would take into consideration the situations with which the leader led. These leadership situations are ones nurses find themselves in on a daily basis, no matter what their specialty. In particular, school nurses, as the only health professional on site in most cases, are faced with these opportunities to lead very often. They are the only ones available to speak knowledgeably about the students’ health needs, the related safety concerns, and the health education needs. These situations may be between nurses and patients, between nurses and families, between nurses and other staff members or persons in administrative positions. The school nurses must assess, plan and implement their actions, and then evaluate the outcome based on the particulars of that situation. These actions take a combination of situational leadership and emotional intelligence (to be discussed in more detail later)

Servant Leadership

Greenleaf (1977) created his philosophy of servant leadership after reading the short novel by Hesse (1956), Journey to the East. This story was about a mythical journey of a group of people on a spiritual quest. The main character, Leo, acted as a servant to the group, doing the necessary menial chores, but was a vital presence to the group. The group was cohesive because of him and followed his suggestions willingly. This servant character then disappears and the narrator of the story tells of his search for Leo. After the servant character is gone, the journey is aborted as the group is unable to function well together. When Leo is later found, the narrator discovers that he is actually the head
of a spiritual order. This servant-leader could have led through his authority, but chose to lead through service instead.

Greenleaf contends that to be a leader one must serve first. He states that one can know if he or she is a servant leader if the people who are being led “while being served, become healthier, wiser, freer, more autonomous” (Greenleaf, 1977/2002, p.27). Spears (2004) discusses the ten basic characteristics enumerated by Greenleaf that are exhibited by servant-leaders. The first of these demonstrates how relationship oriented this philosophy is. Servant-leaders listen intently to others and help clarify what it is that they want and need. In other words, servant-leaders cannot articulate their vision or goals to the followers until they understand what the followers want and need. Knowing this information will then guide the leaders’ style of leadership and they will be able to communicate better with their followers. Further, the servant-leader needs to be empathetic, accepting and recognizing the values of others, even if they conflict with their own.

Servant-leaders must also strive to heal. This characteristic is viewed by Greenleaf as one of the most important. “There is something subtle communicated to one who is being served and led if implicit in the compact between servant-leader and those led is the understanding that the search for wholeness is something they share” (Greenleaf in cit, Spears, 2004, p. 9).

Servant-leaders also need to be aware of themselves and others. This characteristic allows the servant-leader to be able to view situations in a more integrated and holistic manner. Self-awareness encompasses the knowledge and understanding of one’s emotions, values, and ethics. Further, this awareness is expanded to include the people
with whom the servant-leader interacts. Greenleaf (1977/2002) stresses that it is “terribly important that one know, both about oneself and about others, whether the net effect of one’s influence on others enriches, is neutral, or diminishes and depletes” (p. 56).

Persuasion rather than authority is used by the servant-leader to gain cooperation from those being led. A sense of community and common goal ensues from this characteristic. Further, servant-leaders must be able to engage in conceptual thinking, coupling the focus on day-to-day issues with the ability to see those actions in a broader and more forward thinking way. This sense of community allows servant-leaders to transcend their managerial roles, fitting those roles into the overall goals to be achieved. Another characteristic – foresight – enables the servant-leader to understand the lessons from the past, the realities of the present, and the likely consequence of a decision for the future (Spears, 2004, p. 9).

Servant-leadership also focuses on the concept of stewardship, which Greenleaf views as the performance of actions which are aimed at the greater good of society. It emphasizes persuasion and openness coupled with strong moral values (Greenleaf, 1977/2002). In addition, servant-leaders have a commitment to the growth of both themselves and others. This characteristic is based on the belief that leaders have a responsibility to empower others to develop to their potential. “Responsibility,” he wrote, “requires that a person think, speak and act as if personally accountable to all who may be affected by his or her thoughts, words and deeds” (Greenleaf as cited in Fricke & Spears, 1996, p. 41).

Although not a specific characteristic of servant-leadership discussed by Spears (2004), the concept of entheos is coupled with stewardship. Greenleaf believes that
entheos is the spirit within persons that urges them forward in a positive constructive sense. "Entheos," he states, "is the essence, the power actualizing the person who is inspired. It is the spirit that sustains" (Greenleaf as cited in Frisk & Spear, 1996, p. 81). According to Greenleaf, as one grows in entheos, he or she experiences paradoxical states of being. One is the feeling of being content, yet discontent, with the way things are. The second encompasses a broadening sense of responsibility for the well-being of others, while focusing more sharply on the performance of the particular tasks necessary for that well-being.

Finally, servant-leaders have a sense of community. This is accomplished by "each servant-leader demonstrating his own unlimited liability for a quite specific community-related group" (Greenleaf, as cited in Spears, 2004, p. 9). At its core then, servant-leadership is "a long-term, transformational approach to life and work—in essence a way of being" (Spears, 2004, p.4).

Although empirical data to support servant-leadership is lacking, it is a philosophy which is either part of the corporate philosophy or the foundation for the mission statement at a number of companies. Among these companies are the Men's Warehouse, TDIndustries, Starbuck's and Southwest Airlines. Further, it has also been incorporated into the leadership and management courses in several colleges and university, Ohio State University, for example (Spears, 2004) and the cooperative extension at the University of Arizona (http://cals.arizona.edu/extension/index.html, 2006), which uses servant-leadership as a basis for its community leadership courses. Servant-leadership is also part of the philosophy of the Kellogg Foundation, Indiana University Board of Trustees and the Detroit Museum of the Arts (http://www.learningtogive.org, 2006).
Only one nursing study using servant-leadership principles was found. Neill, Hayward, and Peterson (2007) used a single group pre-test-post-test design on 114 nursing students. Data were collected over a four year time frame, prior to and after each student nurse participated in a senior health mobile project. Although the differences in their response levels on several indices of servant leadership, i.e. listening, empathy, were statistically significant, ranging from $p=.005$ to $p<.001$, the instrument used as a data collection method was not designed specifically to evaluate servant-leadership. Further, the study centered on students' perceptions, rather than capabilities. It is interesting to note that the authors focused on the principles, rather than referring to servant leadership as a theory.

Nurses serve their patients, not at slaves, but in the spirit of Greenleaf. It is what gives their work meaning. They want those for whom they care to become healthier and more autonomous, to take care of their own health needs. Servant leadership is subtle often "all anybody is likely to see is the result. They don’t see the cause" (Greenleaf, 2002b, p. 151). Blanchard (1999) said that “servant-leadership is more about character than style” (p, 128), it is the need within to serve. By integrating the philosophy of servant-leadership into their practice, nurses focus less on directing other people and more on “serving their needs and fostering the use of shared power in an effort to enhance effectiveness in the professional role (Neill, Hayward, & Peterson, 2007, p. 427).

A significant part of the school nurse’s role is that of educator. School nurses are not only an integral part of the educational environment, they teach daily, either in a formal sense through classroom health presentations, or informally, through the interactions with their students, their families, and the staff (Selekman, 2006). School nurses focus on
educating their students so that they are empowered for their own health. Greenleaf (1977) merely restates this motivation as “for the person with creative potential (the teacher as servant) there is no wholeness except in using it” (p. 6).

Greenleaf further describes a facet of leadership as something that “excites the imagination and challenges people to work for something they do not yet know how to do, something they can be proud of as they move toward it” (p.9). Through being servant leaders, the school nurses can motivate others, whether colleagues, students, families or school staff, to strive for healthier lifestyles and more individual responsibility for their actions. The development of these core values and the characteristics of servant leaders in each nurse are important more than ever as nurses increasingly manage themselves (Porter-O’Grady, 2003b; Howatson-Jones, 2004).

Transformational Leadership

Burns (1978) proposed that both leaders and followers could increase each other’s motivation and morality. He identified this type of leadership as transformational and differentiated it from transactional leadership, which focuses on day-to-day management. Transformational leaders, according to Burns, model their ideals and values for the followers. Coupled with charismatic methods, the transformational leader attracts followers and motivates them to collaborate towards the common goal. This type of leadership is viewed by Burns as a process, rather than discrete exchanges as seen in transactional leadership.

Bass (1985) expanded on Burns’ theory by identifying four components of transformational leadership: idealized influence, inspirational motivation, intellectual
stimulation, and individualized consideration to influence the behavior of others (Bass & Avolio, 2000). Through the “four I’s” as they are called, transformational leaders demonstrate their ideals and values through the way in which they fulfill the tasks and obligations of their work. Idealized influence is the result. These transformational leaders are trusted and respected by others and are looked to when difficult decisions need to be made. These transformational leaders are also able to motivate others to meet high standards. They do this through the clear articulation of a vision and can motivate others to share that vision and work toward it. Thirdly, transformational leaders empower others to be innovative and creative by challenging the normal beliefs or views of the group. This stimulates change through critical thinking and problem solving, as these leaders encourage their followers to think up new ways to work better or more efficiently. Lastly, transformational leaders act as coaches, offering support of those with whom they interact (Hall, Johnson, et al, 2002). The result of effective transformational leadership is performance beyond expectations, through the additive effect of the four I’s (Northouse, 2001).

Bass further underlined the need for a strong moral character in the leader, imbedded ethical values, and a morally sound process through which the leader and followers move toward their chosen goal. Tyrrell (1994) emphasized the concept of vision as a mark of transformational leadership: “nurses at all levels are expected to demonstrate leadership in setting direction for nursing practice, and that visionary leadership allows nurses to create a picture of an ideal future” (p. 93). Murphy (2005) agreed with Tyrell, stating that “a transformational leader could be categorized as a visionary, a futurist or a catalyst for change that assumes a proactive approach” (p. 131).
Because of the close interplay between leaders and followers, coupled with the concepts of vision and change, transformational leadership seems to fit well in care-related and educational fields (Stanley, 2006). In fact, Thyer (2001) states that this type of leadership is “ideologically suited for nurses” (p. 9). Transformational leadership in nursing is thus based on the premise that the leader developed a vision and behaviors reflecting a belief in all nurses as creative professionals who want to enjoy their work and achieve success; a belief that nurses are capable of self-direction, and if properly motivated, can solve even the most difficult and complex problems (Trofino, 2000, p. 233).

Kouzes and Posner (1992) viewed the four I’s in a slightly different manner, outlining five components of transformational leadership: challenge the process, inspire a shared vision, enable others to act, model the way, and encourage the heart. Following these premises, a leader looks for creative opportunities to change the status quo and would be able to develop that idea for change into a vision to be shared with others. Further, the leader encourages a collaborative process, following high moral standards coupled with a strong work ethic and clinical expertise to attain that vision. Leaders empower others to strive for the common goal, emphasizing and nurturing their strengths, thus minimizing their weaknesses. This increases feelings of self worth and self esteem. (McGuire & Kennerly, 2006) Lastly, the leader shares the credit for the goal accomplished, acknowledging the participation and expertise of those with whom he or she worked. This action not only improves feelings of competency in the followers, but it motivates them to continue the creative process. In other words, transformational leadership is the ability to get people to want to change, to improve, and to be led. It
involves assessing the motives of the followers, satisfying their needs, and valuing them as people and colleagues (Northouse, 2007).

Although usually used at the management or organizational level, transformational leadership can be applied in both one-to-one and group settings. It is a process that can be learned with conscientious effort (Hall, Johnson, et al, 2002). To be effective, transformational leaders must also develop high self-esteem, self-regard, and self-awareness (Sofarelli & Brown, 1994).

Transformational leadership is being used in both in the business world and in nursing. For example, Sam Walton, who founded Wal-Mart, used to visit his employees regularly, interacting with them on a personal level and thanking them for their work (Hall, Johnson, et al, 2002). In nursing, McGuire and Kennerly (2006) studied the transformational and transactional characteristics of nurse managers in relation to the staff nurses' commitment to the organization in which they worked. The convenience sample consisted of 63 nurse managers from selected hospitals, who each supervised at least five staff nurses. The results supported the value of transformational leadership. Those managers who demonstrated higher levels of these transformational leadership characteristics promoted a higher sense of commitment in the nurses they supervised. Another study (Hendel, Fish, & Galon, 2004) demonstrated that transformational leadership significantly affected the conflict strategy used by the nurse managers in five Israeli hospitals, with collaboration being the top choice. Further, Stordeur, D’hoore, and Vanderberghe (2001) showed that transformational leadership decreased the level of perceived organizational stress and emotional exhaustion reported by staff nurses.
Murphy (2005) calls transformational leadership a “cascading chain reaction” (p. 128). For example, health care consumers are seeking more autonomy, empowerment, and thus control over the health care decisions which they face (Krupart et al, 2000; Mullen et al, 2000; Porter-O’Grady, 2003b, 2003c). Murphy contends that as this empowerment of the consumer increases, empowerment of the nurse must keep pace. Kuokkanen & Leino-Kilpi (2000) concur as they state that empowered nurses are “highly motivated, well informed, and committed to the organizational goals, and thus deliver patient care with greater effectiveness.” (in cit, Murphy, p. 135).

Murphy emphasizes that “the transformational leader is the catalyst for creating new innovative organizational paradigms, which maneuver between the system, the staff, and patient care” (p. 135). Porter-O’Grady (2003a) comments that “the most important expectation is to communicate vision and change” (p. 266), from “practicing nurses who can model transformative engagement in their own work and relationships” (p. 267). Given that most school nurses are assigned multiple schools, have to interact with a myriad of staff within the bureaucratic education system, and have a greatly varied client population, their need for the skills of the transformational leader is vital for success.

Situational Leadership

Hersey and Blanchard (1969) devised a more situational approach to leadership, incorporating the style of the leadership used, the situation, and the readiness and expertise of the follower. This theoretical model had its conceptual beginnings in the Ohio State University and University of Michigan Leadership Studies, which touted two
main concepts: task accomplishment and interpersonal relationships (Bass, 1990). Hersey and Blanchard first called their situational leadership theory the “Life Cycle Theory”.

Situational leadership theory contends that leaders/managers change their leadership style depending upon the level of follower maturity and expertise, while also adapting it to the situation in which the leader and follower found themselves. They developed this leadership approach as a theoretical framework that could explain a systematic way to manage personnel in the business world. Situational leadership is based on the principle that there is no one leadership style which fits every situation. Each style has varying degrees of directive and supportive behaviors on the part of the leader/manager and depends on the follower and the task to be performed.

The situational leadership model underwent a variety of changes and was renamed Situational Leadership II or SLII (Hersey & Blanchard, 1972; Blanchard, Zigarmi, & Nelson, 1993; Blanchard, Zigarmi, & Zigarmi, 1985). Hersey, Blanchard, and Johnson (2001) refined the general definition of leadership further as “what occurs whenever one person attempts to influence the behavior of an individual or group, regardless of the reason” (p. 9). They further outline three competencies of situational leadership: diagnosing, adapting, and communicating. Diagnosing involves understanding the particular situation. Adapting, the second phase, is a process through which leaders alter their behavior and other available resources to meet the goals unique to the situation. Communicating, the last phase is broadly used to indicate methods of interacting with others so that they can understand and accept the directions of the leader (Hersey, Blanchard, & Johnson, 2001).
Using these three competencies, the leader first assesses the situation by carefully defining the expected outcome. Then, the leader assesses the knowledge level and willingness of the person designated to complete the tasks defined by the outcome. Based on these two assessments, the leader chooses the leadership behavior most applicable to the situation.

Situational Leadership stresses a process. As the task, knowledge, and/or readiness of the follower changes, leaders then match their leadership style to accomplish the desired outcome (Farmer, 2005). Readiness is defined within the situational leadership model as “the extent to which a follower demonstrates the ability and willingness to accomplish a specific task” (Hersey, Blanchard, & Johnson, 2001, p. 175). Hersey and Blanchard (1977) further described four general responses available to the leader/manager: controlling, planning, organizing, and motivating, which later evolved into a continuum from directing, coaching, supporting, to delegating (Hadden & Davies, 2002). These response phases are based on the task behavior needed by the leader and the readiness or maturity level of the follower. Task behavior is defined as

the extent to which the leader engages in spelling out the duties and responsibilities of an individual or group. These behaviors include

telling people what to do, how to do it, when to do it, where to do it, and who is to do it. (Hersey, Blanchard, & Johnson, 2001, p.173)

High amounts of task behavior might be necessary in a leadership situation in which the follower lacks the particular expertise needed to fulfill the leader’s desired outcome. Perhaps the follower is new to the job, or has been promoted to a position in which the follower has no experience. In these cases, task behavior would be the focus.
The coaching and supporting phases follow those which are more directive, as the follower attains greater expertise and functions effectively with progressively less supervision. At the delegation point, which is the least interactive, the leader expects the desired outcome and only steps in if there is difficulty meeting the objective. This does not mean that the leader remove his or her supportive behavior, but rather the leader no longer has to actively lead, but merely awaits the outcome adding minimal support as needed. If the follower demonstrates signs that his or her skills are deteriorating or if a new skills needs to be taught, the situational leader can return to any of the previous stages, as befits the situation.

Thus, situational leadership is a fluctuating pattern of behavior which takes regular assessment and evaluation by the leader regarding the readiness and expertise of the follower. In order for this process to be effective, a relationship must be established between the leader and follower. Hersey, Blanchard, and Johnson (2001) define relationship behavior as “the extent to which the leader engages in two-way or multi-way communication. The behaviors include listening, facilitating, and supportive behaviors” (p. 173). Thus through two distinct behaviors, one directed at the accomplishment of the task, and the other directed toward the interpersonal relationship, the leader can assist the follower to not only become competent, but have feelings of accomplishment and empowerment.

Situational leadership theory has been used extensively in the business world, with very positive results. Some examples include, Biogen, Idec, and Genentech (pharmaceuticals), Smith’s Snack Food Company and Foster Farms (food); Nokia; and the Host Marriott Corporation. The Coffee Bean and Tea Leaf Company, for example,
reported an 8% decrease in turnover and an increase of $500,000 in sale revenues after instituting this theory as the basis for their leadership training (kenblanchard.com, 2007).

Silverthorne and Wang (2001) conducted a study involving 79 managers and 234 subordinates randomly selected from major companies in Taiwan. They demonstrated that managers who used situational leadership theory were more adaptive to situations than those who did not. Further, there was a positive correlation between adaptive managers and productivity. Productivity was measured by absenteeism rate, quality of work, turnover rate, units produced, reject rate, and overall profitability. Although the trends with each of the measures were in the predicted directions, thus generally supporting their suppositions, Silverthorne and Wang did not find significant findings in all the categories.

Situational leadership has also been used successfully in the military, Yeakey (2002) notes that the “situational leadership model continues to be used in the military services as a training vehicle in virtually all formal leadership training programs” (p. 82). Vecchio, Bullis & Brazil (2006) conducted a study on 1,132 members of the U. S. Military Academy corps of cadets. They were divided into 86 squads, which were then divided into smaller units. These unit members were asked to complete a set of questionnaires on their respective unit leaders. Similarly, the unit leaders filled out questionnaires on their unit members. Eight hundred sixty participants completed the questionnaires. All questionnaires had internal reliability coefficients between .79 and .89. Results were only significant in relation to the leader-member exchange and during the more directive situations. For example, there was a positive relationship between the leader’s style if the member was very inexperienced. This relationship was not seen with
experienced members. The authors suggest that the area of member readiness needs improved conceptualization, as it is difficult to measure adequately.

Yukl and Van Fleet (1982) conducted an intricate comparison of four separate studies of cadet training and combat situations, using critical incident and questionnaire methods. Critical incidents were positive or negative incidents described in writing by the participants and then coded into previously determined leadership behavior categories. Their findings demonstrated clear variations in the relative importance of different behaviors depending on the nature of the situation, that is, whether it was non-combat or combat related. Consideration for the welfare of the subordinates and inspiration by the leader were found to be related to leader effectiveness in all four studies.

Situational Leadership Theory has rarely been applied to nursing. Lockwood-Rayermann (2003) discusses how the education of nursing students or new graduates through preceptoring following the situational leadership model is advantageous to both the preceptor and student. The leadership skills of the preceptor are reinforced and, through role modeling, the student becomes more comfortable with his/her new nursing expertise while being supported appropriately by the preceptor. At the end of the preceptorship, the student is expected to have greater self confidence coupled with newfound knowledge and skill. Although applying the principles of Situational Leadership, this author did not empirically test its effectiveness. Situational Leadership Theory is being used, however, as the basis for the clinical preceptorship program at the University of Minnesota (umn.edu, 2007).

Farmer (2005) applied situational leadership as a model for supervising nurse telecommuters. These nurses work from home, providing advice and care to patients via
the internet. Farmer discussed how taking into consideration the expertise and motivational levels of the learner coupled with the actual situation at hand could be used to effectively manage the telecommuting nurses one is supervising. Farmer confined her comments to managers, however, and did not include the front-line nurse. Further her sample size was very small, nor was this study empirical in nature.

Numerous authors agree that Situational Leadership is an intuitive theory (Vecchio, Bullis & Brazil, 2006; Zigarmi, Blanchard, O’Connor, & Edeburn, 2005). Translated into nursing practice, Situational Leadership seems to follow the nursing process. It involves assessing and diagnosing the presenting situation, planning and choosing appropriate actions which fit that particular situation and then implementing that plan. This last phase focuses heavily on the actual interactional behaviors applied by the nurse and their impact on the other participants of the interaction. Depending on the outcome of the interaction, the nurse now evaluates his or her situational leadership style and the behaviors exhibited by the other participants, and can make appropriate adjustments in future interactions. This evaluation process takes personal insight and good interpersonal skills (Milstead & Furlong, 2006).

For example, if the nurse is orienting a novice nurse or training an assistant, the neophyte is usually eager to begin and learn the tasks expected of him or her (high readiness), but require close directive behavior by the leader (controlling task behavior) until the leader is confident that the neophyte is able to function with less supervision. Specifically, school nurses often must train non-licensed personnel to provide first aid and administer a selection of medications when the nurses cannot be present at one of their assigned schools. Close, directive task behavior by the school nurse is necessary for
the safety of the students until which time as these non-licensed personnel demonstrate safe, competent care. As the followers progress, in this case the non-licensed aides, the school nurses’ leadership task behavior would also progress through the coaching phase, then the supporting phase, finally finding the nurse able to delegate responsibility for selected tasks to the aide.

Situational leadership theory is also applicable when the school nurse is interacting with a student newly diagnosed with a chronic illness, for instance diabetes. This student has only a rudimentary knowledge of the disease process at best and now must learn to incorporate its management into the school setting. Coupled with the student’s inexperience is that of his or her parents. The needs of the parents further complicate the situation as they must relinquish supervision of their child to the school for much of the day. Emotions run high, as is expected.

The focus of the school nurse at the initial stage needs to be on teaching both the student and parents about the disease process and its management. Close directive supervision of the student is required to ensure safety, while the school nurse continues to assess the knowledge level of the family, teach the missing elements, and reinforce those already learned. Lastly, the emotions generated by the situation must be acknowledged and addressed by the school nurse to ensure optimal functioning by all involved.

Looking at the above examples, delegating behaviors would be employed by the school nurse when the non-licensed personnel has been observed giving consistent safe first aid and administering medications according to protocol. In the case of the student with diabetes, the school nurse would use delegating behaviors when the student has demonstrated safe independent self care and the parents demonstrate reasonable
knowledge of diabetes and are comfortable with the school’s management of their child’s health needs.

Nurses are constantly in situations that require them to exert influence on other people, whether they are trying to obtain compliance from a patient or obtain needed assistance from a supervisor. The core components of situation assessment, choosing applicable behaviors, and follower readiness found in Situational Leadership Theory seem to translate readily to nursing leadership.

Emotional Intelligence

Through the discussion of leadership, one essential component becomes obvious: leadership can only exist in a relationship. There must be both a leader and at least one follower and they must interact in some way. Both the leader and follower bring to the interaction their past experiences and view the interaction through the knowledge gained and the emotions evoked by the past. Moss (2005) contends that the “emotional and rational realms overlap, interact with, and affect each other...both realms must be acknowledged in order to provide quality health care” (p.4).

In the mid 20th century, Leeper (1948) spoke of emotions as organizing responses. He viewed their role as a means by which cognition was focused, thus impacting on ensuing actions. During this same time period, the concept of intelligence was also being studied and defined. Wechsler (1958) offered a broad definition of intelligence which is the most widely accepted (Salovey & Mayer, 1990). He defined intelligence as “the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment” (as cited in Salovey & Mayer, 1990, p.3). This concept
of intelligence has been subdivided by many, with one partition being social intelligence. (Thorndike, 1920; Gardner, 1983; Sternberg et al, 1981).

The problem with social intelligence, however, was that the concept was so broadly described that testing its parameters was virtually impossible. In their seminal article, Salovey and Mayer (1990) agreed with the functional perspective of Leeper and first defined emotional intelligence as “a subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (pg. 5). Further, as this set of abilities is viewed as a part of intelligence, individuals with a greater level of emotional intelligence are theorized to function better as leaders compared to those with lesser ability. This perspective views emotions as a set of abilities which can improve with experience and training, and are measurable with a performance based test (Ciarrochi, et al, 2000).

Further, Mayer, Salovey, and Caruso and others (Mayer, Caruso, & Salovey, 1999; Ciarrochi, Chan, & Caputi, 2000; Roberts, Zeidner, & Matthews, 2001) have attempted to demonstrate that this ability based model meets three criteria which define intelligence. Firstly, Mayer, Caruso, and Salovey (1999) stated that in order for emotional intelligence to actually be a new form of intelligence, it “must reflect mental performance rather than simply preferred ways of behaving” (p. 268). This first criterion thus eliminates personality traits and preferred ways of behaving and focuses on those which are cognitively mediated. This means that behaviors which result from particular emotions are to be considered, while behaviors which are associated with personality traits would not be included. Secondly, these authors contended that any intelligence “should describe
a set of closely related abilities that are similar to, but distinct from, mental abilities described in already established intelligences (p. 268). This second criterion contends that emotional intelligence should correlate with already well defined intelligence, but not to such a large degree that emotional intelligence could not be viewed as a separate entity. The third criterion simply states that as is considered true for all other intelligence, emotional intelligence is also expected to increase with age and experience. For example, adolescents should display less emotional intelligence compared to adults of the same gender.

Studies using the two emotional intelligence assessment tools, the MEIS (Mayer, Caruso, & Salovey, 1999) or the MSCEIT (Mayer, Salovey, Caruso, & Sitarenios 2001) have provided some support of the above criteria. For example, the two assessment tools are ability-based and thus conceptually support the first criterion. Further, using the MEIS, the authors found a correlation of $r = .36$ between overall scores and verbal intelligence. They argue that this correlation was sufficiently high enough to support their contention that emotional intelligence was related to other intelligences, but low enough to signify that emotional intelligence was different also.

Subsequent studies supported this notion that the MEIS assessed a new construct, measuring more that personality traits or established intelligence factors (Ciarrochi, Chan, & Caputi, 2000; Mayer, Salovey, Caruso, & Sitarenios, 2003). Lastly, Mayer, Caruso, and Salovey (2000) tested the MEIS on both adults and adolescents. They found that the adults did perform significantly better than the adolescents, lending credence to the third criterion.
In contrast, other researchers have studied or written about emotional intelligence during a similar time frame (Bar-On, 1997; Cooper, 1997; Goleman, 1995, 1998; Schutte et al, 1998). For example, Bar-On (1997, 2000) and Goleman (1995, 1998, 2002) developed descriptions of emotional intelligence which were not ability-based. Their models are termed mixed models as they include clusters of personality traits in the case of the former and the concepts of motivation and power, in the case of the later.

Bar-On (1997) characterizes emotional intelligence as “an array of non-cognitive capabilities, competencies, and skills that influence one’s ability to succeed in coping with environmental demands and pressures” (p. 14). He developed the first commercially available operational assessment index for emotional intelligence. However, the remainder of his research seems to be aimed at validating this self administered inventory, the Emotional Quotient Inventory, or EQ-i (Matthew, Zeidner, & Roberts, 2002). The EQ-i includes questions related to a person’s self regard, independence, problem solving, and other attributes. It would be difficult then to differentiate these responses from those solely focused on the emotional realm (Mayer, Caruso, & Salovey, 2000).

Goleman is noted more for his popular books than for his scientific study of emotional intelligence (Matthews, Zeidner, & Roberts, 2002). Goleman’s definition of emotional intelligence is wide sweeping and includes components of personality, motivation, and hope. Goleman (1995) states that emotional intelligence includes: abilities such as being able to motivate oneself and persist in the face of frustrations’ to control impulse and delay gratification’ to regulate one’s moods and keep distress from swamping the ability to think; to empathize and to hope “ (p. 34).
Goleman developed a self administered assessment tool, the Emotional Competence Inventory (ECI). This questionnaire also includes questions related to motivation, self esteem, and other traits more related to personality. Further, there is insufficient empirical evidence to support the validity and reliability of Goleman’s self report measure (Matthews, Zeidner, & Roberts, 2002). Due to the overlap with personality and other concepts, the difficulties inherent with self reports, and in some cases, insufficient data, interpretation of the mixed models is difficult (Ciarrochi, et al, 2000).

Lastly, Livingstone and Day (2005) conducted a study comparing the construct and criterion-related validity of the MSCEIT and the EQ-i. They found that these two instruments were not correlated and thus were not measuring the same construct. Van Rooy, Viswesvaran, and Pluta (2005) completed a meta analytic review of the emotional intelligence construct. Their findings over numerous studies provided further evidence for this difference. They found that the correlation between the mixed model and ability-based instruments was only .14. They further suggest that the ability model would be better suited for “development programs where the aim is to increase the performance of current employees” (p. 457). Therefore, for the purpose of this study the conceptual model of Salovey and Mayer was used.

Salovey, Mayer, & Caruso (2002) describe the four generally accepted components of the ability-based emotional intelligence model: emotional perception and expression; emotional facilitation of thought (using emotional intelligence); emotional understanding; and emotional management. These are derived from the revised definition of emotional intelligence which is “the capacity to perceive emotions, assimilate emotion-related
feelings, understand the information of those emotions, and manage them” (Mayer, Caruso, & Salovey, 2000, p. 267).

The first of these components—emotional perception and expression—involve the ability to recognize emotions in oneself and others. This includes identifying emotions in one’s physical and psychological states; being in tune with how one is feeling. Further, this component includes being able to identify emotions in other people, whether through verbal or nonverbal cues. Accurate emotional expression coupled with the ability to express needs which might be related to them is the third portion of this component. Finally, the ability to discriminate between accurate and inaccurate feelings is included.

The second component—emotional facilitation of thought—focuses on how emotions affect the cognitive system and how they then can assist in better problem solving, reasoning and decision making. Involved here is the ability to redirect and prioritize thinking based on emotional input; the ability to generate emotions to aid in memory and judgment; the ability to use emotions to listen to multiple points-of-view; and to use emotions to improve problem solving and creativity. This component then focuses on the use of emotional intelligence to improve social functioning.

Emotional understanding, the third component of this model, is more complex and relational. It involves the ability to understand the relationship among emotions, the causes and ramifications of them, the transitions between them, and the complexity of emotional blends and when emotions are in conflict.

The last component focuses on emotional management. Here, the focus is not on suppressing or eliminating emotional expression, but rather the ability to be open to feelings, whether pleasant or not, and to monitor and regulate them as appropriate.
Further, it involves managing the emotions of others by using them to obtain the best outcome in the particular situation. This is a very complex endeavor, however. Mayer, Caruso, and Salovey (1999) found that there was a correlation between emotional intelligence and verbal intelligence. As much of managing others’ emotions is done verbally, this lends support for this last component (Webb, 2007).

Intertwined in emotional management is also the ability to consciously engage, disengage from, or prolong a particular emotional state. For example, a nurse working in a crisis situation cannot allow her feelings of horror or sadness overwhelm her, or she would become ineffective. Rather, she disengages from those emotions to efficiently care for those in need. Later, she can then revisit that emotional state and allow herself to feel them as deeply as she chooses. Thus, persons who are emotionally intelligent understand what they are feeling, how it relates to the situation at hand, and can ascertain the same in others. They then can choose their emotional reaction to different situations, strengthening their interpersonal relationships. Lastly, they are congruent between what they feel and the manner in which they manage those emotions (Caruso, Mayer, & Salovey, 2003).

The four components of the ability-based model are described by the authors as being hierarchical with perception of emotions occupying the lowest level and management of emotions, the highest. In other words, if a person does not perceive the occurrence of a particular emotion, it is impossible for him or her to manage it. This conceptual hierarchy is supported by studies done with alexithymia. Persons with this disorder have been shown to have difficulty recognizing emotions in others, using emotions to enhance reasoning, and managing their emotions (Parker, Taylor, & Bagby, 2001).
As any situation in which leadership is needed is between two or more persons, the “ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional intellectual growth” (Mayer and Salovey, 1997, p.10) is essential. Thus emotional intelligence has become an intricate part of leadership.

Moss (2005) states that “nursing leadership presents a special situation: a field in which emotions are inherent in frontline work” (p. ix). Her comments, like others, are directed toward nurse managers, but she implies that the level of emotional intelligence in the staff nurse is equally important. Goleman, Boyatzis, & McKee, (2002) add another concept, that of resonance, which is defined as “a reservoir of positivity that frees the best in people” (p.ix). In other words, if a leader emits enthusiasm and positive energy, those with whom he/she comes in contact will meet their potential. The opposite would also be true: leader negativity would breed discontent and lack of progress.

Although still in its infancy, emotional intelligence has been studied in several different fields. In business, Carmeli (2003) examined the “moderating role of emotional intelligence for the relationship between work-family conflict and job satisfaction and career commitment” (p. 789). Out of a sample of 98 senior managers, emotional intelligence was positively and significantly related to higher levels of altruistic behavior, high affective commitment to the organization, and was more likely to effectively control work-family conflict. The author concluded that emotional intelligence augmented altruistic behavior and commitment to the organization and did moderate work-family conflict. In addition, a study by Barling, Slater, and Kelloway (2000) suggested that
"individuals higher in emotional intelligence are seen by their subordinates as displaying more leadership behaviors" (p. 159).

Slaski and Cartwright (2002) conducted a study of 224 managers in a large retail organization. Significant correlations indicated that managers who scored higher in emotional intelligence suffered less subjective stress, experienced better health and well-being, and demonstrated better management performance. Another study by the same researchers sampled 120 managers, who were divided equally between a control and experimental group. The later group was given emotional intelligence training. Using a pre-test post-test design, Slaski and Cartwright found a significant increase in emotional intelligence 6 months post training when compared to the control group. There was also a significant positive change in reported feelings of health and well-being as reported through qualitative measures.

Lopes, Salovey, Côté, and Beers (2005) studied emotion regulation abilities in a sample of 76 college students. Using a combination of an ability-based emotional intelligence instrument (MSCEIT Version 2.0) and questionnaires, the authors assessed the quality of these individuals' social interactions with peers. Emotional regulation abilities were found to be significantly associated with self-rated interpersonal sensitivity and peer nominations of interpersonal sensitivity, and the proportion of positive vs. negative peer nominations. The authors suggest from these data that training in emotion regulation abilities might help people interact more effectively.

Lyons and Schneider (2005) examined the relationship between ability-based emotional intelligence components with performance under stress. Their sample consisted of 126 undergraduates who were asked to perform mental math and videotaped
speech tasks. Emotional management was found to be significantly correlated with performance. This finding demonstrated that specific dimensions of ability-based emotional intelligence predict stressor appraisals and performance. However, these relationships differed depending on the gender of the participant.

Jordan and Troth (2002) also conducted a study on undergraduates. Their sample consisted of 139 nursing students enrolled in an introductory management course. The Work-group Emotional Intelligence Profile-Version 6 (Jordan, 2000) was used. This profile employs two scales, one which captures the ability to deal with one’s own emotions and the other assesses one’s ability to deal with other’s emotions. The two scales have alpha reliability coefficients of .81 and .85 respectively. Correlations between the two scales were sufficient at $r = .58$, $p< .01$. The results strongly indicated that “individuals with higher levels of emotional intelligence are more likely, or are more able, to engage in collaborative conflict resolution” (p. 98). The authors suggest that nurses who are taught emotional management and discussion skills will be better able to deal with and resolve conflicts.

Using a hermeneutic approach, Akerjordet and Severinsson (2004) interviewed seven mental health nurses who had at least five years of acute mental health care experience. Four themes emerged: relationship with the patient; the substance of supervision; motivation; and responsibility. The authors concluded that emotional intelligence “stimulates the search for a deeper understanding of a professional mental health nurse identity” (p. 164). For example, they found motivation to be “an inner power that makes us act or indicates the direction for action. Motivation is about …how one interacts and learns with others” (p. 167).
Codier (2007) examined the emotional intelligence of clinical staff nurses. Her sample was small (n = 27) and voluntary, comprised of staff nurses from different clinical subspecialties in a hospital in Hawaii. She found that RNs on the clinical ladder had higher emotional intelligence that those who were staff nurses (r = .46, p < .05). Further, she found that there was a positive correlation between total emotional intelligence scores and clinical practice level and concluded from this that higher emotional intelligence levels reflected higher levels of clinical performance. One interesting finding was that 37% of the sample had low average emotional intelligence scores. The author suggested that this might be due to the lack of emotional intelligence education in nursing school, both in the didactic and clinical rotation arenas.

Summary

The concept of leadership is difficult to define and is often discussed in the context of management. Thus, literature and research which is meant to support one concept, i.e. nursing management, is transposed and considered acceptable when discussing another: leadership (Lett, 2002). However, nursing can learn much from leadership scholars and researchers in other disciplines. Servant leadership, transformational leadership, and situational leadership were each developed in the business world. Servant leadership is centered on the desire to serve, the philosophy of stewardship and awareness of one’s own beliefs and emotions and those of the followers he or she serves. Although not empirically studied to any great extent, servant leadership principles are visible in the mission statements and philosophies of both industrial companies and institutions of higher learning. This type of leadership has yet to be studied in nursing.
Transformational leadership also provides key components to leadership, including vision, empowerment, and the support and motivation of the followers. It, too, was conceived in the business world, but has been applied to several studies of nursing managers. However, no empirical studies of transformational leadership of nurses in non-administrative positions have been done.

Situational leadership is fairly extensively used in the business world. In two small, non-empirical studies, situational leadership has been discussed in the nursing literature. However, the nurses involved in these studies were not school nurses, but nurses in managerial roles. Again, no empirical studies of situational leadership of nurses in non-administrative positions have been done. However, this theoretical framework does add the concepts of situational awareness, appropriate leadership behaviors, and follower readiness to the leadership literature.

Finally, emotional intelligence has been shown to improve with training and has been significantly correlated with leadership effectiveness in managers. Emotional intelligence has not been studied empirically in connection with nursing leadership. It has not been studied in relation to school nurses nor as it pertains to the leadership abilities or effectiveness of staff nurses.
CHAPTER 3

CONCEPTUAL FRAMEWORK

Emotionally Intelligent Leadership Model (EILM)

The conceptual framework upon which this study is based, the Emotionally Intelligent Leadership Model (EILM), was developed by the author. It is a composite leadership model which uses key aspects of EI as a foundation and combines the core components of servant-leadership, situational leadership, and transformational leadership (Appendix A: Figure).

In the center of the model are the primary components of servant leadership: desire to serve, awareness of self and others, and stewardship. Rogers states that “Nursing exists to serve people. Its direct and over-riding responsibility is to society” (Rogers, 1992, as cited in Fawcett, 2005, p.122). Rogers further states that “for nurses [the] focus consists of a long-established concern with people and the world they live in” (ibid, p. 128). Thus, the desire to serve is coupled with stewardship, the belief that one’s actions need to positively impact those with whom one interacts.

In this center are also the values and ethics that align with the Nurse Practice Act and Code of Nursing Ethics. These are the foundations upon which nurses base their practice. To be at ease with these guidelines, nurses have some awareness of what they believe and also how these beliefs coincide and conflict with those of others. Nurses need a
community or holistic point-of-view which takes into consideration the patient system with which they interact. “Personal knowledge is concerned with the knowing, encountering and actualizing of the concrete, individual self. …Such personal knowing extends not only to other selves but also to relations with one’s own self” (Carper, 1999, p.16). Nurses know why they are nurses and express frequently that the interaction with the patients and the feelings of satisfaction when these interactions are beneficial is a great part of their job satisfaction. Wanting to make a difference in their patients’ lives underlies most nurses’ reasons for being in and staying in the profession.

From the circle of servant-leadership, which contains the central philosophy of nursing, one moves outward from the quiet action of the servant-leader, to the more dynamic one of the transformational leader. Fawcett (2005) expresses this progress well as she emphasizes that values form the basis of each person’s goals. Thus, the circle of transformational leadership is concentric around that of the servant-leadership philosophy (Appendix A: Figure). The focus expands in the circle of transformational leadership, encompassing the primary concepts of vision, empowerment, and motivation of others.

Thus, from the desire to lead others through service comes the nurses’ ability to develop a vision of how “things should be.” Whether the change is small and confined to the immediate health care site, or the vision is for change at an organizational level, the vision drives the actions of the nurse. Through challenging the process, nurses become change agents enlisting others, through the use of personal influence, to join in the vision’s journey. Transformational nurse leaders empower others to believe in the vision by enabling others to act and offering coaching and support. These transformational nurse
leaders share the vision, encouraging their followers to help to develop the route to accomplishment.

The outermost concentric circle involves the situation and thus encompasses the aspects of situational leadership. Once the nurse leader establishes his or her servant-leadership philosophy and constructs the vision of health care he or she wants to attain, the nurse leader must then consider the situation and the readiness and/or willingness of the follower. Situational leadership theory thus adds the situational assessment, applicable leadership behaviors, and follower readiness to the model. The components of this situational leadership circle progress from the other two by making the more esoteric components of the inner circles more practical. Blanchard links the ideas of servant-leadership with situational leadership theory. He states that servant leaders are preferred as “they are willing to use any style- directive, supportive, or any combination-which best serves the needs of those they lead” (Blanchard, 1999, 128). Further, how the components of transformational leadership are turned into action flow into the situation which presents itself. Situational leadership also emphasizes the behaviors of coaching and supporting that are seen in transformational leadership. What has been added is the close situational assessment central to situational leadership and an emphasis on the readiness and expertise of the follower, which were only implied in transformational leadership. Although servant-leadership emphasizes the concept of stewardship, the practical behaviors of that stewardship need to be applicable to a particular situation as assessed by the leader.

These three concentric circles depicting the components of three leadership philosophies/theories are embedded in emotional leadership. This primary component
provides the relational and interactional basis through which leadership can be employed. Emotional intelligence is integral to the relationship between leader and follower. As noted previously, leadership cannot exist in a vacuum. There must be both leader and follower and thus a relationship between the two. For the agreed upon goals and vision to be achieved, this leader-follower relationship must be successful. Leaders begin with self awareness through an understanding of their beliefs, ethics, and moral code. They begin to identify the emotions connected to their belief system and act congruently. As they become more aware of themselves, these leaders progress to becoming more aware of the belief patterns in others. This self awareness of one’s emotions and the ability to identify emotions in others comprise the foundational tier of emotional intelligence. As people in general and leaders in particular continue to mature, so must their emotional intelligence in order for the leader-follower relationship to remain functioning.

Skinner and Spurgeon (2005) state that “transformational leadership requires a balance between conceptual and emotional understanding” and that “given the importance of strong emotional relationship between the leader and follower...emotional intelligence may underlay the expression of transformational behavior” (p. 2). Because the relationship between the leader and others is so important in effective transformational leadership, the leader needs to be able to identify, choose, and regulate his or her emotions. Further, the leader needs to be able to identify and regulate the emotions of others in order to attain the set goal which means that the leader must possess a higher level of EI.

In the outermost circle of situational leadership, this foundation of emotional intelligence is also crucial. In order to identify the impact of their behavior on followers,
leaders must be able to identify and regulate their emotions to best fit the situation.

Leaders must also be able to "read" the emotional responses and timbre of the followers. This ability will aid leaders in the selection of behaviors appropriate for the situation and in the evaluative process of the interaction. Through an emotionally intelligent approach to leadership and the situation in which it presents, the relationship between the leader and follower is maintained. Thus, additional groundwork is unnecessary when future interaction occurs.

Given the variety and complexity of circumstances within which school nurses find themselves, their shared focus on the optimal health for their students, and the need for school nurses to develop their own vision and act as agents of change within their school communities, the core components of these three theoretical perspectives are applicable.

In addition, school nursing is relational, whether between nurse and student, or parent, or administration. To be successful, school nurses need to be able to identify their own emotions, recognize the emotions of others, and monitor, use, and regulate these emotions. Without this emotional intelligence, the complex interactions confronted daily by school nurses might not be as successful.

School nurses need to have the tools necessary to influence those around them. They need to learn negotiation skills and methods of leadership which can be adapted to the variety of situations they face. They need to incorporate the concept of servant into their practice, not in a demeaning way, but as a means through which they empower the patients and families to take responsibility for their own health. Further, these nurses need to be able to visualize the future and articulate this vision, so that their colleagues, students, and administrators can have a clear picture of the vital impact school nurses
have on the health and academic success of their students. Lastly, because of the diversity of the population with which the school nurse interacts, knowledge and development of emotional intelligence is also vital. Effective leaders tend to have more emotional competencies, such as a greater ability to identify emotions in themselves and others, and to monitor and regulate these emotions (Moss, 2005). In other words, maintaining optimal health in the students served by school nurses is a similar goal found in other specialties of nursing. However, the level of autonomy coupled with policy restrictions, legal mandates, and the myriad of lay and professional people with whom they must interact, makes the work environment one in which leadership skills and emotional intelligence are vital.

In summary, the Emotionally Intelligence Leadership model is composed of three concentric circles, embedded in emotional intelligence. The innermost include the principles of servant-leadership, the core values of the nurse. Encircling and progressing out from that circles, is the second, transformational leadership, containing the principles of vision, motivation, and empowerment. Encompassing these two, is the outer circle of situational leadership, which now takes into consideration the philosophical principles of servant-leadership coupled with the active components of transformational leadership, and applies them to the situation either at hand or that which is envisioned. Situational leadership adds the practical aspect to the framework, as the focus is now on the situation in which the leader and follower find themselves. Acting as the underlying foundation of leadership is each of the components of emotional intelligence. By identifying, expressing and regulating the emotions of self and others, richness and context are added to the interpersonal relationships inherent in leadership.
Research Questions and Hypotheses

This study addressed the following research questions: (1) Will leadership training incorporating the EIL model affect the level of emotional intelligence of school nurses? (2) Will leadership training incorporating the EIL model affect school nurses’ self perceptions of their leadership skills?

To address these questions, the following hypotheses were proposed:

1. School nurses who receive leadership training will show significantly higher overall emotional intelligence scores as measured on the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) than school nurses who do not receive the leadership training.

2. School nurses who receive leadership training will show significantly higher overall scores as measured on the Leadership Practices Inventory (LPI) than school nurses who do not receive the leadership training.

3. School nurses who receive leadership training will show significantly higher overall scores as measured on the Grossman and Valiga Leadership Characteristics and Skills Assessment (GVLA) than school nurses who do not receive the leadership training.

4. School nurses who receive leadership training will show significantly higher overall scores as measured on the Grossman and Valiga Leadership Skills: Rate Yourself Questionnaire (GVQ) than school nurses who do not receive the leadership training.
Conceptual and Operational Definitions

In this study, a conceptual definition of leadership was created by the researcher that reflected the EILM. Therefore, leadership was conceptualized as an emotionally intelligent relational process by which a person with a desire to serve uses personal persuasion to influence others to work toward the attainment of a vision, through the use of situational assessment, appropriate behaviors, and emotional intelligence. The operational definition of leadership is the subjects’ scores on the LPI, the GVLA, and the GVQ.

The conceptual definition of emotional intelligence is “the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them” (Mayer, Caruso, & Salovey, 2000, p. 267). The operational definition of emotional intelligence is the subjects’ scores on the MSCEIT.

The leadership training course is the independent variable. This course is 18 hours in length, divided into two eight hour sessions and coupled with two hours of individual homework assignments. The theoretical concepts included in the leadership training course are leadership, the role of the follower, and emotional intelligence. The leadership section involved lectures, discussion, dyad, and group work related to the development of different leadership definitions, and specifically, situational, transformational, and servant leadership. The practical components included lecture about and practice of assertion skills, negotiation skills, and the leadership process. This process demonstrated the logical progression that a leader takes from identification of a problem through data gathering, follower involvement, stock holder involvement, solution development, negotiation, action and evaluation. Individual homework involved a journal entry and a
problem identification. The course ended with a course evaluation developed by the researcher which was completed by each participant anonymously.
CHAPTER 4

METHODOLOGY

Description of the Research Design

This study incorporated a two group before and after quasi experimental design. The design was considered quasi experimental, because the participants volunteered to be part of this study. However, by using random assignment to populate the control and experimental groups the design was stronger than a typical quasi experimental design without randomization (Shadish, Cook, & Campbell, 2002). The SPSS, version 14.0, was used to randomize the two groups. By randomizing the participants, this design eliminates selection bias. Further, as the pre and post test instruments were identical and all participants completed the same number and kind of instruments during the same time period, internal validity was improved (Shadish, Cook, & Campbell, 2002).

Identification of the Population and Sample

Participants were selected from a large urban school district in the western United States which employs approximately 179 school nurses to meet the health needs of its over 307,000 student population. All of these nurses have at least a baccalaureate degree in nursing and one year of previous nursing experience as minimum requirements for employment. Each is licensed to practice in the state.
The assignments of these school nurses are varied and can include one, two, or three schools depending on the census and acuity of the students at that particular site. For example, an average high school has over 3000 students. This population would be one nurse’s only assignment.

On the other end of the spectrum, there are two nurses assigned to a specialty school, which has only 150 students. However, this specialty school’s population is comprised of students who are severely physically, and usually mentally, disabled. They require maximum assistance with activities of daily living, including multiple tube feedings and medications.

Most assignments, though, contain multiple schools of two elementary, an elementary and a middle school, or two middle schools being the norm. When three schools are assigned to one nurse, it is usually because the student census is low (< 500/school) and the distance between them is not more than a few miles (Diana Taylor, personal communication, August 3, 2007).

All of the 179 school nurses in the district were invited to participate in the study, both in person and by e-mail. The seventy nurses who volunteered to participate were fully informed regarding the purpose of the study, the random possibility of being either part of the experimental or control group, and that they could drop out of the study at any time without ramifications.

Measurement Methods

Four data collection instruments were employed in this study and one general demographic questionnaire. The demographics questionnaire included questions
regarding age, gender, highest educational degree attained, number of years of nursing experience, and number of years of school nursing experience (Appendix B: Demographic Data Sheet). The four instruments are the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), the Leadership Practices Inventory (LPI), the Grossman and Valiga Leadership Characteristics and Skills Assessment (GVLA) and the Grossman and Valiga Leadership Skills: Rate Yourself Questionnaire (GVQ). Each will be discussed in detail below.

The MSCEIT is a second generation emotional intelligence test developed by Mayer, Salovey, and Caruso (2000). This assessment tool was chosen as it was specifically designed to assess the components of the ability based emotional intelligence model, which is the emotional intelligence perspective being used in this study. Further, it has been shown to have higher correlation between the expert and consensus scores, $r = .98 (p = .05)$ than its predecessor the MEIS ($r = .26; p = .05$) (Roberts, et al, 2001). The MSCEIT takes a relatively short time to complete, approximately 35 minutes, and has 141 items. In contrast, the MEIS has 402 and thus took much longer to finish.

As discussed in the literature review, emotional intelligence according to the ability based model is theorized as intelligence in its own right. Therefore, the MSCEIT is scored in the same manner as a standard IQ test, with the mean equal to 100 and the standard deviation equal to 15. As is true in a standard intelligence test, some answers are correct or there may be more than one correct answer for a particular question. Thus, partial credit is given for some answers.

The MSCEIT is composed of 141 items, each having 5 components, for a total of 705 total responses per test. These items are designed to measure the four branches of the
ability model of emotional intelligence. These four branches as previously discussed are labeled 1) perceiving emotions; 2) using emotions to facilitate thought; 3) understanding emotions; and 4) managing emotions. The MSCEIT yields four different types of scores, which are a) a total score; b) two area scores-experiential and strategic-; c) four separate branch scores; and d) eight task scores.

The first branch (perception of emotion) is assessed through the use of pictures. Participants are asked questions regarding the emotions they perceive in a series of pictures of faces, landscapes, and abstract designs.

The second branch (facilitating thought) has questions aimed at assessing the participants' ability to employ emotions in cognitive activities. Here, the participant is asked to compare different sensations to emotions. For example, "hot" and "red" are used as cues to elicit corresponding emotions perceived by the participant. Further, questions which measure the relationship between cognition and moods are included.

The third branch (understanding emotions) is assessed using the Blends test. The items in this test give examples of two or more emotions and ask what emotion would result if they were blended together. Also the progress of one emotion into another is assessed in third branch questions, for example, irritation progressing to rage.

Finally, the fourth branch, managing emotions, is measured through a series of scenarios. The participant is asked to rate several choices of behavioral responses to the given scenario. To do this, the participant incorporates emotions into his or her decision. The other portion of this last section also includes scenarios, but the participant now rates the behavioral decisions of other people, rather than being asked what he or she would do (Mayer, Salovey, & Caruso, 2002b).
Both consensus and expert scoring is used. Consensus scoring is based on the premises that if the subject picks the same response as a particular proportion of a sample then that subject’s score is multiplied by that proportion. For example, if a subject chooses the same response as 47% of the sample, then that subject’s score would be incremented by .47. The total score for that subject is the sum of all the raw scores over the 141 test items. The MSCEIT is also scored using experts. In this instance the subject’s score is compared to the proportion of experts who chose that response. In this study, consensus scoring was used.

Over 5000 individuals have taken the MSCEIT and the scores based on consensus and expert norms have correlated at $r = .91$ (Mayer et al, 2003). Split-half reliabilities were also done on approximately 2000 participants which yielded full test .93 and .91 for consensus and expert scoring, respectively. These authors also computed the reliabilities of the four branches of the model using both methods and obtained results between .76 and .91. Another study of 59 college students looked at the test-retest reliability over a three week interval and found $r = .86$ (Brackett and Mayer, 2003).

Two separate studies demonstrated that there is evidence of a unitary, overall emotional intelligence factor (Palmer et al, 2004; Mayer et al (2003). These latter researchers also measured the goodness-of-fit indices on the model, looking at a one, two, three, and four branch model. Although they found that all four models fit fairly well, the best fit was with the four branch model ($NFI = .98, .97; TLI = .96, .97; RMSEA = .05, .04$) using consensus and expert scoring, respectively.

To ascertain the discriminate and convergent validity of the MSCEIT, Brackett, Mayer, & Warner (2001) gave this test to 330 college students. They found that the area
and total scores were only modestly correlated with the verbal SAT scores ($r_s = .23$ to .39). Further, Brackett and Mayer (2003) studied the possible correlation between the Big Five personality traits and the MSCEIT and found no significant relationship between the MSCEIT and Neuroticism, Extraversion, or Conscientiousness. They did find that the MSCEIT was moderately associated with Agreeableness and Intellect ($r_s = .28$). Lopes et al (2003) found similar results when they studied correlations between the MSCEIT and Big Five traits. Further, these researchers found no association between the MSCEIT and social desirability, mood, or with personality scales measuring self-esteem or public or private self-consciousness.

The Leadership Practices Inventory (LPI) was developed by Kouzes and Posner in 1992. It was developed based on a series of case studies in which over 1100 managers were asked detailed questions about their personal best experiences as leaders (Posner & Kouzes, 1988). The LPI was chosen because its measures constructs similar to those found in this study’s theoretical framework, namely challenging the process (transformational) inspiring a shared vision (transformational), enabling others to act (servant, situational, transformational), modeling the way (servant); and encouraging the heart (servant). Further, it has been used in nursing research (Tourangeau & McGilton, 2004), and has demonstrated excellent validity and reliability (see discussion below). Although the LPI has two versions, self assessment and assessment by an observer, only the self assessment was used in this study. The LPI-self is a 30 item questionnaire. The respondent answers each question using a 10-point scale ranging from 1-almost never to 10 almost always. There are six questions measuring each of the five constructs. The
mean score of each set of six questions equals the respondent's score for that construct. The higher the score the more the respondent thinks he or she does that behavior.

The LPI has found to be a valid and reliable instrument. Leong (2004) reviewed the different studies which looked at the validity and reliability of the LPI. He found that the internal consistency estimates of the LPI-Self ranged from .70 to .85. Further, a test-retest reliability study of 157 MBA students resulted in retest estimates ranging from .93 to .95. Leong also report that a primary factor analysis consistently loaded on the five components, with these five factors accounting for 60.2% of the variance. This factor structure remained stable across samples totaling 36,000 subjects.

Posner (2000) used a subset of 514 LPI-other responses, entering them into a stepwise regression analysis to determine how well manager leadership practices predicted manager leadership effectiveness. The resulting model was highly significant (F = 318.9; p<.0001) and explained 76% of variance in reported leadership effectiveness.

Both the Grossman and Valiga Leadership Characteristics and Skills Assessment (GVLA) and the Gross and Valiga Leadership Skills: Rate Yourself Questionnaire (GVQ) are self administered questionnaires which informally assess the participant's self perceived leadership characteristics and skills (Grossman & Valiga, 2005). The GVLA has two parts, each containing 20 questions. Each question is answered using a 4-point scale, ranging from strongly agreeing with the statement to strongly disagreeing with the statement. The first part of the GVLA is aimed at determining the respondent's perception of what makes a good leader, while the second part assesses the respondent's perception of his or her own ability to lead
Grossman and Valiga (2005) also state that “the best leaders have strengths in at least a half-dozen key emotional-intelligence competencies out of 20 or so” (p. 23). Although what these 20 competencies are is not mentioned, they did develop the Grossman and Valiga Leadership Skills: Rate Yourself Questionnaire (GVQ), which they state will give the respondents an informal idea about their strengths and weaknesses about these emotional-intelligence competencies. There are 12 items on the GVQ and the responses range on a 4-point scale from seldom agree to frequently agree.

No validity or reliability assessments of the GVQ or the GVLA instruments were found in the literature. The purpose for using these two additional instruments in this study was to test their internal consistency and to gather data as to whether the results from these instruments correlate with the LPI. In addition, correlations between the LPI and the MSCEIT were completed, as the literature does report positive correlations between EI and Leadership skills.

Description of the pilot study

As the different components of the leadership course had not been taught as a unit before, the researcher decided to pilot the course. This allowed the researcher to incorporate the material into a coherent package. Further, the pilot study gave the researcher information regarding the relevance of the material taught, the appropriate timing of each section and its related discussion or activity, and the relevance of the homework assignments. This information was obtained partly through class discussion, but also through an evaluation tool which each participant completed anonymously at the end of the course. Lastly, the pilot study enabled its participants to receive CEUs free of
charge and established a relationship between the researcher and the hospital at which the pilot study was conducted.

This pilot study involved six nurses who were employed at a local acute care facility. Five women and one man volunteered to take the two eight hour classes. Prior to the beginning of the first class, the participants signed a letter of assent (Appendix D) and completed the demographic data sheet, (Appendix B).

The leadership classes focused on a brief description of different leadership theories and philosophies, culminating in a rudimentary working leadership model. The importance of followers was described and the qualities and limitations of the different general types of followers were discussed. In addition, the concepts of assertion and negotiation were discussed, including time allotted for practice of designated skills. Emotional intelligence was briefly covered and included in the leadership model. There were two homework assignments that the participants completed between the two class meetings. One was a self evaluation of leadership through a reflective journal and the other focused on identified problems found in their workplace. One of the problems described by the participants was chosen by the group and served as the example through which the leadership process was explained and illustrated during the second class. Upon completion of the two days, the participants filled out an evaluation.

Description of the Leadership Classes

Based on the pilot study, the leadership training classes given as an intervention for this research were reworked to be appropriate for the leadership needs of school nurses. Thus, the scenarios used as activities were altered to fit situations facing school nurses,
which are different than those facing nurses in an acute care environment. Further, based on the feedback from the pilot study, each of the subsections of leadership theories, definitions, followers, assertion, and negotiation were expanded, both in breadth and depth. The theories of servant, transformational, and situational leadership were discussed in detail, emphasizing the core concepts of each. Further, a detailed section focusing on the concept of emotional intelligence was developed (Appendix C. Leadership Outline). An activity was added to the class which focused on identifying emotions both in the participants and in those with whom they interacted. Throughout the ensuing lecture and discussions, the emotional aspects were underlined for the participants, and their possible role in the interpersonal interactions was emphasized. The homework assignments remained the same, as did the use of one of the problems identified by the group as a basis for the second class.

As critical feedback was obtained from the pilot study and from the research committee members, it became apparent that the leadership model also needed to be reworked. The leadership model needed to better reflect its basis in emotional intelligence and the progression and interaction of the three leadership philosophies/theories of servant, transformational, and situational leaderships. The final model, the Emotionally Intelligent Leadership Model, was then presented during the leadership classes (Appendix A. Figure).

The leadership classes consisted of lectures, interspersed with discussion, dyad and small group discussions. Illustrative examples were used from school nursing to make the material more meaningful to the particular audience. Each participant received a packet
containing the agenda for that day, a copy of the PowerPoint slides and activities. An explanation of the homework assignment was included in the first day's packet.

The first class included individual introductions and statements of why each participant chose to attend the classes and what he or she wanted to get out of the training. Although all the participants are employed by the same school district, meetings of the entire school nursing staff are infrequent. This activity enabled the participants to learn a little about each other and also built group cohesiveness over the two day sessions.

A lecture/discussion of leadership, its definition and various theories followed. Particular attention and explanation was spent on the description and concepts of servant, situational, and transformational leadership. How leadership differed from management was addressed through a small group activity during which the participants discussed different qualities which can be found in either leaders or managers or both. Following the small group discussions, the group reconvened and shared their findings as a whole.

Emotional intelligence was presented in detail, including the different definitions and a brief explanation regarding the researcher's choice of definitions and research tools. The theory of Mayer, Salovey, and Caruso (1999) was presented, including the identification of emotions, the ability of persons to use emotions in particular situations, and the possible effects emotions may have on interpersonal interactions. This was coupled to a small group activity which challenged the participants to describe a selection of emotions using words related to the five senses. The findings of the small groups were then discussed by the entire group.
The information presented about leadership and emotional intelligence was then summarized in a discussion of the Emotionally Intelligent Leadership Model, which emphasizes the major concepts of servant, transformational, and situational leadership, while demonstrating how these leadership theories are imbedded in emotional intelligence.

The concept of followers and their importance was discussed next. The different types of followers and their characteristics were also presented, followed by an interactional model demonstrating the connection of the leader and followers to a designated purpose.

The last section of the first class focused on assertion, its definition, misconceptions about this concept, and useful techniques. The participants practiced assertive communication through another activity, coupled with reflective questions and group discussions.

The second class began with a discussion of the first homework assignment. The participants seemed eager to share the situations during which their leadership skills were tested. They were able to openly critique themselves and encouraged comments from their fellow participants. During this time, the researcher acted as a facilitator and role model.

Following a brief review and practice of assertion, the concept of negotiation was then addressed. The negotiation process was described, along with pertinent rules, possible pitfalls, and a selection of useful strategies. The participants practiced during small group activities and then problem solved difficulties they encountered afterwards with the whole group.
Finally, the leadership process was introduced. A brief discussion regarding problem identification and definition, brainstorming, narrowing down solution possibilities and identification of the primary solution ensued. The role of the followers, stockholders, and related costs were also discussed. Each participant then briefly described the problem he or she identified during the second homework assignment. All of the problems were listed on a whiteboard and one was selected by the group. This problem was used as the core of a leadership plan which the whole group completed during the remainder of the class time.

The result of this group activity was a clear definition of the perceived problem, a narrow list of possible solutions, an outline of the selected solution, a list of the followers and stockholders, any foreseeable pitfalls, an estimate of related costs, and additional information that needed to be gathered prior to the beginning of actual negotiation and action. A few evaluation questions were also developed by the group to keep them on track as the process enfolds.

The researcher acted as a guide and facilitator during this process, through open ended questions, demonstration of brainstorming techniques, and by taking the opposing side for the sake of argument and problem solving by the group. Her actions were purposeful, as she wanted to role model leadership, thus providing a concrete example of the material covered in the course.

Lastly, evaluations were completed by each participant. All the participants indicated that the classes were valuable and improved their leadership knowledge and skills (Appendix C. Course Evaluation).
Ethical Considerations

Participation in this study was voluntary and data were treated as grouped data in reporting study results. No personal identifying data were collected. The only connection between an individual respondent and the data was a code number given by this researcher to each respondent. This code number was placed on the LPI, the GVQ, and the GVLA for record keeping purposes only. The list matching participant and code number was known only to the researcher, was kept in a secure location, and was shredded when the study was concluded. This list was used to remind those participants who had not completed the data collection instruments to do so within the study’s timeframe.

To ensure confidentiality, no identifying information was requested on the research instruments. The only identification obtained was the participant’s signature on the Informed Consent Letter, which was separated immediately from the research materials upon receipt. There was minimal risk involved in participating in this study, arising from the possibility of discomfort from answering the questionnaires’ questions. The participants were asked to sign the Informed Consent Letter, to ensure that the participant understood the purpose and expectations of the study.

The researcher received approval of both the institutional review board (IRB) of the school district in which the school nurses are employed and the IRB of the educational institution at which the researcher was a graduate student. No data were collected prior to approval being obtained from both institutions.
Data Collection Procedures

Once the total number of volunteer participants was known (N = 70), the names were divided randomly into two groups, control and experimental. Each participant was notified of his or her assigned placement via intra-departmental e-mail, followed by a research packet via district school mail. The data were collected using both an online instrument and pen-and-paper assessments. A research packet containing a letter of explanation (Appendix D), an informed consent (Appendix D), and copies of the demographic data sheet, LPI, GVLA, and GVQ (Appendix B) were sent by intra school district mail to each of the participants. Each participant was asked to complete the research packet privately and as individuals to prevent contamination of the data. The respondents were directed to then return the research packet by intra school district mail inside a sealed self addressed envelope directly to the researcher, thus maintaining respondent privacy.

Upon receipt, the signed informed consent was separated from the data collection instruments and each instrument response sheet was given a code number unique to the individual. The data were inputted into a SPSS (v.14.0) by code number only.

The MSCEIT was accessed online by the participants after a user number and password was given to them by the researcher. This user number and password enabled them to access the MSCEIT, while providing them anonymity. Each participant’s responses were scored by MHS, the company which publishes the MSCEIT, using consensus scoring. A confirmation e-mail was sent to the researcher when each participant completed the MSCEIT, and these data were then downloaded by the researcher using a private password account; hence the confidentiality of the respondents.
was maintained. The data obtained from the MSCEIT, which included the total experiential scores, total strategic scores, and the total emotional intelligence scores, were then entered into the SPSS spreadsheet under the participant’s unique code number.

Reminder e-mails were sent four days, and again two days, prior to the end of the requested collection date, to any participants from whom a research packet had not been received. Personal phone calls were used in two cases when participants had not returned the research packet and in six cases when the participants had not completed the MSCEIT.

All of these data were collected prior to the experimental group participating in the leadership classes which were given on two Saturdays, spaced two weeks apart. Eleven weeks after the leadership classes were completed, an identical set of data was collected from each of the participants, following the same procedure as described above. The second research packet did not include the letter of consent, letter of explanation, or demographic data sheet found in the first packet, as these were not necessary elements of the second data collection.

Statistical Analyses

Descriptive statistics were calculated for each of the demographic variables: age, highest educational degree attained, number of years in nursing, and number of years in school nursing.

The responses on the GVLA and GVQ were assigned number values to facilitate statistical analyses. The GVLA had a 4-point scale ranging from strongly agree (4) to strongly disagree (1). The GVQ had a 4-point scale ranging from almost always agree (4)
to seldom agree (1). Each respondent’s scores were summed and the group means of these sums for each group at the first data collection (GVLA1; GVQ1) and at the second data collection (GVLA2; GVQ2) were then used in the statistical analyses.

The data were first analyzed for normality using the Shapiro-Wilk test. Follow-up analyses were computed using the appropriate parametric or nonparametric statistic depending on the results of the tests of normality.

In order to examine whether there were significant changes both within groups and between the first data collection and the second, the control and experimental groups were examined across time using either t-tests or the Wilcoxon signed ranks test. Correlations were calculated to determine if any of the instruments correlated significantly with each other. Both internal consistency and test-retest reliability was calculated on the GVLA and the GVQ by means of the Cronbach’s alpha and the appropriate correlation coefficient, either the Pearson correlation or Spearman’s rho. Alpha was set at 0.05 for all statistical tests.
CHAPTER 5

FINDINGS OF THE STUDY

Seventy participants agreed to participate in the study. All 35 participants assigned to the control group completed the study. However, one control participant did not complete the second GVLA, GVQ, or LPI. Thus analyses involving these instruments were done with 34 participants in the control group.

Of the 35 participants originally assigned to the experimental group, seven dropped out of the study because they could not attend the leadership classes. An additional three participants did not attend the second leadership class, so their data were not included in the analyses. Therefore, a total of 25 participants completed the study as part of the experimental group.

Analysis of Data

Descriptive Data

Table 1 summarizes the distribution within both the control and experimental groups with regards to gender, age, and educational background (Appendix D). As there was only one male in the sample, gender was not analyzed as a significant factor. Because age and education were grouped data, a contingency table analysis was completed. Fifteen cells had expected counts of less than five; therefore the likelihood ratio test \( (G^2) \) was
used instead of the Pearson Chi-square. The two groups were found to be comparable in terms of age ($G^2 = 11.180, p = .192$) and level of education ($G^2 = 6.816, p = .235$).

The groups were then compared in terms of RN experience and years of school nursing experience (Appendix D, Table 2). Years of RN experience and years of school nursing experience were recorded as continuous data and thus the means, medians, and standard deviations were compared. The control group had a mean of 23.69 years of RN experience, with a range of from 3 to 45 years and the experimental group had a mean of 21.76 years, with a range of 5 to 38 years. No significant difference was found between the control and experimental groups for years of RN experience. The Shapiro-Wilk test indicated normality for both the control ($W = .978, p = .694$) and the experimental ($W = .955, p = .317$) groups.

When years of school nursing experience was examined, the control group had a mean of 9.26 years and a range of 2 to 27 years, while the experimental group had a mean of 8.28 years with a range of 1 to 18 years. The Shapiro-Wilk statistic was significant for the control group in terms of school nursing experience ($W = .866, p = .001$), but not for the experimental group ($W = .949, p = .237$). Therefore, the Mann-Whitney test was used for these data and the results indicated that the difference between the groups was not significant ($z = -.241, p = .810$) for years of school nursing experience.

Based on the results of the Shapiro-Wilks tests performed on the research variables, parametric statistical analyses were used on the GVL.A1, the GVL.A2, the EI.REA1, EITOT1, and the GVO2. Nonparametric statistics were used on the remainder of the variables and if one of the variables in a pair being compared was found to have a non-normal distribution.
Statistical Analysis of the Research Hypotheses

Hypothesis 1: School nurses who receive leadership training will show significantly higher overall emotional intelligence scores as measured on the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) than school nurses who do not receive the leadership training.

Six different scores from the MSCEIT were used in the data analyses. These included the total emotional intelligence scores (EITOT1 and EITOT2), and the two area emotional intelligence scores: experiential (EIEXP1 and EIEXP2) and strategic (EIREA1 and EIREA2). The experiential emotional intelligence score is made up of the two branch scores which measure perceiving emotions and facilitating thought. The strategic emotional intelligence score combines the two branch scores of understanding emotions and managing emotions. The total emotional intelligence score measures overall emotional intelligence. As females consistently score higher on the MSCEIT than males, (Mayer, Salovey, & Caruso, 2002b) it was necessary to score the one male participant’s MSCEIT with a correction for gender to prevent inaccurate comparisons. The numbers following the acronym indicate either the first (1) or second (2) data collection.

First, each of the data sets was analyzed using either a t-test or a Mann-Whitney test to determine if there were differences within each of the groups prior to the leadership training. None of the results were significant (Appendix A. Table 3).

The two data collection results were then analyzed using the Wilcoxon signed ranks test to determine if either group’s median scores changed significantly from time1 to time2. None of the results were significant for the control group: EIEXP (W = -.442, p = .658), EIREA (W = -.1245, p = .213), and the EITOT (W = -.254, p = .800). For the
experimental group, similar results occurred: EIEXP (W = -1.171, p = .241), EIREA (W = -1.171, p = .242), and EITOT (W = -.013, p = .989). The hypothesis was therefore not supported.

**Hypothesis 2:** School nurses who receive leadership training will show significantly higher overall scores as measured on the Leadership Practices Inventory (LPI) than school nurses who do not receive the leadership training.

A Mann-Whitney test was first completed on the LPI to ascertain if there was a difference within either of the groups prior to the leadership training. Neither the LPI1 (U = 370.0, p = .311) nor the LPI2 (U = 362.0, p = .334) yielded significant results. The Cronbach’s alpha internal consistency reliability assessment for this inventory was α = .949.

The two data collection results were then analyzed using the Wilcoxon signed ranks test to determine if either group’s median scores changed significantly from time1 to time2. There was no significant difference for the control group (W = -.956, p = .339), but the experimental group did show a significant difference (W = -2.382, p = .017).

Therefore, hypothesis 2 was supported.

**Hypothesis 3:** School nurses who receive leadership training will show significantly higher overall scores as measured on the Grossman and Valiga Leadership Characteristics and Skills Assessment (GVLA) than school nurses who do not receive the leadership training.

A t-test was first completed on the GVLA to ascertain if there was a difference within the two groups prior to the leadership training. Neither the results of the GVLA1 (t = -6.688, p = .494) nor of the GVLA2 (t = -.135, p = .893) were significant. The Cronbach’s
alpha internal consistency assessment was $\alpha = .695$. The test-retest reliability for the GVLA for the control group was $r = .411$, $p = .016$.

The two data collection results were then analyzed using the paired samples t-test. There was a significant change in the mean difference between the two data collections for both the control group ($t = 2.094$, $p = .044$), and for the experimental group ($t = 2.303$, $p = .030$). Although both groups demonstrated significant change, whether the experimental group’s change was significantly higher than the experimental group could not be determined, so hypothesis 3 was not supported.

**Hypothesis 4**: School nurses who receive leadership training will show significantly higher overall scores as measured on the Grossman and Valiga Leadership Skills: Rate Yourself Questionnaire (GVQ) than school nurses who do not receive the leadership training.

A t-test or a Mann-Whitney test was first completed on the GVQ to ascertain if there was a difference in medians within the two groups prior to leadership training. Neither the results of the GVQ1 ($U = 416.0$, $p = .890$) nor of the GVQ2 ($t = -1.754$, $p = .085$) were significant. The test-retest reliability for the control group was $r = .656$, $p = < .001$ and the Cronbach’s alpha internal consistency reliability for total scores was $\alpha = .86$.

The two data collection results were then analyzed using the Wilcoxon signed ranks test to determine if either group’s median scores changed significantly from time1 to time2. Neither the control group ($W = -1.762$, $p = .078$) nor the experimental group ($W = -1.762$, $p = .078$) demonstrated significant change between the time1 and time2 and therefore, hypothesis 4 was not supported.
Correlation Analyses

Finally, a variety of correlation analyses were completed first on the control group and then on the experimental group. Either a Pearson coefficient or a Spearman's rho was used. The results are summarized in Appendix A. Table 4.

For the control group, the GVLA and the GVQ were significantly correlated, but this significance was not seen for the experimental group. Further, the GVQ correlated with the LPI for both the control and experimental groups. However, there was no correlation between the GVLA and LPI for either group.

Finally, the two EI area scores, for both time 1 and time 2, and the total emotional intelligence scores were correlated (Appendix A, Table 5). For the control group these correlations among the area scores and the total emotional intelligence scores were high in most cases. The only exception was between the EIEXP1 and the EIREA1 (r = .175, p = .314). The two overall EI scores (EITOT1 and EITOT2) for the control group were highly correlated (r = .504, p = .01).

The correlations among the two area scores and total EI scores for the experimental group all correlate highly, with the highest correlation being between the EITOT1 and the EOTOT2 (r = .799, p = .01).

In summary, leadership training significantly improved the experimental group's LPI mean score, but did not significantly change its GVLA, GVQ, or MSCEIT scores. No significant differences in either the experimental or control group was found prior to the leadership training provided to the experimental group. Internal consistency reliability was assessed for LPI, GVLA and GVQ. Correlation analyses were done between GVLA

73
and GVQ, LPI and GVQ and finally GVLA and LPI for the control and experimental groups.
Discussion of Results

Although emotional intelligence has been studied in various domains, little is known about how EI develops or whether it can be improved through education or training (Qualter & Gardner, 2007). According to Mayer and Salovey (1999), emotional intelligence increases with age and experience, but there is little scientific evidence for effective ways to accelerate this process. Although Ulutaş & Ömeroğlu (2007) found significant improvement in EI in preschool children over a 12 week training program, there seems to be a serious lack of quality research, however, evaluating the effect on emotional skills training on adults ((Lopes, Côté, & Salovey, 2006).

Latour & Hosmer (2002) indicate that the mentoring of subordinates over time by their supervisors is one way to increase EI. However, their comments were observational and lack quantitative or qualitative data. Brackett, Alster, Wolfe, Katulak, and Fale (2007) provided a two day EI training workshop to the teachers and administrators in a New York school district. In semi-structured interviews six months after the training, the participants indicated significant changes in their perceptions of their own EI related behaviors.
In the current research, the lack of significant change in EI in the experimental group following the leadership classes may be the result of several factors. The leadership classes combined concepts related to leadership and emotional intelligence. The emphasis was on leadership, rather than emotional intelligence. Only a few hours were devoted to EI and much of that was theoretical in nature. The concept of EI was new to the participants and it was incorporated into the larger picture of leadership, rather than being the primary focus of the classes.

Although frequent examples were used through the two day classes emphasizing the role of EI in the scenarios presented, there was insufficient time to thoroughly discuss or practice the information that had been introduced through the lecture portion of the class. The EI programs previously sited that did demonstrate significant improvement were of much greater length, had a focused agenda, and the expertise of the presenters was at a higher level than the expertise of this researcher. This teacher’s lack of expertise and experience teaching EI to others may have negatively impacted the learning of the participants.

Another reason for the lack of significant change in EI could be related to the short time between data collection times. There were only approximately 11 weeks between the leadership classes and the second assessment of EI. This short time period may not have been sufficient for the development of a significant change in emotional intelligence. Sparrow and Knight (2006) emphasize that “changing one’s attitudes or one’s habits tends not to be an instantaneous affair. Both tend to take longer than the acquisition of knowledge or skills” (p. 277). An extension of the time period between the first data collection and the second may have been beneficial. Interviews with
participants of the experimental group several months after the leadership classes coupled with the second MSECIT assessment may have yielded different results or have provided a better insight into how the courses could have been improved to enhance the EI learning of the participants.

The Leadership Practices Inventory (LPI) has been shown to validly measure individual perceptions of transformational leadership (Posner & Kouzes, 1988, 1992). Transformational leadership is one of the major components of the conceptual framework of the study. It can be argued that the LPI also has components of servant leadership and situational leadership as discussed early in chapter 3. As the leadership classes were based on the Emotionally Intelligent Leadership Model (EILM), much of the content and practice was geared toward improving the attributes in the participants which are found in these three leadership theories.

Transformational leadership is a process that can be learned with conscientious effort (Hall, Johnson, et al, 2002). George, Burke, Rodgers, et al, (2002) implemented a leadership training program for 140 staff nurses consisting of 4 eight-hour classes over a 2 month period. The RN participants showed significant improvement in LPI scores at completion of the program and 6 months post training program.

Although the leadership classes presented during the current research project were fewer in number, shorter in length and given during a shorter time period than the training programs discussed previously, the school nurses who participated still significantly improved their perceptions of their leadership skills as measured by the LPI. Through lectures, discussions, and practice scenarios presented, the school nurses were given skills which could then improve how they respond to difficult situations and which
could increase their confidence in their leadership abilities. Making the information, discussion topics, and scenarios specific to their clinical subspecialty was very important (Cook & Leathard, 2004).

Increasing these leadership abilities allowed the school nurses to more actively support those with whom they interact. The participants universally commented on the benefit of the classes to improving their ability to interact with their health office aide and to be direct, but not confrontational when interacting with a difficult parent, student, or staff member.

By incorporating homework assignments in the class format, material addressed in the first class was reinforced through the homework and also provided a group specific foundation for learning during the second class. This method was used to maximize the learning potential of the time allotted to the classes. Although the participants received CEUs for the classes, two full weekend days were taken up by the classes. Thus, an expectation of active or sustained participation over an increased number of days was not feasible. However, the significant improvement of LPI scores does lend credence to the argument discussed previously that school nurses who are not in administrative positions would benefit from leadership training, even if a comparatively short program is provided.

The GVQ demonstrated an acceptable level of internal consistency in this study ($\alpha = .86$). Further, the correlation of the GVQ with the EIEXP1s and EIEXP2s for the control group may hold promise. Grossman and Valiga indicated that the GVQ was based on characteristics of emotional intelligence (see discussion in chapter 4). Therefore, this correlation, at least with the control group, demonstrates that Grossman and Valiga’s
assumption may have some validity. Further, the GVQ was designed to indicate self-perception of emotional intelligence, albeit in a general way. The correlation between the GVQ and the LPI may indicate that emotional intelligence and leadership as measured by the LPI are interrelated.

However, the characteristics of emotional intelligence upon which Grossman and Valiga based the GVQ have not been reported. Further, the instrument is very short and the response options are positively skewed. *Seldom agree* is the least positive response, giving the respondent no negative choices. Further explanation of the foundation of this instrument, a more balanced response choice and much more extensive use in research is needed before the GVQ’s value can be ascertained Grossman and Valiga (2005) have presented this instrument as an informal assessment tool and their intent may not have been to have it used as a formal research assessment instrument.

Although both of these instruments reportedly measure self-perceptions of what makes an effective leader, this lack of correlation with one another suggests that each of these instruments may focus on different aspects of the overall concept of leadership, thus not sharing sufficient specificity.

Limitations

Mayer, Salovey and Caruso (1999) have indicated that EI may improve with age and experience. Thus for this sample, both the age of the participant and the number of years he or she has been in nursing may confound the results. Randomly assigning the participants to the control and experimental groups attempted to address this problem and the two groups were found to be not significantly different on these two parameters.
However, individual differences in the ability to develop EI may affect results when measuring group differences rather than examining individual differences. Perhaps assessment of individual differences in EI among participants may be considered given the individual variation in developing EI skills.

The sample may be a factor affecting the results of this study. Attrition and incomplete data decreased the sample size, particularly in the experimental group. The small size of the experimental group (N = 25) may have contributed to lack of significant findings.

Also, the leadership classes themselves may need restructuring. The length and number of the classes may need to be increased to allow more time to be spent specifically on emotional intelligence or leadership and EI may need to be separated into two distinct educational programs with classes devoted to each of these two subjects. The spacing between classes and time allowed before final assessment need to be increased to allow for development of both skills related to emotional intelligence and leadership. Lastly, practice sessions at work conducted by trained mentors may improve the learner’s understanding and skill in these areas.

As school nurses are fairly autonomous due to their work environment, it may take more time for skills of leadership outside of a managerial role to be enhanced. These nurses may not think of themselves as leaders: a perception that would have to change to allow for leadership qualities described in the Emotionally Intelligent Leadership Model to develop.

Lastly, the results of this study can not be generalized to the school nurse population. Although the standards of practice for all school nurses in the United States are
established by the national association, the individual states dictate the scope of practice through each of their specific Nurse Practice Acts. Further, the size of the student population and work environments are determined by each individual school district. Although this study indicated that leadership training significantly and positively impacted this sample of school nurses, the classes would have to be adapted to the specific needs of an audience residing in another school district or state.

Recommendations for Further Study

This research represents a preliminary investigation of leadership training designed to improve the leadership skills and EI of school nurses. The study does provide some preliminary information about leadership skill development and the link between leadership and emotional intelligence. Baseline data has been provided related to the self-perceptions of school nurses’ leadership practices. A range of related studies examining school nurse leadership practices could yield data of value with regards to the need for leadership training for each school nurse, rather than only those aspiring to administrative roles.

School nursing is a unique subspecialty which demands autonomy of its practitioners. The data indicate that leadership training does significantly impact the self perceptions of leadership in a small sample of these nurses. More research needs to be conducted to add credence to these findings. The school nurses who participated in this study evaluated the classes very highly and recommended them to their peers. Plans to present the classes to members of the control group are already developed, and participants are eager to participate.
It would be especially useful to assess the leadership needs of the neophyte school nurse. The transition from other health care settings to school nursing is difficult at best. Implementation of similar leadership classes used in this study as part of the initial training of neophyte school nurses may reduce the stress of this transition. Improving these new school nurses' leadership and EI skills prior to beginning work in this field may improve problem solving, interpersonal and self reflection skills which in turn may make the transition smoother and improve retention. In addition, leadership training tailored for more experienced school nurses may positively impact retention, job satisfaction and effectiveness in this role.

A qualitative review of the course evaluations coupled with personal interviews of a sample of the school nurses who participated in the leadership classes may also render valuable information regarding their perception of leadership. It is important to ascertain what the learner thinks and feels he or she needs to learn and what is applicable for the particular work environment. These data could then be used to refine the leadership classes to better meet the specific needs of school nurses.

As discussed previously, the scope of practice of the school nurse is defined by the national association, but the manner in which the role is actualized differs by state. Comparing the perceptions of leadership and the emotional intelligence of school nurses from different geographic areas may add insight into the common attributes and also highlight the unique needs of a particular cross section of school nurses.

It is important to further investigate EI in this sector of the nursing population. As school nurses are the only health care professionals on schools’ campuses, the development of their emotional intelligence may positively impact not only their
relationships with the students and parents, and also with fellow staff members and the public at large. How significant improvement in emotional intelligence in this population can be achieved provides a basis for further research studies.

Comparison studies of the emotional intelligence of school nurses and the emotional intelligence in other nursing subspecialties and other careers may shed light on what individuals chose which subspecialty or career. In light of the nursing shortage, these data may be able to assist in recruitment and retention of personnel.

It is important to further test the validity and usability of the EILM. In order to adequately accomplish this task, more specific instrument development is also needed to assess the various components of the model. There are no instruments presently developed that measure the characteristics inherent in servant leadership. Further, those measures which are aimed at situational leaders are designed to measure more managerial qualities than leadership as a separate concept. Once valid and reliable instruments are developed specifically for these theories or an instrument developed which obtains usable data about the EILM as a whole, the model can be tested for its validity and usefulness within a nursing organization or school of nursing.

Schools of nursing are charged with graduating leaders, yet what specific observable outcomes define these graduates as leaders is still up for debate. An assessment of the precise leadership skills required by nursing graduates needs to be completed and clearly differentiated from the expected nurse graduate management skills. Once needed leadership skills are identified for the nurse graduate, the EILM could be used as a unifying strand within a baccalaureate nursing curriculum.
Leadership education coupled with emotional intelligence skill training could be taught as an ongoing process throughout the nursing program. This would enable the students to have sufficient time to practice these skills to achieve competency at graduation. The traditional management class, usually taught during the senior semester, could then focus on those management skills graduates also need to be successful practitioners.

The inclusion of this model in a nursing curriculum, therefore, could provide the opportunity to measure emotional intelligence and leadership skills of nursing students from admission to graduation. This would provide the nursing faculty with data needed to tailor student leadership education to meet the increasing call for leadership at the point of care.

Both leadership skills and emotional intelligence take time to develop and using a more holistic model of leadership might have a positive impact on those nurses who are educated with this model in place. Studies comparing students’ emotional intelligence scores and self perceptions of leadership from institutions who employ the EILM and those who do not would allow the investigation of the model as an educational tool. Lastly, as this model has evolved over the course of this research, data obtained from these studies may add to its further development and applicability.

Replication of this study using a much larger sample may provide more significant results. Further, expansion of the leadership classes, the addition of classes specific to emotional intelligence, and more time between the comparisons of emotional intelligence and leadership scores may also yield significant results.
Conclusion

The positive link between emotional intelligence and leadership has been indicated in a variety of studies (Codier, 2007; Carmeli, 2003; Barling, Slater, & Kelloway, 2002). Further, emotional intelligence has been shown to increase with age and experience (Mayer, Salovey, & Caruso, 1999). This study attempted to demonstrate that leadership classes given to school nurses which contained an emotional intelligence component would positively impact both the leadership self perceptions of school nurses and their emotional intelligence. Although the data did not indicate that the classes had an impact on the emotional intelligence of the participants, the results do provide evidence that leadership training significantly improves the self perceptions of leadership in this sample of school nurses. In addition, the EILM developed for this study may provide a basis for further investigation of both leadership and EI.
APPENDIX A

THE EMOTIONALLY INTELLIGENT LEADERSHIP MODEL

Transformational
Vision
Empowerment
Support
Motivation

Servant
Service
Stewardship
Awareness

Situational
Situational Awareness
Appropriate Behaviors
Follower Readiness

EMOTIONAL INTELLIGENCE
Through Relationships
Table 1

Descriptive Demographic Data

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Table 2

Comparison of RN and SN Experience

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Table 3

T tests or Mann-Whitney Scores for MSCEIT

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<td>EIEXP2</td>
<td></td>
<td></td>
<td>368.0</td>
<td>.297</td>
</tr>
<tr>
<td>EITOT1</td>
<td>-862</td>
<td>.392</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EITOT2</td>
<td></td>
<td></td>
<td>425.0</td>
<td>.851</td>
</tr>
</tbody>
</table>
Table 4

Correlation Analysis of the GVLA, GVQ, and LPI

<table>
<thead>
<tr>
<th>Variables</th>
<th>GVLA1</th>
<th>GVLA2</th>
<th>GVQ1</th>
<th>GVQ2</th>
<th>LPI1</th>
<th>LPI2</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVLA1</td>
<td>1</td>
<td>.391**</td>
<td>-.487**</td>
<td>-.337</td>
<td>-.263</td>
<td>-.274</td>
</tr>
<tr>
<td>GVLA2</td>
<td>1</td>
<td>-.376*</td>
<td>-.431*</td>
<td>-.431*</td>
<td>-.263</td>
<td>-.297</td>
</tr>
<tr>
<td>GVQ1</td>
<td>1</td>
<td>.656**</td>
<td>.622**</td>
<td>.421*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GVQ2</td>
<td>1</td>
<td>.552**</td>
<td>.488**</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).

<table>
<thead>
<tr>
<th>Variables</th>
<th>GVLA1</th>
<th>GVLA2</th>
<th>GVQ1</th>
<th>GVQ2</th>
<th>LPI1</th>
<th>LPI2</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVLA1</td>
<td>1</td>
<td>.660**</td>
<td>-.210</td>
<td>-.124</td>
<td>-.033</td>
<td>-.274</td>
</tr>
<tr>
<td>GVLA2</td>
<td>1</td>
<td>-.021</td>
<td>-.282*</td>
<td>-.045</td>
<td>-.307</td>
<td></td>
</tr>
<tr>
<td>GVQ1</td>
<td>1</td>
<td>.348</td>
<td>.410*</td>
<td>.307</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GVQ2</td>
<td>1</td>
<td>.451*</td>
<td>.405**</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
Table 5

Correlations among Area Scores and Total Emotional Intelligence

### Control Group

<table>
<thead>
<tr>
<th>Variables</th>
<th>EIEXP1</th>
<th>EIEXP2</th>
<th>EIREA1</th>
<th>EIREA2</th>
<th>EITOT1</th>
<th>EITOT2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIEXP1</td>
<td>1</td>
<td>.484**</td>
<td>.176</td>
<td>.051</td>
<td>.901**</td>
<td>.356*</td>
</tr>
<tr>
<td>EIEXP2</td>
<td>1</td>
<td>.350*</td>
<td>.361*</td>
<td>.514**</td>
<td>.788**</td>
<td></td>
</tr>
<tr>
<td>EIREA1</td>
<td>1</td>
<td>.743**</td>
<td>.303</td>
<td>.700**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EIREA2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EITOT1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

### Experimental Group

<table>
<thead>
<tr>
<th>Variables</th>
<th>EIEXP1</th>
<th>EIEXP2</th>
<th>EIREA1</th>
<th>EIREA2</th>
<th>EITOT1</th>
<th>EITOT2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIEXP1</td>
<td>1</td>
<td>.749**</td>
<td>.550**</td>
<td>.502*</td>
<td>.941**</td>
<td>.775**</td>
</tr>
<tr>
<td>EIEXP2</td>
<td>1</td>
<td>.335</td>
<td>.395</td>
<td>.670**</td>
<td>.760**</td>
<td></td>
</tr>
<tr>
<td>EIREA1</td>
<td>1</td>
<td>.488*</td>
<td>.741**</td>
<td>.549**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EIREA2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EITOT1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
APPENDIX B

Demographic Data Sheet

Please complete the following questions and return this sheet with your research packet.

1. female ___ male ___

2. Age:

   20-25 ___  26-30 ___  31-35 ___  36-40 ___  41-45 ___  46-50 ___  51-55 ___  56-60 ___  61-65 ___
   over 65 ___

3. Level of education: (check all that apply)

   BSN ___
   Master's in Nursing ___
   Master's in another field ___
   Nurse Practitioner ___
   PhD, EdD ___
   MD ___

4. Total number of years of nursing experience (including 2007-2008) ______

5. Total number of years of school nurse experience (including 2007-2008) ______

Code # ______
Grossman and Valiga Leadership Characteristics and Skills Assessment (GVLA)

Directions: For the following 40 questions, put an “X” in the box to indicate your response.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leaders are very creative.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The most important goal of a leader is to be sure the job gets done.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Leaders should focus on people, NOT on the system.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>One does not need to be in a position of authority to be a leader.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Credibility is an important characteristic of a leader.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Leaders tend to be people with high energy who are passionate about their work.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Leaders focus more on being creative than on accomplishing their vision or goal(s).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Persistence is a trademark of an effective leader.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Leaders are committed to their vision and tend not to adapt to change well.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Leaders are good at empowering others to grow.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>It is important for leaders to have a dream and to be future-oriented.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>A person’s ability to lead in a professional setting depends on his or her self-esteem.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>A leader’s style of leading is determined by the situation and/or task at hand.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>A good leader must have integrity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Leaders mentor others to assist them in pursuing their dreams.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Leadership is a quality one is born with and it cannot be acquired.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Good leaders help others to resolve conflict.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>One does not need to be an excellent critical thinker in order to be a great leader.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>A good leader should have excellent communication skills.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Leaders always follow the rules.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>I value integrity higher than power.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>People tend to think I have the ability to influence others.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>I feel confident about my knowledge base and skills, given my years of experience.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>I have a definite dream for where I want to be in my profession.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>I have mentored another person and found the experience rewarding.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Change usually makes me feel nervous, and I tend to lose my self confidence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>I feel energized taking risks unless they are life threatening.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>I do not feel confident calling a physician about my patient’s status.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>When I experience conflict, I usually give in and accommodate the other person.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>I feel I do make a difference as a nurse and plan to continue to do so.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Since I am only a nurse I am not responsible for patient care medical errors.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>I often follow others when I am not sure what to do about something.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>I notice I agree with others easily unless the issue is very dear to my heart.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>I attempt to empower ancillary workers because I find the team spirit is enhanced.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Personally, I do not really have a vision as to where I plan to be in a few years.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>I enjoy conflict and rarely compromise my needs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>I am an autonomous person.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>I have been told I am extremely reliable and dependable.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>I have great passion for my nursing career.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>It is important to me to think about and plan for the future.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Grossman and Valiga Leadership Skills: Rate Yourself Questionnaire (GVQ)

Directions: For the following 12 questions, put an “X” in the box to indicate your response.

<table>
<thead>
<tr>
<th></th>
<th>Seldom agree</th>
<th>Occasionally agree</th>
<th>Often agree</th>
<th>Almost always agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am aware of what I am feeling.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I know my own strengths and weaknesses.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I deal calmly with stress.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I believe the future will be better than the past.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I deal with changes easily.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I set measurable goals when I have a project.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Others say I understand and am sensitive to them.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Others say I resolve conflicts.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Others say I build and maintain relationships.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Others say I inspire them.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Others say I am a team player.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Others say I helped to develop their abilities.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Code# ________
August 23, 2007

Ms. Anne Diaz
408 Lacy Lane
Las Vegas, NV 89107
E-mail: ardiar5@cox.net

Dear Ms. Diaz,

The Permissions Committee has met and considered your request to use pages 18-22 Leadership Characteristics and Skills Assessment; and pages 23-24 Leadership Skills: Rate yourself, from Grossman and Valiga: The New Leadership Challenge, Creating the Future of Nursing 2nd edition to be used as a means of data collection for your dissertation at the University of Nevada and distributed to 80 participants.

Permission is granted, provided the material is original to the F.A. Davis book (no separate acknowledgement to a third party appears). Full credit to the F.A. Davis title, author, and to F.A. Davis as publisher must appear with the material where it is used.

This permission extends to the use described above only and not to any other derivative work, ancillaries or editions (in English or any other language) which you may develop later. Should you wish to use this material again, please resubmit your request.

There is no fee for this usage.

Best regards,

Darlene Dargan-Woods
Permissions Coordinator
F.A. Davis Company
An Independent U.S. Publisher for Over 125 Years
1915 Arch Street
Permission to use Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)
August 22, 2007

Anne:

Thank you for your interest in the MSCEIT tool. I have recently approved you for a 30% research discount on MSCEIT products. Your account number with MHS is 163825. When you are ready to order reports please contact our customer service department at 1-800-456-3003, any of these representatives will be able to help you make your first order. I have placed notes in your account regarding your discount, however it is safe to mention this to the representative that helps you.

Good luck with your research!

Sincerely,

Kari Anne Matusiak
Business Development Coordinator
Corporate Division, MHS Inc.
1-416-492-2627 ext. 290
APPENDIX C

Leadership Classes: Day 1 Outline

Welcome and Participant Introduction

Objectives

Leadership:
  Definitions
  Theories

Leadership vs. Management

Emotional Intelligence
  Criteria for an intelligence
  History of concept
  Mayer and Salovey

Emotional Intelligence and Leadership

Emotionally Intelligent Leadership Model

Followers
  Description and Purpose
  Types of Followers
  Expectations of Followers
  Traits of Good Followers

Assertion

Explanation of Homework Assignments

Closure
Leadership Classes: Day 2 Outline

Opening Remarks

Review of Assertion

Discussion of Reflective Journal Experience

Negotiation
  Process vs. Content
  Rules of Negotiation
  Pitfalls
  Tools for Negotiating

Leadership Plan
  Small group discussion
  Large group case study

Course Evaluation
Leadership Course Evaluation

Please respond by putting an “X” in the box that most closely matches your opinion:

<table>
<thead>
<tr>
<th></th>
<th>Disagree strongly</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The material on negotiation skills was useful.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The material on assertion skills was useful.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The information about leadership styles was useful.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The interactive activities increased my confidence.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The interactive activities increased my leadership skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The interactive activities increased my assertiveness.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The reflective journal helped me clarify my leadership style.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The reflective journal helped me clarify my leadership strengths.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The reflective journal helped me clarify the areas of leadership I might need to change.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This class helped improve my leadership skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This class improved my ability to correctly assess situations and apply appropriate leadership techniques.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This class improved my ability to listen to another’s opinion and understand what he/she is saying.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This class improved my ability to lead in confrontational situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This class improved my ability to identify good followers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Was there any portion of the class that was not helpful to your leadership role?

   yes   no

If yes, what was it and what did you think was not helpful about this portion? How would you improve it?
Was there a portion of the class that was especially useful to your leadership role?
   ____ yes  ____ no
If yes, what was it and what did you think was helpful about this portion?

Please add any suggestions you might have to improve the class
APPENDIX D

Letter of Explanation

Date

Dear Colleague:

As school nurses, we are challenged daily with situations that ask us to be leaders. Our practice is largely autonomous, as we are the only health care professionals at our respective schools. Further, the importance of how school nurses perceive, use and manage emotions is intuitively known, but has never been documented. Leadership training, beyond that obtained in formal academic settings, is limited to those who desire to be administrators. Also, emotional intelligence as it relates to leadership has not been developed as yet.

Thus, I am conducting a study to discover if there is a relationship between leadership training and how school nurses perceive their own leadership characteristics and skills. Further, I want to discover if leadership training impacts the overall emotional intelligence of school nurses.

You have indicated a willingness to participate in this study. Attached is the research packet. Please sign the Letter of Consent with your completed research packet. There is minimal risk involved in participating in this study, only possible discomfort answering some of the questions. A signed written consent is required for participants of any study conducted within the domain of either the Clark County School District or the University of Nevada, Las Vegas. Your signature on the letter of consent also indicates that you understand the purpose, expectations of the study, and that participation in the study can be terminated by you at any time.

Please return the letter of consent with your completed research packet via intra district mail addressed to Anne Diaz, Health Office, O’Callaghan MS. The letter of consent will be immediately separated from your research packet to maintain the confidentiality and anonymity of your responses.

After all the research packets are returned, you will be randomly assigned to either the control or experimental group. If you are in the control group, you will be expected to fill out and return this same research packet, minus the demographic sheet, during the last week in January, 2008. For your participation, you may attend the leadership classes when they are repeated in Spring, 2008, after the completion of the study. If you choose to attend these leadership classes, you will receive 18 CEUs free of charge.
If you are randomly assigned to the experimental group you will be expected to participate in two leadership classes to be held on Saturday November 3 and Saturday, November 17. In addition, you will also be expected to fill out and return this same research packet, minus the demographic sheet, during the last week in January, 2008. For your participation, you will receive 18 CEUs free of charge as soon as all your data has been collected.

All data collected will be reported as group findings, comparing the control group to the experimental group. No individual scores will be reported or released.

If you have any questions regarding the study or any of the research instruments, please call me at xxx-xxxx (cel) or at my middle school, xxx-xxxx, ext. xxxx. Thank you for your participation in this research. Together we are contributing to the body of nursing knowledge regarding leadership and emotional intelligence.

Sincerely,

Anne L. Diaz, RN, MSN, NCSN
Dear Participant:

This in-service, Leadership for Nurses, is a pilot program in preparation for my dissertation research. Your criticisms about the material presented, the scenarios, the activities and your final evaluation will be used to alter and/or improve the classes, which will then be used as the treatment in my dissertation research. All written responses are to be given anonymously and will be kept confidential. Participation in these leadership classes constitute your assent to allow the information you give to be used in my dissertation.

Thank you for your active participation in this endeavor.

Sincerely,

Anne L. Diaz, RN, MSN, NCSN

I ______________________________ give my assent without reservations.

______________________________  ______________________________
Signature                           Name (print)
TITLE OF STUDY: Leadership Training and Emotional Intelligence in School Nurses

INVESTIGATOR(S): Cheryl Bowles, EdD, RN and Anne L. Diaz, RN, MSN, doctoral student

CONTACT PHONE NUMBER: 702-895-3082 (Bowles) or 702-895-4807 (Diaz)

Purpose of the Study
You are invited to participate in a research study. The purpose of this study is 1) to see if leadership training will positively impact the emotional intelligence of school nurses and 2) to see if leadership training will positively impact the school nurses' perceptions of their leadership skills.

Participants
You are being asked to participate in the study because you are a school nurse in the Clark County School District and at least 21 years of age.

Procedures
If you volunteer to participate in this study, whether as part of the control group or the experimental group, you will complete parts 1, 2, and 3 as listed below. If you are in the experimental group you will complete part 4, in addition to parts 1, 2, and 3.

1. Complete a demographic questionnaire which includes your age, gender, highest educational degree attained, number of years you have been a nurse and the number of years you have been a school nurse.
2. Complete a research packet which contains three short leadership questionnaires, which are the Leadership Practices Inventory (LPI), the Grossman and Valiga Leadership Characteristics and Skills Assessment (GVLA), and the Grossman and Valiga Leadership Skills: Rate Yourself Questionnaire (GVQ). This packet will be completed at the beginning of the study and at the end of January.
3. Complete the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCETT) on line once at the beginning of the study and once at the end of January.
4. If a member of the experimental group, you will participate in an 18 hour leadership training program given on two Saturdays.

Benefits of Participation
If you are in the experimental group you will learn about leadership and emotional intelligence. The increased knowledge you gain and practice during the classes may positively impact your perception of your leadership skills, thus improving your feelings of leader competence. Further, your ability to identify, express and evaluate emotions in yourself and others during an interaction may increase. You will be given 18 CEUs free of charge for your participation. If you a part of the control group, you will be given the opportunity to participate in the same leadership training classes, for the same 18 CEUs free of charge in the Spring of 2008.
INFORMED CONSENT
School of Nursing

TITLE OF STUDY: Leadership Training and Emotional Intelligence in School Nurses
INVESTIGATOR(S): Cheryl Bowles, EdD, RN and Anne L. Diaz, RN, MSN, doctoral student
CONTACT PHONE NUMBER: 702-895-3082 (Bowles) or 702-895-4807 (Diaz)

Risks of Participation
There are risks involved in all research studies. This study included only minimal risks. You may become uncomfortable when answering some of the questions.

Cost/Compensation
There will not be financial cost to you to participate in this study. The study will take approximately three hours of your time if you are in the control group and 21 hours of your time, including the leadership training course, if you are in the experimental group. If you participate in the leadership training course, you will receive 18 CEUs free of charge, after all data has been collected. No CEUs will be given unless the participant completes the study. The participants of the control group may participate in the same leadership training course to be given in the Spring 2008 if they so choose and will receive 18 CEUs free of charge, as long as they have previously completed all the research instruments.

Contact Information
If you have any questions or concerns about the study, you may contact either Cheryl Bowles, EdD, RN, 895-3082, or Anne Diaz, RN, MSN at 702-895-4807. For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted you may contact the UNLV Office for the Protection of Research Subjects at 702-895-2794.

Voluntary Participation
Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with the university or school district. You are encouraged to ask questions about this study at the beginning or any time during the research study.

Confidentiality
All information gathered in this study will be kept completely confidential. No reference will be made in written or oral materials that could link you to this study. All records will be stored in a locked facility at UNLV for at least 3 years after completion of the study. After the storage time the information gathered will be shredded by the researcher.
INFORMED CONSENT
School of Nursing

TITLE OF STUDY: Leadership Training and Emotional Intelligence in School Nurses
INVESTIGATOR(S): Cheryl Bowles, EdD, RN and Anne L. Diaz, RN, MSN, doctoral student
CONTACT PHONE NUMBER: 702-895-3082 (Bowles) or 702-895-4807 (Diaz)

Participant Consent:
I have read the above information and agree to participate in this study. I am a school nurse employed by the Clark County School District and am at least 21 years of age. A copy of this form has been given to me.

Signature of Participant ___________________________ Date ___________________________

Participant Name (Please Print) ___________________________

Participant Note: Please do not sign this document if the Approval Stamp is missing or is expired.
BIBLIOGRAPHY


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County Hospital Innovators Award: Honorable Mention for Women Connected


Publications:


Dissertation Title: Leadership Training and Emotional Intelligence in School Nurses
Dissertation Examination Committee:
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Committee Member: Dr. Lori Candela, RN, Ed.D.
Committee Member: Dr. Michele Clark, RN, Ph.D.
Committee Member: Dr. Chad Cross, Ph.D.