The Relationship Between Nurse Leaders' Emotional Intelligence and Nurse Followers' Organizational Commitment and Retention

by

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DEDICATION

I would like to dedicate this dissertation to my parents, the late Dale and Pauline Richmond, for giving me the loving gift of discipline, work ethic, and a stable, loving upbringing. They both worked very hard to give their children faith, hope, and security. To my sister, Sandra Perryman and my late brother Steven Richmond, for allowing me to be their big sister, as I honed my own emotional intelligence abilities. Thank you for your patience and love.

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Abstract

The associations between a leader's emotional intelligence (EI) and the factors related to employee commitment, retention, and satisfaction have been increasingly identified in the literature to be important considerations for employers in many diverse industries outside of healthcare (Cavallo & Brienza, 2004; Klem & Schlechter, 2008; Shooshtarian, Ameli, & Aminilari, 2013; Webb, 2014; Zakarlasen & Zakarlasen-Victoroff, 2012; Zammuner, Dionisio, Prandi, & Agnoli, 2013).

Young-Ritchie, Spence-Laschinger and Wong (2009) emphasized that nursing satisfaction and retention would be essential to ensure quality-nursing care and warrant nurses to remain in the future workforce. Therefore, it would be valuable to consider these findings in anticipation of projected short supply of nurses in the U.S. (American Nurses Association, 2015). The purpose of this quantitative, correlational study was to explore the relationships between selfreported EI of nurse leaders and self-reported organizational commitment (OC) and retention of nurse followers at a Midwestern hospital. The study utilized the Mayer, Salovey and Caruso Emotional Intelligence Test (MSCEIT) to measure 12 purposively sampled nursing leaders' EI and Meyer and Allen's Three Component Model (TCM) of Employee Commitment survey to quantify 127 nurse followers' OC. In addition, nurse followers' retention to both the nursing unit and overall organization was explored with OC and EI. Statistical analyses included descriptive and correlational testing. No significant findings were noted between the EI of nurse leaders and OC of nurse followers or between nurse leaders' EI and retention of nurse followers within the nursing unit or overall organization. Of note were significant incidental findings between nurse followers' OC and retention in both nursing units and the overall organization. Keywords: Nurse leaders, organizational commitment, emotional intelligence, nurse retention

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CHAPTER ONE: INTRODUCTION

Purpose of Study

The purpose of this quantitative, correlational study was to explore the relationships between existing self-reported emotional intelligence (EI) of nurse leaders and the self-reported organizational commitment (OC) and retention of their nurse followers at a Midwestern hospital.

Background and Rationale

Salovey and Mayer first defined emotional intelligence in 1990 as a subset of social intelligence. The first definition described EI as "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" (Salovey & Mayer, 1990, p. 189). In 1997, Mayer and Salovey redefined EI to better connect the concepts of intelligence and emotion, and to distinguish EI from a trait or characteristic. The new definition described EI as "the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth (Mayer and Salovey, 1997, p. 5). The theoretical framework of EI will be further explained in Chapter II and will serve as the theoretical underpinnings of this study.

The associations between a leader's EI and the various factors related to employee commitment, retention, and satisfaction have been increasingly identified in the literature to be important considerations for employers in many diverse industries outside of healthcare (Cavallo & Brienza, 2004; Klem & Schlechter, 2008; Shooshtarian, Ameli, & Aminilari, 2013; Webb, 2014; Zakarlasen & Zakarlasen-Victoroff, 2012; Zammuner, Dionisio, Prandi, & Agnoli, 2013).

A growing body of research has also indicated a relationship between employees' EI and job satisfaction, well-being, and job stress (Görgens-Ekermans & Brand, 2012; Karimi, Leggat,

Donohue, Farrell, & Couper, 2013; Onuoha & Segun-Martins, 2013; Ramesar, Koortzen & Oosthuizen, 2009), as well as job retention (Codier, Kamikawa, Kooker, & Shoultz, 2009), workplace flourishing (Schutte & Loi, 2014), and organizational commitment (Güleryüz, Güney, Aydin, & Asan, 2008). In addition, Luca and Tarricone (2001), like Wang and Huang (2009), found that higher employee EI improved group cohesiveness and teamwork of staff members. Literature supports Chopra and Kanji's (2010) and McQueen's (2004) assertions that EI has relevance in a variety of human resource, relationship management and job performance strategies.

While it is encouraging to know there is a growing body of knowledge related to the positive benefits of a leader's EI, as it is demonstrated in transformational and other leadership styles (Hur, van den Berg, & Wilderom, 2011; Lopez-Zafra, Garcia-Retamero, & Martos, 2012; Polychroniou, 2009; Syndell, 2008; Wang & Huang, 2009), there is a paucity of research regarding the role that EI alone has in nurse leaders' interactions with the nurses they lead, especially as it relates to OC and retention (Young-Ritchie, Laschinger, & Wong, 2009). A highly emotionally intelligent nurse leader may alone provide a synergy with his or her nurse followers that could influence the workplace despite the leadership style that is exhibited by the nurse leader. These emotionally intelligent interactions could possibly contribute to both nurse leaders' and nurse followers' organizational commitment and their continued work in the nursing profession.

Healthcare organizations face rising pressure to increase nursing resources as a result of the aging of the United States (U.S.) population and retirements of significant numbers of aging nurses. The U.S. is projected to encounter a nursing shortage over the next 10 years that is twice the level of the shortage experienced in the mid-1960s (Rosseter, 2014). It is relevant to consider

that in the U.S., between 2012 and 2022, the need for registered nurses is expected to grow to 3.24 million. This growth in nursing positions is brought on by the aging of the U.S. population and the associated chronic medical problems that typically come with aging (U.S. Bureau of Labor Statistics, 2014). The 19% growth of 526,800 nursing positions, along with the projected need for another 525,000 nurses to replace those leaving the profession due to retirement, will place a critical burden on healthcare resources (Rosseter, 2014).

In light of these anticipated acute shortages in the nursing profession, there is a growing realization that nurse leaders must possess a variety of complex abilities, including the possibility of EI abilities, to enhance nursing retention and satisfaction (Feather, 2009). Studies have indicated that a leader's caring abilities, including EI abilities, have positive effects in the workplace to engage nurses in preventing stress, job burnout, and turnover (Hoar, 2011; Karimi, Leggat, Donohue, Farrell & Couper, 2013). Moreover, Young-Ritchie, Spence-Laschinger and Wong (2009) emphasized that nursing satisfaction and retention would be essential to ensure quality nursing care and warrant nurses to remain in the future workforce. Therefore, it was important to consider these findings in anticipation of the projected inadequate supply of nurses in the United States (American Nurses Association, 2015), when strategies to increase retention and engagement of nurses will be greatly needed.

Most concerning is the limited knowledge regarding nurse leaders' EI and its relevance to nurse followers' OC and retention (Young-Ritchie, Laschinger, & Wong, 2009). Organizational commitment and retention will be of utmost importance to the nursing profession in coming years during a critical nursing shortage. For the benefit of future nursing leadership considerations, it would be helpful to strengthen the information that is known about the relationships EI has with OC and retention.

Problem Statement

A review of current literature revealed a dearth of information regarding the role EI alone played in nurse leaders' rapport with their nurse followers, especially as it related to the nurse followers' OC and retention. In light of proposed significant nursing workforce shortages (Rosseter, 2014), this study attempted to add to the current knowledge concerning leadership characteristics favorable in nursing. Emotionally intelligent interactions between nurse leaders and their nurse followers could contribute significantly to both the nurse leaders' and the nurse followers' OC and retention at the bedside.

Research Questions/Hypotheses

The research questions and hypotheses of this study were:

- R1: What is the relationship between nurse leaders' self reported EI scores and their nurse followers' self-reported OC scores in a Midwestern hospital?
- H1: There is a significantly positive relationship between nurse leaders' self-reported EI scores and their nurse followers' self-reported OC scores in a Midwestern hospital.
- R2: What is the relationship between nurse leaders' self-reported EI and their nurse followers' retention in the nursing unit in a Midwestern hospital?
- H2: There is a significantly positive relationship between nurse leaders' self-reported EI and their nurse followers' retention in the nursing unit in a Midwestern hospital.
- R3: What is the relationship between nurse leaders' self-reported EI and their nurse followers' retention in the organization in a Midwestern hospital?
- H3: There is a significantly positive relationship between nurse leaders' self-reported EI scores and their nurse followers' retention in the organization in a Midwestern hospital.

Definition of Terms

Emotional intelligence. The ability to perceive and express emotions, to access and generate feelings, and to understand and regulate the emotions of oneself and others (Mayer & Salovey, 1997), as measured by the Mayer-Salovey-Caruso Emotional Intelligence Test (Multi-Health Systems, Inc., 2015).

Midwestern hospital. A hospital physically located in one of the eight states noted by Longworth (2012) to comprise the Upper Midwest. These states include Minnesota, Wisconsin, Iowa, Michigan, Missouri, Illinois, Indiana, and Ohio.

Nurse follower. A nurse who is willing to cooperate in work activities to the extent that group goals are achieved through teamwork (Holden Leadership Center, 2009). For the purposes of this study, a nurse follower was a registered nurse who had worked for a nurse leader in an acute care, hospital nursing unit for the prior one year. Nurses hired within the past year of the study date were not included in the study.

Nurse leader. A clinician who is experienced in the nursing field, has good communication skills, and is approachable and empowered to act as a role model to subordinates by motivating them to match their values and beliefs about nursing and their care practices (Stanley, 2006). For the purpose of this study, a nurse leader was defined as the highest-ranking nurse with direct authority over nursing staff within an acute care, hospital nursing unit. The nurse leader was to be the leader of the designated nursing unit for over one year.

Organizational commitment. Organizational commitment is the amount of identification and involvement that a person has within an organization (Mowday, Porter, & Steers, 1982,

p. 20) as measured by the Three Component Model (TCM) Employee Commitment Survey (Academic Version 2004), authored by J. Meyer and N. Allen and under license from The University of Western Ontario (The University of Western Ontario, 2014).

Retention. The percentage of employees employed at the beginning of the specific period and continues to be employed at the end of the specific period (Society for Human Resource Management, 2012). For the purpose of this study, retention was measured as the percentage of registered nurses employed in the nursing unit one year prior to the start of the proposed study and who continued to be employed in the nursing unit or the overall organization when the study commenced. The hospitals' human resources departments reported retention data.

Assumptions/Limitations/Delimitations

Assumptions. All participants would meet the inclusion criteria for this study, and be willing to participate in the study, free from inducements, and would answer all survey questions honestly and when free from distraction or workplace stressors.

Limitations. The choice of nonprobability, purposive sampling in this study decreased the likelihood that the sample was representative of the population and increased the chances of error in the findings (Bondmass, 2013). Additional bias could have been introduced with the choice of internet-based survey instruments and biased in favor of computer literate participants and only those having access to the Internet; the self-report nature of the instruments could also be acknowledged as a limitation (Leedy & Ormrod, 2013).

In addition, Leedy and Ormrod (2013) asserted that it would be unprofessional for a researcher to fail to identify and concede the possibility of biased data. For this reason, a further limitation to consider would be the researcher worked as a nurse leader at the institution studied. This employment status could have introduced unintended bias, due to the possibility some of

the study sample would not participate in the research from fear that the researcher would either judge them or reveal their answers to the study questions (Fowler, 2014). Under those circumstances, Fowler (2014) asserted, the omission of those participants' contributions to the study could result in response bias. In an attempt to address this bias, the researcher assured all participants in writing, multiple times during the consenting process, that all participants' answers and participation would be kept strictly confidential.

Delimitations. Leedy and Ormrod (2013) suggested that researchers point out what is not envisioned or intended in the proposed research study. For this reason, it must be mentioned that there were several research questions that could have been asked concerning the EI of nurse participants in this study. For the purposes of this study, the researcher's intent was to focus on the EI of only the nurse leaders and the resulting relationships with nurse followers' outcomes. Consequently, assessment of nurse followers' EI was not included in this study.

Furthermore, the researcher would concede that there were multiple variables that played into a nurse's decision to leave employment within a hospital. Many of these variables were mentioned in the review of literature in chapter two. This study did not attempt to measure all variables associated with retention, some of which included; stress, teamwork, group cohesion, emotional exhaustion, access to opportunity and support resources, lack of autonomy, and working conditions (Estryn-Behar, van der Heijden, Fry & Hasselhorn, 2010; Gieter, Hofmans, & Pepermans, 2011; Young-Ritchie, Laschinger, & Wong, 2009). In addition, while nurses' OC and job satisfaction were both strongly associated with turnover intention, measurement of nursing satisfaction was not included this study (Gieter, Hofmans, & Pepermans, 2011).

Conclusion

Healthcare entities employing registered nurses would benefit from an awareness of the variables influencing their employees' commitment and retention. Past research supported that an employee's direct leader plays a role in whether or not the employee stays in the department or the larger organization (Beecroft, Dorey & Wenten, 2008; Han & Jekel, 2011; Porter, Kolcaba, McNulty, & Fitzpatrick, 2010; Portoghese, Galletta, Battistelli, & Leiter, 2014; Young-Ritchie, Laschinger, & Wong, 2009).

In light of the projected declines in the supply of registered nurses in the United States (Rosseter, 2014), it could be deemed valuable to establish the nursing leadership characteristics that could prove useful in improving OC and retention of nurses. Nursing leaders could find it beneficial to know the role EI plays in their interactions with nurse followers (Hoar, 2011; Laschinger, Wong & Grau, 2013). Administrative nurse leaders could also use this information to build organizational strategies for the commitment and retention of all nurses in their organizations (Bulmer-Smith, Profetto-McGrath, & Cummings, 2009; Feather, 2009; Morrison, 2008). The proposed study intended to address the gaps in EI literature and contributed to the existing body of knowledge surrounding the associations between leadership EI and the organizational commitment and retention of bedside registered nurses.

CHAPTER TWO: REVIEW OF LITERATURE

Chapter Two comprised a review of the research literature for the study's central concepts. There is a general overview and synthesis of literature published on the theoretical aspects of EI, and OC. Also included, is a summary of the research surrounding EI, OC and retention as they relate to leadership, nursing leadership, and the nursing workforce. The objectives of the literature review was to provide a background of the pertinent research that had been established in relationship to EI, OC and retention and offer a purpose for the current study, and identify the gaps in literature concerning EI and nursing leadership. A summary concluded this chapter, which offered gaps found in current research. These gaps included the correlation of nursing leaders' EI with their nurse followers' OC and retention.

The literature review was conducted using College of Saint Mary's library of electronic databases, Academic Search Premier, CINAHL Plus with Full Text, ProQuest, EBSCOhost, PubMed, ERIC, PsycARTICLES, Electronic Journal Service, ProQuest Nursing and Allied Health Source. The main themes on which the reviews were focused included EI, EI and leadership, OC, OC and leadership, nursing leadership, nursing leadership and EI, nursing retention, and general nursing workforce.

Emotional Intelligence

Goleman, Boyatizis and McKee (2013) asserted that EI has become a label for the skills that many have considered in the past as "soft skills," the abilities that are relational, social, or interactive and present in almost every facet of a person's life. EI is considered to be an important indicator of success in the workplace and especially in leadership. Bulmer-Smith, Profetto-McGrath, and Cummings (2009) found in a large integrative review of the literature surrounding EI and nursing that emotion is a central element of nursing care, but nursing has

been slow to develop a nursing theory surrounding emotional intelligence in nursing. Bulmer-Smith et al. (2009) also noted multiple gaps in the knowledge about EI and nursing practice. Akerjordet and Severinsson (2010) supported these findings when they performed their own exhaustive literature review to conclude that there is "cautious optimism" about the future of EI to contribute to the development of nursing leadership (p. 372). Due to the limited research of EI in association with nursing thus far, it would be beneficial to consider EI research in all facets of nursing, especially nursing leadership.

Historical perspective of the emotional intelligence concept. The theory of EI was noted by Salovey and Mayer (1990) to be rooted in social intelligence and was originally described by Thorndike (1920) as the "ability to understand men and women, boys and girls – to act wisely in human relations" (p. 228). Interestingly, when referring to the difficulty in testing social intelligence, Thorndike asserted that social intelligence necessitated individuals to react and adapt their reactions, as well as use their speech, gestures, and facial expressions (p. 231). In light of Thorndike's work, Salovey and Mayer (1990) suggested that EI was a "subset" of social intelligence, in which EI "involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). Many of the abilities described in Thorndike's portrayal of social intelligence are congruent with abilities that nurses must have in order to perform their duties. Evaluation of the impact that emotions and intelligence have in nursing outcomes would be valuable in understanding how to sustain and grow the nursing profession.

According to Fernandez-Berrocal and Extremera (2006), EI was first addressed in scientific literature, by Salovey and Mayer in 1990. In their seminal publication, Salovey and Mayer described EI as a set of skills that allow a person's emotions to be displayed as orderly reactions

to events, which could be adjusted to alter the experience more positively (Salovey & Mayer, 1990, p. 186). These skills are further explained in an upcoming section of this chapter. The first study concerning the concept of EI was performed on an individual's ability to recognize emotion in three sorts of stimuli: color, faces, and designs. The results of that study indicated that EI was responsible for the identification of emotions (Mayer, Caruso, & Salovey, 2000). Although that study provided the beginning to the research regarding EI, it would be beneficial to learn more about EI and the role it plays in nursing practice and leadership.

Definitions of emotional intelligence.

Thompson. In exploring the various definitions of EI noted in literature, Thompson (1994) offered that EI was "the extrinsic and intrinsic processes responsible for monitoring, evaluation, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (p. 27).

Goleman. Goleman (1998) described EI as the ability to recognize not only personal feelings, but also the feelings of other people. Goleman went on to note that EI also included the ability to inspire others, as well as to handle the emotions that occurred within oneself, and in one's associations with others. Goleman, Boyatzis and McKee (2013) also asserted that EI began with self-awareness. The leader's ability to know his or her own internal influences and to act as a result of those signals would conclude with better decisions (Goleman et al., 2013).

To put it another way, employees' perceptions of their leader's ability to recognize feelings and emotions are significant to the leader's success within an organization (Momeni, 2009). It could be theorized then, that the abilities assigned to EI by Goleman et al. (2013), Momeni (2009), and Thompson (1994) might be considered advantageous to a healthy nursing workplace.

Freshwater and Stickley. Freshwater and Stickley (2004) suggested that EI could be described as a collection of non-cognitive skills that individuals use to succeed at a given task. The authors also asserted that the practice of nursing had evolved beyond the physical care of patients to include the emotional aspects of care that should be covered in the education of nurses (Freshwater & Stickley, 2004). Conversely, it should also be considered that if nurses could have the ability to identify their own emotions correctly, they could better facilitate and manage their patients' emotions, as well as those of the patients' family members, during times of illness and stress. In addition, the management of emotions could lead to better patient satisfaction during their healthcare experience. Further research on these concepts would be helpful.

Mathews, *Zeidner*, *and Roberts*. Mathews, Zeidner, and Roberts (2002) referred to EI as "the competence to identify and express emotions, understand emotions, assimilate emotions in thought, and regulate both positive and negative emotions in oneself and others" (p. xv). Interestingly, the presence of negative emotions could cause conflict in the workplace, which has been found to cause job strain and lower commitment in nurses (Veld & Van De Voorde, 2013).

In light of these findings, the ability to control negative and positive emotions could be an important work trait of nursing leaders and prove helpful in providing workplace atmospheres that retain nurses and increase organizational commitment.

Theoretical perspectives of emotional intelligence. EI offers a number of theoretical frameworks that described both the ability model of EI offered by Mayer, Salovey and Caruso (2004) and the trait models or mixed models of EI offered by Bar-On (2006) and Goleman et al. (2013).

The mental-abilities model centered on feelings alone and how they interrelated with thinking. The mixed models considered mental abilities in both interpersonal and intrapersonal

qualities that are considered to be components of EI. These models of EI provided a way to measure an assortment of competencies that include both traits and abilities (Mayer, Salovey & Caruso, 2000). It is important to note here that Feather (2009) asserted that many of the abilities required for nurse leaders' success appeared to be dependent on EI.

Mayer, *Salovey and Caruso Model of EI*. Mayer et al. (2004) offered a conceptual model of EI that included four branches or "abilities" that were related to EI and referred to a collective blend of emotion and intelligence (p. 199). The four-branch model included the abilities to perceive, facilitate, understand, and manage emotions and thoughts (Mayer et al., 2004).

Perception. The first branch of the EI model described by Mayer et al. (2004) was perception of emotions. Perception referred to the "capacity to recognize emotion in others' facial and postural expressions" (Mayer et al., 2004, p. 199). Perception also entailed the recognition of emotions in other forms of exchanges or contacts, such as music and verbal merits (Mayer et al., 2004).

Facilitation. The second branch of the model, facilitation of emotions, signaled the translation of emotions into feelings and then manipulation of those feelings to enable thoughts. Facilitation also included the ability to make judgments regarding emotions, and develop perspectives about the feelings that accompanied emotions. These perspectives ultimately assisted in cultivating a plan for those feelings (Mayer et al., 2004). Holding the emotion in cognitive thought enabled a person to compare it to previous emotions and feelings and then proceed to evaluate the emotion correctly, to gauge the behaviors based on prior experiences (Mayer, Salovey & Caruso, 2000).

Understanding. The third branch, understanding of emotions, consisted of the ability to explain and examine emotions, watch the emotions over a period of time, and know what to

expect as a result of the emotions (Mayer et al., 2004). Grewal and Salovey (2005) added that understanding emotions entailed comprehending the "differences between related emotions, such as between 'pride and joy' and understanding that negative emotions could escalate if not mediated" (p.334).

Management. The fourth and final branch, management of emotions, involved dealing with emotion in alignment with personal values and societal norms. This branch included self-management of emotions by use of personal abilities to calm and reassure emotions while dealing with stress and pressure (Mayer et al., 2004). Grewal and Salovey (2005) further pointed out that the management of emotion included not only one's own emotions, but also the emotions of others. In addition, emotion management included retention or preservation of negative emotions, when needed, to secure a goal. An example of preservation of negative emotions could be demonstrated when a person shouted in passionate indignation to fire up a football team (Grewal & Salovey, 2005, p. 335).

Goleman model of EI. First published in 1998, Goleman's model of EI included five domains of emotional competencies or "traits" and learned abilities. These domains consisted of self-awareness, self-regulation, motivation, empathy, and social skills (Goleman, 1998). In 2000, Goleman collaborated with Boyatzis and Rhee to refine the model from five domains to four: self-awareness, self-management, social awareness, and relationship management. These four domains had twenty competencies that were measured with the Emotional Competence Inventory (Boyatzis, Goleman, & Rhee, 2000).

Self-awareness. Goleman, Boyatzis, and McKee (2013) offered that within the self-awareness domain were the abilities of emotional self-awareness, accurate self-assessment, and

self-confidence. The authors also pointed out that leaders with EI were highly aware of their inner thoughts and recognized how those resultant emotions affected their job performance.

Self-management. The self-management domain contained the abilities of emotional self-control, transparency, adaptability, achievement, initiative, and optimism. In addition, those with strong self-management abilities continually learned to improve and challenge themselves to new goals (Goleman et al., 2013, p. 254).

Social awareness. The domain of social awareness comprised the abilities of empathy, organizational awareness, and service, which included a large span of emotions and relationships. Those individuals with strong social awareness abilities were in harmony with their own emotional signs and feelings; were good listeners; and had strong social networks, solid relationships, and well-developed inner values (Goleman et al., 2013, p. 255).

Relationship management. The last domain, relationship management, incorporated the characteristics of inspirational leadership, influence, development of others, change catalyst, conflict management, teamwork and collaboration. Those with high relationship management skills encouraged and inspired those around them, as well as exceled at recognizing the potential in others on their team (Goleman et al., 2013, p. 256).

Bar-On model of EI. Bar-On (2006) noted that his Emotional-Social Intelligence Theory was a "cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands" (p. 3). Developed in 1988, Bar-On based his model on the ability to have self-awareness of emotions and conduct effective relationships with others (Bar-On, 2006).

Bar-On (2006) noted he was influenced by Darwin's work with emotional expression for survival and adaptation, as well as Thorndike's theory of social intelligence and Wechsler's work with intelligent behavior (p. 3). Bar-On's model comprised five major areas of skills, each of which, included subsets of competencies or skills (Bar-On, 2006).

Intrapersonal skills. The intrapersonal skill subset included emotional self-awareness, assertiveness, self-regard, self-actualization, and independence (Bar-On, 2006). Bar-On (2010) noted that those with strong intrapersonal skill sets were familiar with their inner feelings and core values. Leaders with self-awareness were candid and honest about their emotions and often knew how their feelings influenced their job performance (Goleman et al., 2013).

Given these points, nurses' daily interactions with their patients have often necessitated skills of personal self-awareness and the ability to channel their core values. These abilities could better equip nurses to deal with the life and death struggles those interactions often require.

Interpersonal skills. The interpersonal skill subset included interpersonal relationships, social responsibility, and empathy (Bar-On, 2006). Individuals who were strong in empathy were able to adjust to a wide assortment of emotions within themselves and others. Individuals with interpersonal skills sets fostered positive relationships and monitored the satisfaction of others (Goleman et al., 2013). These findings are particularly important when considering Klakovich's (2009) assertion that interpersonal communication skills were important for nursing student skill development "often from the first course in the Nursing program" (para. 1).

Stress management. The stress management skill subset included stress tolerance and impulse control (Bar-On, 2006). This skill set also included the ability to cope with stress, correctly perceive information, and solve both personal and interpersonal problems (Bar-On, 2010). To further illustrate this skill concept, Taft (2006) suggested that emotionally intelligent

leaders with self-control had the ability to manage their stress without allowing the arising feelings to deter them.

Furthermore, when leaders were able to display self-control, they could better manage nursing collaboration, teamwork, and conflict (Taft, 2006). The nursing leaders' ability to effectively deal with stress could also build trust in their leadership, which could in turn lead to improved employee commitment.

Adaptability skills. The adaptability skill subset included reality testing, flexibility, and problem solving (Bar-On, 2006). The ability to handle numerous demands and concentrate on solving problems creatively in any organizational venue would be valuable both to leaders and to their followers.

General mood skills. The general mood skill subset included optimism and happiness (Bar-On, 2006). Bar-On (2010) noted that happiness infused positivity into individuals and contributed to a person's well-being, energy, and ability to cope with stress. In light of this information and because nursing leaders deal with numerous issues daily in both patient and personnel situations, it would be beneficial to have the ability to display optimism and happiness to minimize stress.

In summary, EI offered a variety of different theoretical frameworks that describe models with both abilities and trait or mixed methodologies. These frameworks provided a means to describe a variety of emotional competencies. Given these points, many of the characteristics are noted to be valuable in nursing leadership. EI could provide an operational context in which nursing leadership might improve organizational commitment and ultimately retention of nurse followers. EI and, specifically, the Mayer, Salovey and Caruso (2004) theory of EI, will provide the theoretical foundation for this study.

Emotional intelligence and leadership. Emotional intelligence characteristics have been well documented to be substantial attributes in the successful leadership of employees. Many of these studies demonstrated that leaders serve as influential members of workplace teams, and when these leaders demonstrate higher levels of EI, they often establish successful employee outcomes (Feather, 2009; Momeni, 2009).

Non-nursing leaders.

Emotional regulation. Kafetsios, Nezlek, and Vassilakou (2012) studied educational leaders' emotional regulation in relationship to work outcomes of both the leaders and their followers. The results indicated that a leader's ability to perform emotional reappraisal strategies was positively related to the followers' emotions and attitudes in the work setting. Prati, Douglas, Ferris, Ammeter and Buckley (2003) also argued that emotional regulation was very important to those with EI, and that emotionally intelligent leaders provide "motivation" and "transformational influence" within a team (p. 34). The ability to self-regulate emotions to constructively distinguish which behaviors are suitable and unsuitable to display would be essential to leaders in any organization.

Job satisfaction. Carmeli (2003) observed that among the senior leaders employed in an Israeli governmental office, those testing higher in EI demonstrated better work attitudes, behaviors, and outcomes in the workplace. The authors also found that emotionally intelligent managers developed more commitment to their careers and better job satisfaction, and their employees with higher EI were able to handle work-family conflict more positively (Carmeli, 2003). These findings should foster further consideration by managers to improve the relationships formed with their followers.

Webb (2014) also discovered a relationship between leaders' EI and employee satisfaction and commitment. The analyses identified significant correlations between the leaders' EI and workers' satisfaction and commitment in the predominately female (82%) population. The research also determined that leaders' emotionality and sociability EI scores were associated with increased employee satisfaction with their leader, which then contributed to worker satisfaction with the organization. Interestingly, wellbeing was not correlated with either worker satisfaction or commitment to the leader or the organization. These findings strengthen the argument that leaders play a significant role in the commitment and satisfaction of their employees. Considerations for increasing leaders' abilities associated with EI would be useful.

Stress. Leaders are known to face challenges and pressures to perform. The associations between managers' abilities in EI and stress management were studied by Ramesar, Koortzen, and Oosthuizen (2009). The researchers found significant correlations between EI and stress management in 12 of the 15 EI scales. Conversely, there were also significant correlations between EI and worrying, optimism, and social confidence scales within the EI measure. These correlations supported the researchers' assertion that stress management was a component of the EI concept. The findings are important information for those managing employees.

Improvement of leader EI skills could perhaps improve the detrimental long-term health effects that come with stress for those in organizational management roles.

Performance and gender. Cavallo and Brienza (2004) also revealed in a large study of executives at Johnson and Johnson's Consumer and Personal Care Group that there was a strong relationship between superior performing leaders and their emotional competence. In this study, subordinates rated their successful leaders significantly higher in 17 of the 20 EI competencies tested. The EI competencies noted to separate the high performing leaders from the lower

achieving leaders were self-confidence, achievement drive, developing others, adaptability, influence, and leadership. Strikingly, gender differences were also discovered in this study. Supervisors rated female leaders higher in adaptability and service competencies, and peers rated female leaders higher in emotional self-awareness, conscientiousness, developing others, service, and communication. Male leaders were rated higher in the EI competency of change catalyst (Cavallo & Brienza, 2004). Because women continue to dominate the nursing workforce (U.S. Department of Health and Human Services, 2013), these findings emphasize the need for considering EI competencies in nursing leadership. Nursing leaders with adaptability and service competencies, such as developing others, may well improve the work environments of the nurses they lead.

Climate. In a cross-sectional study within the clothing manufacturing industry, Klem and Schlechter (2008) found that the psychological climate of an organization was significantly associated with the leader's EI. The study also determined that giving credence to emotions was consistently the highest predictor of a good psychological climate within the organization. These findings add to the increasing predictive value of EI and positive employee outcomes within organizations. Leaders creating a positive psychological climate could increase employee morale and possibly decrease the intent to leave the workplace.

Nursing leaders.

While there has been increasing research directed toward emotional intelligence as it relates to transformational leadership style (Kumar, 2014), there has not been the same attention paid to the role nurse leaders' EI alone plays in the outcomes of their nurse followers. It would be helpful to focus studies on the EI skills of nursing leaders to evaluate the association of those skills with the outcomes of their nurse followers.

Bullying. In a meta-analysis of bullying and victimization, Hutchinson and Hurley (2013) found in their synthesis of the literature that emotionally intelligent leaders had an opportunity to moderate bullying behaviors through their ability to create and influence the areas they led. Leaders' EI abilities of ethical behavior, self-awareness, and self-management allowed them to affect the workplace and their staff outcomes. The researchers pointed out that transformational leadership qualities also might serve to support effectively dealing with bullying in nursing. The analysis also revealed that there were still critics of EI who felt further work was needed to study and integrate EI frameworks into nursing practice (Hutchinson & Hurley, 2013). In a like manner, Bennett and Sawatzky (2013) supported exploring the EI concept in leadership training to supply leaders with the tools to combat workplace bullying.

During the next decade, healthcare will face major restructuring to better serve the U. S. population (The Advisory Board, 2011). It would be helpful to know if EI in nursing leaders could improve the workplace culture by promoting ethical behaviors and civility, as well as organizational commitment.

Organizational commitment. In a dissertation, Boivin (2013) studied the role of nurse leaders' EI on followers' organizational commitment. The results uncovered no significant correlation between the leaders' EI and the length of time the leaders had been in the healthcare field. The findings also did not support leaders' EI being significantly related to followers' organizational commitment. While these findings added to the knowledge base of EI and leadership, it would be interesting to replicate this study using different tools for both EI and organizational commitment.

Satisfaction. Hoar (2011) also found nurse leaders' EI was associated with staff nurses' satisfaction and intent to stay in their positions. The study results revealed that the strongest

relationship was noted to be between the nurse leaders' ability to perceive emotions and the staff nurses' perception of nurse manager support.

These findings would support development of nurse managers' EI abilities. However, further study would be warranted to build greater knowledge of EI characteristics that benefit leaders' and nurse followers' outcomes.

Emotional intelligence in employees. Human resource professionals have increasingly referred to EI as a precursor for success in personal, as well as business goals. Employees with higher EI have displayed a variety of positive competencies and outcomes (Bell, 2015). Evidence continues to increase regarding the role that EI plays in both non-nursing and nursing employees.

Non-nursing employees.

Job Satisfaction. Positive associations between work outcomes and EI have also been demonstrated in non-leadership employee populations. In a randomly sampled Iranian industrial population, Shooshtarian, Ameli, and Aminilari (2013) found that EI was positively associated with employees' job satisfaction and performance but not with their commitment. The employees with higher EI were found to identify and regulate their emotions better than those with lower EI abilities. The higher EI employees were also better able to handle the stressful situations they encountered. This study demonstrated the connection between employees' EI and their abilities to contribute to organizational outcomes even when stressful situations were present.

Goldstein (2014) supported these findings when in a study of New York accountants, higher interpersonal EI factors correlated with higher job satisfaction. It was suggested that in light of these results, EI should be used in the recruitment and pre-employment screenings of future employees. Conversely, no evidence was offered to substantiate the latter suggestion. The

information that higher EI employees were better able to regulate emotions is important for nursing leaders to take into account. Their nurse followers regularly deal with stressful situations in the workplace, often with family and patient situations. These situations call for the ability to control their emotions. The nurses' capacity to regulate emotions at that time could save precious patient satisfaction scores and decrease nurses' stress.

Studies by Moon and Hur (2011) and Onuoha and Segun-Martins (2013) also observed higher EI scores in employees, which predicted higher job satisfaction. While the study populations were not healthcare related, the results remain important because of the nature of the work that nurses and nursing leaders are faced with daily, while caring for the nation's sick. Healthcare work is extremely emotional and physically exhausting (Stordeur, D'Hoore, & Vandenberghe, 2001), as well as impactful to patient outcomes (Van Bogaert, van Heusden, Timmermans, & Franck, 2014). The EI and overall abilities of nurses to monitor their own perceptions and reactions to their practice environment may well have an important impact on their job satisfaction and organizational commitment.

Gündüz-Çekmecelioğlu, Günsel, and Ulutaş (2012) found job satisfaction was also positively correlated with EI. Employees who scored higher in EI were more likely to have higher levels of internal job satisfaction. The findings suggested that employees who were higher in EI were able to identify and regulate their emotions more effectively. The researchers also stressed that EI was not correlated with external job satisfaction, which is manifested in the use of money, rewards, wages, and job promotions. In turn, it would be important to consider retention of employees in times of staffing shortages and lower morale. The use of enticements such as money and rewards may not provide leaders with the internal job satisfaction that comes

with higher EI. This research suggested that strategies to increase EI and internal job satisfaction might provide a longer-term solution to satisfaction issues.

Well-being. In other fields of work, Brunetto, Stephen, Shacklock, and Farr-Wharton, (2012) found that EI had an effect on a population of Australian police officers. In their descriptive study, the researchers found that EI predicted officers' perception of their well-being and job satisfaction, which in turn affected their engagement and commitment, ultimately increasing their retention. The results also indicated that female officers demonstrated greater EI scores than males. Because of the service orientation of the study population, there may conceivably be benefit in considering replication of this study in the nursing field.

Gender. Gender differences were discovered when measuring EI in a multicultural study performed by Ponterotto, Ruckdeschel, Joseph, Tennenbaum, and Bruno (2011). Ponterotto et al. found that gender predicted variances in EI scores measured with the Multicultural Personality Questionnaire developed by van der Zee & van Oudenhouven (2000). Women's scores correlated with both cultural empathy and social initiative scales, an outcome postulated by the authors to be a result of the socialization of women in the United States. This knowledge is important to nursing studies of EI because of the continued predominance of women in the nursing field. The results of the study would not be generalizable to all nurses unless there were efforts to include men proportionately in the sampling of nurses.

Emotional regulation and ethical behaviors. Fu (2014) discovered that within a group of Chinese construction employees, regulation of emotion in oneself, which is an EI competency, had positive associations with ethical behaviors. Correspondingly, Mesmer-Magnus, Viswesvaran, Deshpande, and Joseph (2010) found that EI was a significant predictor of ones' own ethical perceptions and the perceptions of others' unethical behaviors in a study of

employed, business students. In addition, the study revealed linkage between higher EI and selfesteem in employees. Consequently, these findings suggest that improving EI abilities might possibly be an organizational strategy to improve the ethical behaviors of both leaders and employees.

Organizational commitment. In addition to the findings of Fu (2014) linking EI with emotional regulation and ethical behaviors, Moon and Hur (2011) examined EI in relationship to organizational commitment and job satisfaction in South Korean retail employees and found that the EI competencies of appraisal of emotions, optimism, and social skills were negatively associated with emotional exhaustion. Emotional exhaustion was then found to be negatively associated with organizational commitment and job satisfaction. These findings are central to nurses in that the work they do is extremely exhausting, both emotionally and physically.

Age. In another study, Onuoha and Segun-Martins (2013) uncovered a negative relationship between age and job satisfaction in their study. In light of those findings, it would be worth noting that there has been limited evidence that age plays a significant role in EI. In Fariselli, Ghini, and Freedman (2006), it was noted through regression analyses that there was a small but significant relationship between EI and age. The researchers found that age explained only 1.6% of the EI variance, which was determined to be weak but significant. They concluded that other, more relevant factors explained variations in EI.

Additionally, Shipley, Jackson and Segrest (2010) found no significant association between EI and age when they studied EI as it related to work experience, age, and academic performance. As well, Atkins and Stough (2005) studied age in a population of senior executives with both an EI ability measure and a self-report measure. A positive age effect was exposed on the self-report measure of EI, but the effect size was noted to be "extremely small,"

and no age effects were noted with the EI ability measure (p. 19). The findings of these studies would be very relevant to nursing leadership and EI. The research suggests that age does not necessarily mean that a chronologically mature nurse would have increased EI abilities associated with successful leadership and that age does not appear to represent a determining predictor of EI skills.

Mental health. In other studies conducted in Australia and the United States, Schutte and Loi (2014) discovered that employees with higher EI had better mental health and greater work engagement. Positive mental health findings were also revealed by Ciarrochi, Deane, and Anderson (2002), when they found individuals with higher EI abilities in managing others' emotions responded to stress with less suicidal ideations. Gupta and Kumar (2010) also observed that EI and self-efficacy were positively correlated with mental health. This information would be helpful in highlighting the importance of the role EI plays in determining overall quality of life of both nursing leaders and their followers.

Group cohesion. Group cohesion was found to be positively correlated with EI in a study by Moore and Mamiseishvili (2012). The EI measure of "awareness of own emotions" was most associated with group cohesion (p. 300). Teamwork and group cohesion were noted to be important employee traits for effective outcomes in the workplace (Moore & Mamiseishvili, 2012). Goleman et al. (2013) also pointed out that high EI leaders who promoted teamwork, created a workplace that was cooperative and helpful. This teamwork environment fostered "close relationships" and improved commitment to the team (p. 256).

Teamwork. Luca and Tarricone (2001) also found a connection between EI and teamwork when they evaluated multimedia students during a semester assignment in which the students were asked to work on a team of four to five students. Much of the work was done online with

meetings scheduled during the semester. The students were asked to rate their own and their peers' contributions to the assignment and were interviewed after the course with a questionnaire based on EI competencies. The researchers found that the successful teams displayed more EI skills than the dysfunctional teams. The more successful teams displayed higher skills in self-awareness, self-regulation, motivation, empathy, and social skills (Luca & Tarricone, 2001). This knowledge is valuable for nursing leaders' strategy and planning, as there are daily events that require the skill of teamwork in the workplace.

Education. The effects of EI have also been studied in educational settings. Shipley,

Jackson and Segrest (2010) found EI to be positively associated with work experience, but not
age or academic achievement. While EI did not have a significant correlation with academic
achievement, an interesting finding in the study was that the mid-level (3.0-3.4) grade point
average (GPA) students reported significantly higher well-being scores than lower GPA (2.0-2.9)
students. The researchers suggested that the lower GPA students might need to develop skills
associated with EI, such as self-control, to better handle educational study demands.

Correspondingly, Por, Barriball, Fitzpatrick, and Roberts (2011) also found in a correlational study of 130 nursing students in the United Kingdom, that EI was positively associated with nursing students' perceived well-being, coping, and nursing competency; and it was negatively associated with perceived stress. The researchers proposed that these findings were perhaps associated with increased levels of control and competence that heighten coping styles during stress and lead to improved perceptions of well-being.

Consideration of these findings could assist those in planning educational curricula and programs for at-risk students. It is particularly important in nursing colleges, where the need to retain and ensure student success is essential in the coming critical nursing shortages. Those

imperiled nursing students may benefit from training in EI to improve their classroom performance.

Nursing employees.

Stress and burnout. Görgens-Ekermans and Brand (2012) studied South African bedside nurses to determine the association between work stress, burnout and EI in a cross-sectional research design. An inverse relationship was found between emotional control and emotional management with both stress and burnout. Higher EI was significantly associated with lower stress and burnout. Workload and work/family pressures predicted burnout. In addition, those working in maternity, pediatrics, and emergency departments reported greater personal achievement than those in non-specialty departments (Görgens-Ekermans & Brand, 2012).

The ability to deal with stress would be considered essential in nursing work (Mimura & Griffiths, 2003). The predictive nature of workload and work/family conflict found in this study indicated that stress might not only play a role in the workplace, but also spill over to relationships away from work. These findings should be considered in staffing decisions made at the organizational level to decrease the stressors associated with high workloads and potential job burnout.

Emotional labor. The extent that EI and emotional labor are related to the well-being and job-stress of Australian community nurses was studied by Karimi, Leggat, Donohue, Farrell, and Couper (2013). The researchers found that nurses with higher EI reported better well-being and lower levels of job stress. Additional findings showed that nurses who perceived high levels of emotional labor, which consisted of suppressing their true feelings, showed higher levels of job stress and lower levels of well-being. EI played a role in moderating the nurses' high emotional

labor. The nurses with high EI were less affected by the stress associated with emotional labor and thus experienced higher well-being as a result (Karimi et al., 2013).

These findings are important to nursing leaders since evidence in literature notes an inverse association between job stress and commitment to the leader, as well as to the organization.

Healthcare cannot risk the adverse outcomes associated with nurses' lack of OC and the resulting risk of nursing turnover.

Collaboration. Morrison (2008) studied nurses' preferred conflict-handling styles and found that nurses favored an accommodating conflict style more often than other styles. The nurses also reported that they used collaboration style less often. Collaboration was found to be positively correlated with higher EI and also a positive way to handle conflict. The researchers suggested that increasing EI skills in nursing would be beneficial to manage the conflict encountered daily in the workplace (Morrison, 2008). Nursing leaders should consider these findings as well. Conflict is associated with less job satisfaction in multiple industries, including healthcare, and increasing the EI skills of nurses could have a positive effect on the nursing performance.

Retention. Codier, Kamikawa, Kooker, and Shoultz (2009) discovered that EI scores of Hawaiian staff nurses were positively correlated with performance and retention. Those nurses found with higher EI were noted to have longer careers, higher performance, and better job retention. Prior to the follow-up research, Codier, Kooker, and Shoultz (2008) performed a 2006 pilot study that also showed a correlation between EI and staff nurse performance. The study used nurse self reported variables for retention measures; restructuring this measure might improve the validity of the study.

Ethical climate. The role EI played in creating an ethical climate and behaviors for nurses was studied by Deshpande and Joseph (2009). The researchers noted that the nurses' individual level of EI, as well as the ethical climate and behaviors of the nurses' peers, impacted the ethical behaviors of the nurses. Another key finding revealed that the independence score, contained within the ethical climate scale, was found to positively correlate with the nurses' ethical decision making. Independence climate was used to describe the unit climate, where each person in the unit decided for himself or herself what was right and wrong. The findings also suggested that peers played a role in the ethical decision-making of nurses at the unit level (Deshpande & Joseph, 2009).

These findings are important learning for nursing. To foster ethical decision-making, leaders should facilitate and monitor the ethical climates in the nursing units they influence.

There appears to be an opportunity for further study of ethical decision-making as it relates to EI and nursing climates. Understanding how nurses affect their peer nurses' ethical decisions and whether EI plays a role in those relationships would be valuable.

Education. EI plays a role for not only nursing leaders and employees, but also the educators who are teaching the next generation of nurses. Allen, Ploeg, and Kaasalainen (2012) found that EI had a significantly positive association with the clinical effectiveness of the nursing faculty. No significant relationships were noted between faculty EI and age, years of clinical nursing, years of clinical teaching, level of education, or employment status. These findings proved helpful in determining the qualities that may promote effective clinical teaching. The nursing shortage has reached colleges of nursing in the United States (U. S. Department of Health and Human Services, 2013), and this information will help strategize the needs of the replacement educators coming into the field of nursing education.

Prior studies within nursing education have primarily measured EI in relationship to the performance of nursing students. Beauvais, Brady, O'Shea, and Quinn-Griffin (2011) researched the association between nursing students' EI and nursing performance. The results revealed a significant relationship between total EI and total nursing performance. Study conclusions suggested EI components should be considered in nursing education curriculums.

Benson, Martin, Ploeg, and Wessel (2012) also studied nursing students. The researchers found, in the first known longitudinal study of EI among nursing students, that there were no significant changes in EI, leadership, and caring of nursing students over the four-year course of study to become a nurse. There was significant effect in the EI subscale scores of adaptability, caring, and professional caring. These EI scores increased from Time 1 to Time 2, but not from Time 2 to Time 3, in the repeated measures study. The change in overall EI (total score) was significantly associated with leadership and caring scores. The researchers suggested that the high baseline values of EI in the study's nursing student population might have contributed to the lack of significant increase in EI scores over the educational time period.

The findings of the prior three studies are intriguing to consider. As Lyon, Trotter, Holt, Powell and Roe (2013) highlighted, there are critics who suggest compassion appears to be a secondary qualification of nursing, behind intellect. These concerns about nurses' caring, compassion, competency, communication, courageousness, and commitment were all pointed out by Lyon et al. (2013) as qualities demonstrated by emotionally intelligent nurses. Strategies to test, build and emphasize those skills should be considered by nursing college faculties (McQueen, 2004). This EI skill building should not stop at graduation, though. Nurses entering the field will need emotionally intelligent leaders in the workplace to help them continue the emotional learning and role modeling that will be necessary to quiet the current criticisms.

Summary. In summary, the relationship between leaders' EI and the climate that they develop for their employees appears to have an increasing importance to the success of organizations. As evidenced by the research, the role of emotional intelligence in the workplace has been determined to play a credible role in the job satisfaction and commitment of employees, as well as in multiple other variables, including stress, teamwork, mental health, and ethical decision-making. While it is encouraging to know that leadership styles have been studied in relationship to EI, there is not the same amount of research regarding the role EI alone has in a nurse leader's interactions with their nurses, especially in regards to OC.

Organizational Commitment

The concept of organizational commitment (OC) is an important consideration in the current and projected shortages within nursing. Healthcare organizations are searching for strategies that engage the full capacity of their personnel to promote organizational success, job satisfaction, and OC (Mosadeghrad & Ferdosi, 2013). Mowday, Porter, and Steers (1982) noted that "certainly, from the employee's perspective, weakened ties to the organization will provide a kind of freedom that will make it less difficult, both psychologically and physically, to leave a given organization" (p. 13). Because there are multiple reasons why nurses leave healthcare organizations (Estryn-Behar, van der Heijden, Fry, & Hasselhorn, 2010), it could be helpful to pair the concept of OC with EI to better understand nursing commitment and determine potential nursing retention strategies at the bedside.

Organizational commitment theory. Etzioni (1961) described organizational commitment theory in terms of an organization's ability to control and have influence over its employees. Etzioni proposed that this control took shape in three constructs. The first construct was moral involvement, in which employees identified with the organization's goals and mission.

Calculative involvement, the second construct, consisted of a weaker relationship grounded in employees' commitment to the organization and based on being rewarded or compensated for their services (Etzioni, 1961). The third construct was alienative involvement, in which employee participation in the organization was limiting or controlling in nature. This construct could be present when employees felt they were not being heard and recognized (Etzioni, 1961).

Structural theory of organizational empowerment. Kanter (1968) defined commitment as "the process through which individual interests become attached to the carrying out of socially organized patterns of behavior which are seen as fulfilling those interests, as expressing the nature and needs of the person" (p. 500). Kanter referred to three types of commitment: continuous, cohesion, and control. It was also noted by Kanter that these forms of commitment were interrelated and often used concurrently by organizations to achieve commitment.

Continuous commitment. Continuous commitment referred to an employee's attachment to the organization as a result of the role he or she played in an organization that produced a reward for the employee. The employee envisioned a personal and economic loss in leaving the organization and was individually invested in the organization's success and goal achievements (Kanter, 1968).

Cohesion commitment. Cohesion commitment involved the social connections that tied the employee to that organization, and the personal loss of contact with the members of that organization if the employee left it. These attachments tied the employee to that organization (Kanter, 1968).

Control commitment. Control commitment involved the organization requiring changes in the employee's perceptions and values to better re-align them to that organization (Kanter, 1968).

Attitudinal and behavioral commitment. Mowday, Porter, and Steers (1982) defined the concept of OC as the "relative strength of an individual's identification with and involvement in a particular organization" (p. 27). This conceptual definition included the characteristics of a firm confidence and trust in the organizational goals and standards, an ongoing enthusiasm and motivation to help the organization succeed, and continuous zeal to maintain a part of the organizational team (Mowday et al., 1982, p. 27).

In addition, the work of Staw and Salancik (1977) was noted by Mowday et al. (1982) to be significant, because it distinguished two theoretical approaches to OC. These two approaches were attitudinal commitment, ascribed to by organizational commitment researchers, and behavioral commitment, endorsed by social psychologists.

Attitudinal commitment. The attitudinal approach was viewed as the workers' desire to continue employment in the organization because they associated with the goals, mission and objectives of that organization (Mowday et al., 1982).

Behavioral commitment. The behavioral approach of commitment implied that workers' past behaviors attached them to the organization (Mowday et al., 1982).

Three-component model (TCM) of Organizational Commitment. Meyer and Allen (1984) originally offered a two-dimension conceptualization of OC. Those dimensions were affective and continuance. Meyer and Allen (1991) then proposed a framework that described three methods of observing OC. This framework's dimensions included affective, continuous, and normative commitments.

Affective commitment. Affective commitment referred to employees' affirmative emotional connection to the organization. Employees could feel connection with the goals and values of

the organization and voluntarily commit to the company of their own free will (Meyer & Allen, 1991).

Continuous commitment. Continuous commitment denoted that employees weighed the costs of leaving an organization and decided whether to accept these costs. Employees might commit to a company because they felt they could not afford losing the financial gains they received from the company or might fear losing the social connections that they had forged (Meyer & Allen, 1991).

Normative commitment. Normative commitment referred to the duty or indebtedness that the employee felt toward the organization, which might give them pause in leaving. Normative commitment was generally higher in companies that put a value on loyalty and gave rewards to those who displayed that loyalty (Meyer & Allen, 1991).

Organizational commitment research in nursing.

Employee attachment and retention. Organizational commitment has been identified with numerous factors that positively link it to employee attachment to the job. Young-Ritchie, Laschinger, and Wong (2009) found in their study of emergency room nurses that emotionally intelligent leader behaviors had a strong effect on OC. All components of structural empowerment, which include the nurses' perceptions of access to opportunity, information, support and resources, were perceived to be higher in the leaders with higher EI (Young-Ritchie et al., 2009). It would be helpful to replicate this study in other nursing specialties. The findings that nurses' OC has been associated with leaders' EI are important to the study of EI.

In addition, Gieter, Hofmans, and Pepermans (2011) found that both OC and job satisfaction were significantly associated with nurses' turnover intentions. The quantitative study of 287 Belgian nurses found two distinct subgroups of nurses that differed in which antecedent

predicted the intention to leave their job. One distinct group of nurses' turnover intentions were solely motivated by job satisfaction, while in the other group of nurses, turnover intentions were motivated by both job satisfaction and OC. Interestingly, the nurses in the second group were younger and had been employed for a shorter time with the organization than the first group. The researchers concluded that multiple factors accounted for nursing turnover and further research to determine turnover antecedents would be helpful.

Internal marketing. In addition, Tsai and Wu (2011) found that nurses' perceptions of internal marketing used to improve service quality and values through establishment of a learning culture in their organization improved nurses' OC, as well as service quality. This information could assist healthcare administrators in developing or improving stagnant cultures and poor commitment situations within their organizations.

Social exchanges. Veld and Van De Voorde (2013) also noted that affective ward commitment was positively related to the social exchanges between nurses and the work climate on the hospital ward. Nurses depended on their social exchanges to evaluate their exchange relationship and, thus, their commitment to the organization. Interestingly, OC was negatively associated with the economic exchange relationship. When nurses perceived that there were social relationships at work, they experienced less stress and greater commitment. If nurses felt the work relationship was just about the economic exchange, commitment was less (Veld & Van De Voorde, 2013).

The aforementioned findings were supported in a study of Slovenian hospital nurses. Lorber and Skela-Savic (2014) found that nurses' OC was positively correlated with job satisfaction, interpersonal relationships, organizational support, and their leaders' style. Interestingly, 78% of the total variability of the nurses' OC was explained with these variables. This information

would be useful to healthcare leaders when planning strategies for nursing staff commitment.

The studies highlighted the importance of nursing leaders not simply depending on economic incentives to gain commitment of nurses, but offered multiple strategies to enhance commitment within healthcare organizations.

Health complaints. In a study of nurses in the Netherlands, Schalk (2011) found that nurses' health complaints increased as OC decreased but did not predict future sick absenteeism. The longitudinal, three-wave study was performed in two nursing homes over a nine-month period. The results indicated there was no direct relationship between OC and absenteeism or between health complaints and absenteeism, which the researchers stated was confirmed in earlier studies. The results did offer evidence that OC was associated with reported health complaints. It was concluded that OC modifications perceived as negative by nurses could produce emotional reactions that might lead to health complaints and ultimately absenteeism (Schalk, 2011).

Further study would be of benefit to provide understanding of this organizational issue.

Managing illness and health complaints of nurses is a daily demand of nursing leaders who arrange patient care. This study offered insights into the health complaints of nurses and provided a possible organizational strategy for nurse leaders. Increasing the commitment levels within nursing units may alleviate the strain of nursing workloads and result in fewer health complaints.

Ethical climates. Borhani, Jalali, Abbaszadeh, and Haghdoost (2014) studied a large group of Iranian clinical nurses identifying a positive and significant correlation between ethical climate and OC. The findings also revealed that nurses felt their hospital's ethical climate scores were strongest in professionalism, followed by rules, caring, independence, and instrumental

variables. These findings suggested that nurses in the study perceived that professional principles based on ethical codes were present in their hospital culture (Borhani et al., 2014).

These results would support leaders' continued efforts to demonstrate ethical decision making in the workplace to improve OC. As previously mentioned, Mesmer-Magnus et al. (2010) found that EI was a predictor of individuals' perceptions of ethicality in themselves and others. With that in mind, it should be considered that leaders' high EI abilities would be beneficial in improving ethical climates within organizations and should be considered for further study.

Generational differences. Jones (2014) addressed the generational differences between nurses regarding OC in a quantitative study of Alabama hospital nurses. The study included both licensed practical nurses (LPNs) and registered nurses (RNs). The results revealed that the generational cohorts had no significant differences within levels of nurses' OC. The findings did reveal that LPNs reported a significantly lower level of affective commitment than the RNs (Jones, 2014). This information is important to those considering human resource decisions in healthcare. In light of the pending shortages of nurses in the U. S., the role of LPNs in the organization should be considered seriously. Further study would be helpful to correlate these findings with future study results and additional commitment variables.

Empowerment. Nurses' perceptions of their ability to elicit change within their nursing unit to best care for their patients is an important consideration for current nursing leaders. In a correlational study involving 161 staff nurses, Wilson and Laschinger (1994) found a strong positive relationship between staff nurses' perceptions of their individual empowerment within their work units and OC. Interestingly, there was a significant positive relationship between the staff nurses' overall empowerment and their perceptions of their immediate nursing leaders'

power. The authors suggested that study results implied nurse leaders could improve their staff nurses' OC through changes made in the work environment to increase their perceived power (Wilson & Laschinger, 1994).

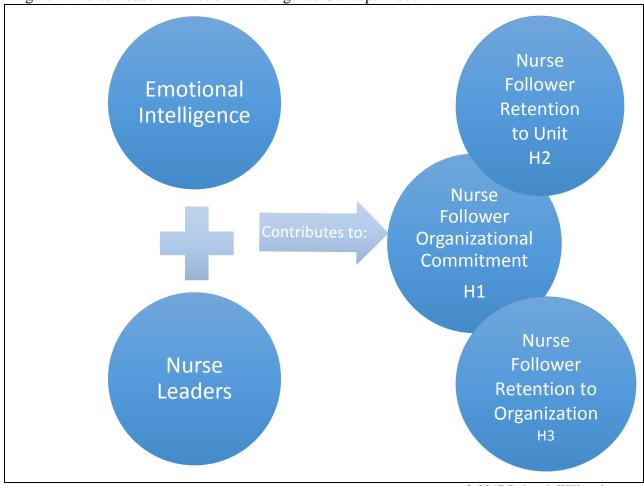
These findings should be considered important to the nursing profession. The results highlight the responsibility of nursing leaders to obtain and demonstrate leadership qualities that are perceived by their followers as empowering both themselves and their followers. The nurse followers' perceptions that their leaders are empowered to make organizational changes will be acutely needed during future U. S. nurse staffing challenges. Abilities associated with high EI apply to accurate perceptions of leaders' empowerment, and it would be interesting to include EI in future study of these concepts.

To conclude, OC appears to play a large role in predicting whether or not employees will contribute to the goals and outcomes of their organization. The impact that leaders play in organizational commitment and engagement has been studied repeatedly in organizational settings and found to be significant. Strumwasser (2014) asserted that the connection between leaders and their employees is one of the most vital components in determining employee engagement and retention. Furthermore, Buckingham and Coffman (1999) reported that in a long-term meta-analysis of over one million employees, productivity and turnover of an employee "is determined by his relationship with his immediate supervisor" (p. 12).

The research presented in this chapter also sought to provide evidence that nursing leaders play a role in their employees' OC. Gaps are noted in the research connecting the EI abilities of nursing leaders to the OC of their followers. It would be of benefit to consider utilizing the concept of OC in combination with EI to determine the qualities that should be emphasized in development of future nursing leaders. Figure 1 visually represents a conceptual model of the

proposed relationships between the EI of nurse leaders and the OC and retention of nurse followers within the overall organization and the nursing unit.

Figure 1: Nurse Leader - Emotional Intelligence Concept Model.



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Figure 1. Nurse Leader - Emotional Intelligence Concept Model. The associations between nurse leaders' emotional intelligence and nurse followers' organizational commitment and retention within the organization and nursing unit.

Summary

Review of current research surrounding EI and OC suggests a strong connection between non-nursing leaders' EI and the work environments they lead. These connections could impact multiple nursing and organizational outcomes. Nursing satisfaction, job retention, and OC are essential human resource components that, in light of the looming critical nursing shortages, need to be seriously addressed by healthcare organizations. In the interim, it would be important

for healthcare entities to employ and develop leaders who exhibit skills that increase retention and commitment in the workplace. As a result of the review of literature presented in this chapter, there would be benefit to learning more about the associations between nursing leaders' EI and the OC and retention of the nurses they lead.

CHAPTER THREE: METHODOLOGY

The purpose of this descriptive, quantitative, correlational study was to examine the relationship of nurse leaders' EI to the OC of the nurse followers they supervised on their clinical units in one Midwestern acute care hospital. Additionally, the nurse leaders' EI was correlated with retention rates of nurse followers to both their nursing unit and the overall organization. The findings of this study added to the existing body of knowledge regarding the relationships between EI and OC in nursing.

Chapter Three included the study's research design and methods. In addition, the chapter included discussion regarding the population, sampling methods, setting, data gathering instruments and procedures, data analysis processes, quality measures, and ethical considerations of the research.

Research Design

Creswell (2014) asserted that the choice of a quantitative research design was, in part, based on the nature of the research problem addressed in the study. The intent of the proposed study was to determine whether a nurse leader's EI is associated with OC and retention of clinical nurses at one Midwestern acute care hospital. The intended study required a design that examined relationships between independent or predictor variables and dependent or outcome variables (Leedy & Ormrod, 2013). The independent or predictor variable for this study was considered to be the nurse leader's EI survey score administered at the onset of the study. The dependent or outcome variables was the OC survey scores of nurse followers reporting directly to the participating nurse leaders, and the retention rates of the nurses on the individual nursing units and the organization. The retention rates were calculated using human resources (HR) personnel records from one year prior to the initiation of the study and concluding at the onset of

this study. The participating hospital's HR department provided personnel data for this measurement. The study data was cross-sectional, and collected once during the study, and measured with validated online survey instruments for EI and OC and hospital HR personnel records.

Leedy and Ormrod (2013) submitted that descriptive quantitative research design encompassed the identification of observable facts or the potential associations between phenomena. In addition, descriptive research did not alter the variables explored in this study and thus, did not seek to establish cause and effect associations. In correlational research, the extent of differences in one or more variables or characteristics was studied to determine possible interrelationships (Leedy & Ormrod, 2013).

Demographic Information

Demographic information was requested from all participants. Dobronte (2013) suggested that when online surveys were used, it would be beneficial to know the characteristics of the population completing the surveys and if the targeted population was actually being reached. Additionally, the demographic information could be used to garner further discernments from the study data, if it was of adequate size (Dobronte, 2013).

For the study, the eight demographic variables of: age in years (20-30, 31-40, 41-50, 51-60, 61 and greater), work status (Full-time, Part-time or PRN), highest degree obtained (Diploma, Associates, Bachelors, Masters, or Doctoral degree), years of experience (1-5, 6-10, 11-15, 16-20, 21-25, 26-30, 31 and greater), patient care specialty (medical-surgical, telemetry, critical care, pediatrics, mother-baby or behavioral health), gender (male, female, or other), marital status (married or domestic partnership, single, never married, widowed, divorced or separated), and children (Yes or No) were included (see Appendix A). The study data was analyzed using

appropriate psychometric processes and discussed later in this chapter. In light of the study's focus, the application of quantitative research was appropriate for this study (Creswell, 2014).

Sample/Population

The intended population for the study consisted of registered nurse leaders of clinical nursing units and registered nurses, who reported directly to the nurse leaders at one acute care hospital in the Midwest. Primary participant inclusion criteria included registered nurse leaders in the targeted nursing units and registered nurses who reported directly to the consenting nurse leaders at the targeted acute care hospital. To avoid bias and possible halo effect, nurse leaders and their staffs who reported directly to the nurse researcher were excluded from the research study (Dictionary of Theories, 2002).

Nonprobability, single stage sampling design in the form of a purposive sample was used for this research. Nonprobability sampling was appropriate for this study because of the need to purposely identify participants who were registered nurses and worked in one of the identified types of nursing units targeted for the study (Burns & Grove, 2005). The single stage sampling procedure was essential due to the researcher's need to have access to the names in the nursing population, to contact them directly through email to participate in the study (Creswell, 2014). Limitations of this sampling method were described in chapter I.

All nurse leaders of targeted clinical nursing units in the Midwestern hospital were given the opportunity to participate in the study, as well as all nurses who directly reported to the participating nurse leaders. Targeted clinical units included in this study were acute care clinical units, where patients were housed on a 24-hour per day basis and received direct patient care from registered nurses. Medical-surgical, telemetry, mother-baby, and critical care, pediatrics,

neonatal, and mother-baby nursing units were included. Emergency, outpatient, and non-acute nursing units were not included.

Leedy and Ormrod (2013) emphasized that the size of the sample depended on "how homogeneous or heterogeneous the population is" (p. 216). The study population of registered nurses was felt to be homogenous in nature because they were all actively working in a community hospital in the Midwest. In addition, Leedy and Ormrod pointed out that when "populations size is around 500 (give or take 100), 50% should be sampled" (p. 216). The approximate number of eligible nurses who were given an opportunity to participate in the study was approximately 610 registered nurse followers and 17 nurse leaders. The confidence interval (CI) for this study sample was set at five and the confidence level (CL) at 95%, which then resulted in a 50% sample size of 340 nurse followers. Leedy and Ormrod also offered that online statistical, sample size calculators could assist researchers in determining sample size. Accessing an online sample size calculator and after inputting the same CI and CL with the 610 potential nurse follower population produced a calculated sample size of 246 (Creative Research Systems, 2012). For the purposes of this study, the sample size consisted of 300 registered nurse followers and 17 nurse leaders.

Setting

The setting for the study was one Midwestern hospital of approximately 500 inpatient beds. Nursing units that provided 24-hour per day patient care and specialized in medical-surgical, telemetry, critical care, pediatrics, neonatal and mother-baby nursing were targeted to participate in the study. Leedy and Ormrod (2013) noted that research performed in the "outside world" setting, might well be "more valid," have larger relevance to everyday situations, and strengthen external validity (p. 103).

The chief nursing officer (CNO) of the targeted hospital was approached via email to seek a one-on-one meeting to discuss permission to conduct research at the facility (see Appendix B). Permission to utilize the targeted nursing units in the study was granted by the CNO (see Appendix C). Two sub-groups were utilized in the research. The first sub-group recruited consisted of the nursing leaders of each of the targeted units. This sub-group was called the *nurse leader group*. The nurse leader group was approached and invited to participate in the study by email (see Appendix D). The registered nurses that reported directly to the nurse leaders who consented to the study were designated as the second sub-group and were recruited to participate in the study by email (see Appendix E). The second sub-group of nurses consenting to the study was referred to as the *nurse-follower group*. Participating nurse leaders and their associated units were coded numerically, in order to facilitate participants' anonymity during data collection. This measure associated each nurse leader with the appropriate nurse follower participants who reported directly to him or her during the data collection and analyses phases of the study.

Data Gathering Tools and Instruments

This section reviews the survey instruments selected for use in this study. Creswell (2014) stressed that research proposals should provide rigorous details about the survey instruments considered for use in the study. In addition, these survey tools were administered through an online data collection website either administered through a survey vendor, as was the case for the EI tool, or through an online SurveyMonkey® website that provided a template to design the online questionnaires. Leedy and Ormrod (2013) contended that there were benefits to utilizing online surveys for research, one of which was that when the sample was larger, costs were less than mailing surveys. In addition, Leedy and Ormrod maintained that access to large numbers of

targeted participants made data collection easier through the ability to email the survey directly to the study sample, along with reminder emails to consider participating in the study.

Emotional Intelligence. Emotional intelligence of the nurse leaders in this study was measured with the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). The MSCEIT was administered to the nurse-leader group only; the nurse follower group was not asked to participate in this survey tool. The online MSCEIT measured the four branches of the EI model of Mayer, Salovey and Caruso (see Appendix F). These branches included perceiving emotions, understanding thought, understanding emotions, and managing emotions (Mayer, Salovey, & Caruso, 2008).

Permission to use the MSCEIT was granted by Multi-Health Systems Inc., Psychological Assessments and Services, North Tonawanda, New York, (see Appendix G). The survey included a 141-question test that took approximately 45 minutes to complete. Individuals were scored objectively using a 21 expert consensus-scoring key. Similar to traditional intelligence testing, individual MSCEIT scores can be analyzed against normative samples. The survey scoring was performed by the survey vendor, Multi-Health Systems Inc., and met the U.S. HIPAA and FERPA standards for privacy and security of participant responses (Multi-Health Systems Inc., 2015).

The MSCEIT generated multiple scores including an overall index of EI and individual scores for the four branches of the EI model. The reliability coefficient used to assess internal consistency of the MSCEIT was the split half reliability coefficient estimate and was reported as r = .93 for the general consensus scoring and .91 for expert scoring. The four branches' reliability scores were reported as r = .91 for general and .90 for expert scoring for the Perceiving Emotion branch. Facilitating Emotion branch was reported as r = .79 and .76 for

general and expert scoring respectively. The Understanding Emotion branch reliability scores were r = .80 and .77 for general and expert scoring respectively, and Managing Emotion branch scores were r = .83 and .81 for general and expert scoring (Mayer, 2004).

There were limitations regarding the MSCEIT's validity noted in the literature (Maul, 2012). Mayer, Salovey and Caruso (2012) countered those concerns by asserting that "a test's validity should be supported by theoretically-expected correlations with a variety of criteria" (p. 407) and arguing that the "MSCEIT correlates meaningfully with a variety of ability based criteria of EI" (p. 407). According to Mayer et al. (2012), the MSCEIT correlated with the Reading the Mind in the Eyes test (Baron-Cohen, Wheelwright, Hill, Raste & Plumb, 2001), the Situational Test of Emotional Understanding (STEU) and the Situational Test of Emotional Management (STEM) (MacCann & Roberts, 2008), as well as the Multifactor Emotional Intelligence Scale (MEIS) (Mayer, Salovey & Caruso, 1997). "Collectively, they provide encouraging support of the adequacy of the MSCEIT's relations with similar ability measures, excepting relatively pure measures of emotional perception" (Mayer et al., 2012, p. 407).

According to Mayer, Salovey and Caruso (2002), the MSCEIT total scores are evaluated by computing and reporting the MSCEIT participants' performance as "empirical percentiles" and arranging them on a normal curve with average score being 100 and the standard deviation being 15. To interpret the scoring, a score of 100 would indicate an average range of EI. (Mayer et al., 2002, p. 18). Table 1 depicts the guidelines, offered by Mayer, Salovey and Caruso (2002, p. 18) to interpret MSCEIT score results.

Table 1

Guidelines for Interpreting MSCEIT Scores

EQI Range	Qualitative Range	
69 or less	Consider Development	
70-89	Consider Improvement	
90-99	Low Average Score	
100-109	High Average Score	
110-119	Competent	
120-129	Strength	
130+	Significant Strength	

From "Mayer-Salovey-Caruso Emotional Intelligence Test: User's Manual (p. 18), by J. Mayer, P. Salovey and D. Caruso, 2002, Tonawanda, NY: Multi-Health-Systems, Inc. Copyright (2002) by Multi-Health-Systems, Inc. Reprinted with Permission.

Organizational commitment. Organizational commitment was measured with the original version of the Three-Component Model (TCM) of Employee Commitment survey authored by J. P. Meyer and N. J. Allen and used under license from The University of Western Ontario (2004). The three scales of the model consisted of affective commitment scores (ACS), normative commitment scores (NCS) and continuance commitment scores (CCS). The survey consisted of statements or items that reflected an employee's insight into his or her relationship with the workplace and reasons for remaining at that organization (see Appendix H). The original version of the survey had 24 questions, and had a 7-point Likert style, disagree-agree scoring scale (Meyer & Allen, 2004). According to Meyer and Allen (2004), survey responses for each of the three scales (affective, continuance and normative) should be scored independently and then averaged to yield a total score for each of the three commitment components. "These scores should range in value from 1 to 7 with higher scores indicating stronger commitment" (Meyer & Allen, 2004, p. 4).

Permission to use the TCM Employee Commitment Survey, authored by John Meyer and Natalie Allen was made under license from The University of Western Ontario, London, Canada (see Appendix I). The TCM was distributed to the nurse follower participants only.

Allen and Meyer (1990) determined reliabilities for each scale with coefficient alpha values determined to be: affective commitment (ACS), .87; continuance commitment (CCS), .75; and normative commitment (NCS), .79. Validity of the TCM was also measured by correlating the TCM with the Organizational Commitment Questionnaire (OCQ) (Mowday, Steers & Porter, 1979). The results revealed correlations of the ACS and CCS measures that were "empirically distinguishable constructs with different correlates" and the ACS and NCS were related but still distinct (Allen & Meyer, 1990, p. 1).

Retention rates. Retention rates were calculated and reported through the study hospital's HR department under the supervision of the HR manager. For the purposes of this research, retention was reported as the percentage of registered nurses who were employed one year prior to the start of the study in the participating unit, and who continued to be employed, in the same unit or global organization at the time the research commenced. Each participating nursing unit was then given a retention rate for the unit and the overall organization.

Data Gathering Procedures

The chief nursing officer (CNO) of the targeted Midwestern hospital was contacted by email to ask for an appointment to discuss the research study. After the CNO provided the researcher written permission to conduct the study at the institution, the study was submitted to the Institutional Review Board (IRB) of College of Saint Mary for approval (see Appendix J). After approval from the College of Saint Mary's IRB, the researcher contacted the study hospital's IRB committee and was granted further permissions (see Appendix K). The researcher

proceeded to contact the targeted hospital's CNO and senior nursing leaders for help in identifying potential nurse leaders as study participants from the targeted units. After identification, those nurse leaders meeting study inclusion criteria were sent an introductory study email (see Appendix D) explaining the study and containing the link to the MSCEIT survey questions (see Appendix F), and demographic questions (see Appendix A). The introductory email contained contact information for the researcher; the online study links; the purpose, risks, and benefits of participation; and explanation of the study tool, the number of questions (141) and expected time to complete the survey (40 minutes). Confidentiality of participants, as well as the survey responses was explained multiple times to the potential participants as outlined within data quality measures later in this chapter. Explanations of how the data would be combined and reported in aggregate form were covered in the study introduction emails to both nurse leaders and nurse followers (see Appendices D and E).

The nurse follower group was identified through nursing unit HR lists. Only the nurse followers working in the nursing units managed by the nurse leaders responding to the study invitation were included. Nurse followers were sent an email entitled the "Study Introduction Email to Nurse Followers Reporting to Nurse Leaders" (see Appendix E). The online survey, TCM of Employee Commitment, was offered to the nurse followers via an online SurveyMonkey® link (see Addendum H). The introductory email explained the study; offered contact information for the researcher; provided the online TCM study link and a link to the demographic questions; described the purpose, risks, and benefits of participation; and explained the study tool, the number of questions in the survey (24), and expected time to complete the survey (15 minutes). The introductory email also assured participants that their identity and responses would be kept private and treated with respect by the investigator.

The survey reminder emails were sent to the nursing leader group and the nurse followers group two weeks following the initial introductory email, to remind them of the study cut-off dates and encourage voluntary participation in the study (see Appendices L and M).

Data Analysis Procedures

After the survey window closed, the TCM of Employee Commitment survey responses were calculated in Excel by the researcher and a statistician. The surveys were delivered via a SurveyMonkey® group web link that allowed each nursing follower participant to anonymously respond to the survey and then be grouped into the specific nursing unit that each participant worked. The demographic data, as well as the survey scores for both nurse leaders and nurse followers were loaded into separate Excel files within the same Excel workbook in a private, password protected computer. In addition, the retention rate for each participating nursing unit was requested from the institution's HR department and loaded into an Excel file. The nurses' names noted to have left the unit in the past year were checked to discern if they were still employed in another unit of the hospital organization. This information then resulted in an organizational retention rate. The researcher downloaded the nurse leaders' MSCEIT overall EI scores from the Multi-Health Systems vendor site into an Excel file and coded each leader's total EI score to a specific nursing unit to match the OC scores of nurse followers to the correct nurse leader. Creswell (2014) suggested reporting the number of members of the sample who did and did not complete the study surveys. These numbers were reported in the demographic information.

The researcher, with the assistance of a statistician, imported data into the Statistical Package for the Social Sciences (SPSS) version 24.0 for Windows database (IBM Corp., 2016). Descriptive analysis was performed for all demographic data, as well as all independent and

dependent variables in this study. Descriptive analysis included means, standard deviations, and ranges of the all survey scores (Creswell, 2014).

Burns and Grove (2005) pointed out that correlational analyses are executed to realize associations between variables (p. 483). For that reason, the data analysis processes called for in this study included correlational coefficients, which, if significant, would reveal the direction and the strength of the relationships between the variables (Leedy & Ormrod, 2013). The significance level for the proposed study was set at .05. Multiple regression analyses would also be considered to determine nature and strength of related variables (Urdan, 2010). Table 2 provided the type of data, data gathering tools, collection methods, and analysis methods as they pertained to the research questions.

Table 2

Data Gathering and Data Analysis: Consistency with Research Questions

Research Question	Type of Data	Data Collection Tool/Instrument	Data Collection Method	Data Analysis Method
R1: What is the relationship between nurse leaders' self reported EI scores and their nurse followers' self-reported organizational commitment scores in two midwestern hospitals?	Interval	MSCEIT TCM of Org Commitment	Online Survey Online Survey	Descriptive Statistics, Pearson's Correlation Coefficient. ANOVA and multivariate regression analysis
R2: What is the relationship between nurse leaders' self-reported EI and their nurse followers' retention in the nursing unit in two midwestern hospitals?	Interval	MSCEIT Retention percentage from HR Department, (Employee to nursing unit) for both study hospitals	Online Survey Statistics from Human Resources Dept.	Descriptive Statistics, Pearson's Correlation Coefficient. ANOVA and multivariate regression analysis
R3: What is the relationship between nurse leaders' self-reported EI and their nurse followers' retention in the organization in two midwestern hospitals?	Interval	MSCEIT Retention percentage from HR Department, (Employee to org.) for both study hospitals	Online Survey Statistics from Human Resources	Descriptive Statistics, Pearson's Correlation Coefficient. ANOVA and multivariate regression analysis
Demographic data: Age group Highest Degree Years of Experience Work status Gender Education Marital Status Children	Ordinal Ordinal Ratio Nominal Nominal Ordinal Nominal Nominal	Demographic survey online	Online Survey	Descriptive Statistics: Mean, Median, Mode, Standard Deviation.

TCM = Three Component Model of Organization Commitment (The University of Western Ontario, 2015). MSCEIT = Mayer, Salovey, Caruso Emotional Intelligence Survey (Multi-Health Systems Inc., 2015)

Data Quality Measures

All measurement tools were administered in conjunction with the appropriate permissions and to the authors' expressed instructions, if available. Validity and reliabilities were discussed earlier in this chapter. All participants completed in full, the measurement tools included in the research. If there were more than two response omissions in a survey, that survey was omitted from the study. The researcher has reported all analyses honestly and ethically, in conjunction with statistical assistance received from an experienced statistician.

Study results have been reported in an aggregate manner in which no specific nursing unit is identifiable. Data from the survey vendors' databases was confidentially handled as it was downloaded to SPSS v.24 and maintained in a password-protected file on a private computer.

Data will be maintained for three years and then destroyed.

Ethical Considerations

Data and participant anonymity and confidentiality have been assured by following ethical research procedures. The researcher successfully completed the National Institutes of Health (NIH) web-based training course entitled "Protecting Human Research Participants" (see Appendix N). Informed consent, which was addressed earlier in this chapter, was included in each online survey introductory email to the sample population. Each potential participant was informed that they could exit the email at anytime or click on the survey link leading to the survey questions, and that this act would be deemed consenting to the study. Participants were assured that they were under no obligation to take part in the study and could withdraw from the study survey at any time without repercussions. All potential participants were informed that their decision to participate or not participate in the study would, in no way, impact their relationship with the employees' institution.

No incentives were offered to nurse follower participants. The nurse leaders were offered the results of their own MSCEIT testing, to be delivered, after the study concludes and results were reported. The introductory email to nurse leaders outlined procedures to request MSCEIT results from the researcher and instructions on how to interpret results. To further provide security and confidentiality of the survey responses, the Internet Protocol (IP) addresses of the participants were stripped from the data set by the researcher after coding (Barchard & Williams, 2008).

Summary

This quantitative, correlational study was designed to determine the relationships between staff nurses' levels of affective, continuance, and normative commitment and the emotional intelligence of their nursing leaders. Retention of nursing staff was also measured in association with the organizational commitment scores of unit nursing staff and the emotional intelligence of the leaders of those units. Purposive sampling of targeted hospital nursing units at a Midwestern hospital was utilized for the study. Data collection included online surveys of TCM (The University of Western Ontario, 2004), and the MSCEIT (Multi-Health Systems, Inc., 2015). Retention rates of participants within their own nursing unit and the overall organization were obtained from the hospital's human resources department. Statistical analyses conducted on the data included descriptive and correlational testing.

CHAPTER IV: RESULTS

Introduction

The purpose of this descriptive, quantitative, correlational study was to examine the relationship of nurse leaders' EI to the OC of the nurse followers on their clinical units in one Midwestern acute care hospital. Additionally, the nurse leaders' EI was correlated with the retention rates of nurse followers to both their nursing unit and the overall organization. Research questions addressed in this study include:

- R1: What is the relationship between nurse leaders' self reported EI scores and their nurse followers' self-reported OC scores in a Midwestern hospital?
- R2: What is the relationship between nurse leaders' self-reported EI and their nurse followers' retention in the nursing unit in a Midwestern hospital?
- R3: What is the relationship between nurse leaders' self-reported EI and their nurse followers' retention in the organization in a Midwestern hospital?

These three questions are used as the basis of the data analysis. Chapter 4 identifies the purposive sample demographics, discusses the methods used to analyze the data, data results for each research question, and a summary of significant findings, limitations and ethical considerations.

Data Analysis

The independent variable for this study was emotional intelligence of nurse leaders and was measured by the nurse leaders' total scores of the Mayer-Salovey-Caruso Emotional Intelligence Test (Multi-Health Systems Inc., 2015). The dependent variables of the study included affective, continuance and normative organizational commitment (OC) scores and retention of nurse followers to the unit and the overall organization. OC was measured through Meyer and Allen's

Three-Component Model (TCM) of employee commitment survey (The University of Western Ontario, 2004). One-year retention rates of nurse followers within the nursing units of participating nurse leaders, as well as within the overall organization, were obtained from the hospital's human resources department.

The MSCEIT survey link was sent via an introductory email inviting a total of 17 nurse leaders to participate in the study. A total of 12 nurse leaders representing 14 nursing units in the hospital completed the MSCEIT surveys, including one reminder email, for a response rate of 70.58%. The TCM Employee Commitment survey was then sent by an introductory email inviting a total of 610 nurse followers who reported to the 12 nurse leaders who chose to participate in the study. The nurse followers were coded into 14 separate unit subgroups within the SurveyMonkey® response collector prior to the survey email invitations being sent out. This procedure was performed to facilitate nurse follower OC scores being associated anonymously with their specific nurse leaders' nursing unit or units. The TCM employee organizational commitment survey link was sent via an introductory email invitation to a total of 610 nurse followers with 127 completed surveys received, after one reminder email, resulting in a response rate of 20.81%.

Demographic/Descriptive Statistics.

Nurse Leaders. Nurse leaders who completed the MSCEIT testing provided demographic information with one abstention. All leader participants' demographic data was utilized, whether or not the participants fully answered all questions. In the analysis, areas where participants omitted demographic data were shared as "unknown". The majority of reporting leaders was female (91.6%) and in the 41-50 year age range (41.7%), followed by the age ranges of 31-40 years (33.3%), and 51-60 years (16.6%), and one unknown (8.3%). In addition, a majority of

nursing leaders were married (50.0%), followed by those that were single, never married (16.6%), divorced (8.3%) and those not responding (25.0%) and over half of the nursing leaders answered yes that they had children (66.6%), followed by those with no children (8.3%) and those not responding (25.0%). Frequency distributions for nurse leaders demographic variables are presented in Table 3.

Table 3

Frequency Distribution of Nurse Leaders' Demographics 1

Characteristic	Frequency	%
Gender		
Male	0	0
Female	11	91.6
Unknown	1	8.3
Age of Leader		
20-30 years	0	0
31-40 years	4	33.3
41-50 years	5	41.7
51-60 years	2	16.6
61 + years	0	0
Unknown	1	8.3
Relationship Status		
Married	6	50.0
Divorced	1	8.3
Separated	0	0
In Domestic Partnership	0	0
Or in Civil Union		
Single, Cohabiting with	0	0
Significant Other		
Single, never married	2	16.6
Unknown	3	25.0
Children		
Yes	8	66.6
No	1	8.3
Unknown	3	25.0

Note. N = 12

In addition, most nursing leaders' reported working full-time (91.6%), with the majority having 11-15 years of experience (41.7%), followed by those with 16-20 years (25.0%), 21-25

years (8.3%), 26-30 years (8.3%), and those greater than 31 years (8.3%), with one unknown (8.3%). The majority of leaders had either a Masters degree (41.7%) or a Bachelors degree (41.7%), followed by an Associate Degree (8.3%). None of the leaders reported having a Doctoral degree or a Diploma in Nursing (0%), with one unknown (8.3%). The leaders' patient care specialties included: Medical-Surgical nursing (33.3%), Critical Care nursing (25.0%), Telemetry nursing (8.3%), Pediatric nursing (8.3%), Mother-Baby nursing (16.6%), and Unknown (8.3%). Table 4 illustrates the latter demographics.

Table 4

Frequency Distribution of Nurse Leaders' Demographics 2

Characteristics	Frequency	%
W. J. G.		
Work Status		
Part time	0	0
Full time	11	91.6
Unknown	1	8.3
Nursing Experience		
1-5 years	0	0
6-10 years	0	0
11-15 years	5	41.7
16-20 years	3	25.0
21-25 years	1	8.3
26-30 years	1	8.3
31+ years	1	8.3
Unknown	1	8.3
Highest Degree Obtained		
Diploma in Nursing	0	0
Associate's Degree	1	8.3
Bachelor's Degree	5	41.7
Master's Degree	5	41.7
Doctoral Degree	0	0
Unknown	1	8.3
Patient Care Specialty		
Medical-Surgical	4	33.3
Telemetry	1	8.3
Critical Care	3	25.0
Pediatric	1	8.3
Mother-Baby	2	16.6
Behavioral Health	0	0
Unknown	1	8.3

Nurse Followers. All nurse follower participants' demographic data was utilized, whether or not the participants fully answered all questions. In the analysis, areas where participants omitted demographic data were shared as "unknown". Nurse followers completing the TCM Employee Commitment Survey were predominately female (96.06%), with ages reported as: 20-30 years (34.65%), 31-40 years (37.01%), 41-50 years (14.17%), 51-60 years (11.04%) and 61 or greater years (3.14%). The majority were married (71.65%), followed by single, never married (13.38%), single, cohabitating with a significant other (8.66%), Divorced (3.93%), and Separated (1.57%). The majority had children (65.35%), versus none (33.85%). Frequency distributions for nurse followers' demographic variables are presented in Table 5.

Table 5
Frequency Distributions for Nurse Followers' Demographic Variables 1

Characteristics	Frequency	%
Gender		
Male	4	3.14
Female	122	96.06
Unknown	1	0.78
Age of Nurse Follower	-	o.,, c
20-30 years	44	34.65
31-40 years	47	37.01
41-50 years	18	14.17
51-60 years	14	11.04
61+ years	4	3.14
Unknown	0	0
Relationship Status	-	· ·
Married	91	71.65
Divorced	5	3.93
Separated	2	1.57
In Domestic Partnership or		
Civil Union	0	0
Single, Cohabiting with		
Significant Other	11	8.66
Single, Never Married	17	13.38
Unknown	1	0.78
Children		
Yes	83	65.35
No	43	33.85
Unknown	1	0.78

A large percentage of nurse followers worked full-time (74.02%), followed by part-time (19.69%) and PRN (6.30%). The majority had 1-5 years of experience (37.79%), followed by 6-10 years (22.04%), 11-15 years (17.32%), 16-20 years (5.51%), 21-25 years (7.09%), 26-30 years (3.15%), and 31 or greater years (6.30%), and Unknown (0.78). The highest level of education was: Bachelors degree (65.35%), followed by Associates Degree (22.83%), Masters degree (5.55%), Diploma in Nursing (4.72%), and Unknown (1.57). Patient care specialties included: Medical-Surgical nursing (14.17%), Telemetry nursing (8.66%), Critical Care nursing (30.70%), Pediatric nursing (18.89%), Mother-Baby nursing (23.62%) and Unknown (3.93%). Table 6 illustrates this data.

Table 6
Frequency Distributions for Nurse Followers' Demographic Variables 2

Characteristics	Frequency	%
Work Status		
Part time	25	19.69
Full time	94	74.02
PRN	8	6.30
Nursing Experience		
1-5 years	48	37.79
6-10 years	28	22.04
11-15 years	22	17.32
16-20 years	7	5.51
21-25 years	9	7.09
26-30 years	4	3.15
31+ years	8	6.30
Unknown	1	0.78
Highest Degree Obtained		
Diploma in Nursing	6	4.72
Associate's Degree	29	22.83
Bachelor's Degree	83	65.35
Master's Degree	7	5.55
Doctoral Degree	0	0
Unknown	2	1.57
Patient Care Specialty		
Medical-Surgical	18	14.17
Telemetry	11	8.66
Critical Care	39	30.70
Pediatric	24	18.89
Mother-Baby	30	23.62
Behavioral Health	0	0
Unknown	5	3.93

Survey Data Analysis.

Data from the completed survey tools of MSCEIT and Three-Component Model (TCM) of employee organizational commitment, as well as, unit and organizational retention data were analyzed utilizing the Statistical Package for the Social Sciences (SPSS), version 24.0 (IBM Corp. 2016), to discern any relationships between the nurse leaders' total EI scores and the nurse followers' affective, continuance and normative OC scores and retention rates in nursing unit and overall hospital organization. A statistician and researcher reviewed data in Excel spreadsheets for any observable errors. After review, the data was loaded into SPSS for calculation of normalcy and correlations. All data in this study was tested for normality. The Shapiro-Wilk test was not significant, indicating that the data were normally distributed. Table 7 illustrates the results of the normality testing.

Table 7
Shapiro-Wilk Test of Normality

	Statistic	df	Sig.
Leader EI	.933	12	.418
Total Org Commit	.914	12	.241
Avg. Org Commit	.951	12	.656
Affective OC Total	.924	12	.316
Affective OC Avg.	.929	12	.373
Continuance OC Total	.876	12	.077
Continuance OC Avg.	.972	12	.927
Normative OC Total	.917	12	.262
Normative OC Avg.	.923	12	.308
Retention to Unit	.964	12	.842
Retention to Org.	.929	12	.372

Note. * This is a lower bound of the true significance.

Research Question 1. The first research question asked whether there was a relationship between the organizational commitment total scores of nurse followers and the total emotional intelligence scores of nurse leaders. Table 8 depicts the descriptive statistics of the independent

and dependent variables pertaining to question one. The TCM employee commitment total scores, by unit group, ranged from a minimum total score of 343.00 to a maximum of 2080.00 with a mean total score of 1053.58 and standard deviation of 573.27. Emotional intelligence total scores, of the nurse leaders surveyed, ranged from a minimum of 87.00 to a maximum of 130.00 and a mean of 105.83, standard deviation of 13.56. In addition, the organizational commitment total scores were averaged by unit and resulted in scores ranging from a minimum of 86.00 to a maximum of 114.00 with a mean of 99.00 and standard deviation of 8.55.

Table 8

Descriptive Statistics of Variables OC, EI and Average Commitment

Item	Minimum	Maximum	Mean	Std. Deviation
Organizational Commitment Total by unit	343.00	2080.00	1053.5833	573.27392
Emotional Intelligence of Nursing Leaders	87.00	130.00	105.8333	13.56354
Average Org Commitment by unit	86.00	114.00	99.0000	8.55995
•				

Note. N = 12

Table 9 illustrates the number of nurse follower respondents by unit, which ranged from 4 to 21 with a mean of 10.58. Average organizational commitment scores ranged from 86 to 114 with a mean of 99. Total organizational commitment scores ranged from 265 to 2080 with a mean of 1039. Nurse leaders' emotional intelligence total scores ranged from 87 to 130 with a mean of 105. For the purposes of data analysis, in those cases where more than one nursing unit reported to the same nursing leader, the data was combined to attribute it to the same nursing leader and protect the leaders' anonymity.

Table 9

Nurse Follower Organizational Commitment with Nurse Leader EI Scores

		Average Org	Total	Leaders'
	Nurse	Commitment	Organizational	Emotional
	Follower	Score by	Commitment	Intelligence
Group	Respondents	Group	Score	Total Score
Follower Group 1	12	114	1,364	106
Follower Group 2	16	97	1,549	129
Follower Group 3	4	86	265	90
Follower Group 4	5	89	444	95
Follower Group 5	14	105	1,474	97
Follower Group 6	7	95	662	130
Follower Group 7	13	95	1,237	110
Follower Group 8	8	93	747	102
Follower Group 9	5	109	543	106
Follower Group 10	21	99	2,080	114
Follower Group 11	5	109	543	87
Follower Group 12	17	97	1,657	104

Note. N = 127 Nurse Followers and 12 Nurse Leaders

In addition, the three component group scores of the organizational commitment survey, which included affective, continuance and normative commitment, were examined for a relationship with EI. Affective commitment total scores by unit ranged from 104 to 757 with a mean of 369 and a standard deviation of 205.39. Affective average scores by follower ranged from 25.20 to 41.58 with a mean of 34.38 and standard deviation of 5.0. Continuance organization total scores ranged from 111 to 618 with a mean of 325.66 and standard deviation of 182.73. Continuance average scores by follower ranged from 24.75 to 35.57 with a mean of 3.22. Normative total scores ranged from 128 to 705 with a mean of 358.83 and standard deviation of 188.44. Normative average scores of followers ranged from 30.40 to 38.42 with mean of 34.07 and standard deviation of 2.57. Table 10 illustrates the descriptive statistics of the affective, continuance and normative organizational commitment scores of nurse followers.

Table 10

Descriptive Statistics of Affective, Continuance and Normative Commitment Scores

Item	Minimum	Maximum	Mean	Std. Deviation
Affective Org Commit Total	104.00	757.00	369.00	205.39
Affective Org Commit Avg.	25.20	41.58	34.38	5.00
Continuance Org Commit Total	111.00	618.00	325.66	182.73
Continuance Org Commit Avg.	24.75	35.57	30.45	3.22
Normative Commit Total	128.00	705.00	358.83	188.44
Normative Commit Avg.	30.40	38.42	34.0776	2.57213

Note. N = 12 Nurse Follower Groups

Statistical analysis was performed utilizing Pearson Correlation Co-efficient testing. The data revealed no statistically significant findings between nurse leaders EI total score and the total group organizational commitment score, r(10) = .409, p = .187. In addition, nurse leaders EI total scores were correlated with total affective commitment scores, r(10) = .414, p = .181, total continuance commitment scores, r(10) = .370, p = .237, and total normative commitment scores r(10) = .434, p = .159, which also indicated no significant relationships. Table 11 demonstrates the results of the analysis.

Table 11

Correlations of Emotional Intelligence Scores and Organizational Commitment

	Pearson Correlation Coefficient	Sig. (2-tailed)
EI/ Total OC	.409	.187
EI/Affective OC Total	.414	.181
EI/Affective OC Avg.	.136	.674
EI/Continuance OC	.370	.237
Total		
EI/Continuance OC	226	.479
Avg.		
EI/Normative OC Total	.434	.159
EI/Normative OC Avg.	139	.667

Note. N = 12. * Correlation is significant at the 0.05 level (2-tailed).

Research Questions 2 and 3. The second and third research question inquired about the relationship between nurse leaders' emotional intelligence and nurse followers' retention within a nursing unit and/or the overall organization. Table 12 displays the descriptive statistics of the independent and dependent variables pertaining to those questions. Nurse leader EI scores ranged from 87 to 130 with a mean of 105.83 and standard deviation 13.56. Retention within nursing units ranged from 62.5% to 90.9% with a mean of 78.7% and standard deviation of 7.75%. Nurse follower retention within the organization ranged from 77.5% to 100% with a mean of 86.2% and standard deviation of 6.35%.

Table 12

Descriptive Statistics of Leader EI, Nurse Follower Retention to the Unit and the Organization

Variables	Minimum	Maximum	Mean	Std. Deviation
Leader EI Score	87.00	130.00	105.83	13.56
Retention Unit	62.50%	90.90%	78.70%	7.75%
Retention Org.	77.58%	100.00%	86.24%	6.35%

Statistical analysis was performed utilizing Pearson Correlation Co-efficient testing. The results revealed no significant relationship between nurse leader EI and nurse follower retention to unit r(10) = .029, p = .929, or overall organization r(10) = .308, p = .330. Table 13 depicts the results of the correlational analysis.

Table 13

Correlations of EI and Retention Scores

	Pearson Correlation Coefficient	Sig. (2-tailed)
Leader EI/Nurse Follower Retention to Unit	.029	.929
Leader EI/Nurse Follower Retention to Organization	.308	.330

Note. N = 12 *Correlation is significant at the 0.05 level (2-tailed)

Incidental Findings. It should be noted that there were incidental findings in this study. The affective, continuance and normative commitment total scores of the TCM Employee Commitment survey correlated significantly with retention of nurse followers to their nursing units. Significant relationships were noted between the affective total score and nurse follower retention to the unit, r(10) = .032, p = .619, the continuance total score with retention to the unit, r(10) = .025, p = .639, and the normative total score with retention to the unit, r(10) = .019, p = .661. The overall total TCM organizational commitment score was also found to be significant with retention to the unit r(10) = .024, p = .643, and with retention to overall organization, r(10) = .039, p = .602.

In addition, the affective and normative total scores correlated significantly to the nurse followers' retention to the overall organization as well. Affective total scores had a significant

relationship with the nurse follower retention to the overall organization, r(10) = .041, p = .595, as well as normative total scores with retention to the overall organization, r(10) = .030, p = .624. Table 14 exhibits the significant findings.

Table 14

Correlations of Organizational Commitment and Retention to Unit and Organization

	Pearson Correlation Coefficient	Sig. (2-tailed)	
Total Org Commit/ Retention to the Unit	.643	.024*	
Total Org Commit/ Retention to the Org.	.602	.039*	
Affective Total/ Retention to Unit	.619	.032*	
Continuance Total/ Retention to Unit	.639	.025*	
Normative Total/ Retention to Unit	.661	.019*	
Affective Total/ Retention to Org.	.595	.041*	
Continuance Total/ Retention to the Org.	.575	.050	
Normative Total/ Retention to the Org.	.624	.030*	

Note. N = 12. * Correlation is significant at the 0.05 level (2-tailed).

Results Summary

Chapter Four presented the analysis of data for this quantitative, correlational study. The purpose of the study was to examine the relationship of nurse leaders' EI to the OC of the nurse followers they supervised on their clinical units in one Midwestern acute care hospital.

Additionally, the nurse leaders' EI was correlated with retention rates of nurse followers to both their nursing unit and the overall organization.

Demographic data was analyzed and reported for both the nurse leaders and the nurse followers who participated in the online survey study. A total of 12 nurse leaders completed the MSCIET online survey instrument and 127 nurse followers completed the TCM of Employee Commitment (TCM) delivered in a SurveyMonkey® online survey, along with demographic questions attached to the surveys by the researcher. Surveys were excluded from the study if participants chose not to provide answers to more than two questions of the MSCIET or TCM. There were no surveys excluded from the study. All participants' demographic data was utilized, whether or not the participants fully answered all questions. In the analysis, areas where participants omitted demographic data were shared as "unknown".

Study data was analyzed utilizing SPSS v. 24.0. Shapiro-Wilk testing revealed that the data were normally distributed. Descriptive statistics were performed on all independent and dependent variable in this study. Statistical analyses were performed utilizing Pearson Correlation Co-efficient testing. The data revealed no statistically significant relationship between nurse leaders' EI and nurse followers' OC, retention to the unit or retention to the overall organization and therefore, the hypotheses for this study were rejected.

In conclusion, the data analysis did not indicate significant relationships regarding the three research questions tested in this research. Of note, there were incidental findings of statistical significance between total organizational commitment scores and retention to the nursing unit and overall organization. The total scores of affective, continuance, and normative organizational commitment also showed significance with retention to the nursing unit and

scores of total affective and total normative commitment was significant with retention to the overall organization.

Chapter Five will provide a background and summary of the study. In addition, there will be a review of the findings to associate them to EI and OC theory and literature. To conclude the chapter, there will also be discussion of limitations, and recommendations for future research.

CHAPTER FIVE: DISCUSSION AND SUMMARY

Introduction

This chapter discusses the relevant background and purpose of this study. The research design, interpretation of results, correlation to the literature and the theoretical context is also reviewed. Limitations of the study and recommendations for future research will conclude the chapter.

Background and purpose of the study

There have been growing concerns in the United States that by 2022, the need for registered nurses is anticipated to expand to 3.24 million. Much of the growth in nursing has been related to the aging of the U.S. population and the chronic medical issues typically associated with aging (U.S. Bureau of Labor Statistics, 2014). As mentioned in chapter one, anticipated shortages in the nursing profession have motivated nurse leaders to attain a variety of complex abilities to enhance nursing satisfaction (Feather, 2009). Studies have indicated that a leader's caring abilities, including EI abilities, have positive effects in the workplace to engage nurses in preventing stress, job burnout, and turnover (Hoar, 2011; Karimi, Leggat, Donohue, Farrell & Couper, 2013). Moreover, Young-Ritchie, Spence-Laschinger and Wong (2009) cited concern that there was limited knowledge regarding nurse leaders' EI and it's significance to nursing OC and retention. Therefore, it was prudent to consider the study of nursing leaders' EI as it relates to nurse followers OC, in anticipation of the American Nurses Association's (2015) projected inadequate supply of nurses in the United States.

The purpose of this quantitative, correlational study was to explore the relationships between existing self-reported emotional intelligence (EI) of nurse leaders and the self-reported organizational commitment (OC) and retention of their nurse followers at a Midwestern hospital.

Research Questions and Hypotheses

The research questions and hypotheses of this study were:

- R1: What is the relationship between nurse leaders' self reported EI scores and their nurse followers' self-reported OC scores in a Midwestern hospital?
- H1: There is a significantly positive relationship between nurse leaders' self-reported EI scores and their nurse followers' self-reported OC scores in a Midwestern hospital.
- R2: What is the relationship between nurse leaders' self-reported EI and their nurse followers' retention in the nursing unit in a Midwestern hospital?
- H2: There is a significantly positive relationship between nurse leaders' self-reported EI and their nurse followers' retention in the nursing unit in a Midwestern hospital.
- R3: What is the relationship between nurse leaders' self-reported EI and their nurse followers' retention in the organization in a Midwestern hospital?
- H3: There is a significantly positive relationship between nurse leaders' self-reported EI scores and their nurse followers' retention in the organization in a Midwestern hospital.

Results and Interpretation

Statistical analyses utilizing SPSS was performed to determine relationships between (12) nurse leaders' EI as measured by the Mayer-Salovey-Caruso Emotional Intelligence Test (Multi-Health Systems, 2015), and the OC of nurse followers as measured by the Meyer and Allen Three Component Model (TCM) of Employee Commitment (The University of Western Ontario, 2004). In addition, the retention rates of the nurse followers in both nursing unit and overall organization were correlated with nurse leaders' EI and nurse followers' OC.

Research Question 1: Relationship between nurse leaders' EI and nurse followers' OC.

To test the hypothesis that there were relationships between nurse leaders' EI and nurse followers' OC, a Pearson correlation coefficient was performed on 12 nurse leaders' EI total scores and the OC subsets of affective, continuance and normative total scores of the 14 nurse follower unit-groups that reported to them (N = 127). The results of the analysis indicated that there were no statistically significant relationships present.

The literature reviewed earlier in chapter II supported multiple assertions that non-nursing leaders' EI plays a positive role in multiple employee outcomes (Carmeli, 2003; Kafetsios, Nezlek, & Vassilakou, 2012; Klem & Schlechter, 2008; Webb, 2014). On the other hand, nursing has limited research regarding nurse leaders' EI alone, being correlated to retention rates and organizational commitment of nurse followers. Interestingly, Hoar (2011) did find significant positive relationships between nurse manager EI and staff nurse satisfaction and self-reported intent to stay, and Young-Ritchie, Laschinger, and Wong (2009) found that emotionally intelligent leader behaviors had a strong effect on OC of emergency room staff nurses. In light of the present study's findings and the lack of research measuring the EI of nurse leaders as it relates to staff nurse retention and OC, it exposes the continued need for further research in this area.

Research Question 2 and 3: Relationships between nurse leaders' EI and nurse followers' retention to the nursing unit or the overall organization.

The hypothesis that nurse leaders' EI was associated with nurse followers' retention to the nursing unit or the overall organization was scrutinized using the EI total scores of the 12 nurse leaders and the one year retention rates of the nurse followers (N = 127) who worked in the 14

nursing units the nurse leaders led. Retention rates were calculated and reported through the study hospital's HR department under the supervision of the HR manager. For the purposes of this research, retention was reported as the percentage of registered nurses who were employed one year prior to the start of the study in the participating unit, and who continued to be employed, in the same unit or global organization at the time the research commenced. Each participating nursing unit was then given a retention rate for the unit and the overall organization. The results of the Pearson Correlation Co-efficient analysis indicated no significant relationships between nurse leaders' EI and retention to either the nursing unit or the overall organization.

The literature pertaining to nurse leaders' EI and retention of nurse followers is very limited. Codier, Kamikawa, Kooker, and Shoultz (2009) discovered that EI scores of Hawaiian staff nurses positively correlated with performance and retention, but nurse leaders' EI was not tested in that study. Carmeli (2003) found that emotionally intelligent non-nurse managers developed more commitment to their own careers and better job satisfaction, and their employees with higher EI were able to handle work-family conflict more positively. While there has been increasing research directed toward emotional intelligence as it relates to transformational leadership styles (Kumar, 2014), there has not been the same attention paid to the role nurse leaders' EI specifically plays in the outcomes of their nurse followers, including retention of staff nurses. It would be helpful to focus research on the EI skills of nursing leaders to evaluate the relationship those skills play in key outcomes of their nurse followers in future studies.

Incidental Findings.

There were incidental significant findings in this study. The affective, continuance and normative commitment total scores of the TCM Employee Commitment survey (The University of Western Ontario, 2014) completed by the nurse followers in this study, correlated

significantly with retention rates of nurse followers to their nursing units. The TCM organizational commitment total scores were also found to be significant with retention to the unit and with retention to overall organization. In addition, the affective and normative total scores of the TCM Employee Commitment survey correlated significantly to the nurse followers' retention to the overall organization as well.

While not an anticipated outcome of the present study, it is interesting to note that literature in this area supports these findings. Sow (2015) discovered significant relationships between the affective commitment scores of the TCM Employee Commitment survey and turnover intentions in healthcare auditors. Furthermore, a Nigerian study of medical doctors and nurses uncovered significant positive associations between affective and normative commitment and retention among medical doctors and significant positive relationships between affective commitment and retention of nurses (Ibrahim, Yaaba, & Shaba, 2016). In addition, Anis, Rehman, Rehman, Khan, and Humayoun, (2011) found significance between organizational commitment and employee satisfaction and retention in the pharmaceutical field in Pakistan. This information is important for healthcare leaders to consider when attempting strategies to retain staff nurses. The knowledge that organizational commitment and retention are positively associated is valuable to nursing and healthcare in general. Further study involving leadership actions associated with improved organizational commitment could possibly improve retention outcomes of bedside nurses.

Implications and Recommendations for Nursing

EI is considered to be an important indicator of success in the workplace and especially in leadership (Goleman, Boyatizis, & McKee, 2013). Bulmer-Smith, Profetto-McGrath, and Cummings (2009) noted in a review of EI and related nursing literature, that emotion was a

central element in nursing care, but nursing had been slow to develop nursing theories surrounding emotional intelligence in nursing. Bulmer-Smith et al. (2009) also noted multiple gaps existed in the knowledge about EI and nursing practice. Akerjordet and Severinsson (2010) continued to support similar findings when they performed their own literature review of EI research and concluded there was "cautious optimism" about the potential of EI in the development of nursing leadership (p. 372). Interestingly, Hart, Brannan, and De Chesney (2014) noted in their integrative review regarding the concept of resilience in nurses, that Glass (2009) found flexibility, adaptability and emotional intelligence were important components of resilience in nurses. These findings have implications for the profession of nursing. Resilience would be an interesting concept to further explore with emotional intelligence when considering the variables associated with nursing retention outcomes. In addition, in light of the incidental findings of the present study, it would be beneficial to continue evaluation of organizational commitment with retention of nurses at the bedside.

Limitations of the Study

As noted by McLeod (2008), one of the limitations of correlational studies includes the inability to imply causation even if the associations between variables are found to be extreme. Correlational analyses do allow researchers to note if there are relationships between variables. The results of this study did not show relationships between nurse leaders' EI and the OC or retention of nurse followers. This study did reveal relationships between the nurse followers' OC scores and retention rates in the nursing units and overall organization. As a result of the limitations of the correlational analyses, it would not be valid to infer anything further concerning the relationships between OC and retention at this time.

In addition, the choice of nonprobability, purposive sampling in this study deceased the likelihood that the sample was representative of the population and increased the chances of error in the findings (Bondmass, 2013). Additional bias could have been introduced with the choice of internet-based survey instruments and biased in favor of computer literate participants and only those having access to the Internet; the self-report nature of the instruments could also have been identified as a limitation (Leedy & Ormrod, 2013).

Leedy and Ormrod (2013) disclosed that it was unprofessional for a researcher to fail to identify and concede the possibility of biased data. For this reason, an additional limitation to consider was that the researcher was employed as a nurse leader within the institution studied. This employment status could have introduced unintended bias, due to the possibility some of the targeted nurses would choose not participate due to fear that the researcher would either judge them or reveal their responses to study questions (Fowler, 2014). Under those circumstances, Fowler (2014) asserted, the omission of these participants' contributions to the study could result in response bias. To address this risk of bias, the researcher assured numerous times in the consenting procedures and reminder emails that strict confidence of the responses was assured.

An additional limitation for consideration would be survey fatigue. Porter, Whitcomb and Weitzer (2004) noted that survey nonresponse rates have been increasing as a result of increased ease in the development and delivery of web-based surveys. As a result of receiving multiple surveys, there is increased chance that response rates will reduce. In light of this information, it should be noted that nurses working within the hospital included in this study had been asked to perform three online employee surveys in the 10 months prior to the research study. Two were general employee input surveys and one was the National Database for Nursing Quality

Indicators (NDNQI) that measures nursing quality, engagement and patient outcomes to study nursing care of bedside nurses (Press Ganey, 2016). The last general employee survey was within one month of the initial invitations to nurse leaders to participate in the present study and five. weeks prior to the nurse followers being invited into the present study. As a result, response rates could have been affected due to survey fatigue. The response rates for the present study were 70.58% for nurse leaders and 20.81% for nurse followers.

One final limitation in this study is the acknowledgement that there are multiple variables associated with both EI and OC that could affect the results of this study. Creswell (2014) noted that control and confounding variables could possibly sway the dependent variables in a study. To control for and evaluate the impact that control variables have between the independent and dependent variables, the use of statistical procedures in the analysis of study results is performed (Creswell, 2014). For the present study, these could include age, length of tenure, gender, nursing specialty, degree attained, or any personal or demographic variables. Creswell (2014) also noted that confounding variables can occur in a study and cannot truly be assessed in the study, but should be pointed out as possibilities in the study because they could have played a part in the associations revealed between the independent and dependent variables. Examples of possible confounding variables in the present study could include, attitudes about work/life balance and number of hours worked by nurses prior to participating in the study. In addition, overall attitudes of nurse followers and leaders about their individual pay, daily workloads, staffing issues, as well as the morale on nursing units and overall organization, may be considered potential confounding variables in this study.

Recommendations for Future Research

In considering recommendations for future research, it is important to consider that there continues to be limited research surrounding EI in association with nursing. It would be beneficial to consider EI research in all facets of nursing, especially nursing leadership. The use of alternative EI and OC assessment instruments should be pursued in future research considering these concepts. It would be interesting to determine if alternative theorists' testing instruments collect different EI and OC domain and ability data that possibly would identify different results.

Another consideration for nursing EI and OC research would be to plan other sampling methodologies in the design of the study. Using a probability sampling method would possibly decrease somewhat, the concern of bias that is greater in non-probability sampling (Surbhi, 2016). The use of a larger sample size and multiple hospitals could improve the power of this study. It would be recommended that the present study use the same data gathering tools in multiple hospitals in multiple states and with a larger sample. In addition, performing statistical tests to control for confounding variables would also be recommended.

Another consideration for future studies would include planning the study when there has been a span of time between institutional surveys. This would decrease the chances of nurses refraining from participating in research due to survey fatigue mentioned earlier in this chapter and the nonresponse bias as a result. In conclusion, EI continues to evolve in nursing literature and future research is needed to assess whether it plays a role in nursing leadership.

Summary

Nursing leaders have been challenged to retain and satisfy the nursing workforce to maintain adequate healthcare resources for our nation's patients (Young-Ritchie, Spence-Laschinger &

Wong, 2009). The purpose of this study was to determine if relationships were present between nurse leaders' EI and nurse followers' OC and retention to both nursing units and the overall organization in a Midwestern hospital.

The results of this study did not find significant relationships between nurse leader's EI and nurse followers' OC and retention to the nursing unit or overall organization. These results were consistent with a prior study that used the same EI and OC data gathering instruments and similar sampling methods with correlational analyses (Boivin, 2013). On the other hand, the results of this study were not consistent with prior research and literature review concerning EI and OC relationships, shared in chapter two. Those studies incorporated varying designs and methodologies, sample sizes, data gathering tools and analyses in research of EI and OC.

This study did contribute to the existing body of knowledge concerning the associations of EI and OC concepts known presently in the profession of nursing. Subsequently, it is recommended that future research utilize alternative design methodologies, larger sample sizes and alternate data instruments. These recommendations would ensure that the nursing profession continues to seek meaningful confirmation of the concepts and personal skill sets required of nurse leaders as they seek to improve retention of nurses at the bedside.

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Appendix A

Demographic Questionnaire for all Study Participants

For purposes of confidentiality, data will be combined for analysis and individual data will not

be identified.
What is your present age in years?
\square 20-30 years
\square 31-40 years
\square 41-50 years
□51-60 years
□61 or greater years
What is your work status?
□Full-time
Part-time
□PRN
What is your highest degree obtained?
□Diploma
□ ASN degree
☐ Bachelors degree
☐ Masters degree
☐Doctoral degree
What are your years of experience as a nurse?
□1-5 years
\Box 6-10 years
□11-15 years
□16-20 years
\square 21-25 years
\square 26-30 years
\square 31 or greater years
What is your patient care specialty?
☐ Medical-Surgical nursing
☐ Telemetry nursing
☐ Critical Care nursing
☐ Pediatrics
☐ Mother-Baby
☐ Behavioral Health

Appendix A continued

What is your gender?
□Male
□Female
☐Other: Please specify
What is your marital status?
☐ Married or domestic partnership
☐Single, never married
\square Widowed
☐Divorced or Separated
Do you have children?
□Yes
\square No

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Appendix B

Email to Chief Nursing Officer Requesting Permission for Research

Dear Chief Nurse_____,

I am a doctoral student at the College of Saint Mary in Omaha, Nebraska. I would like to talk to you

regarding my doctoral study: The Relationship between Nurse Leaders' Emotional Intelligence (EI) and

Nurse Followers' Organizational Commitment (OC) and Retention in a Midwestern hospital. I have

attached a copy of my research request email/informed consent to both nurse leaders and their nurse

followers for your review. The study tools and the time needed to complete them are explained in the

request email.

The study methodology includes email invitations to both nurse leaders and nurse followers to

participate via online surveys concerning EI and OC. The study also includes nine demographic

questions. I will provide a copy of the proposed survey questions at your request. The surveys are

research based, proprietary tools with documented validities and reliabilities and used with permissions.

This study will be confidential and your institution will not be identified at any point of the study.

All participants' identities will be kept confidential, and their answers will be reported only in aggregate

form. The study poses no known risks or harm to any participant and there are no costs to participate in

the study. All participants will be assured that they are free to withdraw at any time, informed that there

is no deception in the study and their employment will not be affected in any way by participating or not

in this research. Nurse leaders will be offered the results of their EI testing at the conclusion of the study.

College of Saint Mary's Institutional Review Board (IRB) approval letter will also be provided to

you for review and I am willing to adhere to any of your institution's IRB requirements as requested.

I would look forward to talking with you more about conducting my research at your hospital and

answering any questions you may have. Please contact me at your convenience.

Sincerely.

Deb Willyard Ed.Dc, MSN, RN

Doctoral Student - College of Saint Mary, Omaha, NE.

Cell: 515-240-5730 or dwillyard91@CSM.edu

Appendix D

Study Introduction/Informed Consent Email to Nurse Leaders

Dear Nurse Leader,

I am a doctoral student at the College of Saint Mary in Omaha, NE. and finishing my doctoral degree in education with an emphasis in health education. I will be conducting a study to determine the relationships between nurse leaders' emotional intelligence (EI) and the organizational commitment (OC) and retention of the nurses that report to them in a Midwestern hospital. I am asking for your participation, as a nursing leader, in this important research. The research has been approved by the College of Saint Mary's IRB. The approval number is CSM XXXX. There are no known risks to this study. Your involvement in this study is strictly voluntary and your answers will be kept confidential. There is no deception in this study and your employer will not have access to any study data. Your Chief Nursing Officer (CNO) has granted permission for this research to occur in your institution. There is no direct benefits, costs, or compensation to you for participating in the study. Results have scientific and professional relevance regarding the association of the EI of nurse leaders and OC and retention of the staff they lead.

The EI survey you will be asked to complete is called the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) and has 141 questions that will take approximately 40 minutes to finish, including eight demographic questions about the participant. This survey should be completed at your convenience in one setting. You have the right to withdraw your participation in the study, at anytime, without penalty. Please complete the online survey in an area free from distractions. If you choose to participate, the survey is copyrighted. You are asked to refrain from digitally copying, saving, storing or otherwise reproducing the test.

If you choose to participate in this study, the nurses reporting to you will be invited via an email to participate in the study as well, by completing the Three-Component Model of Employee Commitment (TCM). The TCM online survey takes approximately 15 minutes and contains 24 questions. There will also be eight demographic questions, specific to this study, included with the online survey. If you

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choose not to participate, the nurses reporting directly to you will not be approached to participate in the

study. No communication will be sent to them. The reason for this decision is the study requires both

leaders and their direct report nurses to provide the needed data to address the research questions of this

study.

During the data analysis phase, your individual EI score will be examined with the OC scores and

retention rates of the participating nurses that report directly to you. The results will then be combined

with other nursing units before being analyzed and reported in aggregate form. At no time during the

study will any other individual, other than the primary researcher, have access to your identity. If you

would like to receive results of your personal emotional intelligence scores with written explanations of

the scores by mail, an opportunity will be provided to all nurse leader participants to contact the

researcher by email after the study concludes.

Thank you in advance for considering participation in this important research. You may contact the

researcher about any aspect of this research at dwillyard91@csm.edu or Dr. Lois Linden, Ed.D., RN,

dissertation chairperson at llinden@csm.edu.

By clicking on the attached link, you will be agreeing that you have read and understand the

conditions of your participation in the study described in this email. By answering the survey questions,

you are voluntarily consenting to participate in the study. The survey will close on November 1, 2016. If

you choose to participate, please complete the survey by that date.

Best regards,

Deborah Willyard, Ed.Dc., RN, MSN

Dwillyard91@csm.edu

515-240-5730

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Appendix E

Study Introduction Email to Nurse Followers Reporting to Nurse Leaders

Dear Prospective Nurse Follower Research Contributor,

I am a doctoral student at the College of Saint Mary in Omaha, NE. I am currently working toward my doctoral degree in education and conducting an online research study to determine the relationships between nurse leaders' emotional intelligence (EI) and the organizational commitment (OC) and retention of the nurses that report to them in a Midwestern hospital.

The College of Saint Mary's Investigational Review Board (IRB) has approved the research. The approval number is CSM XXX. I am asking for your participation in this online study. There are no known risks to you by participating in this study. Your involvement in the study is voluntary and your answers and identity will be kept strictly confidential. There is no deception in this study. Your leader or your organization will not have access to any individual study data or know if you chose to participate or not. The study is not connected in any way to the hospital in which you are employed. There are no direct benefits, costs or compensation to you for participating in the study. Results have scientific and professional relevance regarding the association of the EI of leaders and the OC and retention of those they lead.

Your individual responses to the 24 questions in the online Three Component Model (TCM) of Employee Organizational Commitment Survey and eight questions of the demographic survey will be kept confidential and combined anonymously with other nurse followers' responses in your nursing unit and ultimately all other nurse followers in the study and results reported aggregately. Your responses and those of your peers will be correlated with the EI score of your leader and the retention rate of your nursing unit and the organization. All results will then be combined with all nursing units participating in the study and further analyzed to determine whether there are any relationships between EI, OC and retention rates of both nursing units and the larger organization.

The web-based survey will take you approximately 10-15 minutes to complete and should be completed at your convenience, in an area free of distractions. In answering the survey questions, you

will be consenting to participate in the research study. Thank you in advance for contributing to this important research. If you choose to complete the survey, please do so before the study closure date of December 2, 2016.

Best regards, Deborah Willyard, Ed.Dc., RN, MSN Doctoral Candidate College of Saint Mary – Omaha, NE.

Appendix F

Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT) Sample

EXAMPLE MSCEIT ITEMS

The MSCEIT has eight sub-tests and 141 individual items. These examples are meant to illustrate the type of items that this ability test of emotional intelligence consists of.

Perceiving Emotions

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



Emotion	Not Much				Very
Happiness	1	2	3	4	5
Fear	1	2	3	4	5
Sadness	1	2	3	4	5
Surprise	1	2	3	4	5

Using Emotions

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

Mood	Not Useful				Useful
	Osejui				
Tension	1	2	3	4	5
Surprise	1	2	3	4	5
Joy	1	2	3	4	5

Understanding Emotions

Tom felt anxious, and became a bit stressed when he thought about all the work he needed to do. When his supervisor brought him an additional project, he felt (Select the best choice.) a) Overwhelmed
b) Depressed
c) Ashamed
d) Self Conscious
e) Jittery
Managing Emotions
Debbie just came back from vacation. She was feeling peaceful and content. How well would <i>each</i> action preserve her mood?
Action 1: She started to make a list of things at home that she needed to do.
Very Ineffective12345Very Effective
Action 2: She began thinking about where and when she would go on her next vacation.
Very Ineffective12345Very Effective
Action 3: She decided it was best to ignore the feeling since it wouldn't last anyway.
Very Ineffective12345Very Effective

Note. Examples of MSCEIT questions. Reprinted from "Emotional Intelligence Skills Group" website by Caruso, 2017, at http://www.eiskillsgroup.com/example-items/. The MSCEIT: Copyright 2002 by Multi-Health-System, Inc. Reprinted with permission.

Appendix G

Permissions to use the MSCEIT

From: R&D [<u>r&d@mhs.com</u>] Sent: 06/05/2016 2:02 PM

To dwillyard

Subject: Professional Research Discount on MHS Product

Hello.

You have been approved for a Professional Research Discount on the MSCEIT for your study entitled The Relationship Between Nurse Leaders' Emotional Intelligence and Nurse Follower's Organizational Commitment and Retention.

This discount grants you 30% off of related product orders over \$50 (before shipping) as well as access to scored datasets for a fee of \$6 per administration using online administration and scoring. Please call client services at 1.800.456.3003 using the following customer number to place your order: XXXX Keep this number on file as you will need it to place future orders with us.

Conditions

- 1) Your discount expires one year from today. If you require a discount beyond the expiry date please re-apply at that point.
- 2) Please bear in mind that scored dataset are to be used for the collection of data <u>only</u> and cannot be used to provide feedback to respondents. If you are intending to provide feedback please ensure that you order one of our available reports. Your 30% discount will apply to the report cost.
- 3) It is mandatory that you are in possession of the Users/Technical Manual while making use of this assessment. Please ensure that you order a copy if you do not already have one.
- 4) Your research is important to us, as agreed upon in your application please remember to send a report of your results to: researchsummaries@mhs.com following the completion of your study.

Administration Instructions

I will send you instructions via email on how to access the online administration and scoring service.

Thank you, and good luck with your research,

ref:

Appendix H

Three Component Model (TCM) of Employee Commitment Survey – Original Version

John P. Meyer and Natalie J. Allen

Department of Psychology

The University of Western Ontario

Instructions

Listed below is a series of statements that represent feelings that individuals might have about the company or organization for which they work. With respect to your own feelings about the particular organization for which you are now working, please indicate the degree of your agreement or disagreement with each statement by circling a number from 1 to 7 using the scale below.

- 1 = strongly disagree
- 2 = disagree
- 3 = slightly disagree
- 4 = undecided
- 5 =slightly agree
- 6 = agree
- 7 = strongly agree

Affective Commitment Scale

- 1) I would be very happy to spend the rest of my career with this organization.
- 2) I enjoy discussing my organization with people outside it.
- 3) I really feel as if this organization's problems are my own.
- 4) I think that I could easily become as attached to another organization as I am to this one. (R)
- 5) I do not feel like 'part of the family' at my organization. (R)
- 6) I do not feel 'emotionally attached' to this organization. (R)
- 7) This organization has a great deal of personal meaning for me.
- 8) I do not feel a strong sense of belonging to my organization. (R)

Continuance Commitment Scale

1) I am not afraid of what might happen if I quit my job without having another one lined up. (R)

- 2) It would be very hard for me to leave my organization right now, even if I wanted to.
- 3) Too much in my life would be disrupted if I decided I wanted to leave my organization now.
- 4) It wouldn't be too costly for me to leave my organization now. (R)
- 5) Right now, staying with my organization is a matter of necessity as much as desire.
- 6) I feel that I have too few options to consider leaving this organization.
- 7) One of the few serious consequences of leaving this organization would be the scarcity of available alternatives.
- 8) One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice -another organization may not match the overall benefits I have here.

Normative Commitment Scale

- 1) I think that people these days move from company to company too often.
- 2) I do not believe that a person must always be loyal to his or her organization. (R)
- 3) Jumping from organization to organization does not seem at all unethical to me. (R)
- 4) One of the major reasons I continue to work for this organization is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.
- 5) If I got another offer for a better job elsewhere I would not feel it was right to leave my organization.
- 6) I was taught to believe in the value of remaining loyal to one's organization.
- 7) Things were better in the days when people stayed with one organization for most of their careers.
- 8) I do not think that wanting to be a 'company man' or 'company woman' is sensible anymore. (R)

Note. (R) indicates a reverse-keyed item. Scores on these items should be reflected (i.e., 1 = 7, 2 = 6, 3 = 5, 4 = 4, 5 = 3, 6 = 2, 7 = 1) before computing scale scores

Note. From TCM Employee Commitment Survey [Academic Users Guide 2004]. Retrieved from http://www.employeecommitment.com/TCM-Employee Commitment-Survey-Academic-Package-2004.pdf. by J. P. Meyer and N. P. Allen, 2004. Copyright 2004 by The University of Western Ontario, London, Canada. Reprinted with permission.

Appendix I

Permissions to use actual Three Component Model of Employee Commitment Survey in Appendix

January 20, 2017 2:55pm

Hi Deb

We have been considering your question, I am sorry it has taken a couple days to get back to you.

We are willing to provide permission for you to include the survey itself in your dissertation on condition that both the source and the granting of permission to reprint be clearly stated.

We suggest the following would be suitable:

"Use of the TCM Employee Commitment Survey, authored by John Meyer and Natalie Allen was made under license from The University of Western Ontario, London, Canada. Its reprinting here is with written permission of the copyright holders and should not be reprinted without permission."

I hope that is acceptable. If you have any further questions, please feel free to contact me.

Kind regards, Jonathan

Jonathan Deeks Business Development Manager WORLDiscoveries® @ Western www.worldiscoveries.ca

Western University 100 Collip Circle, Suite 105 London, ON Canada N6G 4X8 tel: (519) 661-2111 x84594

fax: (519) 850-2528

IRB Approval Letter from Primary IRB of Record



August 1, 2016

Dear Ms. Willyard,

Congratulations! The Institutional Review Board at College of Saint Mary has granted approval of your study titled *The Relationship between Nurse Leaders' Emotional Intelligence and Nurse Followers' Organizational Commitment and Retention.*

Your CSM research approval number is **CSM 1609**. It is important that you include this research number on all correspondence regarding your study. Approval for your study is effective through September 1, 2017. If your research extends beyond that date, please submit a "Change of Protocol/Extension" form which can be found in Appendix B at the end of the College of Saint Mary Application Guidelines posted on the IRB Community site.

Please submit a closing the study form (Appendix C of the IRB Guidebook) when you have completed your study.

Good luck with your research! If you have any questions or I can assist in any way, please feel free to contact me. Sincerely,

Vicky Morgan

Dr. Vicky Morgan
Director of Teaching and Learning Center
Chair, Institutional Review Board * irb@csm.edu

7000 Mercy Road • Omaha, NE 68106-2606 • 402.399.2400 • FAX 402.399.2341 • www.csm.edu

Survey Reminder Email to All Eligible Nursing Follower Participants

Dear Potential Research Contributor:

The purpose of this email is to remind you about the opportunity to participate in a nursing research study to determine possible relationships between emotional intelligence of nursing leaders and the organizational commitment and retention of the nurse followers that report to them. If you have already completed the online survey that was sent to you in a prior email dated______, thank you very much for participating and you can delete this email. If you have not had an opportunity yet to fill out the survey and wish to volunteer to do so, please click on the attached SurveyMonkey® link or copy and paste the entire URL into your browser to access the survey. The survey takes approximately 15 minutes to complete and contains 24 questions with 7 additional demographic questions. Your information will be kept strictly confidential, used only for the purposes of the research study and your participation is voluntary. Study results will be combined with other nursing units' responses. These results will be reported in aggregate form and kept strictly anonymous. The last day to participate in this study is:
_______. The Survey link is:_______. You can click on the link or copy and paste it into your URL. Please note that by clicking on the survey link you are consenting to participating in the study. You may withdraw from the survey at any time by clicking on the exit survey icon.

This research study is the final project in my dissertation journey at the College of Saint Mary in Omaha, Nebraska. I look forward to reporting whether there are any associations identified between nurse leaders' emotional intelligence and the organizational commitment and retention of the nurses that report to them. I thank you for considering participating in this important research. If you have questions or concerns regarding the study or the process in accessing the survey online, or wish to withdraw from the study, please contact me by email at dwillyard91@csm.edu, or phone me at 515-240-5730.

Best regards, Deborah Willyard, Ed.Dc, RN, MSN Doctoral Candidate College of Saint Mary, Omaha, NE.

Appendix M

Survey Reminder Email to All Eligible Nurse Leader Participants

Dear Potential Research Contributor:

The purpose of this email is to remind you about the opportunity to participate in a nursing research study to determine possible relationships between emotional intelligence of nursing leaders and the organizational commitment and retention of the nurse followers that report to them. If you have already completed the online survey that was sent to you in a prior email dated , thank you very much for participating and you can delete this email. If you have not had an opportunity yet to fill out the survey and wish to volunteer to do so, please click on the attached SurveyMonkey® link or copy and paste the entire URL into your browser to access the survey. After answering the 7 demographic questions, please click on the attached link entitled Mayer-Salovey-Caruso Emotional Intelligence Test. The test takes approximately 40 minutes to complete and contains 141 questions. You may withdraw from the survey at any time. Your information will be kept strictly confidential, used only for the purposes of the research study and your participation is voluntary. Your emotional intelligence score will be correlated with the organizational commitment scores of the nurses in your unit. Study results will also be combined with other nursing units' responses. These results will be reported in aggregate form and kept strictly anonymous. The last day to participate in this study is: _____. The SurveyMonkey® link is:_____. The EI link is: You can click on the link or copy and paste it into your URL. By clicking on this link you are consenting to the study. This research study is the final project in my dissertation journey at the College of Saint Mary in Omaha, Nebraska. I look forward to reporting whether there are any associations identified between nurse leaders' emotional intelligence and the organizational commitment and retention of the nurses that report to them. I thank you for considering participating in this important research. If you have questions regarding the study, or would like to receive your EI survey results after the study concludes, please contact me by email at dwillyard91@csm.edu, or phone me at 515-240-5730. Best regards, Deborah Willyard, Ed.Dc, RN, MSN