A QUANTITATIVE STUDY OF MORAL DISTRESS IN VHA NURSES

by

Mary E. Kelly

DELORES CAUTHEN, PhD., Faculty Mentor and Chair

JACKIE HEISLER, PhD., Committee Member

PAULA STECHSCHULTE, PhD., Committee Member

Suzanne C. Holmes, DPA, Dean

School of Public Service Leadership

A Dissertation Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

Capella University

December 2012

© Mary E. Kelly, 2012

Abstract

Ethical issues continue to be an important aspect in the practice of professional nursing. The complexities of nursing practice begin in nursing school and continue throughout a nurse's career. Advances in health-care technology, emphasis on cost-effectiveness, and higher acuity level patients in hospitals lead to ethical conflicts and a phenomenon known as moral distress. Moral distress constitutes a serious problem in nursing practice. Studies regarding moral distress correlate the phenomenon to nurse turnover, intent to leave, burnout, job dissatisfaction, and stress. Moral distress differs from experiencing an ethical dilemma in that moral distress is the inability to do what one considers morally correct due to perceived or actual organizational constraints. The purpose of this non-experimental descriptive correlational quantitative study with convenience sampling was to examine the relationships between the experience of moral distress, the perception of the practice environment, and likelihood of resigning from a clinical position within the Veterans Healthcare Administration (VHA) system. The target population included members of a professional nursing organization. Data was collected utilizing the Moral Distress Scale (MDS) survey instrument, the Practice Environment Scale of the Nursing Workforce Index (PES-NWI), and demographic data. Results showed frequency and intensity of moral distress experienced influenced perception of the practice environment, negatively. Additionally, the intensity and frequency of moral distress experienced as well as perception of the practice environment, did not influence the likelihood of resigning a clinical position.

Dedication

I would like to dedicate this dissertation to my husband, Tim. With his support and encouragement I was able to persevere and complete this milestone in my life. I would also like to thank my son, Carlos, my grandchildren, Connor and Emma, and my daughter-in-law, Amy, for their patience and understanding during this long process. A special thank you goes to my good friend, Betty Gurka, for her friendship and timely encouragement over the past few years.

I also wish that my family in heaven could be here to celebrate this special occasion with me: my mother, Anita, who instilled in me a love of learning, my generous sister, Vicky, who taught me to read at an early age, and my precious daughter, Anamarie, who brought such joy to my life.

Acknowledgments

I would like to thank my mentor, Dr. Delores Cauthen, for her encouragement and support during this long process.

I also would like to thank Dr. Constance Davis, Doctoral Advisor, for the help and encouragement during the challenging periods.

My thanks to Dr. Mary Corley for the use of the moral distress scale instrument.

My special thanks to God for giving me the strength to see this through and giving me a sense of purpose. Through Him, all things are possible.

Table of Contents

List of Tables

List of Figures

CHAPTER 1. INTRODUCTION

Introduction to the Problem

Ethical issues continue to be an important aspect in the practice of professional nursing. The complexities of nursing practice begin in nursing school and continue throughout a nurse's career. Generally, nursing practice standards rely on a Code of Ethics (ANA, 2001) that advocate for the patient. A statement by the American Nurses Association notes, "the context in which nurses now practice has changed and expanded. In addition, many nurses now fill broader roles than those historically performed at the bedside" (para. 1). For example, nurses encounter issues such as end-of-life care, futile care, unnecessary testing, and euthanasia that continue to influence their daily practice (Brzostek, Dekkers, Zalewski, Januszewska, & Górkiewicz, 2008; Corley, 2002; Rice, Rady, Hamrick, Verheijde, & Pendergast, 2008; Thacker, 2008). Changes in the healthcare system continue to evolve affecting nurses. According to the United States Government Accounting Office (GAO; 2001), healthcare services structure, organization, and delivery changed due to increased attention regarding cost-effectiveness and technology. In addition, hospital admissions changed from decreasing in the mid-1980s to the mid-1990s, to increasing between 1995 and 1999. This increase also resulted in higher acuity level patients in the hospitals and less acute patients admitted to nursing homes and community-based care settings (Institute of Medicine, 2000; The Robert Wood Johnson Foundation, 1996). Changes in the practice environment that have resulted in organizations attempting to function efficiently with fewer resources have also affected nurses (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; American Association

of Colleges of Nursing, 2002; Davis, Aroskar, Liaschenko, & Drought, 1997). These changes in the healthcare environment and the practice of nursing may lead to ethical conflicts and a phenomenon known as moral distress.

Moral distress constitutes a serious problem in nursing practice. Research has shown moral distress correlations to nurse turnover, burnout, job dissatisfaction, and stress (Aiken et al., 2002; Cohen & Erickson, 2006; Corley, Elswick, Gorman, & Clor, 2001; Dahlqvist et al., 2007; Elpern, Covert, & Kleinpell, 2005; Goldman & Tabak, 2010; Hart, 2005; Rice et al., 2008; Zuzelo, 2007). Moral distress differs from experiencing an ethical dilemma in that moral distress is the inability to do what one considers morally correct due to perceived or actual organizational constraints (Jameton, 1984). Moral dilemmas are defined as circumstances in which a person must "adopt two (or more) alternative but incompatible actions, such that the person cannot perform all required actions" (Beauchamp & Childress, 2009, pp. 10-11). In addition, the demand for registered nurses (RNs) is projected to increase 41% between 2000 and 2020 (DHHS, 2002). With the issue of the current and projected nursing shortage, strategies become necessary to retain every RN possible. Therefore the topic of moral distress is worthy of investigation due to the effects that moral distress can have on job dissatisfaction, job turnover, nurse attrition, burnout, stress, and ultimately the impact on patients.

Background of the Study

Prior to identifying moral distress in the nursing profession, role conflict (House & Rizzo, 1972) was recognized as causing stress in managers of organizations. Research by Rokeach (1973) explored how values held by a person motivate behavior. The topic

of moral distress in the profession of nursing emerged in the literature as early as 1984 when Jameton (1984) defined the concept. As mentioned previously, moral distress occurs as a reaction to the inability to perform the perceived right moral action. In other words, in the profession of nursing, the inability to act on one's own values may result in stress. Jameton (1993) later identified moral distress as a two-step process of initial and reactive distress. Jameton notes, "Initial distress involves the feelings of frustration, anger, and anxiety people experience when faced with institutional obstacles and conflict with others about values" (p. 544). The author then defines reactive distress as "the distress that people feel when they do not act upon their initial distress" (p. 544).

The development of the Moral Distress Scale (MDS; Corley et al., 2001) aided in measuring moral problems that confront nurses leading to the occurrence of moral distress. This in turn tested the theory of moral distress. Specifically, the scale was created to provide data to "report on the relationships between moral distress and a nurse's background, work experience, and history of employment resignation" (p. 251). Findings from research data gathered from 1994-1997 prompted the researchers to recommend further research on interventions to reduce moral distress as well as a measure of moral distress regarding nurse autonomy, job stress, job satisfaction, and intent to leave. The authors noted that the reduction of moral distress should be given a priority because of the influence the experience may have on nurse resignation and the importance of supporting ethical practice in nursing.

In addition, Corley's (2002) proposed theory of moral distress and research agenda discussion recommends research to identify factors predicting moral distress and to clarify relationships among moral distress, nurse stress, and job dissatisfaction. Corley

notes the need for longitudinal studies to aid in discovering the factors precipitating moral distress that result in nurse resignation. The author also suggests studies that seek to discover the impact of moral distress on patients, incidence of moral distress in different work settings and times, and "preventative solutions, including education, continuing educations and interventions in the work environment" (p. 648).

Many studies of moral distress have focused on intensive care unit (ICU) nurses involved with end-of-life and futile care issues (Cohen & Erickson, 2006; Corley, 2002; Erlen & Sereika, 1997; Zuzelo, 2007). As health-care practices change, new medical situations require experience with ethical decision-making outside of the intensive care units. For example, palliative care in hospitals is on the rise, patients previously sent to the ICU remain on the medical floors, and procedures performed in the operating room occur at the bedside (Brzostek et al, 2008; Erlen & Sereika, 1997).

Knowledge of the extent of moral distress experienced by nurses outside of the ICU setting remains unknown. One comprehensive literature review conducted by Schluter, Winch, Holzhauser, and Henderson (2008) notes no substantial research data exists to definitively state moral distress causes nurses to leave a workplace or the profession. Common sense links moral distress with nurse turnover but, methodologically sound data is needed. Information regarding the experience is essential to determine if and what will support nurse retention, quality of care, and nurse satisfaction.

Statement of the Problem

The problem of moral distress, defined as the "ethically appropriate course of action is known but cannot be taken" (Elpern et al., 2005, p. 523), affects many variables including job satisfaction and retention. The American Association of Critical-Care Nurses (AACN; 2008) defines moral distress in the association policy position statement as "you know the ethically appropriate action to take, but are unable to act upon it", and "you act in a manner contrary to your personal and professional values, which undermines your integrity and authenticity" (p. 1). The AACN policy position notes, "Moral distress is a serious problem in nursing. It results in significant physical and emotional stress, which contributes to nurses' feelings of loss of integrity and dissatisfaction with their work environment" (p. 1). The position statement also notes the negative effect moral distress has on nurses remaining in the nursing profession or workplace, quality of patient relationships, and cost of nursing care. Even though much research has been done in the private and public sectors, no research has been found specifically regarding RNs in the Veterans Healthcare Administration (VHA) regarding moral distress. Since the purpose of dissertations is to produce new significant knowledge that increases our understanding about a problem, it was determined to be useful to know the relation of the experience of moral distress to the perception of practice environment as well as the likelihood of resigning from a clinical position in the VHA system. Therefore, the research problem concerned the lack of knowledge regarding the phenomenon of moral distress in the VHA system.

Purpose of the Study

The purpose of this non-experimental descriptive correlational quantitative study with convenience sampling was to determine the relationships between the experience of moral distress in the professional RN, the perceived practice environment, and the likelihood of resigning from a clinical position within the VHA system.

Research Questions

As noted previously, this quantitative study sought to discover the relationships of moral distress, the perceived practice environment, and the likelihood of resigning. The following five research questions guided this study:

RQ1: To what extent does the intensity of moral distress experienced by registered nurses influence their perception of the practice environment?

RQ2: To what extent does the frequency of moral distress experienced by registered nurses influence the perception of the practice environment?

RQ3: To what extent does the intensity of moral distress experienced by registered nurses influence their likelihood of resigning?

RQ4: To what extent does the frequency of moral distress experienced by registered nurses influence their likelihood of resigning?

RQ5: To what extent does the registered nurse's perception of the practice environment influence their likelihood of resigning?

The five hypotheses tested included:

H10: The intensity of moral distress experienced by registered nurses does not influence their perception of the practice environment.

H1A: The intensity of moral distress experienced by registered nurses does influence their perception of the practice environment.

H20: The frequency of moral distress experienced by registered nurses does not influence their perception of the practice environment.

H2A: The frequency of moral distress experienced by registered nurses does influence their perception of the practice environment.

H30: The intensity of moral distress experienced by registered nurses does not influence their likelihood of resigning.

H3A: The intensity of moral distress experienced by registered nurses does influence their likelihood of resigning.

H40: The frequency of moral distress experienced by registered nurses does not influence their likelihood of resigning.

H4A: The frequency of moral distress experienced by registered nurses does influence their likelihood of resigning.

H50: The registered nurse's perception of the practice environment does not influence their likelihood of resigning.

H5A: The registered nurse's perception of the practice environment does influence their likelihood of resigning.

Significance of the Study

Rationale for this study included the lack of available research regarding the professional nurse, the incidence of moral distress experienced, the perceived practice environment, and the likelihood of resigning from a clinical position as an RN. The topic

of moral distress is an important concept in the practice of professional nursing. Registered nurses as a professional group experience moral and ethical situations on a routine basis (Corley, 2002; Fairchild, 2010). Problems occur when nursing staff must deal with everyday ethical decisions and experiences that constitute moral distress (Sporrong, Höglund, & Arnetz, 2006; Tschudin, 2006).

Nursing theorists (Davis et al., 1997; Uustal, 1993; Watson, 2008) note ethical obligations of the nursing profession are ultimately geared toward the patient. Other nursing theorists, such as Corley (2001), regard the practice of nursing being viewed as fundamentally ethical with moral standards that permeate all aspects of patient care. One qualitative study by Lindh, Severinsson, and Berg (2009) notes that moral strength is needed to provide good nursing care by "having the courage to act on one's convictions", "being attentive and recognizing vulnerability", and "facing the unpredictable" (p. 1885). As noted previously, nurses face ethical problems resulting from expanding roles, technology, diagnostic equipment, treatments, and procedures. Ethical issues such as end-of-life-care (Thacker, 2008), chronic illness and death (Erlen & Sereika, 1997), and euthanasia (Berghs, Dierckx, De Bal, de Casterlé, & Gastmans, 2004; Brzostek et al., 2008), produce a wide range of perceptions and practice depending on the culture, education, and age of nurses.

Little is known about the professional RN experience of moral distress outside of the ICUs. The current quantitative descriptive correlational research study has relevance in the field of public service leadership because it sought to gain knowledge of a phenomenon that has been shown to influence nurse burnout, retention, loss of self-worth, interdisciplinary team relationships, physical symptoms, behavioral

manifestations, and psychological effects (Deady & McCarthy, 2010; Elpern et al., 2005; Sourdif, 2004; Torjuul & Sorlie, 2006). In addition, Valentine (2007; Foglia, Pearlman, Bottrell, Altemose, & Fox, 2009) notes hospital leadership is responsible for creating a culture that reflects an atmosphere of trust, respect, communication and accountability. In order to improve job retention and nurse job satisfaction, it is the role of nursing leadership to eliminate barriers in the healthcare workplace.

Concern for quality of patient care and patient safety has been linked to nurse satisfaction and job turnover as well (Lucero, Lake, & Aiken, 2009). In one systematic review conducted by the Association of Healthcare Quality Research (Kane, Shamliyan, Mueller, Duval, & Wilt, 2007), results showed that the quality of patient care may be threatened due to shortages of registered nurses that lead to increased workload for the remaining nurses. Due to these findings, recommendations have been made to increase nurse to patient ratios as a means to improve patient safety. In addition, some evidence suggests healthcare organization commitment to high quality of care as well as a stable nursing workforce “leads to better patient outcomes, patient satisfaction with overall and nursing care, and nurse satisfaction with job and provided care" (p. 12).

Knowledge of the incidence of moral distress in relation to the perceived practice environment sought to explain and predict where gaps exist as well as generalize to other persons and places (Leedy & Ormrod, 2004), which adds to scholarship and practice. This new knowledge will be beneficial to healthcare leaders in order to implement workforce strategies to retain nurses, reduce the cost of turnover, and ultimately influence the quality of patient care. The current quantitative study was meant to aid VHA RNs by educating them on what constitutes moral distress, the research process, and, through that

process, learn more about themselves. By identifying the frequency and intensity of moral distress, recommendations were made regarding interventions to deal with or prevent the incidence of moral distress in the healthcare workplace.

In addition, this quantitative study will add to the body of knowledge that other researchers in the field have recommended. For example, Sporrong et al. (2006; Pauly, Varcoe, Storch, & Newton, 2009) noted that moral distress needed to be identified in various workplaces and interventions implemented and assessed for providing prevention of moral distress and decrease in the incidence of moral distress. Similarly, Gutierrez (2005) emphasized the need for further research of this phenomenon. This also included the similar recommendations that Sporrong et al. made as well as regarding the need for further research of the "effects of moral distress on patient care, including determining if a correlation exits between moral distress and nurses euthanizing and hastening patient's deaths" (p. 240). Rice et al. (2008) recommend further research regarding the older and more experienced nurse to determine if moral distress contributes to that category of nurses leaving medical and surgical bedside nursing. Similarities can be found in other health-care professionals as well. In one study (O'Donnell, et al., 2008), found health-care social workers experienced the phenomenon of moral distress and recommended further study. Finally, the current research study has made additional recommendations in Chapter 5 for further research according to the findings.

Definition of Terms

The following section addresses the terms and definitions from other research and literature that were utilized in this study.

Burnout. Burnout is defined as a psychological syndrome resulting from excessive stress reactions to the healthcare work environment and produces "an overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and lack of accomplishment" (Leiter & Maslach, 2009, p. 332).

Ethical climate. Ethical climate is defined as the "organizational conditions and practices that affect the way difficult patient care problems, with ethical implications, are discussed and decided" (Hart, 2005, p. 174).

Ethical decision-making. Ethical decision-making by nurses is a deliberative process requiring the nurse to identify and to evaluate alternative actions and consequences in order to determine what they ought to do (Erlen & Sereika, 1997, p. 954).

Ethical or moral dilemma. Ethical or moral dilemma is defined as a situation involving the conflict of "values or beliefs about what is the right or best course of action" (Cohen & Erickson, 2006, p. 776).

Ethical sensitivity. Ethical sensitivity is defined as the RNs ability "to be aware and interpret verbal and non-verbal clues and behaviors in order to identify client needs" (Schluter et al., 2008, p. 306).

Intent to stay. Intent to stay is defined as the likelihood of individuals maintaining continued membership in a particular organization (Price & Mueller, 1981).

Job satisfaction. Job satisfaction is defined as the positive or affective orientation an individual has regarding the work being performed (Price, 2001).

Moral agent. Moral agent is defined as the RN who assumes the role by virtue of the profession and "is capable of making moral judgments about the rightness and

wrongness of actions" and "has the motives that can be judged morally" (Beauchamp & Childress, 2009, p. 74).

Moral courage. Moral courage is defined as the "individual's capacity to overcome fear and stand up for his/her core values" (Lachman, 2007, p. 131).

Moral distress. Moral distress is defined as a dependent variable that will utilize the Corley Moral Distress Scale (Corley et al., 2001) to measure the frequency and level of the powerless feeling occurring because the "ethically appropriate course of action is known but cannot be taken" (Elpern et al., 2005, p. 523). Interval data will be gathered utilizing a 7-point Likert scale.

Moral residue. Moral residue is defined as continued feelings of guilt and inadequacy resulting from the inability to follow through on "what should have been done, but was not, owing to a lack of power or resources" (Schluter et al., 2008, p. 307).

Nurse satisfaction. Nurse satisfaction is the opinion of nurses, either positive or negative, about their nursing position "in terms of pay, reward, administration style, professional status, and interaction with colleagues" (Kane et al., 2007, p. 15).

Practice environment. The practice environment is an independent variable that will be measured utilizing the Practice Environment Scale of the Nursing work Index (PES-NWI) instrument developed by Lake (2002) and is utilized by The Joint Commission (2009) to assess and collect data regarding the perceived hospital work environment. Interval data will be gathered utilizing a 4-point Likert scale.

Operational definitions include the two survey instruments defined above, the MDS and the PES-NWI, and one single-item question regarding the likelihood of resigning a nursing position.

Assumptions and Limitations

As noted previously, the practice of nursing consists of moral standards and ethical behavior that is expected in all aspects of patient care (Corley, 2002). Assumptions that affected the study and the phenomenon of moral distress included (a) nurses encounter ethical situations frequently, (b) nurses are considerably affected by ethical issues, (c) nurses have difficulty resolving moral problems in the work place, (d) the perceived practice environment plays a role in the phenomenon of moral distress, (e) the likelihood of leaving a clinical position could be correlated to moral distress frequency and intensity, and (f) the likelihood of leaving a clinical position could be correlated to the perception of the practice environment. These ontological assumptions, known as the study of categories of things that exist or may exist in some domain (Fuchs, 1993); can be found in the definition of logical positivism (Benton & Craib, 2001). The authors note that logical positivism claims two sources of knowledge exist, including knowledge gained through logical reasoning, and knowledge gained through observation and testing of hypothesis through adherence of scientific laws.

Current study assumptions were based on research conducted by Corley et al. (2001) through scientific testing of the theory of moral distress utilizing the MDS questionnaire. Axiological assumptions, meaning the study of the nature of values and value judgments, of the study were studied in an objective manner utilizing the MDS. The researcher assumed the Corley MDS would measure the intensity or level of disturbance and frequency of moral distress of the sample population of RNs surveyed.

Additionally, regarding the assumptions, the researcher assumed that all RNs in spite of age, education, race, and area of practice, experience some form of moral distress

during their professional nursing career. The common sense view links moral distress of RNs with dissatisfaction and nurse turnover. Therefore, the researcher assumed the response regarding the likelihood of resigning from a clinical position would have a positive correlation to the phenomenon of moral distress. The researcher also assumed the Corley MDS would measure the intensity and frequency of moral distress of the sample population and the relation to the perceived practice environment. Finally, the researcher assumed the likelihood of resigning from a clinical position would have a positive correlation to the perception of moral distress but a negative correlation to the perception of the practice environment.

Limitations of the study included the use of only RNs who are members of a particular professional nursing organization. Therefore, the moral distress experience of frequency and intensity might not be similar for RNs not belonging to this particular professional nursing organization or nurses employed by other healthcare organizations than the VHA. Additionally, the results might not generalize to another group of RNs with different demographic characteristics of age, race, years of nursing practice, education level, and area worked. Thus, external validity and generalizability may be limited. Furthermore, the survey instrument may have listed limited clinical situations that do not necessarily reflect the variety of experiences of the nurses regarding moral distress. The study did not collect data regarding other personal ethical experiences outside of the work environment. Then too, the study was limited to RNs who have computer access and could participate online utilizing the SurveyMonkey internet questionnaire option. Low response rates as well as dishonesty in responding to the questions may have constituted other limitations. In spite of these limitations, the

research questions were addressed and the ability to draw conclusions from the findings was not limited.

Nature of the Study

The current research was conducted with a non-experimental descriptive correlational quantitative design approach with convenience sampling to obtain data regarding moral distress experienced. The convenience sample consisted of RNs who are members of professional nursing organization and employed by the VHA system. The quantitative approach was appropriate due to the desire to empirically measure moral distress objectively. The theory of moral distress (Corley et al., 2001) was the theoretical foundation of the study. A correlational design that was cross-sectional (Leedy & Ormrod, 2004) provided statistical data regarding relationships between the variables of moral distress, the perceived practice environment, and the likelihood of resigning from a clinical position.

The intent of this study was not to show causal relationships but correlations. The topic was clear and easily surveyed with the valid survey tools known as the Moral Distress Scale (MDS; Corley et al., 2001) and the Practice Environment Scale of the Nursing Work Index (PES-NWI; Lake, 2002; The Joint Commission, 2009). The survey was accessed through an online survey service called SurveyMonkey. A 7-point Likert scale measured the frequency and intensity of RN moral distress. The PES-NWI utilized a 4-point Likert scale regarding factors in the perceived practice environment. The single-item question regarding the likelihood of resigning from a clinical position utilized a 10-point Likert scale. The population consisted of registered nurses employed by the

VHA with a convenience sample of RNs who are members of a specific professional nursing organization.

Chapter Summary

Due to changes related to the healthcare environment and the profession of nursing, the possibility of ethical conflicts in the workplace have increased. Moral distress has been identified in research as a phenomenon that occurs when it is felt there is an inability to perform the right action. Studies have shown the effects of moral distress on job dissatisfaction, attrition, job turnover, burnout, and stress on nurses. The purpose of this study was to determine the relationship of moral distress experienced by professional RNs who are members of a professional nursing organization, the perceived practice environment, and the likelihood of resigning a clinical position.

Organization of the Remainder of the Study

Chapter 2 contains the theoretical framework and model for the study as well as a review of literature on moral distress in nursing, perceived practice environment, and intent to leave from the workplace. Evaluation of viable research designs and conceptual debates regarding moral distress will also be discussed.

Chapter 3 includes an overview of the methodology that guided the study. This includes the planned sources of the data, characteristics of the proposed study participants, instrumentation, data collections procedures, and data analysis techniques. Procedures for the protection of human subjects are also presented. Finally, limitations

of the methodology will be discussed as well as strategies to minimize the impact of the identified limitations.

CHAPTER 2. LITERATURE REVIEW

Introduction to the Literature Review

Extensive research regarding moral distress in registered nursing continues to contain a gap in knowledge. The purpose of this non-experimental descriptive correlational quantitative study with a convenience sampling was to determine the frequency and level of moral distress experienced in the practice of professional nursing, the perceived practice environment, and the likelihood of resigning from a clinical position. A theoretical framework based on the phenomenon of moral distress reflects the problems found when this concept is encountered. The following review of the literature provides discussion of the current research regarding three themes of moral distress, perceived practice environment, and intent to leave or job turnover.

First, research and literature presented on the theory of moral distress (Corley, 2002; Corley et al., 2001; Cohen & Erickson, 2006; Elpern et al., 2005; Rice et al., 2008; Zuzelo, 2007) provides the foundation for the research design. The concept of moral distress, defined as a painful emotion that occurs in response to the inability to act according to one's values due to some kind of constraint, occurs in all areas of clinical nursing. Second, the perceived practice environment that includes professional support and making decisions about patient care responsibilities has been found to attract and retain a qualified workforce (Li et al., 2007). Third, the issue of leaving or considering quitting a clinical position and job turnover for nurses contributes to the problem of the nursing shortage (Erlen, 2004; Kane et al., 2007; Mrayyan, 2008; Takase, Maude, &

Manias, 2005) and is influenced by moral distress (Bowles & Candela, 2005; Ruggiero, 2005).

The literature search process consisted of accessing the Academic Complete database through the university library, Google Scholar, and Pub Med database. Search terms included moral distress, moral problems, moral integrity, moral conflict, moral courage, moral development, ethics, ethical dilemma, ethical distress, ethics survey, nursing ethics, values, workplace distress, nurse retention, nurse job turnover, nurse dissatisfaction, burnout, intent to leave, intent to stay, nursing shortage, magnet hospitals, conscience, transcultural, ethnonursing, ethical concerns, cultural values, end-of-life nursing care, palliative care, practice environment, nursing work index, bioethics, stress, nursing, nurse decision making, critical care, futile care, organizational climate, and ethical climate.

Theoretical Framework

Moral Distress

Moral distress in nursing was recognized in studies conducted as far back as 1984 (Corley et al., 2001). Prior to that time research conducted on nurse job satisfaction, job turnover, and burnout attributed these phenomena to stress. It was not until Jameton (as cited in Corley et al., 2001) identified the term moral distress as a concept that it was defined as an ethical disequilibrium and not just stress. Sporrong et al. (2006) defined moral distress as knowing the moral path to take but not being able to because of institutional constraints. In other words, the nurse knows the right action to take but cannot act because of internal or external forces. The nurse experiences physical or

emotional symptoms that may affect them professionally, socially, or spiritually (Pendry, 2007). Nurses describe symptoms of anguish, tearfulness, sleeplessness, headaches, frustration, powerlessness, and insecurity (Laabs, 2007; Pendry, 2007) when confronted with what they view as ethical problems.

The underlying concepts of the theory of moral distress include nursing as a moral profession with nurses as moral agents. The moral concepts of the theory encompass commitment, sensitivity, autonomy, sense making, judgment, conflict, competency, and certainty. Moral concepts lead to a moral intent to act and end in positive outcomes for nurses. Utilization of moral courage and moral comportment that empowers nurses to become whistleblowers when ethical conflicts arise, ultimately leads to moral comfort. When the moral concepts previously mentioned are thwarted, moral distress, moral suffering, and moral residue result. Each concept has the potential to impact the patient, nurse, or organization. The impact on the patient results in the lack of patient advocacy as well as avoidance by the nurse. This leads to increased patient discomfort and suffering. Suffering also impacts the nurse resulting in resignation, burnout, or leaving the profession of nursing altogether. The final impact is on the organization in three areas. First, the high nurse turnover leads to difficulty recruiting. The second and third issues of impact on the organization lead to decreased quality of care and low patient satisfaction. These may result in poor reputation and problems with accreditation for the organization (AACN, 2008; Corley, 2002).

It can be said that the world view of the goal of the practice of nursing is to behave ethically and to advocate for the patient (Jormsri, Kunaviktikul, Ketefian, & Chaowalit, 2005; Lachman, 2010; Nortvedt, 2001). Episodes of moral distress result

from obstructing the process of caring for patients, obstructing the safeguarding of patients from harm, and obstructing the provision of a healing environment by the nurse (Corley, 2002). The author contends challenges exist in the form of nursing education and nurse staffing. Nursing education requires more than the teaching of ethical principles such as beneficence, justice, patient autonomy, and nonmaleficence. Novice and experienced nurses have need of new strategies to manage ethical difficulties in the workplace. The challenge in terms of nurse staffing refers to nurses leaving nursing altogether, resignations, and burnout. Corley notes this is an issue in other countries as well as America.

Cultural values also represent a variable in the theory of moral distress. Cultural diversity continues to rise in the US. The European American majority dramatically shifted over the last 20 years (Yarbrough & Klotz, 2007). It is estimated that "1 in 11 residents of the US is foreign born" (p. 493). The authors note that by the year 2020, racial and ethnic minorities will rise to almost 40%. The changing demographics reflect across the whole country. The nursing population nationwide is the largest group of health-care workers. For example, in Texas, fewer than 60% of the nursing graduates were *White* women illustrating the majority-minority population in Texas rose making it the fourth ranking state with that designation. The authors note for this reason the composition of the nursing workforce will change over the next few years due to the increase in cultural and racial diversity. The diversity of the student body consequently reflects the future of the nursing community. Because nursing values and ethical beliefs in the US stem from the western belief system, a move toward cultural sensitivity is in order (Spangler, 1992). Western values and culture also are the foundation of the

American Nurses Association Code for nurses. Orr (as cited in Yarbrough & Klotz, 2007) recommends a change in the teaching of ethical principles. The author presents a scenario in which the professional clinician and the patient hold completely different perspectives and expectations in a given situation. A code of ethics and a state nurse practice act guide self-regulation by nurses in this country but may not correspond to the values and ethical training of foreign-born nurses. With the current discussion on diversity in cultural values, it stands to follow, ethical issues in nursing practice risk turning into moral distress. When moral conflict occurs, the role of hospital leadership is to consider the causes. Suggestions regarding warding off moral distress in nurses include implementing shared governance, increased autonomy for professional RNs, improved staffing, better working hours, stress reduction programs, education about moral distress, work-site interventional programs, cultural sensitivity training, fostering nurse-physician collaboration, providing a counselor at the unit level, and, finally, inclusion of staff nurses on hospital ethics committees.

Practice Environment

As noted previously, the healthcare environment has changed dramatically over the past thirty years and one issue that continues to plague organizations is the nursing shortage (DHHS, 2002; USGAO, 2001). This has led to studying the practice environment of nurses (AACN, 2002) to determine the root of the problem (Erickson et al., 2004; Lake & Friese, 2003; Sovie, 1984). In 1981, the governing council of the American Academy of Nursing appointed the Task Force on Nursing Practice in Hospitals to study nursing recruitment and retention at that time (McClure, Poulin, Sovie, & Wandelt, 2002). Successful hospitals were rated highly in administration, professional

practice, and professional development. Hospitals were evaluated for their ability to attract and retain RNs by having low turnover rates and low vacancy rates; being located in geographic areas with significant competition for nursing services, and were hospitals that nurses would recommend to their colleagues. This was the beginning of the magnet hospital concept. The Nursing Work Index was the first multidimensional measure of the perceptions of the professional practice environment that utilized the organizational traits reported in the original magnet hospital study (AHRQ, 2007; Erickson et al., 2004; Kramer & Hafner, 1989). Kramer and Hafner developed a 65-item scale to measure organizational traits characteristic of the professional work environment that utilized a 4-point Likert scale ranging from 4 (*strongly agree*) to 1 (*strongly disagree*). Nurses rated the presence of the items in their current workplace and importance. Findings resulted in a job satisfaction score and quality of patient care score. The NWI has been revised over the years (Aiken & Patrician, 2000; Havens, 2001; Moorer, Meterko, Alt-White, & Sullivan, 2010) and now includes the PES-NWI (Lake, 2002; The Joint Commission, 2009).

Along these lines, in the late 1990s, an extensive practice environment study known as the International Hospital Outcomes Study (IHOS; Clarke & Aiken, 2008) began with teams located in the USA, Canada, England, Scotland, Germany, and New Zealand collecting data regarding patient and nurse outcomes. This study has expanded to include many more countries and themes have expanded to include staffing, work environments, nurse shortages, quality of care concerns, rationing of nurses, nurse migration, regionalization of care, and global trends in healthcare organizations. Three types of data have been collected over the years. First, hospital nurses involved in direct

patient care were surveyed regarding working conditions, work-related experiences, and assessments of quality of care. Second, governmental data was obtained regarding size of hospitals, types of technology, structural statistics, and general descriptive hospital characteristics. The third type of data concerns information about the outcomes of hospital patients. One survey tool that has been instrumental to the IHOS is the Nursing Work Index-Revised. It includes questions about factors that are important for nurse job satisfaction and professional practice. Clark and Aiken note that the tool is powerful in that it has been psychometrically validated with internally consistent scales "that quantify the quality of practice environments for nurses beyond staffing in a way that had never been possible previously" (pp. 3319-3320). Some of the studies utilizing the PES-NWI include comparing the nursing perceptions of the practice environment in mental health and medical-surgical settings (Roche & Duffield, 2010), freestanding hemodialysis facilities (Thomas-Hawkins, Denno, Currier, & Wick, 2000), adding a nursing information technology subscale (Moorer et al., 2010), measuring nursing practice in the VHA (Li et al., 2007), critical thinking of nurse managers related to staff RN perceptions of the practice environment (Zori, Nosek, & Musil, 2010), validation of the scale (Halcomb, Davidson, Caldwell, Salamonson, & Rolley, 2010), variation in quality of care (Lucero et al., 2009; Patrician, Shang, & Lake, 2010), staffing (Lake & Friese, 2003), and comparisons to magnet hospitals (Flynn & McCarthy, 2008; Middleton, Griffiths, Fernandez, & Smith, 2008).

Intent to Leave/Job Turnover

Pendry (2007) notes the concept of job turnover due to moral distress requires consideration. Interestingly, the recently approved term of moral distress became an official nursing diagnosis in the care of patients. In other words, nurses are taught to recognize the symptoms of moral distress of patients in their care and provide them with opportunities to reduce the phenomenon. Yet, conversely, nurses do not recognize the symptoms mentioned earlier as their own moral distress. Pendry cited studies that reported the reason for resignation was due to moral distress. Another study reported 15% of the nurses attributed resigning due to moral distress (Corley as cited in Pendry). Other studies reported nearly 23% planned to resign within the first year and Aiken (as cited in Pendry) noted this increased to 33% for nurses under the age of 30 years. However, the last two studies mentioned only reported the intent to resign and not actual resignations.

Goldman and Tabak (2010) note the influence of ethical climate on nurse job satisfaction. The authors caution that negative perceptions regarding the organization ethical climate may lead to job turnover. As noted previously in the conceptual framework of the theory of moral distress, the impact on nurses results in resignation or intent to resign, burnout, and leaving the profession of nursing (Corley, 2002). This perpetuates the problem of the nursing shortage and becomes a no-win situation.

Erlen (2004) contends the more nurses experience moral distress, remain in the job, and complain, the more difficult it is to recruit and retain new nurses. The author contends that the organizational environment requires change to resolve the issues of moral distress. Therefore, it is simplistic to think the hiring of more nurses is the answer.

According to Erlen, a reenvisioning of the nursing profession to recreate the role of advocate and moral agent is required to eliminate moral distress.

In conclusion, this current study did seek to test the theory of moral distress by utilizing the Moral Distress Scale. Additionally, findings did provide information regarding the relationship between moral distress frequency and intensity, perceived practice environment, and the likelihood of resigning from a clinical position.

Crucial Theoretical Debates

In reviewing the published research conducted on moral distress in nursing, it was found that it fails to address the possibility that the perceived practice environment may cause additional conflict (Brzostek et al., 2008; Doutrich, Wros, Izumi, 2001 & 2006; Thacker, 2008; Wros, Doutrich, & Izumi, 2004). Controversy exists in the literature regarding the influence of moral distress on job turnover, burnout, or leaving the profession and the perceived practice environment. In order to bridge the gap, the current study attempted to extend the knowledge by determining if there is a relationship in the frequency and level of moral distress experienced by nurses, the perceived practice environment, and the likelihood of resigning from a clinical position in a healthcare system.

Review of the Critical Literature

Research on nursing and problems encountered in ethical decision making presents much information on the theory of moral distress. Themes that surfaced included issues with intent to leave, job turnover and the perceived practice environment

of nurses. A critical review of the literature is presented and evaluated the credibility, efficacy, and generalizability of current research. Additionally, the literature presented for each theme has been summarized, synthesized, and discussed to elucidate how each theme supported and justified the need for the current study.

Moral Distress

The majority of literature and research regarding nursing and ethical problems mentions the phenomenon of moral distress. In one quantitative study measuring moral distress experienced, Corley et al. (2001) evaluated the moral distress scale instrument from 1994 to 1997. The instrument had been developed to measure moral concepts in nursing. The scale combined concepts from three theories: (a) House and Rizzo's role conflict theory, (b) Rokeach's theory on values and value systems, and (c) Jameton's conceptualization of moral distress. The study was based on the three assumptions that nurses bring values to work, can identify ethical problems, and can evaluate the cause of moral distress. Instrument development and testing included domain identification, content analysis, content validity, and test-retest. A convenience sample of 214 nurses completed the survey of 32 items. The authors noted the results of the study showed high reliability in the area of role conflict and probably reflects redundancy of the items. One disturbing result showed the nurse characteristics did not predict moral distress or previous resignations because of moral distress. Even though none of the factors scored a high current mean level, 15% of the sample reported resigning a position due to moral distress. The conclusion was that the instrument is appropriate for measuring moral distress but further testing is needed. The second study methodology is in contrast to the first.

A qualitative study done by Gutierrez (2005) utilized an open-ended guided interview instrument to increase understanding of moral distress in the experience of 12 critical care nurses. Three moral concepts addressed included moral conflict, moral judgment, and moral action. The nurses identified 14 constraints for moral action that led to moral distress. Effects of moral distress described by the nurses included emotional, physical, social, professional issues. Responses of interest to support conducting the current study were the reluctance to come to work and mention of leaving the job. The authors concluded with recommendations to aid in dealing with the moral distress of nurses and the need for continued research. Some areas for continued research mentioned by the authors include delineating predicting factors, assessing efficacy of interventions to reduce or prevent moral distress, and detailing effects on patient care.

Hamric and Blackhall (2007) utilized a shortened version of the MDS survey in one study that reduced the items to 21 and reduced the Likert scale from 7 to 5 items that ranged from 0 (*never occurred/not distressing*) to 4 (*occurred very frequently/greatly distressing*). To give a more accurate reflection of moral distress, items that were rarely experienced or not distressing were eliminated from the scale. The descriptive 2-site pilot study explored the perspectives of 196 RNs and 29 attending physicians on caring for patients in fourteen intensive care units. These perspectives included relationships among moral distress, ethical climate, physician/nurse collaboration, and satisfaction with quality of care. Three questions regarding quitting a clinical position remained the same as the original scale. Cronbach alpha internal consistency reliability used in the analysis was .83. Results showed overall the RNs experienced more moral distress and lower collaboration, perceived a more negative ethical environment, and were less satisfied

with the quality of care provided on their units than the physicians. Recommendations by the authors included engaging in explicit discussions of moral distress, recognition of differences in nurse/physician values, and improving collaboration.

Perceptions of RNs regarding moral distress and ethical climate were studied by Pauly et al. (2009). The MDS and the Hospital Ethical Climate Survey (HECS) were utilized in a cross-sectional study as well as three open-ended qualitative questions relating to moral distress. A random list of 1700 RNs received the survey and 374 (22%) returned the survey. Intensity and frequency of moral distress were measured by the MDS. Findings showed the moral distress intensity mean was 3.88 on a scale of 0-6 and a range of 0-5-95 (*SD* = 1.069). The highest intensity (4.63) related to working with levels of RN staffing that was considered unsafe by the study participant. Midpoint of 3 was seen as medium intensity and involved the two items that stated give medication intravenously during a Code with no compressions or intubation and ask the patient's family about donating organs when the patient's death is inevitable. Mean moral distress frequency was 1.31 with a range of 0-4.39 (*SD* = 0.722). The top frequency item (mean frequency 2.78) corresponded to the top intensity item that referred to working with levels of RN staffing that the study participant considered unsafe. The HECS mean score was 3.48 (*SD* + 0.612) on a scale of 1-5 with a range of 1.73-4.96. The HECS scores were negatively correlated to the MDS scores indicating a more positive ethical climate results in less intense reports of moral distress. Only the peer factor of the HECS did not significantly correlate with moral distress intensity. This led the authors to conclude that there are multiple dimensions and complex relationships between the experience of moral distress and the elements of the ethical climate.

Zuzelo (2007) also utilized both the MDS and open-ended questions to explore the moral distress of 100 RNs. The items (32) were scored from 0 to 6. The three factors revealed through factor analysis include individual responsibility, not in patients' best interest, and deception. Total variance (19.38%) and internal consistency was established using a theta test (0.96 for the entire instrument). Results revealed moral distress experienced by nurses occurred in a variety of settings. As noted in the previously mentioned study conducted by Pauly et al. (2009), the most morally distressing event identified by study participants was working with levels of nursing staff perceived to be unsafe. In the Zuzelo study, items with high intensity but low frequency included working with incompetent providers and following prescribed medication regimens that were ineffective. Items with high frequency and high intensity included following family wishes to continue life support even though the patient's best interests were not served and carrying out physician's orders for unnecessary tests and treatments. Additionally, nurses reported little or no formal ethics education. This is a significant finding that supports the final recommendations of the current study. Lack of education in ethics adds to the possibility of moral distress. The credibility of all of the studies reviewed stems from the fact that all nurses experienced some level of moral distress. The generalizability may apply as well for the same reason.

Issues such as end-of life care (Thacker, 2008), chronic illness and death, euthanasia (Brzostek et al., 2008), and job perceptions of international nurses (Hayne, Gerhardt, & Davis, 2009) involve nurses of numerous cultures as well. These studies have produced a wide range of perceptions and practice depending on the culture, education, and age of nurses. For example, one study by Doutrich et al. (2001) showed

similarities and differences in ethical concerns for nurses. Interviews conducted presented data on beliefs, values, and practices of Japanese nurses. Then ethical concerns of Japanese nurses were compared to those of American nurse's from a previous study. Similarities of ethical concerns included relief of patient suffering, regard for personhood, family need, the preservation of dignity, and a concern for the provision of nondiscriminatory treatment. Differences resulted in the cultural values of the Japanese nurse that included a new concept of patient's having a treatment choice, caught in the middle of family and physician, and less nursing autonomy or credibility.

In addition, Wros et al. (2004) performed a secondary analysis of the previous study (Doutrich et al., 2001) to expand on the knowledge of values of nurses from the two cultures. Reinterpretation of the qualitative data included a hermeneutic interpretive method and feminist approach. Similarities revealed common values but background meanings and actions provided different outcomes. For example, truth-telling is highly valued in the USA but Japanese culture belief of the connection between patient and nurse takes precedence and truth may not be viewed as caring. Additionally, respect for personhood in Japanese culture protects the patient from force- feeding but is a common trigger for moral distress in the American nurse. In this final study, Izumi (2006) provided additional insight and focused on the Japanese nurse and ethical concerns. The findings showed even in their own country, values of the practicing Japanese nurse and ethical behavior were usurped by imported western ethics. In other words, the Japanese nurses' culturally unique ethical values were disregarded in some instances.

Practice Environment

The perceived practice environment has been studied extensively for over 25 years due to concerns regarding the nursing shortage (Erickson et al., 2004; Lake & Friese, 2003; Sovie, 1984). Research has shown the perceived practice environment affects job satisfaction (Lake & Friese, 2003; Patrician et al., 2010; Zori et al., 2010), emotional exhaustion, intent to leave, and fair to poor quality of care (Friese, Lake, Aiken, Silber, & Sochalski, 2008; Lucero et al., 2009; Patrician et al., 2010).

Not only has the perceived practice environment been studied in the private sector but it has also been studied in the military sector as well. One study by Patrician et al. (2010) utilized the PES-NWI and Maslach Burnout Inventory to discover how Army nurses and Army civilian nurses rated their practice environment, levels of job dissatisfaction, emotional exhaustion, job termination intentions, and quality of patient care. This was similar to the study conducted by Lake in 1999 that resulted in data regarding satisfaction, stress, burnout, and turnover. The authors chose to measure dissatisfaction instead of satisfaction to be consistent with the literature and intent to leave as a precursor to turnover. Overall response rate was 53% (995) out of the 1,793 surveys that were mailed. Staff RNs consisted of civilian (63%) and military (37%) working in Army hospital inpatient units. The 31 items of the PES-NWI were determined to fall into five domains of practice. The five domains consisted of nurse participation in hospital affairs, nursing foundations for quality care, nurse manager ability and support, staffing and resource adequacy, and, finally, collegial nurse-physician relationship. Data was summarized utilizing descriptive statistics. Differences between Army and civilian nurses within the sample were examined by chi-square and t tests.

Robust logistic regression models determined the work outcomes and nurse-rated quality of care variables. All mean scores of the PES-NWI were above the midpoint of 2.5 indicating more favorable than unfavorable ratings overall. Differences were found between the Army and civilian nurse's as evidenced by Army nurse's rating nurse participation in hospital affairs, and nursing foundations for quality of care higher than civilian nurse's. Other variables surveyed resulted in job dissatisfaction at 27%, high emotional exhaustion scores at 30%, 34% intended to leave their positions within one year, and quality of care was rated as fair to poor by 16% of the sample. Of interest in relation to the current study, multivariate logistic regression analysis for all variables showed an unfavorable perception of the practice environment was the strongest consistent predictor of negative work outcomes.

Comparisons have also been made using the PES-NWI between settings. Roche and Duffield (2010) examined the differences in the perceived practice environment between 96 randomly selected medical and surgical wards and 6 mental health wards between 2004 and 2006. The survey resulted in a 76.3% response rate from 2,556 nurses in Australia and was a secondary analysis of data collected in three other studies. In contrast to the majority of studies regarding the perceived practice environment, respondents included staff other than RNs such as enrolled nurses that are similar to Licensed Vocational Nurses and nursing assistants. Other instruments were used in the study but only data from the PEW-NWI is reported. Descriptive statistics were calculated and a *t* test or *x2* was used to assess the differences in demographic variables between general nurses and mental health nurses. Five domains of the PES-NWI were calculated as means of the item scores and a *t* test was conducted to compare domain

scores. As in previous studies, domain scores above 2.5 were considered positive and were calculated to examine the differences between the mental health and general ward nursing staff. Results showed the subscale scores had normal distributions and similar standard deviations for both groups. Interestingly, the composite PES-NWI score was the same level (2.70) for both groups but differences were seen in individual domains. Mental health nurses perceived significantly stronger relationships with physicians (3.13) compared to general settings (2.81) and staffing to be adequate (2.58) compared to general settings (2.26). In contrast, mental health nurses scored lower on nurse management and leadership (2.66) compared to general wards (2.87), nurse participation in hospital affairs (2.52) compared to general wards (2.65), and nurse foundations (2.60) compared to general wards (2.93). The authors concluded that the perceived practice environment of mental health differs from medical or surgical settings and may be due to the fact that mental health nurses focus on the therapeutic relationship and readily measurable patient outcomes are not available in mental health.

Perceived practice environment has also been studied to determine differences in nursing quality of care in multiple hospitals. A secondary analysis of a 1999 survey of RNs was conducted by Lucero et al. (2009) to describe RN reports of unmet nursing care needs and examine the variation of nursing quality across 168 acute care hospital settings. A questionnaire of unmet nursing care needs was developed based on focus groups and contained the following seven nursing activities: teach patients or family, prepare patients and family for discharge, comfort/talk with patients, adequately document nursing care, back rubs and skin care, oral hygiene, and develop or update nursing care plans. In addition, the 31 item PES-NWI was used to measure the perceived practice environment.

The sample consisted of 10,184 RNs from Pennsylvania. Data analysis examined descriptive statistics on study participant demographics, the care environment, and unmet nursing care needs overall. Univariate statistics were used to examine the assessment of unmet nursing care needs. Measures of central tendency, variability and symmetry appraised each care need left undone and unmet care needs composite measure across hospitals. The PES-NWI variables were not controlled and were examined for variation across hospitals. Results showed nurses on average care for six patients. Most nurses reported the domains of nursing foundations and collegial relations between nurses and physicians were present in their care environment with a mean of 2.8. The authors fail to discuss the three other domains that fell below the 2.5 mean that is considered as a positive response for the perceived practice environment. Unmet needs were found to display considerable variation and there were instances of 60% or more when the nurses left necessary nursing care undone on their last shift. The authors concluded that nurses have an ongoing concern about spending insufficient time with patients, quality of nursing care reflects differences in hospital care environments, and organizations must develop care environments that seek to reduce harm to patients.

Studies regarding characteristics of the practice environment have also involved magnet facilities. Early studies found higher job satisfaction, higher perceived quality of care by nurses, higher perception of empowerment, and lower intent to leave (Aiken, Havens, & Sloane, 2000; Kramer & Hafner, 1989; Laschinger, Almost, & Tuer-Hodes, 2003). Other studies have examined magnet facility nurse outcomes that included nurse burnout, needle stick injuries, and higher nurse-to-patient ratios (Aiken & Sloane, 1997; Aiken, Sloane, & Lake, 1997; Scott, Sochalski, & Aiken, 1999). Additionally, better

patient-related outcomes were found that included fewer patient falls, medication errors, and nosocomial infections (Laschinger & Leiter, 2006), as well as, higher patient satisfaction and decreased mortality (Aiken et al., 1997; Aiken et al., 2000; Aiken & Sloane, 1997).

Intent to Leave/Job Turnover

Studies describing the characteristics and demographics of nurses who value ethical behavior also explore job turnover intentions (Estryn-Behar, van der Hejiden, Fry, & Hasselhorn, 2010; Tourangeau, Cummings, Cranley, Ferron, & Harvey, 2010; Zurmehly, Martin, & Fitzpatrick, 2009), job satisfaction or dissatisfaction (Davis, Ward, Woodall, Shultz, & Davis, 2007; MacKusick & Minick, 2010; Morgan & Lynn, 2009), and burnout (Gallagher & Gormley, 2009; Lang, Pfister, & Siemens, 2010; Leiter & Maslach, 2009).

In one related study by Hart (2005), the utilization of three self-administered questionnaires determined nurse turnover intention. The non-experimental cross-sectional study of a theoretical sample size of 1,200 resulted in 463 eligible responses of randomly selected RNs. The sample consisted of primarily women (94%) and *White* (94.3%) participants. The study utilized an eight-page questionnaire consisting of the Hospital Ethical Climate Survey, the Anticipated Turnover Scale, and the Nursing Retention Index. Descriptive statistics, Pearson product-moment correlations, and hierarchical regression techniques were used to analyze the data. Findings showed that hospital ethical climate was most important in nurses' decisions to leave a position as well as the profession of nursing. Internal consistency reliability was estimated using

Cronbach's alpha at 0.95. Nurses attributed reasons they left previous positions were due to ethical conflict. Likewise, they reported lower intention to stay in the current position. Interestingly, retention bonuses had no effect on intention to stay but educational reimbursement, flexible scheduling, and higher wages did. Additionally, ethics education played a positive factor in intention to remain in the position as was also reported by Schluter et al. (2008).

Similar results were reported in a study by Corley, Minick, Elswick, and Jacobs (2005). Utilizing a descriptive-correlational study design, findings showed positional turnover in previous positions. Demographic factors of race, age, years of nursing experience, time in current position, and having left a position in the past due to moral distress were correlated. Effects of hospital ethical climates on positional and professional turnover were reported by 25.5% of the RNs. Intensity of the moral distress experienced correlated negatively with age triggering the authors to note the intensity and frequency of moral distress differ. Furthermore, even though the frequency may occur at a lower rate, the intensity may cause cumulative effects.

In a related theme, the concept of conscience has also been studied. In one study on the development of the Perceptions of Conscience Questionnaire (PCQ; Dahlqvist et al., 2007), 444 health-care providers participated including RNs, enrolled nurses, nurses' assistants, and physicians. The authors determined from an extensive literature review that the concept of conscience has various meanings in moral philosophy, theology, psychology, and nursing. The purpose of the study was to develop a questionnaire for identifying various perceptions of conscience. The authors note that the burden of conscience may influence the perception of job satisfaction. Of the 444 participants, 396

responses were complete and were analyzed utilizing a principle component analysis with varimax rotation. The authors agreed upon eigenvalues > 0.90 and factor loadings > 0.45. Six factors that emerged labeled conscience as authority, warning signal, demanding sensitivity, asset, burden, and depending on culture. Top loading items of each factor revealed, God speaks to us through our conscience (.071), we cannot avoid the voice of conscience (.079), the voice of conscience must be interpreted (0.76), at my workplace I can express what my conscience tells me (.078), I have to deaden my conscience in order to keep working in healthcare (0.71), and finally, our conscience expresses our social values (0.82). The authors concluded that the factors identified by the PCQ may help to explore the consequences of perceptions of conscience as to whether conscience is an asset or a burden and the stress generated.

Goldman and Tabak (2010) studied the perceptions of 95 nurses working in the internal medicine wards regarding the ethical climate of the organization and job satisfaction. The first hypothesis examined demographic characteristics and perceived ideal ethical climate. The second hypothesis examined job satisfaction in relation to the congruence of five ideal and actual ethical climate types defined as: caring, laws and codes, instrumental, independent, and services. Utilizing multiple linear regressions, the fit of each type was determined. It was found that the caring and independent fit significantly influenced job satisfaction. The third hypothesis correlated perceived actual ethical climate and the various aspects of job satisfaction. Results showed a significant, positive moderate to weak correlation between perceived dimensions of caring and service and all aspects of job satisfaction ($P \leq 0.018$). Except for salary, significant positive correlations were found between perceived dimensions of laws and codes and all

aspects of job satisfaction. Statistically significant negative correlations were found between the instrumentation dimension and satisfaction with the team ($P < 0.014$). In response to these findings, the authors recommend organizations determine the type of ethical climate preferred by nurses in order to ensure "the ability of nursing staff to experience congruence between caring organizational missions and caring work environments" (p. 243) and thereby increasing job satisfaction.

Job satisfaction and dissatisfaction have also been explored utilizing a qualitative design in one earlier study (McNeese-Smith, 1999). Semi-structured, taped interviews were conducted with 30 staff nurses and content analysis revealed 11 categories. These categories included patient care, environment, factors that interfere with job/patient care, feeling overloaded, relations with coworkers, personal factors, salary and benefits, professionalism, organizational factors, cultural background of the nurse, and career stage of the nurse. The author notes job satisfaction seems to be supported by Maslow's theory of a hierarchy of needs from physiological to self-actualization. Conversely, factors causing job dissatisfaction did not include environment, salary and benefits, and cultural background. Four themes emerged regarding job dissatisfaction with patient care included verbal abuse, bad patient outcomes, lack of patient response to care and teaching, and fear of or making an error. Primarily, job dissatisfaction was caused by factors that interfered with self-esteem and relationships. Themes of dissatisfaction emerged that included feeling overloaded due to heavy patient care, too many patients' needs, too few staff, poor care provided by coworkers, lack of organizational fairness, and fear of making a mistake. Findings were validated by examining qualitative studies. The author found support from a meta-analysis by Blegan of 48 studies of job

satisfaction. Implications from this study suggest that education and practice must help nurses identify satisfiers and nurse administrators must be cognizant of the fact that nurses may resign if they experience too much job dissatisfaction.

One longitudinal analysis of turnover among nurses (Estryn-Behar et al., 2010) examined factors that differentiated between "stayers" and "leavers" within the profession. The cross-national exploratory European survey included 34,587 nurses working in 623 healthcare facilities. Two measurements were conducted with a 1-year time interval that utilized 14,016 "stayers" and 866 "leavers". Findings showed that 86.8% of nurses left the profession voluntarily and involuntary departure was more frequent in European countries. Two main categories for leaving included working conditions and family reasons. Working conditions included such issues as emotional difficulties, dissatisfaction with use of one's competence, lack of autonomy, relationship problems, work schedule difficulties, dissatisfaction with pay, time pressure, and quality of care. Family reasons included issues regarding caring for relatives. The authors recommended that health organizations should pay better attention to preventative measures to job dissatisfaction and to conduct further empirical research into policy systems.

A descriptive study by Hayne et al. (2009) examined Filipino nurses in the United States regarding recruitment, retention, occupational stress, and job satisfaction. Results showed positive job satisfaction and adaptation in the U.S. workplace. Instruments used included the revised editions of the Nursing Work Index and Occupation Stress Inventory. Four research questions were asked regarding the strategies employed to recruit and retain Filipino nurses, perceptions of their work environment, mean job

satisfaction level, and the primary indicators of occupational stress. Filipino nurse were recruited from a 550–bed U.S. hospital and of the 26 eligible nurses, 15 packets were completed for a net 58% response rate. Findings showed the nurses as a whole perceived the organization provided them the freedom to act in their patients' best interest, use their skills and competencies to make independent judgments, the organization provided them control over their practice, the organization was conducive for the practice of professional registered nursing, and a positive relationship with the medical staff. The authors note an ethnonursing approach that is culturally competent acknowledges cultural similarities and differences and encourages sharing of professional values and belief systems.

Review Summary

In summary, the literature review supported this study due to the wealth of research published regarding nurse moral distress experienced, perceived practice environment, intent to leave, and job turnover. For example, the theory of moral distress is well documented in studies by Corley (2002), Cohen and Erickson (2006), Elpern et al. (2005), Rice et al. (2008), and Zuzelo (2007). The instrument for measuring moral distress (Corley, 2002) is cited in many studies as well. Additionally, the themes of perceived practice environment, intent to leave, and job turnover are well supported in the literature. What is lacking is research that describes moral distress frequency and intensity, perceived practice environment, and the likelihood of resigning from a clinical position by professional RNs in the VHA system.

Evaluation of Viable Research Designs

The approach to the current research study was quantitative because first, it was a measureable objective reality. Second, it was exploratory, descriptive and non-experimental (Leedy & Ormrod, 2004). It was also possible to expand on the theory of moral distress by using a correlational design that is cross-sectional. This design was appropriate in that it utilized a method of statistical analysis of the relationship between two or more variables. For example, correlation of the perceived practice environment to the experience of moral distress of the nurse may add significance. Therefore, the intent of this study was not to show causal relationships but correlations. It was also a cross-sectional study because sampling consisted of nurses from several age groups at one point in time (Leedy & Ormrod).

Chapter Summary

Moral distress experienced in nursing appears in every aspect of nursing practice. Some studies have shown that moral distress affects job turnover, job dissatisfaction, burnout, and intent to leave the profession of nursing. With the nursing shortage continuing to plague the US healthcare system, healthcare administrators require data to assist in combating the problem. Research has shown that moral distress and ethical climate of an organization influences the nurses' decision to remain. What was unknown was the moral distress experienced by VHA nurses. By providing scientific results from the study regarding the professional registered nurse's ethical challenges, the outcome of gaining new perspectives may guide the healthcare leader to a better understanding of nurse's moral distress and the need for interventions to alleviate this phenomenon.

CHAPTER 3. METHODOLOGY

Introduction

This chapter presents the methodology that was utilized for the current quantitative study of moral distress in professional RNs in the VHA system. The researcher's philosophy provides justification for the choice of inquiry or research design and methods used. The importance of the methodology rests in providing a description of how the study was conducted. The hope is to provide an understanding of the observation, measurement and social reality as well as possible future duplication (Burns & Grove, 1997; Neuman, 2006) of this study. This chapter includes discussion of the sampling design, measures, data collection procedures and analysis, limitations of methodology, internal and external validity, expected findings, and ethical issues.

Researcher's Philosophy

A postpositivist social science (PSS) approach was appropriate and therefore utilized for the current study. This philosophical approach seeks to analyze quantitative data through surveys and describe the human behavior of nurses. By combining deductive logic with the empirical data, the PSS approach enabled the researcher to discover and confirm probabilistic causal laws (Neumann, 2006). Desire to gain knowledge encouraged the researcher to adopt an essentialist orientation to reality. In other words, the PSS approach allowed the discovery of order and the universal causal laws. Determinism is another characteristic of PSS that fit the study because this view provided predictions of behavior. Additionally, an explanation or theory of social reality

develops from PSS. Three conditions are required to verify the explanation gleaned from PSS. First, no logical contradiction must be evident; second, the observed facts require consistency; and third, replication of the results is necessary. Considering the elements of the PSS approach aided in predicting the general patterns of nurses in the practice of nursing. Therefore, the researcher's personal philosophy and the foundational philosophy were derived from the epistemology of objectivism (Crotty, 2003; Watson, 2008). This assumption illustrates the researcher's views, participants, and data are independent of each other. The ontological assumption demonstrates one view of reality can be measured by survey research and statistical analysis. Finally, the axiological assumption is that a value-free view of the study was appropriate. The researcher's view is that the philosophical assumptions mentioned supported a quantitative approach to the research problem and research questions.

Research Design Model

Chosen research design model for the current research study was a non-experimental descriptive correlational quantitative research design utilizing a convenience sample. Determination of this type of research design was guided by five main factors. First, the study of moral distress required a measureable objective reality (Burns & Grove, 1997). Second, the design provided a logistic and deductive form of reasoning. Third, the research focus covered a lot of breadth. Fourth, quantitative research provided a basis for knowing regarding relationships. Fifth, the researcher utilized survey instruments to gather data and, therefore, the element of analysis was

numbers. The statistical analysis of the data also characterized this form of design and generalizability as well.

Additionally, the researcher's time availability was limited and the desire for structure was high (Leedy & Ormrod, 2004). The current study employed a correlational design that was cross-sectional. This design was appropriate in that it utilized a method of statistical analysis to determine the relationship between two or more variables. For example, frequency and intensity of moral distress experienced, perceived practice environment, likelihood of resigning from a clinical position, and demographic data were described and correlated. Therefore, the intent of this study was not to show causal relationships but correlations. Utilization of nurses from different age groups created a cross-sectional study of sampling and comparing at one point in time (Leedy & Ormrod). Finally, the study was non-experimental in that no specific treatment or intervention was utilized to determine an outcome (Creswell, 2003).

Research Design Strategy

The research design strategy consisted of integrating the elements of the quantitative design with an overall plan. Descriptive as well as correlational relationships became evident as the study progressed. By including multiple groups of nurses with varying demographic characteristic measures at a single point in time, the strategy became cross-sectional. The quantitative design strategy was explicit to a specific sample from a population. Potential threats were controlled by measurement, preventative action, and analysis. The design strategy was to keep the study costs at a minimum and follow a conservative path. Construction of the design was purposeful in

avoiding threats to validity. Therefore, the design strategy was supportive of the current study.

Sampling Design

Convenience sampling was utilized for the current study. Importance of choosing the correct sampling plan included utilizing a technique that would accurately reflect the population under study (Burns & Groves, 1997). This design was chosen because it was accessible, inexpensive, and took less time. The target population was composed of male and female RNs, who are members of a professional nursing organization and also employed by the VHA. The researcher is also a member of the organization and this provided an accessible sample from the population for the researcher. Regarding the educational level of the sample, it is believed that the comprehension of the VHA RN is above a 12th grade level. The profession of nursing requires education beyond high school and the designation of RN requires state licensure. In addition, according to the report from the National Commission on VA Nursing (2004), VHA RNs "differ from the national nursing workforce in several important ways. The VHA RN workforce is more highly educated than the national RN workforce. Of the more than 38,000 RNs, 34% hold bachelor's degrees in nursing, and 19% are master's or doctorally prepared" (p. 2). Voluntary subjects were entered into the study until the desired representative sample size was reached or within two months from the first communication. It was estimated that the organization currently has approximately 3200 members. It was not known how many members currently met the study criteria. Due to a concern regarding member privacy, the organization gatekeeper would not allow the researcher to contact the membership directly. The researcher sent the invitation to participate to the

organization's membership chair and the organization sent the invitation to participate letter to the membership via the organization's e-mail distribution list. It was unknown how many e-mail addresses were valid e-mail addresses or how many members were not supervisors. Via the e-mail, voluntary participants were instructed to utilize the hyperlink provided in the invitation to participate letter. Study criteria excluded supervisors. The organization estimated that after removing member names that did not have an e-mail address listed, had retired, or were listed as management, the membership number that could have theoretically been contacted by e-mail was reduced to 1500. Many of the members had only listed themselves as RNs and not by job title. Even though there were many unknowns, a sample size calculation was performed. To detect a significant relationship at a .05 level of significance or a 95% confidence interval, a power of .80, and a large effect size of .35, the minimum number of participants determined was 42 (Cohen, 1992). This reflected the minimum number of participants needed for a multiple linear regression with five independent variables that would detect a strong, statistically significant relationship between the independent variables and the dependent variable. However, if the relationship was average in strength, more participants may have been needed to detect a significant relationship at the .05 level of significance. A sample size of 42 would have been sufficient to detect the expected relationships hypothesized. The total responses obtained far exceeded the minimum at 124. All responses were considered to be included in the data analysis. Inclusion criteria consisted of RNs who are current members of the professional organization, currently employed by the VHA, work in direct patient care areas, and work in all types of clinical areas. Administrative RNs such as nurse managers were excluded. Justification for this lies in the fact that

nurses in leadership positions possess abilities to avoid moral distress due to their position and job duties that do not include direct patient care activities (Cohen & Erickson, 2006). Care was also taken to identify and describe biases in the sample.

Measures

Measures were utilized that provided accurate and consistent data. The purpose was to avoid sources of error, minimize sources of error, or estimate how much error remained (Mertens, 2005). The postpositivist influence on the measurement aided in providing reliability, validity, and objectivity. Data was collected utilizing the MDS survey instrument that measures moral concepts in nursing and the PES-NWI survey instrument that measures perceptions of the practice environment. This researcher received permission to use the MDS instrument from the developer, Dr. M. Corley and The Joint Commission granted permission for the PES-NWI to be used for research purposes. In addition, demographic data as well as a data from a single-item question regarding likelihood of resigning was collected.

The MDS instrument has been revised over the years since 1984 (Corley et al., 2001). The MDS survey combined concepts from three theories: (a) House and Rizzo's role conflict theory, (b) Rokeach's theory on values and value systems, and (c) Jameton's conceptualization of moral distress. Originally, the developers identified domains by reviewing research findings and through content analysis of interviews with nurses. A total of 32 items were identified and items were listed using a 7-point Likert scale. Content validity was established through 100% agreement on content validity by a panel of experts in the field of ethics. The MDS survey instrument was based on the three

assumptions that nurses bring values to work, can identify ethical problems, and can evaluate the cause of moral distress. The MDS underwent a descriptive analysis as well as a factor analysis.

Instrument development and testing included domain identification, content analysis, content validity, and test-retest. A convenience sample of 214 nurses completed the survey of 32 items. The authors noted the results of the study showed high reliability in the area of role conflict and probably reflects redundancy of the items. Items were scored on a 7-point Likert scale. Mean scores on each item ranged from 3.9 to 5.5, indicating moderately high levels of moral distress (range from 1.16 to 6.25). It was noted that the higher the mean, the greater the level of moral distress. The items with highest mean scores included instances where working with low staffing resulted in inadequate patient care ($M = 5.47$) and carrying out physician orders for unnecessary tests and treatments for terminally ill patients ($M = 5.44$). Even though none of the factors scored a high current mean level, 15% of the sample reported resigning a position due to moral distress.

Factor analysis was used to create the variables, not to estimate the reliability. Initially, only exploratory factor analysis was run. Confirmatory factor analysis was used to confirm the variables that had been created. A varimax rotation yielded three theoretically meaningful factors including action response, aggressive care, and honesty. Eigenvalues greater than 1.0 yielded a 5-factor solution with 21.7% variance explained. The scale met only the unidimensionality criterion that subsequent factors have similar but gradually declining amounts of variance. Thus, a total scale score would not be meaningful. Reliability estimation of the MDS factors was estimated by determination of

the interitem, item-factor, and factor-to-factor correlations as well as by internal consistency estimates for each factor. The original instrument testing included a test-retest, known groups, and administration of the instrument to a sample of 214 nurses. Test-retest reliability showed $P < 0.01$ of 35 nurses at 0.86. None of the demographic variables (age, education, gender,) or work experience variables (work setting, years as a nurse, and years in current position) predicted the level of moral distress.

Operationally defined for the current study, the researcher utilized the more current MDS survey that was revised by Corley et al. in 2005 and the PES-NWI (Lake, 2002). The MDS currently is a 38 question survey that now includes items about pain management, managed care, and incompetent health-care personnel (problems identified in previous surveys of ethical concerns). Three experts in nursing ethics reviewed the 38 items to assess the extent to which each item could measure moral distress frequency and intensity. Content validity index was 100% after three items were revised, based on the experts evaluations. Cronbach's alpha for the revised MDS intensity scale was 0.98 (M = 3.71; SD = 1.57; range 0-6) and 0.90 for the MDS frequency scale (M = 1.54; SD = 0.68). Additionally, three questions were included regarding quitting a clinical position: 1) Yes, I left a position, 2) Yes, I considered quitting but did not leave, and 3) No, I've never considered quitting or left a position. The testing of reliability and validity of those three questions could not be found in any current literature therefore, the decision was made to ask only one question regarding likelihood of resigning from a clinical position. A 10-point Likert scale was utilized to align with the two main surveys. Choices ranged from 1-*never* to 10-*definitely*.

The PES-NWI (Lake, 2002), was developed from the original Nursing Work Index (NWI) Scale. Lake developed subscales from the original 65 NWI items that had been designed by Kramer and Hafner in 1989. The NWI items resulted from extensive literature on job satisfaction and work value instruments as well as characteristics of the 41 magnet hospitals of the time. Using data from the research of Kramer and Hafner (1989) that utilized a 25% random sample of nurses from 16 magnet hospitals (*n* = 1,160), Lake performed an exploratory factor analyses of the representative 48 practice environment items. Results showed that a 31-item five-factor instrument was the best of all models. Cronbach's alphas ranged from .71 to .84 for individual nurse data and supported the reliability of the perceived practice environment subscales. Mean inter-rater reliability ranged from .86 to .97. Inter-item correlations ranged from .64 to .91 for aggregate hospital level data. Differentiation between magnet and non-magnet hospitals supported the perceived practice environment subscale construct validity. Scoring of the items ranges from 1-*strongly disagree*, 2-*disagree*, 3-*agree*, and 4-*strongly agree*. Higher score indicates strong agreement that the perceived practice environment contains a particular characteristic. Mean scores below 2.5 represent disagreement and mean scores above 2.5 represent agreement that the characteristic is present.

Finally, for the current study, demographic data was collected regarding age, gender, approximate number of years worked as an RN, total years worked in the VHA system, type of unit currently working in, approximate number of years worked in this particular unit, job position, race (US Census, 2010), education level, and region where the VHA facility is located known as the Veterans Integrated System Network (VISN). In keeping with a cross-sectional design, these demographic variables helped to describe

the sample as well as provide comparisons to other studies regarding moral distress (Estryn-Behar et al., 2010; Tourangeau et al., 2010; Zurmehly et al., 2009) and the perceived practice environment (AAC, 2002; Bowles & Candela, 2005; Erickson et al., 2004; Friese et al., 2008). According to Burns and Grove (1997), demographic variables are "selected by the researcher based on experience and previous research" (p. 188).

Data Collection Procedures

Data was collected utilizing the MDS survey instrument, the PES-NWI survey instrument, single-item question regarding likelihood of resigning, and a demographic characteristics questionnaire. This researcher utilized the more current MDS survey that was revised by Corley et al. in 2005. After Capella University IRB approval, all survey items were entered into the online service known as SurveyMonkey.

As mentioned previously, due to a concern regarding member privacy, the organization gatekeeper would not release membership e-mail addresses. The invitation to participate was sent to the membership chair of the organization by the researcher and the membership chair sent the invitation to participate letter via e-mail to the membership e-mail distribution list. It was unknown exactly how many e-mail addresses were on record, how many were valid e-mail addresses, or how many members were not supervisors. The study criteria excluded nurse supervisors. A broadcast e-mail was sent to the organization's membership by the membership chair via their personal e-mail address providing them with the invitation to participate letter explaining the study, inviting them to participate, and containing the link to SurveyMonkey. The professional nursing organization is a private organization and not a VHA entity therefore,

participation in the study required nurses to complete the survey on personal time away from the workplace. Nurses were informed of this in the invitation to participate and also that participation was completely voluntary. Nurses were also assured that the survey was confidential, no personal identifying information was required, and no IP addresses would be collected by the survey mechanism. SurveyMonkey privacy policy states that they will not use the collected data for their own purposes. Data collected was kept private and confidential. The researcher was the owner of all data collected or uploaded into the survey. Additionally, the researcher indicated SSL encryption for the survey link and survey pages during transmission on the collectors setting page of the SurveyMonkey website.

Participants accessed the survey through the online service known as SurveyMonkey through the link provided in the invitation to participate letter. When linking to the survey site, study participants were instructed to first read and accept the online informed consent prior to beginning the actual survey. Participants were informed that the survey would only take 15-25 minutes to complete. Participants were also informed that they could simply stop the survey at any time if they felt uncomfortable recalling past experiences. Since this was not a therapeutic or experimental study, it was determined to have minimal risk. However, as an option, participants were provided with the contact number of a confidential and anonymous crisis hotline that is available 24/7 and deals with depression. The contact number was provided in the invitation to participate and in the informed consent. All potential participants in the sample were required to have access to the internet in order to receive the e-mail regarding the invitation to participate letter that was sent by the organization. Data from the MDS and

PES-NWI surveys, single-item question regarding likelihood of resigning as well as the demographic characteristics was collected. The professional nursing organization's membership chair sent reminder e-mails to members, upon request from the researcher as needed until the desired sample size was reached.

Nurses were encouraged to complete the MDS and PES-NWI surveys as well as the demographic questions. Demographic questions included age, gender, approximate number of years worked as an RN, total years worked in the VHA system, type of unit currently working in, approximate number of years worked in this particular unit, job position, race (US Census, 2010), education level, and VISN. Mertens (2005) notes a survey is one of the best methods to obtain data quickly and easily from subjects in a nonthreatening way. Other advantages include anonymity, low-cost, ease of comparison and analysis, surveys can obtain many data, and surveys can be administered to many subjects. Challenges include not getting careful feedback, impersonal aspect of surveys, surveys do not get the full story, lying, omission, inaccurate recall, misunderstanding of the question, insufficient information, and the wording of surveys can bias the subject's responses (Sproull, 2002).

Data from the online survey items was scored according to a coding procedure (Burns & Grove, 1997; Neuman, 2006) established by the researcher. The codebook contained each variable from the online survey with the corresponding code. Each survey item of the MDS was assigned a code for frequency as well as intensity. For example, item 14 asks for a response to the statement, "Follows the family's wishes for the patient's care when I do not agree with them but do so because hospital administration fears a lawsuit" and was identified by the code WISHF, for frequency, and

WISHI, for intensity. In addition, the responses were assigned a number from 0-6 that ranged from *none* to *great extent*' for intensity and *never* to *very frequently* for frequency. This allowed for measurement at an interval level. In addition, the responses to the PES-NWI were assigned values to also allow measurement as interval data. Four choices for each question ranged from *strongly disagree*, *disagree*, *agree*, and *strongly agree*. The question of likelihood of resigning from a position was scored on a scale of 1-10. This scale ranged from *never* to *definitely*. Data coding facilitated in creating the online survey and each question item was accounted for as well as each response option to ensure correct data analysis.

Data Analysis Procedures

As noted previously, data was collected through an online survey utilizing the MDS and PES-NWI survey instruments. Constructs were created from responses to the MDS and PES-NWI questions. Responses to the questions were averaged for each of the constructs. For the MDS, three constructs were created for intensity and for frequency that included individual responsibility (20 items), not in patient's best interest (7 items), and deception (3 items). For research questions 3-5, the dependent variable was the likelihood of resigning. For the PES-NWI (31 items), six constructs were created that included nurse participation in hospital affairs (9 items); nursing foundations for quality of care (10 items), nurse manage ability, leadership, and support of nurses (5 items); staffing and resource adequacy (4 items); and collegial nurse-physician relations (3 items). A single question regarding likelihood of resigning was measured on a scale of 1-

10, with 1 representing *never* and 10 representing *definitely*. All variables used in the analysis to test the hypotheses were interval level.

After the data was collected, it was analyzed with SPSS version 16. Descriptive statistics were analyzed for each of the demographic questions as well as for the constructs created from responses on the MDS and PES-NWI. Scales that were created were used in multiple linear regression to answer the research questions and test the hypotheses. Assumptions of multiple linear regression were assessed for each multiple linear regression conducted. The current research study sought to answer five research questions and five hypotheses:

RQ1: To what extent does the intensity of moral distress experienced by registered nurses influence their perception of the practice environment?

H10: The intensity of moral distress experienced by registered nurses does not influence their perception of the practice environment.

H1A: The intensity of moral distress experienced by registered nurses does influence their perception of the practice environment.

To test Hypothesis 1 a multiple linear regression was conducted. Independent variables in the regression were three interval level MDS constructs of individual responsibility, not in the patient's best interest, and deception. The MDS scales associated with the intensity of moral distress were used for testing of Hypothesis 1. The dependent variable in the regression was the interval level overall construct of the PES-NWI. Prior to conducting the regression, the assumptions of multiple linear regression were assessed. These assumptions were normality, linearity, and homoscedasticity.

The assumption of normality was assessed for both the independent and dependent variables. Histograms were created to examine the frequency distribution of scores for each of the four constructs used in the regression. If the shape of the distribution of scores for each of the constructs resembled a bell-shaped curve, the assumption of normality was considered met. However, if the shape of the distribution of scores was either positively or negatively skewed and/or either platykurtic or leptokurtic, the assumption of normality was considered violated. If this was the case, data transformations were attempted in order to create a bell-shaped distribution of scores and aid in meeting the assumption of normality. Four transformations were attempted: square root, natural logarithm, common logarithm, and inverse. If the shape of the distribution of scores was not improved after attempts at transforming the data, the original scores were used in the analysis.

Assumptions of linearity and homoscedasticity were assessed for the regression model. To assess this assumption, the standardized residuals versus the standardized predicted values were plotted in a scatterplot. A best-fit regression line was fit to the data points and the distribution of the data points around the regression line was examined. If the data points were evenly distributed throughout the length of the regression line and did not represent a curve, the relationship between the variables was considered linear and the assumption of linearity was considered met. If the data points resembled the shape of curve, a non-linear model was considered more appropriate for the data and was considered as an alternative to the parametric multiple linear regression.

As was the case for the assumption of linearity, if the data points in the scatterplot were evenly distributed throughout the length of the regression line, the assumption of

homoscedasticity was considered met. If the data points formed the shape of a cone or a funnel, the assumption of homoscedasticity was considered violated. This indicated a higher likelihood of a type II error. If the regression model was statistically significant at the .05 level of significance, which would indicate that the combination of the three intensity of moral distress scales significantly predicted a registered nurse's likelihood of resigning, the null Hypothesis 1 was rejected and the alternative Hypothesis 1 was accepted.

RQ2: To what extent does the frequency of moral distress experienced by registered nurses influence the perception of the practice environment?

H20: The frequency of moral distress experienced by registered nurses does not influence their perception of the practice environment.

H2A: The frequency of moral distress experienced by registered nurses does influence their perception of the practice environment.

To test Hypothesis 2 a multiple linear regression was conducted. The independent variables in the regression were the three interval level MDS constructs of individual responsibility, not in the patient's best interest, and deception. For testing of Hypothesis 2 the MDS scales associated with the frequency of moral distress were used. The dependent variable in the regression was the interval level overall construct of the PES-NWI. Prior to conducting the regression, the assumptions of multiple linear regression were assessed in the same manner as in Hypothesis 1. These assumptions are normality, linearity, and homoscedasticity. If the regression model was statistically significant at the .05 level of significance, which would indicate that the combination of the three frequency of moral distress scales significantly predicted a registered nurse's

likelihood of resigning, the null Hypothesis 2 was rejected and the alternative Hypothesis 2 was accepted.

RQ3: To what extent does the intensity of moral distress experienced by registered nurses influence their likelihood of resigning?

H30: The intensity of moral distress experienced by registered nurses does not influence their likelihood of resigning.

H3A: The intensity of moral distress experienced by registered nurses does influence their likelihood of resigning.

To test Hypothesis 3 a multiple linear regression was conducted. The independent variables in the regression were the three interval level MDS constructs of individual responsibility, not in the patient's best interest, and deception. For the testing of Hypothesis 3 the MDS scales associated with the intensity of moral distress were used. The dependent variable in the regression was the interval level variable likelihood of resigning. Prior to conducting the regression, the assumptions of multiple linear regression were assessed in the same manner as in Hypothesis 1. These assumptions were normality, linearity, and homoscedasticity. If the regression model was statistically significant at the .05 level of significance, which would indicate that the combination of the three intensity of moral distress scales significantly predicted a registered nurse's likelihood of resigning, the null Hypothesis 3 was rejected and the alternative Hypothesis 3 was accepted.

RQ4: To what extent does the frequency of moral distress experienced by registered nurses influence their likelihood of resigning?

H40: The frequency of moral distress experienced by registered nurses does not influence their likelihood of resigning.

H4A: The frequency of moral distress experienced by registered nurses does influence their likelihood of resigning.

To test Hypothesis 4 a multiple linear regression was conducted. The independent variables in the regression were the three interval level MDS constructs of individual responsibility, not in the patient's best interest, and deception. For testing of Hypothesis 4 the MDS scales associated with the frequency of moral distress were used. The dependent variable in the regression was the interval level variable likelihood of resigning. Prior to conducting the regression, the assumptions of multiple linear regression were assessed in the same manner as in Hypothesis 1. These assumptions were normality, linearity, and homoscedasticity. If the regression model was statistically significant at the .05 level of significance, which would indicate that the combination of the three frequency of moral distress scales significantly predicted a registered nurse's likelihood of resigning, the null Hypothesis 4 was rejected and the alternative Hypothesis 4 was accepted.

RQ5: To what extent does the registered nurse's perception of the practice environment influence their likelihood of resigning?

H50: The registered nurse's perception of the practice environment does not influence their likelihood of resigning.

H5A: The registered nurse's perception of the practice environment does influence their likelihood of resigning.

To test Hypothesis 5 a multiple linear regression was conducted. The independent variables in the regression were the five interval level PES-NWI constructs of nurse participation in hospital affairs; nursing foundations for quality of care; nurse manager ability, leadership, and support of nurses; staffing and resource adequacy; collegial nurse-physician relations. The dependent variable in the regression was the interval level variable likelihood of resigning. Prior to conducting the regression, the assumptions of multiple linear regression were assessed in the same manner as in Hypothesis 1. These assumptions were normality, linearity, and homoscedasticity. If the regression model was statistically significant at the .05 level of significance, which would indicate that the combination of the five practice environment (PES-NWI) scales significantly predicted a registered nurse's likelihood of resigning, the null Hypothesis 5 was rejected and the alternative Hypothesis 5 was accepted.

For the current study, descriptive statistics and correlational analysis were performed with the statistical software, SPSS software version 19. Descriptive statistics included measures of central tendency for interval level variables and measure of frequency distribution for nominal or categorical level variables. Measures of central tendency included means and standard deviations and measures of frequency distribution included a count of the number of responses for each category within a variable, and the percentage of responses for each category within a variable. The hope was to discover the frequency and intensity, or level of disturbance, of moral distress encountered by VHA hospital RNs and the relationship to the perceived practice environment as well as the likelihood of resigning from a clinical position. Quantitative data analysis strategies were utilized for the study. This method was utilized in a similar study by Hart (2005)

and included bivariate correlations of demographic factors and employment characteristics that were determined as well as nurses positional and professional turnover likelihood in relation to moral distress. The study variables are presented in Table 1.

Table 1. Study Variables Used in Descriptive Statistics and Multiple Linear Regressions

Variable	Instrument	Research Question [a]	Variable Type
Total Practice Environment	PES-NWI	RQ1(DV), RQ2(DV)	Interval
Individual responsibility	MDS(intensity)	RQ1(IV), RQ3(IV)	Interval
Not in the patient's best interest	MDS(intensity)	RQ1(IV), RQ3(IV)	Interval
Deception	MDS(intensity)	RQ1(IV), RQ3(IV)	Interval
Individual responsibility	MDS(frequency)	RQ2(IV), RQ4(IV)	Interval
Not in the patient's best interest	MDS(frequency)	RQ2(IV), RQ4(IV)	Interval
Deception	MDS(frequency)	RQ2(IV), RQ4(IV)	Interval
Likelihood of resigning	Added to survey [b]	RQ3(DV), RQ4(DV), RQ5(DV)	Interval
Nurse participation in hospital affairs	PES-NWI	RQ5(IV)	Interval
Nursing foundations for quality of care	PES-NWI	RQ5(IV)	Interval
Nurse manager ability	PES-NWI	RQ5(IV)	Interval
Leadership	PES-NWI	RQ5(IV)	Interval
Support of nurses	PES-NWI	RQ5(IV)	Interval

Note. [a] DV = dependent variable and IV = independent variable. [b] This variable was created and added to the end of the survey.

Limitations of Methodology

Methodological limitations include the problem of generalizability to other populations (Burns & Grove, 1997). Generalizability was a limitation for this study because the sample of RNs were employed by a federal healthcare system. Other limitations included the possible misunderstanding of the survey instrument and uneven sample groups regarding demographic differences. Uneasiness with computer use may also have caused a limitation for subjects. An attitude contrary to participating in research may have been a limitation and, also, possibly a cultural behavior.

Internal Validity

Internal validity of the study refers to the true reflection of reality and not the result of extraneous variable effects (Burns & Grove, 1997). The purpose of the current study was to examine correlations between perceived practice environment data and intensity and frequency of moral distress experienced as well as correlations between intensity and frequency of moral distress experienced, the perceived practice environment, and likelihood of resigning a clinical position. Threats to internal validity were avoided by considering alternative explanations that may lead to false-positive or false-negative conclusions. In contrast to causal research, the internal validity of this study was not affected by issues that would be common in studies that seek to examine causal factors. Issues such as maturation, testing, selection, mortality, interaction with selection, diffusion or imitation of treatments, or rivalry of respondents did not pertain to this study. The current study was attempting to determine correlations. One threat to the

internal validity of this study could have been history (Burns & Grove, 1997), in that an unrelated event could have influenced responses.

External Validity

External validity refers to the generalizability of the study beyond the study sample (Burns & Grove, 1997). In other words, the extent to which research findings can be generalized a) to a wider population, and/or b) across populations, treatments, settings/contexts, and time. The intent of the current study was to be able to generalize the findings to other RNs than the population of nurses surveyed. Mertens (2006) notes transferability aids in strengthening external validity. Transferability occurs when the readers of the research findings generalize subjectively regarding those findings. Threats to external validity might include the interaction of selection of subjects and researcher. In other words, friends of the researcher might tend to participate in the study to help the researcher out. Another threat to external validity concerns selection bias since this was a non-probability sample. Volunteer bias is another possible threat because it reduces the homogeneity of the characteristics between the sample and the larger population. The use of a single method could also be seen as a threat to external validity in that the study survey was only available online and not mailed to participants. Finally, the interaction of history and participation may also cause a threat. The period of history when a study is conducted needs to be considered when reporting findings. For example, societal events and changes to nursing practice may affect the generalizability of the study.

Expected Findings

Expected findings of the study sought to answer five research questions created to determine the relationship between the frequency and intensity of moral distress experienced by VHA RNs, perceived practice environment, and nurse's likelihood of resigning a position. It was expected that the results would show a negative relationship between the intensity of moral distress experienced by RNs and the perceived practice environment, a negative relationship between the frequency of moral distress experienced by RNs and the perceived practice environment, a positive relationship between the intensity of moral distress experienced by RNs and the RNs' likelihood of resigning from a clinical position, a positive relationship between the frequency of moral distress experienced by RNs and the likelihood of resigning from a clinical position, and lastly, a negative relationship between the perceived practice environment and the likelihood of resigning from a clinical position. For Research Questions 1 and 2 it was expected that the negative experience of increased intensity and frequency of moral distress, as indicated by higher scores for each of the MDS scales, would correlate negatively to a positive perception of the practice environment, as indicated by higher scores for the total PES-NWI scale. For Research Questions 4 and 5 it was expected that the negative experience of increased intensity and frequency of moral distress, as indicated by higher scores for each of the MDS scales, would correlate positively to the RNs' likelihood of resigning from their clinical position, as indicated by the RNs' responses to the question asking them to rate on a scale of 1-10 the likelihood of resigning. Finally, for Research Question 5 it was expected that a positive perception of the practice environment, as indicated by higher scores for each of the PES-NWI scales, would correlate negatively to

the RNs' likelihood of resigning from their clinical position, as indicated by the RNs' responses to the question asking them to rate on a scale of 1-10 the likelihood of resigning. If the results of the linear regressions were significant at the .05 level, the corresponding null hypothesis was rejected and the alternative hypothesis was accepted. If the linear regression models used to test the hypotheses was found to be non-significant, a practical significance may have resulted. This may be associated with the "amount of variance explained, control in the study design to eliminate unexplained variance, or detection of statistically significant differences" (Burns & Grove, 1997, p. 621).

Ethical Issues

Creswell (2007; Dunn & Chadwick, 2002) cautions researchers to obtain consent, avoid deception, maintain confidentiality, and protect the anonymity of the participants when conducting research. Conducting human participant research requires "not only expertise and diligence but also honesty and integrity" (Burns & Groves, 1997, p. 195). Regarding the current study, Capella IRB approval was received prior to the start of data collection. In addition, approval by the board of the nurse professional organization was received prior to sampling the membership. A risk-benefit analysis was performed to determine the magnitude and probability of risk (Beauchamp & Childress, 2009) and risk was found to be minimal. As noted previously, the very nature of nursing practice contains some risks that involve ethical problems resulting from expanding roles, technology, treatments, and procedures. Nurses may deal frequently with ethical issues such as end-of life care (Thacker, 2008), chronic illness and death (Erlen & Sereika,

1997), and euthanasia (Berghs et al., 2004; Brzostek et al., 2008). These experiences produce a wide range of perceptions and practice depending on the culture, education, and age of nurses. Therefore, participation in this study was viewed as an acceptable risk in relation to the benefits that may occur. The nurse was advised to stop participation in the study if they felt uncomfortable, sad, or distressed. However, as an option, participants were given contact information of a confidential and anonymous crisis intervention hotline that deals with depression that is available 24/7. After obtaining anonymous informed consent from participants, online, RNs completed the MDS and PES-NWI surveys, as well as, the demographic data collection tool. Data collection forms were void of any names or identifying information (Dunn & Chadwick, 2002). Data was locked in a file cabinet as well as safeguarded on the researcher's computer with the use of passwords to ensure security. Data will be destroyed from the computer after a period of seven years utilizing the software, SDelete v1.6, by Windows Sysinternals. In order to avoid ethical misconduct, the researcher followed regulations and codes that direct the ethical conduct of research (Dunn & Chadwick, 2002). This corresponded to the requirements stated in the Capella University (2006) IRB manual. Ethical principles were followed that include respect for persons, beneficence, justice, confidentiality, privacy, and anonymity. Because of the nature of the study and the demographic data required, one item of concern for this project was to assure participants of the researcher's respect of cultural, individual, and role differences. That also included respect due to differences based on age, gender, years of nursing experience, race, work location, and educational status. By utilizing an anonymous survey online, privacy was

respected and confidentiality ensured. Additionally, ethical principles were followed by providing the following to study participants:

1. A brief description of the research purpose and procedures, including expected study duration.
2. A guarantee of anonymity and confidentiality of records.
3. Identification of the researcher and where to receive information regarding subject rights or questions.
4. A statement that participation is completely voluntary and can be terminated at any time without penalty.
5. A statement of alternative procedures that may be used.
6. Offer to provide a summary of findings (Neuman, 2006, p. 136).

The research, design, and target population of nurses presented no more than a minimal risk of harm to study participants. There was no therapeutic intervention and this was not an experimental study. Anonymity of the online survey safeguarded against ethical misconduct regarding participant's human rights. In summary, practicing the ethical principles outlined above as well as adherence to the Capella University IRB manual assured the most ethical conduct possible regarding the research study.

Chapter 3 Summary

Providing information regarding the methodology of the research study aids in explaining how the study was conducted including a philosophical grounding, guide for a research design and strategy, sampling design, measures, data collection procedures, and data analysis procedures. Limitations of the methodology included the possibility of

generalizability to other populations, internal and external validity considerations, expected findings, and ethical issues to consider. With that said, the explanation of the methodology provides a guideline for future researchers to replicate the research procedures of the study regarding moral distress in the practice of nursing.

CHAPTER 4. RESULTS

Introduction

This chapter includes the findings of the statistical analysis of the MDS and the PES-NWI and the relevance of these findings. The following research questions were used to guide the study:

RQ1: To what extent does the intensity of moral distress experienced by registered nurses influence their perception of the practice environment?

RQ2: To what extent does the frequency of moral distress experienced by registered nurses influence the perception of the practice environment?

RQ3: To what extent does the intensity of moral distress experienced by registered nurses influence their likelihood of resigning?

RQ4: To what extent does the frequency of moral distress experienced by registered nurses influence their likelihood of resigning?

RQ5: To what extent does the registered nurse's perception of the practice environment influence their likelihood of resigning?

The purpose of this non-experimental descriptive correlational quantitative study with convenience sampling was to determine whether relationships exit between experience of moral distress in professional registered nursing, perceived practice environment, and likelihood of resigning from a clinical position.

Results of the study will be presented followed by a discussion of the major findings. Current study results will be presented in the following order: description of the sample, presentation of data and results of the analysis, and hypothesis testing.

Description of the sample includes demographic characteristics, career characteristics, and unit characteristics. Presentation of data and results of the analysis discussion includes internal consistency reliability, description of the variables of frequency of moral distress, intensity of moral distress, the PES-NWI, and likelihood of resigning a clinical position. Data analysis continues with discussion of assumption testing including procedures for assumption testing, results of normality of assumption testing, and the results of linearity and homoscedasticity assumption testing. Finally, testing of the 5 hypotheses will be discussed.

Description of the Sample

Demographic Characteristics

Participants in the study included 124 registered nurses that were not currently supervisors and were currently working in the VHA system. Participants were asked four, nominal/categorical demographic questions about their age, gender, ethnicity, and education. Frequency distributions of their responses were analyzed with descriptive statistics consisting of counts and percentages. The sample was composed primarily of *White* female nurses aged 50-59 with a BSN education.

Female participants accounted for 89.5% (111) of the participants. Few of the participants were under the age of 40, 59 (47.6%) of the participants selected the 50-59 years of age category, 28 (22.6%) selected the 40-49 years of age category, and 23 (18.5%) selected the 60 or older category. Majority of the participants were *White* 94 (75.8%), while only 19 (15.3%) identified themselves as an ethnicity other than white. Eleven (8.9%) of the participants declined to respond to the question regarding ethnicity.

Regarding education, nearly half of the participants selected BSN (*n* = 60, 48.4%) followed closely by AD/Diploma (*n* = 25, 20.2%), and MSN (*n* = 24, 19.4%). Results of the descriptive statistics on the demographic characteristics of the sample are presented in Table 2.

Table 2. Frequency Distributions of Demographic Characteristics of Sample

Demographic	Category	*n*	%
Gender	Female	111	89.5
	Male	13	10.5
Age	50-59 years	59	47.6
	40-49 years	28	22.6
	60 or older years	23	18.5
	30-39 years	9	7.3
	21-29 years	5	4.0
Ethnicity	White	94	75.8
	Declined to Answer	11	8.9
	African American	10	8.1
	Hispanic	5	4.0
	Filipino	2	1.6
	Other	1	.8
	American Indian	1	.8
Education	BSN	60	48.4
	AD/Diploma	25	20.2
	MSN	24	19.4
	Other	15	12.1

Note. $n = 124$.

Career Characteristics

Frequency distributions of responses to the career questions were analyzed in a similar manner to the demographic characteristics. Responses were analyzed with descriptive statistics consisting of counts and percentages. Descriptive statistics also revealed that the participants were experienced as nurses, with 73.4% (91) of the participants indicating 11 or more years of experience. Largest percentage of participants had 31 or more years of experience as a nurse 36 (29%), followed by 11-20 years of experience 28 (22.6%), and those with 21-30 years of experience 27 (21.8%). Largest percentage of participants had been in the VA healthcare system for 11-20 years 29 (23.4%), followed by those who had been in the VA healthcare system for 6-10 years 25 (20.2%), 3-5 years 24 (19.4%), and 21-30 years 24 (19.4%). Descriptive statistics on the career characteristics of the sample are presented in Table 3.

Table 3. Frequency Distributions of Career Characteristics of Sample

Characteristic	Category	*n*	%
Years as a nurse	31 or more years	36	29.0
	11-20 years	28	22.6
	21-30 years	27	21.8
	6-10 years	14	11.3
	3-5 years	12	9.7
Years in VA healthcare system	0-2 years	7	5.6
	11-20 years	29	23.4
	6-10 years	25	20.2
	3-5 years	24	19.4

Table 3. Frequency Distributions of Career Characteristics of Sample (continued)

Characteristic	Category	*n*	%
Years in VA healthcare system			
	21-30 years	24	19.4
	1-2 years	11	8.9
	31 or more years	8	6.5
	Less than 1 year	3	2.4
Job position	Staff nurse	117	94.4
	Clinical nurse leader	7	5.6

Note. $n = 124$.

Unit Characteristics

Participants were asked to identify the type of unit in which they were currently working and approximately how many years they had worked in this current unit. Largest percentage of participants were employed in an outpatient clinic 24 (19.4%) or in a medical unit 21 (16.9%). Two thirds of the sample was comprised of participants who had been in their current unit for fewer than 4 years 57 (46%) or had been in their current unit for 5-8 years 26 (21%). Results of the descriptive statistics on the frequency distribution of the unit characteristics are presented in Table 4.

Table 4. Frequency Distributions of Unit Characteristics of Sample

Characteristic	Category	*n*	%
Type of unit	Outpatient clinic	24	19.4
	Medical	21	16.9

Table 4. Frequency Distributions of Unit Characteristics of Sample (continued)

Characteristic	Category	*n*	%
Type of unit	Outpatient clinic	24	19.4
	Other	20	16.1
	Behavioral health	14	11.3
	Intensive care	11	8.9
	Spinal cord injury	7	5.6
	Emergency department	6	4.8
	Medical rehabilitation	5	4.0
	Palliative care	5	4.0
	Community living center	4	3.2
	Home-based primary care	4	3.2
	Surgical	3	2.4
Years in unit	1-4 years	57	46.0
	5-8 years	26	21.0
	Less than 1 year	13	10.5
	15-20 years	12	9.7
	9-14 years	11	8.9
	21-30 years	3	2.4
	31 or more years	2	1.6

Note. $n = 124$.

Presentation of Data and Results of the Analysis

Internal Consistency Reliability

The MDS and the PES-NWI survey instruments data yielded a total of 12 constructs that were used in the statistical analysis conducted to test the study hypotheses. Although established as statistically reliable measures of the intended phenomenon, items

used to create each of the study constructs were subjected to tests of reliability within the context of the current study. Cronbach's coefficient alpha was used to assess the internal consistency reliability of the six MDS constructs and the six PES-NWI constructs. To consider the combination of the items an acceptable measure, the combination of items had to yield a coefficient alpha of .70 or greater. This was accomplished for all 12 of the study constructs.

A total of six constructs were created from the MDS items: three constructs that measured the frequency of the moral distress and three constructs that measured the intensity of the moral distress. Within the frequency measures and intensity measures, these constructs consisted of individual responsibility, not in the patient's best interest, deception, and an overall measure of moral distress. For the three MDS frequency constructs, coefficient alphas varied from a low of .758 for the frequency of deception construct, to a high of .903 for the individual responsibility measure of the frequency of moral distress. The same was true for the three MDS intensity constructs. Coefficient alphas varied from a low of .763 for the intensity of deception construct, to a high of .892 for the individual responsibility measure of the intensity of moral distress. Since the coefficient alphas for all six of the MDS constructs were above .70, the constructs were considered reliable measures.

A total of six constructs were created from the PES-NWI items. These constructs consisted of nurse participation in hospital affairs; nursing foundations for quality of care; nurse manager ability, leadership, and support of nurses; staffing and resource adequacy; collegial nurse-physician relations; and an overall measure of the practice environment. For the six PES-NWI constructs, coefficient alphas varied from a low of .810 for the

staffing and resource adequacy construct, to a high of .948 for the overall measure of the practice environment. Since the coefficient alphas for all six of the PES-NWI constructs were above .70, these constructs were also considered reliable measures. The results of the internal reliability consistency of MDS and PES-NWI constructs are found in Table 5.

Table 5. Cronbach's Alpha Measures of Internal Consistency Reliability of Study Constructs

Construct	Number of items	Cronbach's alpha
MDS Frequency		
Individual responsibility	20	.903
Not in the patient's best interest	7	.845
Deception	3	.758
MDS Intensity		
Individual responsibility	20	.892
Not in the patient's best interest	7	.821
Deception	3	.763
PES-NWI		
Nurse participation in hospital affairs	9	.904
Nursing foundations for quality of care	10	.838
Nurse manager ability, leadership, and support	5	.905
Staffing and resource adequacy	4	.810
Collegial nurse-physician relations	3	.891
Overall practice environment	31	.948

Note. $n = 124$.

Description of Study Variables

After study constructs were established as reliable measures, descriptive statistics were used to explore the central tendency of scores on the constructs. Minimum and maximum values were examined, as well as means and standard deviations. Results of the descriptive statistics are presented first for the MDS constructs, followed by the PES-NWI constructs, and finally for the variable likelihood of resigning.

Frequency of Moral Distress (MDS frequency)

The central tendency of the MDS frequency constructs (individual responsibility, not in the patient's best interest, and deception) were examined first. For the frequency questions of the MDS, participants were asked to rate on a scale of 0-6, the frequency with which they were morally distressed by the given situations. Items were then summed to create the three MDS frequency constructs. Lowest possible score for any of the constructs was 0. For the individual responsibility construct, highest possible score was 120, for the not in the patient's best interest construct the highest possible score was 42, and for the deception construct the highest possible score was 18. Central tendency of the averaged items is presented for the purposes of comparison in this section since the number of items comprising each construct is different. However, the summed item constructs were used in the analysis to test the hypotheses.

The average of the items used in each of the constructs indicated that the frequency of moral distress in the situations posed to the study participants was less than two for all of the MDS frequency constructs. This indicated that the participants did not experience moral distress with much frequency. Situations that most frequently caused moral distress for the participants were those in which the outcome was not in the

patient's best interest (M = 1.94, SD = 1.30), followed by those in which the participant was individually responsible (M = 1.30, SD = .98), and finally those in which there was deception (M = .56, SD = 1.09). Results are presented in Table 6.

Intensity of Moral Distress (MDS intensity)

The central tendency of the MDS intensity constructs (individual responsibility, not in the patient's best interest, and deception) were examined second. For the intensity questions of the MDS, the participants were asked to rate on a scale of 0-6, the intensity of the moral distress experience in the given situations. Items were then summed to create the three MDS intensity constructs. Lowest possible score for any of the constructs was 0. For the individual responsibility construct, the highest possible score was 120, for the not in the patient's best interest construct the highest possible score was 42, and for the deception construct the highest possible score was 18. Central tendency of the averaged items is presented for the purposes of comparison in this section since the number of items comprising each construct is different. However, the summed item constructs were used in the analysis to test the hypotheses.

The average of the items used in each of the constructs indicated that the intensity of the moral distress experienced in the given situations was less than three for all of the MDS intensity constructs. Although still low, the averages were higher than those of the frequency constructs. Situations that caused the greatest degree of intensity of moral distress were those in which the outcome was not in the patient's best interest (M = 2.68, SD = 1.53), followed by those in which the participant was individually responsible (M = 2.15, SD = 1.30), and finally those in which there was deception (M = 1.05, SD = 1.61). Results are presented in Table 6.

Table 6. Measures of Central Tendency on Six MDS Frequency and Intensity Constructs

	Central Tendency of Averaged Constructs [a]			Central Tendency of Summed Constructs		
Construct/Variable	Max.	*M*	*SD*	Max.	*M*	*SD*
MDS Frequency						
Individual responsibility	5.10	1.30	.98	102	26.06	19.58
Not in the patient's best interest	6.00	1.94	1.30	42	13.60	9.12
Deception	5.33	.56	1.09	16	1.69	3.27
Overall [a]	6.38	1.82	1.17	204	58.19	37.41
MDS Intensity						
Individual responsibility	5.90	2.15	1.30	118	42.95	25.92
Not in the patient's best interest	6.00	2.68	1.53	42	18.77	10.73
Deception	6.00	1.05	1.61	18	3.15	4.82
Overall [a]	6.56	2.80	1.44	210	89.57	46.15

Note. $n = 124$. [a] Not used to test the study hypotheses.

Practice Environment Scales of the Nursing Workforce Index (PES-NWI)

Central tendency of the PES-NWI constructs (nurse participation in hospital affairs; nursing foundations for quality of care; nurse manager ability, leadership, and support of nurses; staffing and resource adequacy; collegial nurse-physician relations; and overall practice environment) were examined third. For PES-NWI items, participants were asked to rate their level of agreement with the given statement on the

practice environment at their workplace. Items were rated on a 4-point Likert scale of *strongly agree* to *strongly disagree*. Items were then averaged to create the five practice environment constructs and an overall practice environment construct. Lowest possible score for any of the constructs was 1, and the highest possible score for any of the constructs was 4. Central tendency of the averaged items is presented for each of the six constructs in Table 7.

Overall, participants tended to disagree with the practice environment statements, which indicated that the practice environment of the participants lacked many of the items described in the questions. This is reflected in averages between two and three for each of the five PES-NWI constructs. Highest average among the PES-NWI constructs was for the collegial nurse-physician relations (M = 2.68, SD = .72), and the lowest average was for the nurse participation in hospital affairs construct (M = 2.19, SD = .66).

Likelihood of Resigning

Participants were asked to rate on a scale of 1 to 10 the likelihood of resigning from their position because of their discomfort with the way patient care was handled at their institution. A rating of 1 represented *never* and a rating of 10 represented *definitely*. The mean rating of the participants' likelihood of resigning (M = 3.39, SD = 2.86) indicated that the participants were not likely to resign from their position because of any discomfort with the way patient care was handled. The results of the measures of central tendency of the in likelihood of resigning variable are presented in Table 7.

Table 7. Measures of Central Tendency on Six PES-NWI Constructs and Likelihood of Resigning

Construct/Variable	Min.	Max	*M*	*SD*
PES-NWI				
Nurse participation in hospital affairs	1	3.56	2.19	.66
Nursing foundations for quality of care	1	3.70	2.58	.55
Nurse manager ability, leadership, and support	1	4.00	2.30	.83
Staffing and resource adequacy	1	4.00	2.23	.66
Collegial nurse-physician relations	1	4.00	2.68	.72
Overall practice environment	1.06	3.52	2.38	.55
Likelihood of resigning [a]	1	10	3.39	2.86

Note. $n = 124$. [a] $n = 122$.

Assumption Testing

Procedure for Assumption Testing

Assumptions of multiple regression were assessed for each multiple regression used to test the study hypotheses. These were the assumptions of normality, linearity, and homoscedasticity. Assumption of normality was assessed by examining histograms of the frequency distribution of scores for each of the dependent and independent variables. Assumptions of linearity and homoscedasticity were assessed in the output of the regression model by examining a scatterplot of the standardized residuals vs. the standardized predicted values. If the assumption of normality was violated, data transformations were attempted in order to create a bell-shaped distribution of scores and

aid in meeting the assumption of normality. Four transformations were attempted: square root, natural logarithm, common logarithm, and inverse. If the shape of the distribution of scores was not improved after transforming the data, the original scores were used in the analysis.

For the assumption of normality, histograms of the independent and dependent variables were examined. If the shape of the distribution of scores for each of the constructs resembled a bell-shaped curve, the assumption of normality was considered met. However, if the shape of the distribution of scores was either positively or negatively skewed and/or either platykurtic or leptokurtic, the assumption of normality was considered violated.

For the assumption of linearity and homoscedasticity, a best-fit regression line was fitted to the data points in the scatterplot and the distribution of the data points around the regression line was examined. If the data points were evenly distributed throughout the length of the regression line and did not represent a curve, the relationship between the variables was linear and the assumption of linearity was considered met. If the data points resembled the shape of curve, a non-linear model was considered as an alternative to the parametric multiple linear regression. As was the case for the assumption of linearity, if the data points in the scatterplot were evenly distributed throughout the length of the regression line, the assumption of homoscedasticity was considered met. If the data points formed the shape of a cone or a funnel, the assumption of homoscedasticity was considered violated. This would indicate a higher likelihood of a type II error.

Results of Normality Assumption Testing

After examining histograms for each of the independent variables and dependent variables, the assumption was found to be violated for all six of the MDS frequency constructs, the PES-NWI construct of collegial nurse-physician relations, and the likelihood of resigning variable. Warner (2008) notes that the histogram aids in visually assessing the distribution shape of scores involving quantitative data. This type of analysis provides a way to "evaluate whether the distribution shape is reasonably close to normal or to identify a shape of distribution if it is quite different from normal" (p. 141). Warner explains further that a distribution of scores that is symmetrical and considered normal has a skewness value of 0. If the scores show a longer tail on the upper right-hand/upper end of the distribution, it indicates the data is positively skewed. All of the constructs with a non-normal frequency distribution were found to be positively skewed, as was the likelihood of resigning variable. Therefore, data transformations were attempted to create normal distributions. For MDS frequency constructs of individual responsibility and not in the patient's best interest, the natural logarithm transformation aided in meeting the assumption of normality. For MDS intensity constructs of individual responsibility and not in the patient's best interest, the square root transformation aided in meeting the assumption of normality. However, data transformations did not aid the frequency distributions of MDS frequency and MDS intensity constructs of deception, the PES-NWI construct of collegial nurse-physician relations, or the likelihood of resigning. For these variables, original scores were used in the analysis. The pre and post data transformation histograms are presented in Figures 1-16.

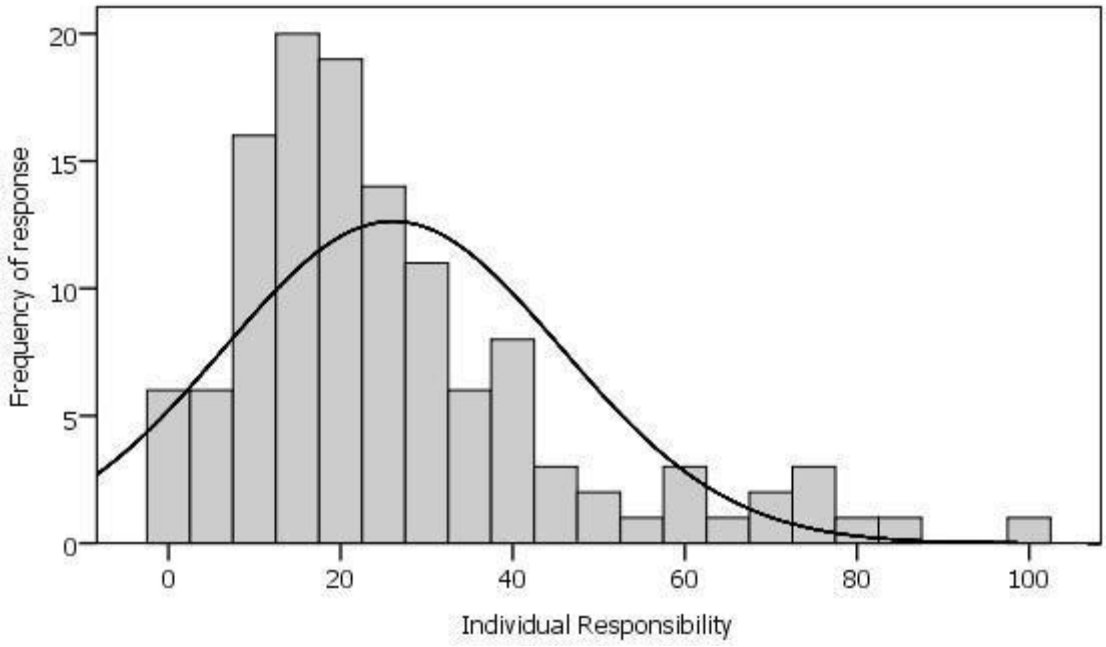

Figure 1. Histogram of the original frequency distribution of the MDS frequency construct of individual responsibility.

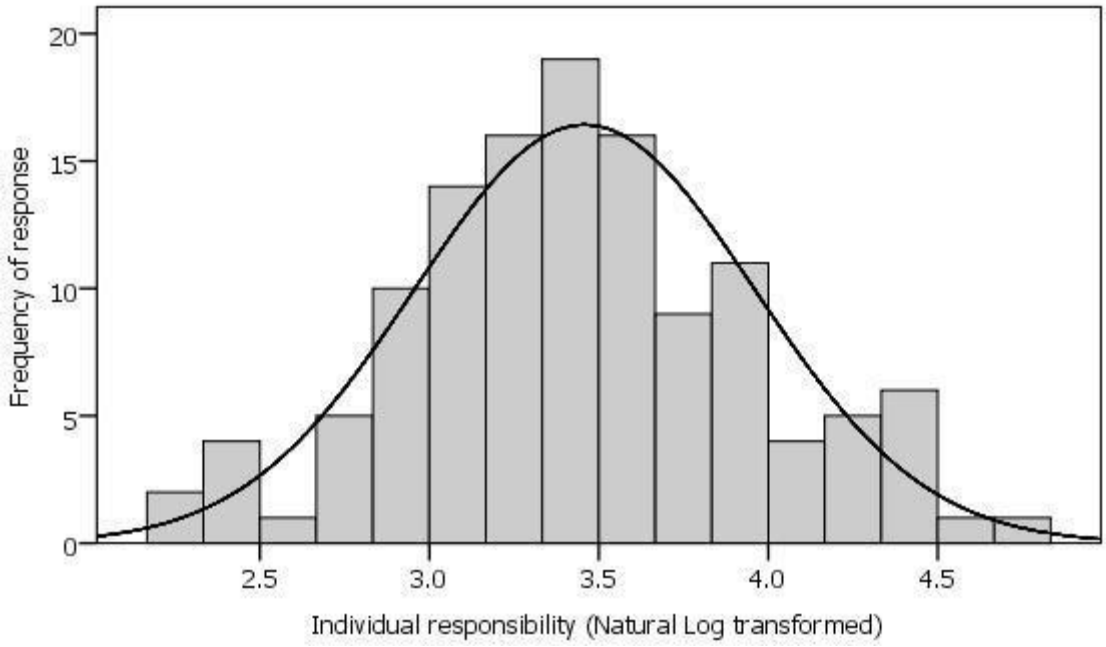

Figure 2. Histogram of the natural log transformed frequency distribution of the MDS frequency construct of individual responsibility.

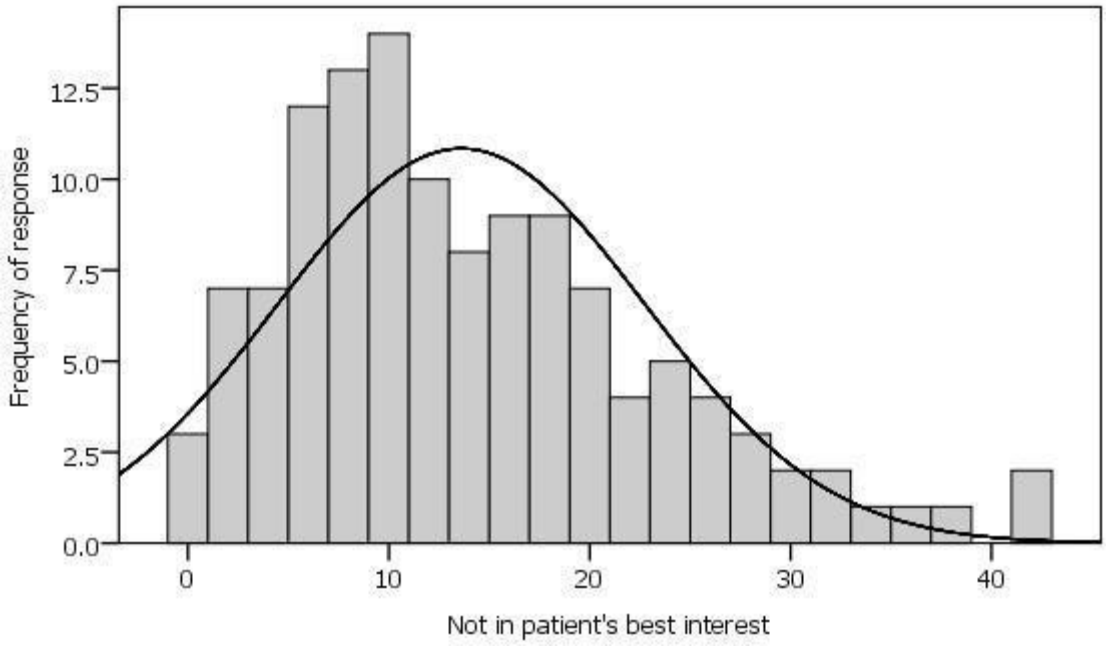

Figure 3. Histogram of the original frequency distribution of the MDS frequency construct of not in the patient's best interest.

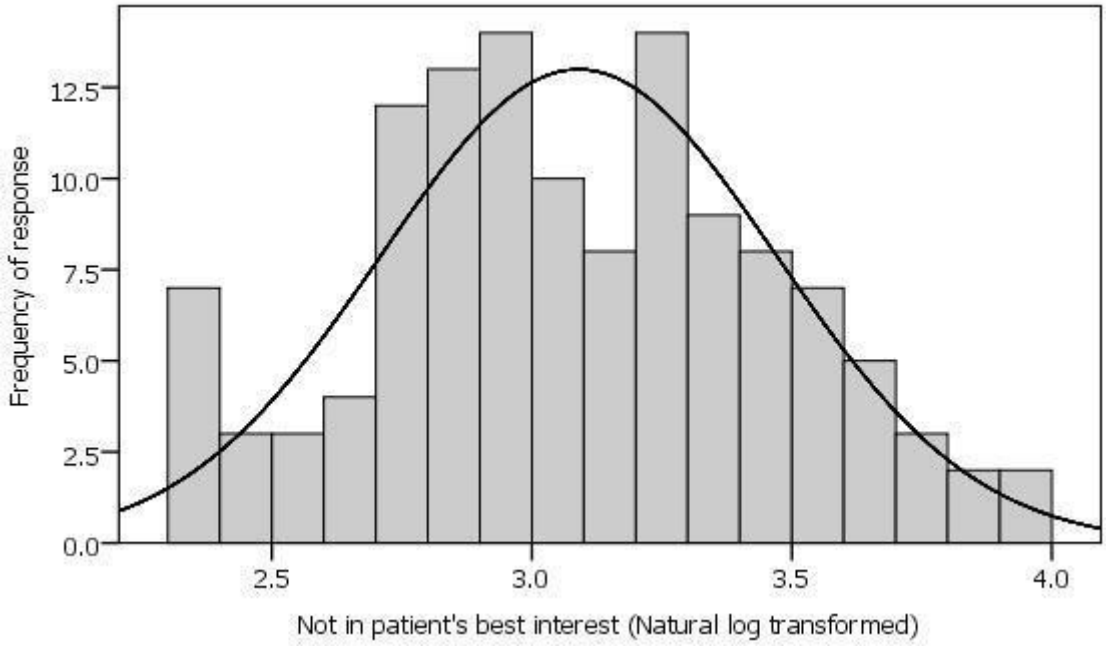

Figure 4. Histogram of the natural log transformed frequency distribution of the MDS frequency construct of not in the patient's best interest.

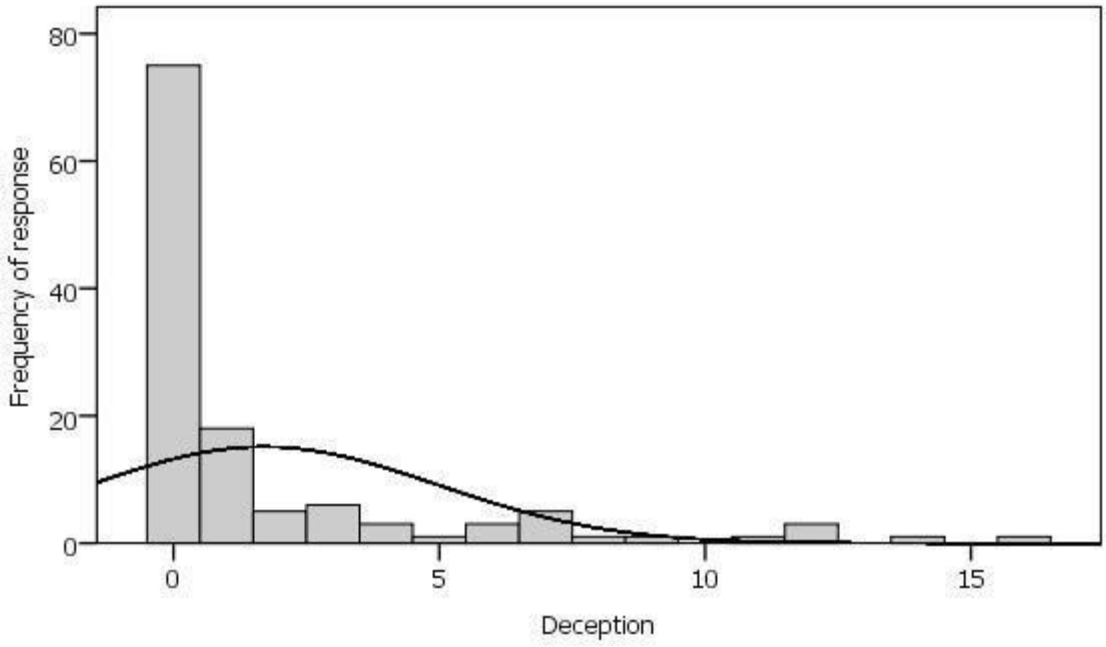

Figure 5. Histogram of the original frequency distribution of the MDS frequency construct of deception.

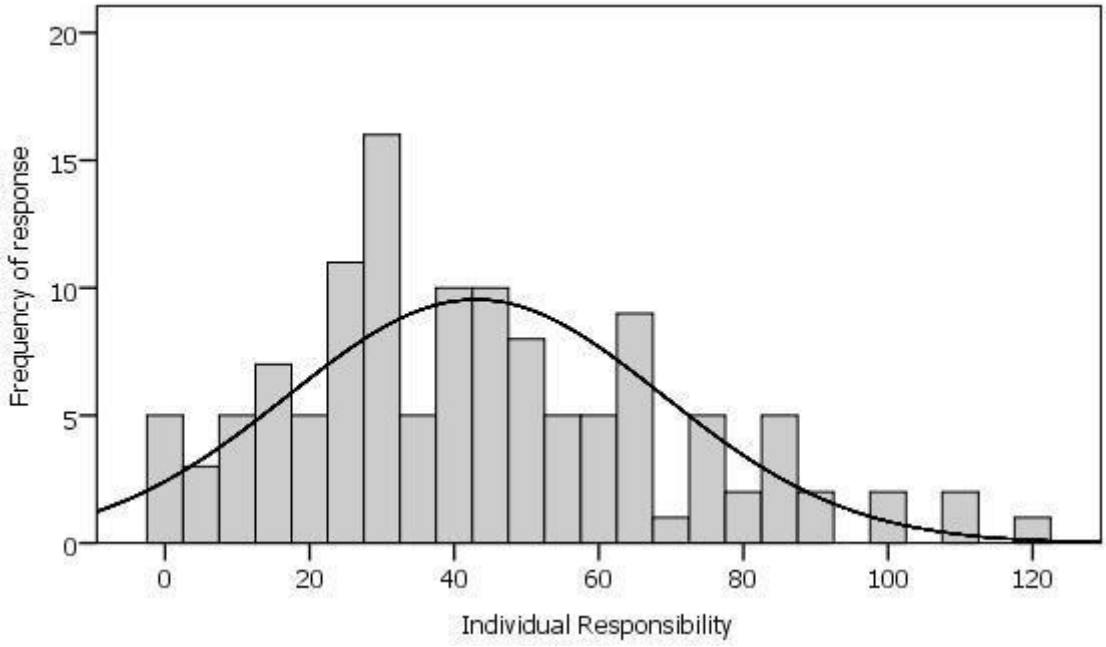

Figure 6. Histogram of the original frequency distribution of the MDS intensity construct of individual responsibility.

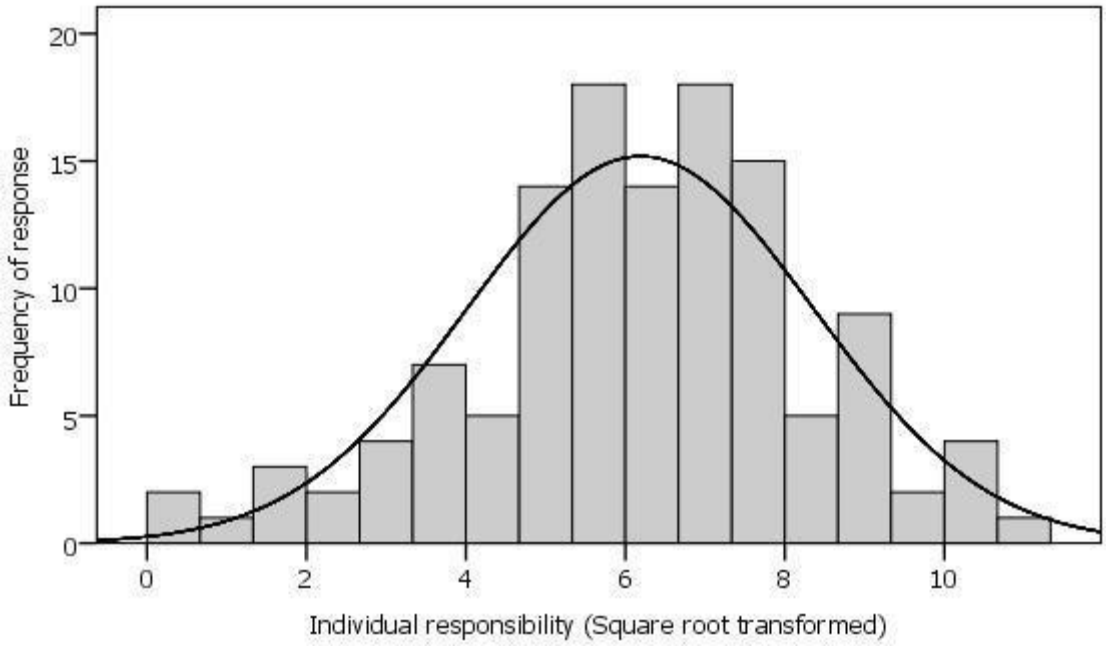

Figure 7. Histogram of the square root transformed frequency distribution of the MDS intensity construct of individual responsibility.

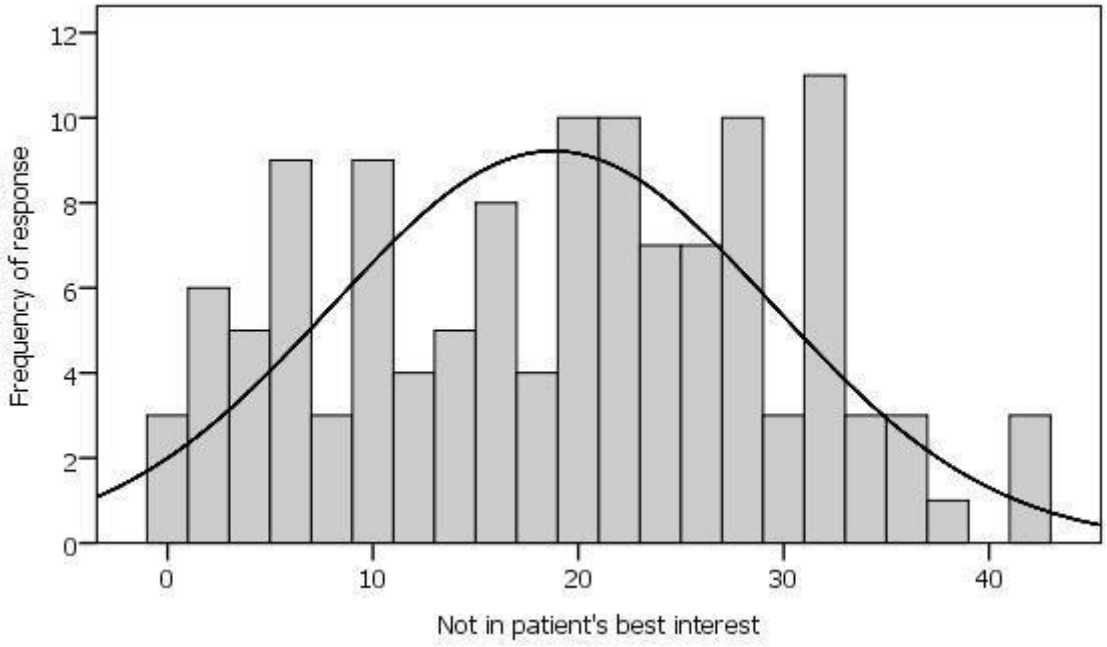

Figure 8. Histogram of the original frequency distribution of the MDS intensity construct of not in the patient's best interest.

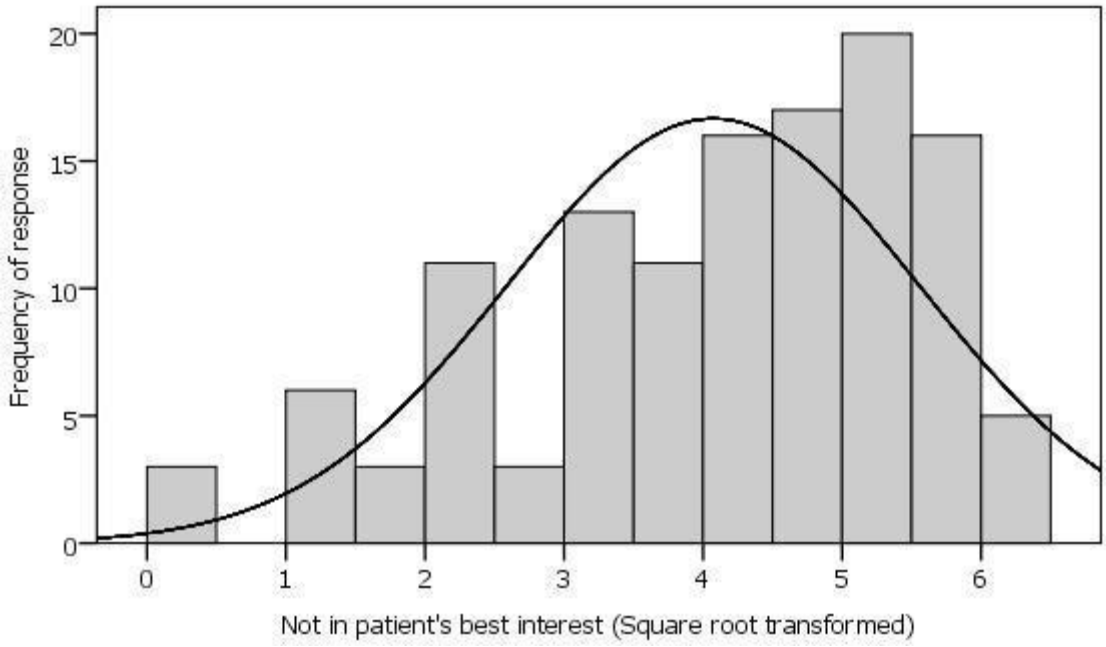

Figure 9. Histogram of the square root transformed frequency distribution of the MDS intensity construct of not in the patient's best interest.

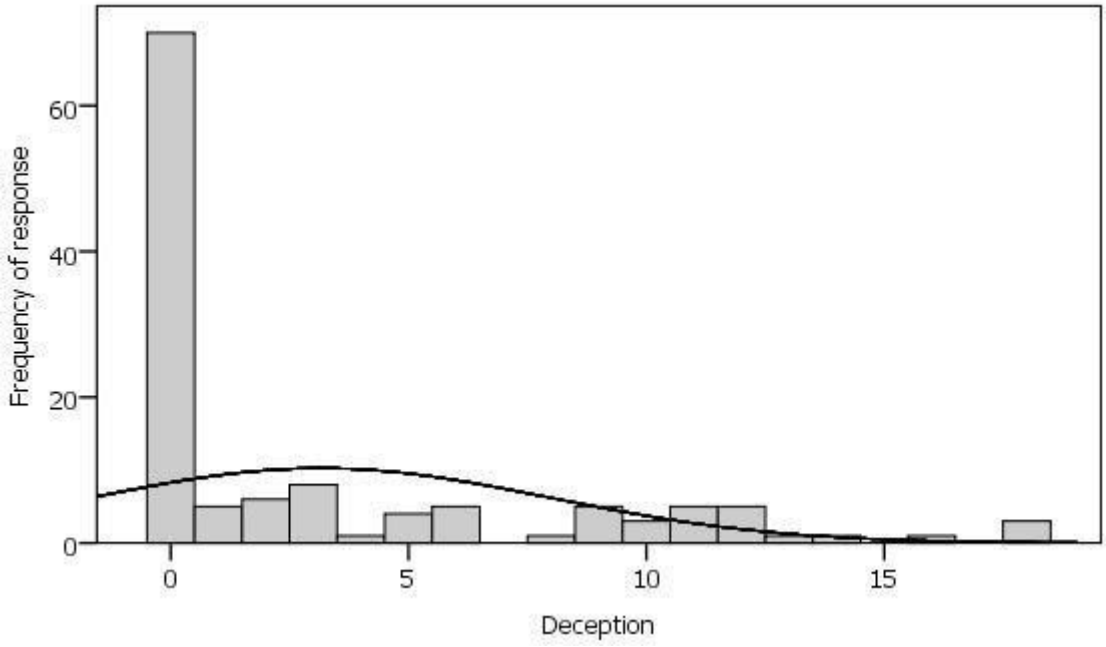

Figure 10. Histogram of the original frequency distribution of the MDS intensity construct of deception.

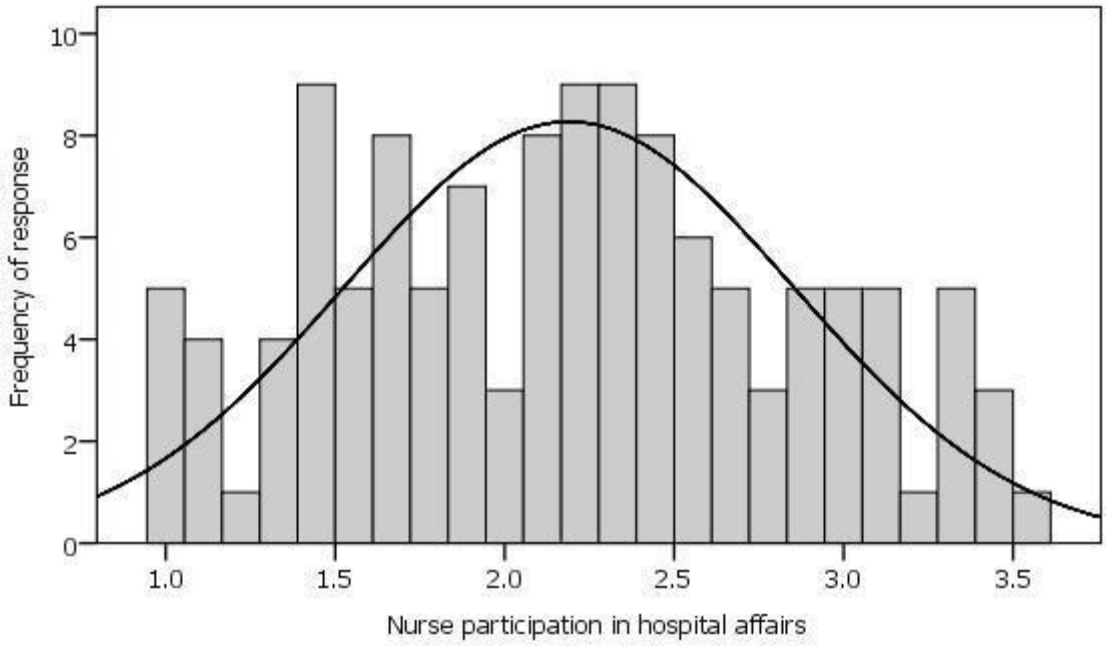

Figure 11. Histogram of the frequency distribution of the PES-NWI construct of nurse participation in hospital affairs.

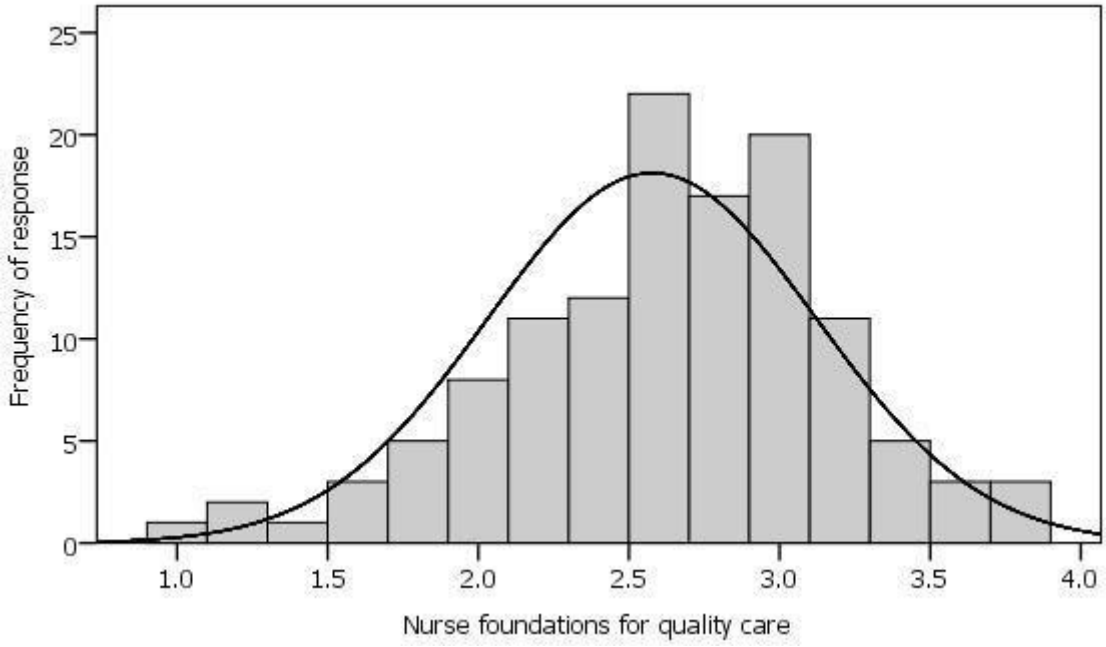

Figure 12. Histogram of the frequency distribution of the PES-NWI construct of nurse foundations for quality care.

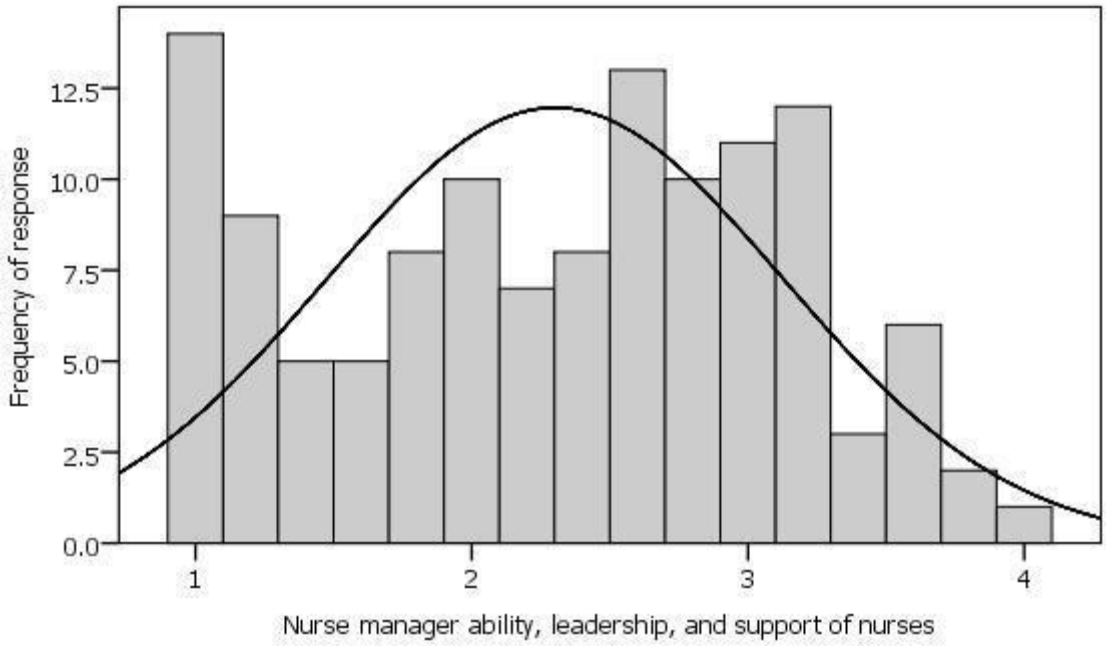

Figure 13. Histogram of the frequency distribution of the PES-NWI construct of nurse manager ability, leadership, and support of nurses.

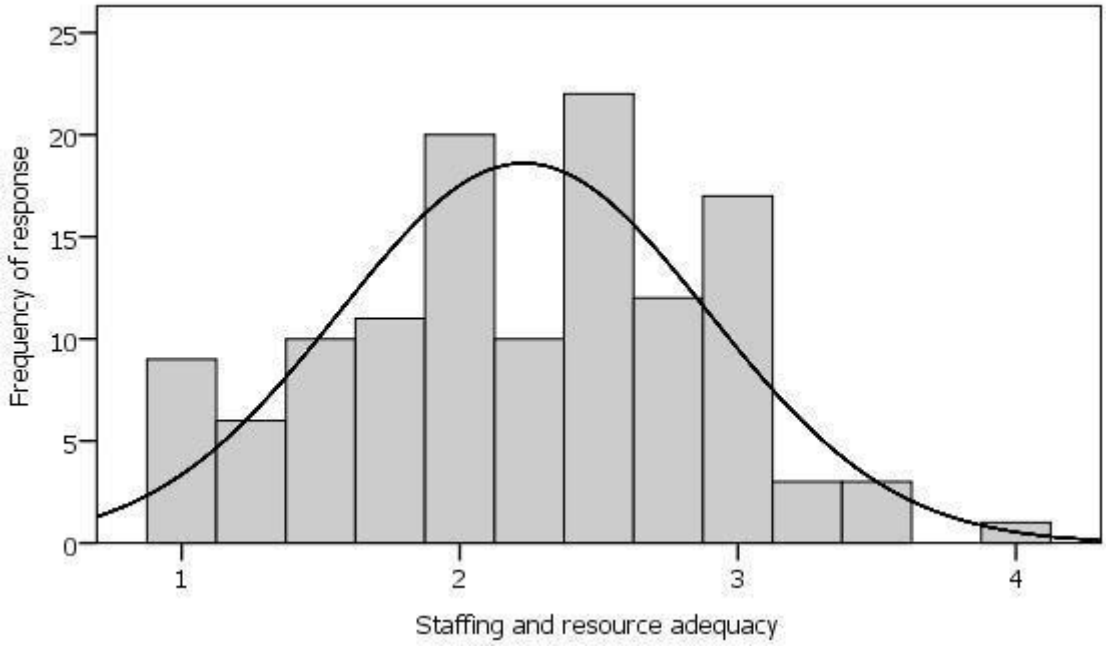

Figure 14. Histogram of the frequency distribution of the PES-NWI construct of staffing and resource adequacy.

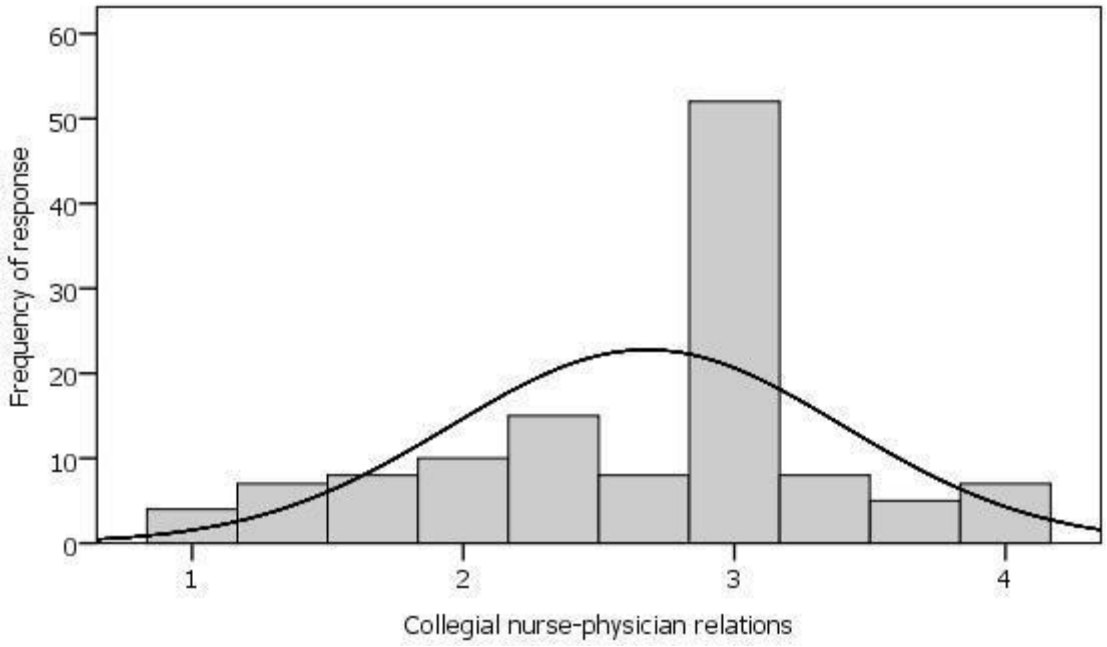

Figure 15. Histogram of the frequency distribution of the PES-NWI construct of collegial nurse-physician relations.

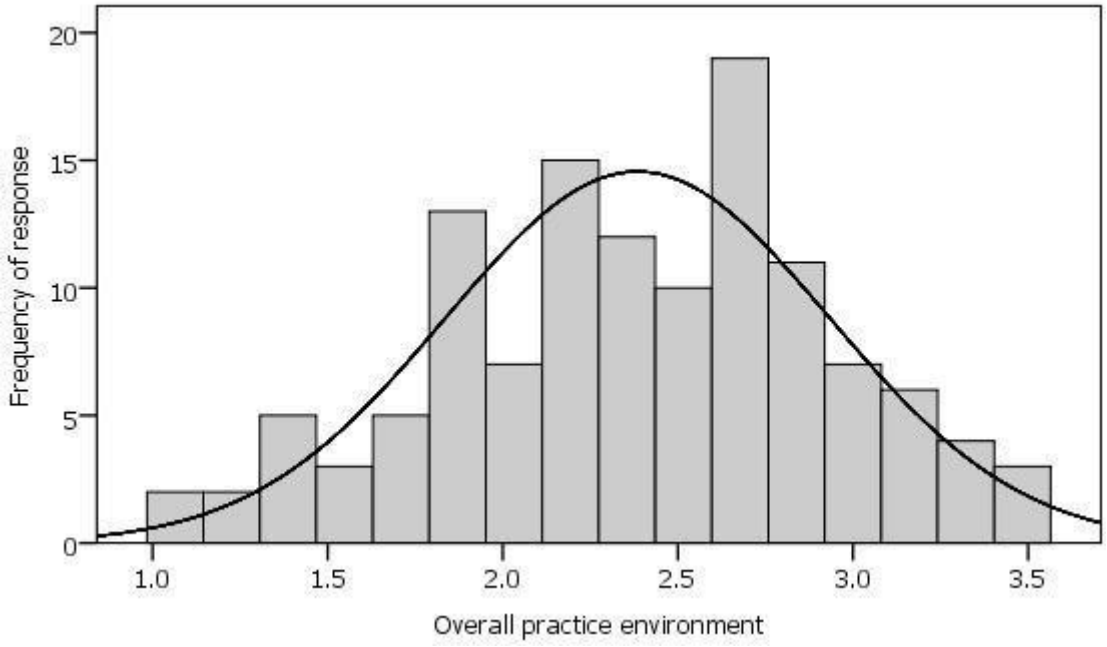

Figure 16. Histogram of the frequency distribution of the PES-NWI construct of overall practice environment.

Results of Linearity and Homoscedasticity Assumption Testing

To assess assumptions of linearity and homoscedasticity, scatterplots of the standardized residuals vs. the standardized predicted values were created in the output for each of the multiple linear regressions. A best-fit line was then fit to the data points and the distribution of the data points was examined for patterns. After examining the scatterplots for patterns in the data points, it was established that the assumption of linearity was met. However, the assumption of homoscedasticity was violated for the multiple regressions conducted to test hypotheses 3-5. Data points were not even and random in their distribution about the best-fit regression line. Therefore, there is an increased probability of committing a type II error, or not finding a significant relationship that does exist. Scatterplots are presented in Figures 17-21.

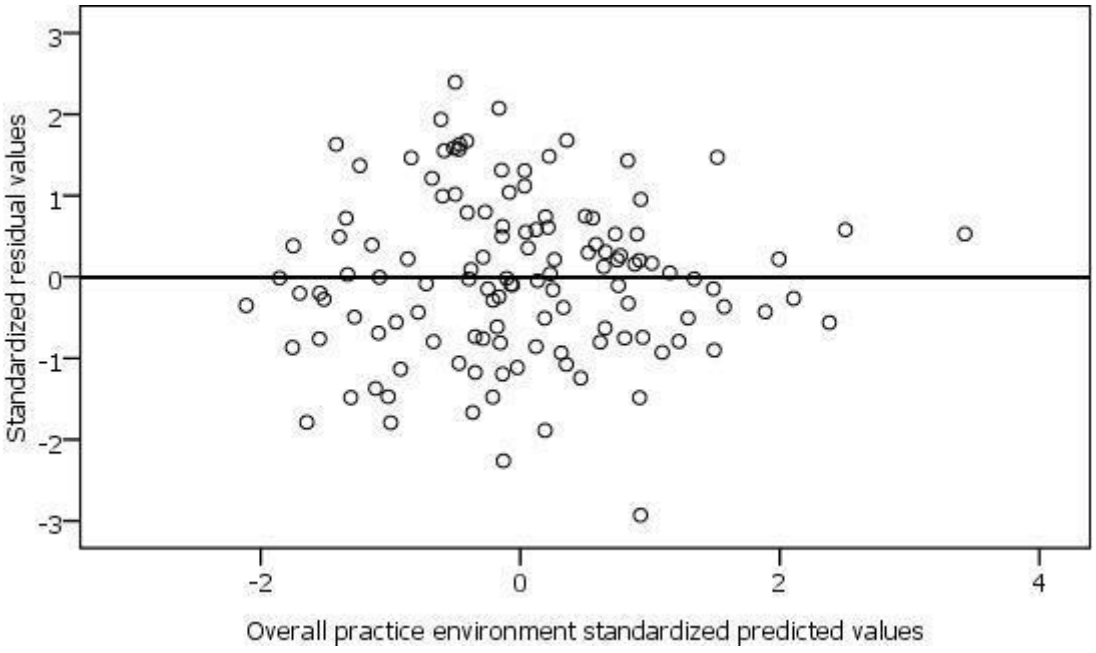

Figure 17. Scatterplot of standardized residuals vs. standardized predicted values for regression using MDS intensity to predict overall practice environment.

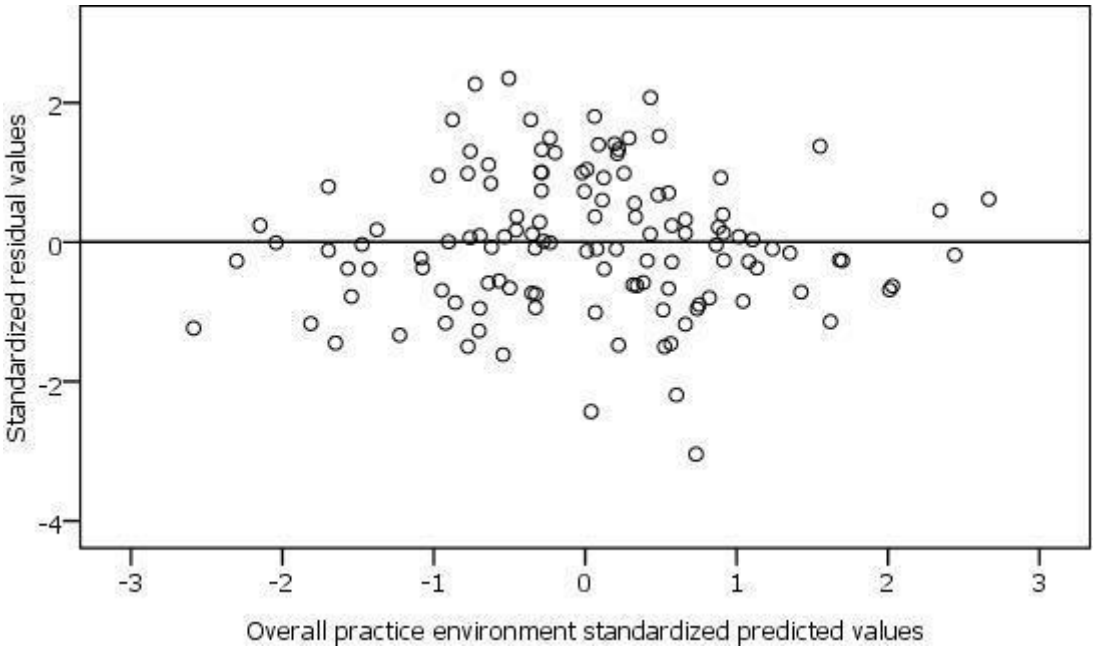

Figure 18. Scatterplot of standardized residuals vs. standardized predicted values for regression using MDS frequency to predict overall practice environment.

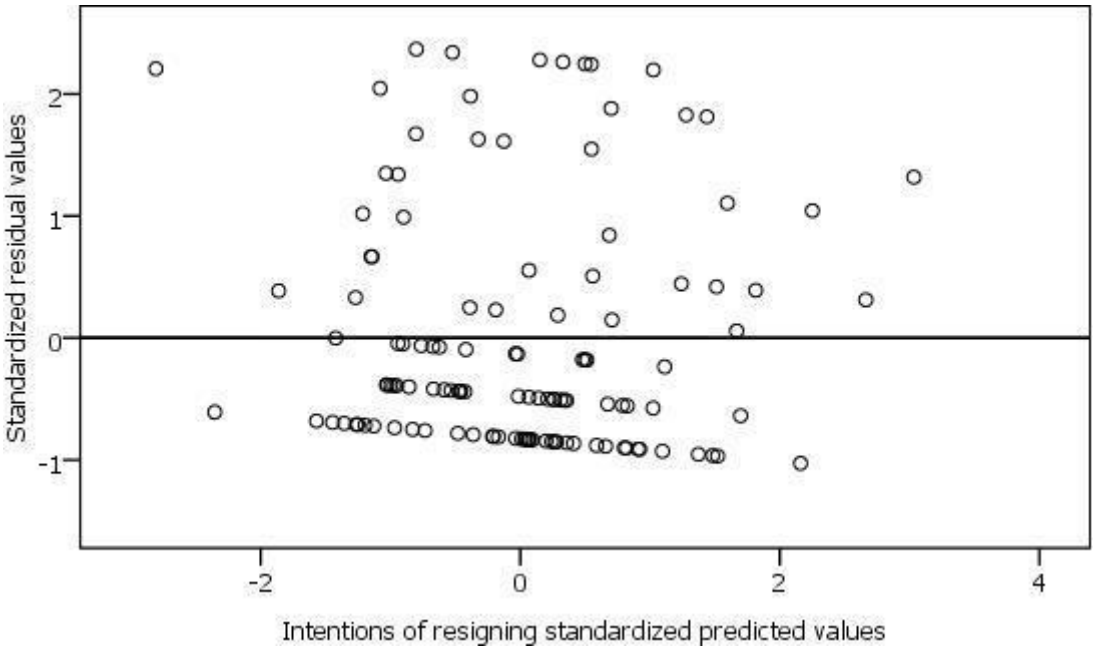

Figure 19. Scatterplot of standardized residuals vs. standardized predicted values for regression using MDS intensity to predict likelihood of resigning.

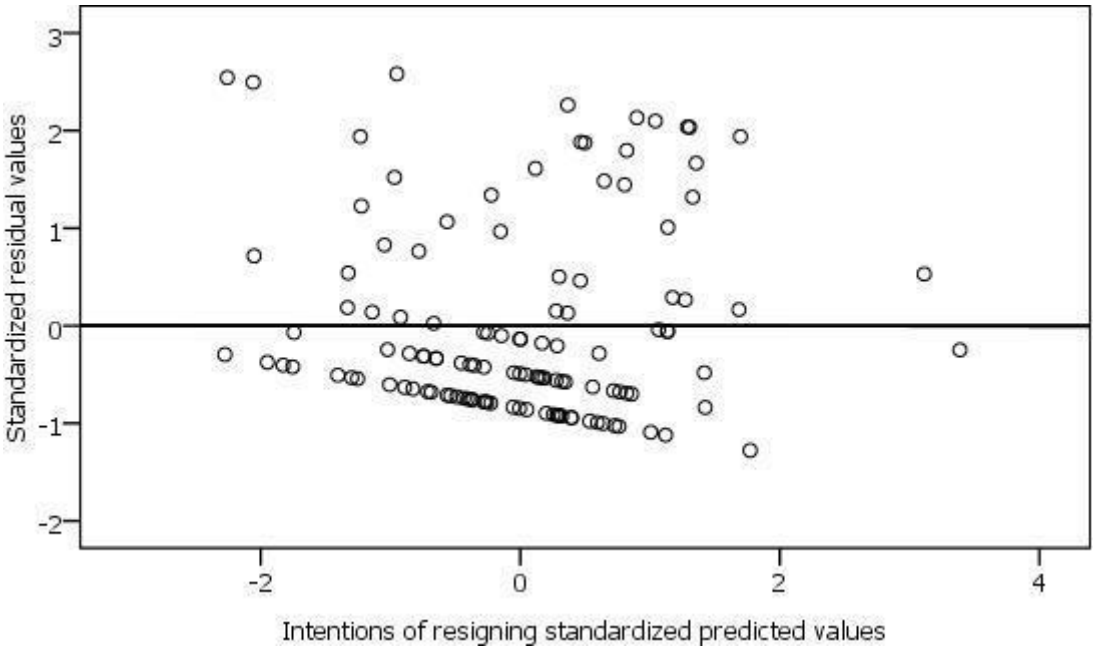

Figure 20. Scatterplot of standardized residuals vs. standardized predicted values for regression using MDS frequency to predict likelihood of resigning.

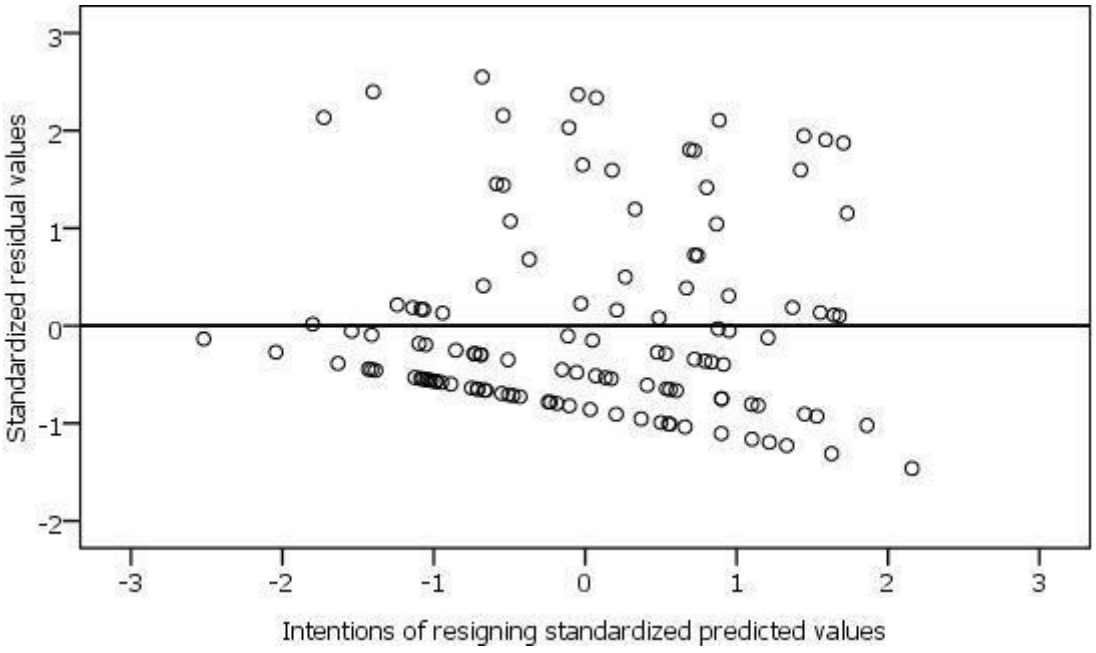

Figure 21. Scatterplot of standardized residuals vs. standardized predicted values for regression using PES-NWI to predict likelihood of resigning.

Hypothesis Testing

The five study hypotheses were tested by conducting multiple linear regression analysis on the constructs of the MDS and PES-NWI, and the variable likelihood of resigning. A total of 13 variables were used: three constructs derived from the MDS questions on the frequency with which moral distress was experienced in the given situations, three constructs derived from the MDS questions on the intensity of the experienced moral distress in the given situations, six constructs derived from the PES-NWI questions on the perception of the practice environment, and responses to a single question that asked nurses to indicate their likelihood or resigning by selecting a value on a scale of 1-10. Before using these constructs as variables in the regression analysis, the assumptions of normality, linearity, and homoscedasticity were assessed. Assumptions of normality and homoscedasticity were found to be violated. Therefore, the MDS frequency and MDS intensity variables of individual responsibility and not in the patient's best interest were transformed, and the transformed variables were used as independent variables in the testing of Hypotheses 1-4.

Hypothesis 1

To test Hypothesis 1, that the intensity of moral distress experienced by registered nurses does influence their perception of the practice environment, a multiple linear regression was conducted. The two square root transformed MDS intensity constructs of individual responsibility and not in the patient's best interest, as well as the construct of deception, were used as interval level independent variables predicting the interval level dependent variable, PES-NWI overall practice environment. Results of the multiple regression model were significant. The null hypothesis was rejected.

Results of the regression model used to test Hypothesis 1 indicated the intensity of the three types of moral distress (individual responsibility, not in the patient's best interest, and deception) experienced by registered nurses did influence their perception of the practice environment, F (3,120) = 6.40, $p < .001$. Intensity of these three types of moral distress accounted for 13.8% of the variance in the nurses' perception of the practice environment. As individual predictors of perception of the practice environment, only individual responsibility significantly contributed to the model predicting the perception of the practice environment. Relationship between individual responsibility and perception of the practice environment was such that as intensity of moral distress in situations in which the nurse was individually responsible increased, perception of the practice environment decreased. Results of the multiple linear regression conducted to test Hypothesis 1 is presented in Table 8.

Table 8. Multiple Linear Regression Using Intensity of Moral Distress to Predict Perception of Practice Environment

Variable	*B*	95% CI
Constant	2.87***	[2.55, 3.19]
Individual Responsibility [a]	-.12***	[-.19, -.06]
Not in the patient's best interest [a]	.07	[-.02, .15]
Deception	.004	[-.02, .03]
R^2	.138	
F	6.40***	

Note. CI = Confidence Interval. [a] Square root transformed.***$p < .001$.

Hypothesis 2

To test Hypothesis 2, that the frequency of moral distress experienced by registered nurses does influence their perception of the practice environment, a multiple linear regression was conducted. The two natural logarithms transformed MDS frequency constructs of individual responsibility and not in the patient's best interest, as well as the construct of deception, were used as interval level independent variables predicting the interval level dependent variable, PES-NWI overall perception of the practice environment. Results of the multiple regression model were significant. The null hypothesis was rejected.

Results of the regression model used to test Hypothesis 2 indicated that the frequency of the three types of moral distress (individual responsibility, not in the patient's best interest, and deception) experienced by registered nurses did influence their perception of the practice environment, F (3,120) = 10.47, $p < .001$. Frequency of these three types of moral distress accounted for 20.8% of the variance in the nurses' perception of the practice environment. As individual predictors of perception of the practice environment, only individual responsibility significantly contributed to the model predicting perception of the practice environment. Relationship between individual responsibility and perception of the practice environment was such that as the frequency of moral distress increased in situations in which the nurse was individually responsible, perception of the practice environment decreased. Results of the multiple linear regression conducted to test Hypothesis 2 is presented in Table 9.

Table 9. Multiple Linear Regression Using Frequency of Moral Distress to Predict Perception of Practice Environment

Variable	*B*	95% CI
Constant	3.71***	[2.88, 4.54]
Individual Responsibility [a]	-.65***	[-.93, -.38]
Not in the patient's best interest [a]	.30	[-.02, .62]
Deception	.01	[-.03, .04]
R^2	.208	
F	10.47***	

Note. CI = Confidence Interval. a Natural logarithm transformed.***p < .001.

Hypothesis 3

To test Hypothesis 3, that the intensity of moral distress experienced by registered nurses does influence their likelihood of resigning, a multiple linear regression was conducted. The two square root transformed MDS intensity constructs of individual responsibility and not in the patient's best interest, as well as the construct of deception, were used as interval level independent variables predicting the interval level dependent variable, likelihood of resigning. Results of the multiple regression model were not significant. The null hypothesis was retained.

Results of the regression model used to test Hypothesis 3 indicated that the intensity of the three types of moral distress (individual responsibility, not in the patient's

best interest, and deception) experienced by registered nurses did not influence their likelihood of resigning, F (3,118) = .35, p = .79. Intensity of these three types of moral distress accounted for .9% of the variance in the nurses' likelihood of resigning. Results of the multiple linear regression conducted to test Hypothesis 3 is presented in Table 10.

Table 10. Multiple Linear Regression Using Intensity of Moral Distress to Predict Likelihood of Resigning

Variable	*B*	95% CI
Constant	3.40***	[1.61, 5.19]
Individual Responsibility [a]	.16	[-.22, -.54]
Not in the patient's best interest [a]	-.23	[-.72, .25]
Deception	-.02	[-.16, .11]
R^2	.009	
F	.348	

Note. CI = Confidence Interval. a Square root transformed. ***p < .001.

Hypothesis 4

To test Hypothesis 4 regarding the frequency of moral distress experienced by registered nurses does influence their likelihood of resigning, a multiple linear regression was conducted. The two natural logarithm transformed MDS frequency constructs of individual responsibility and not in the patient's best interest, as well as the construct of deception, were used as interval level independent variables predicting the interval level

dependent variable, likelihood of resigning. Results of the multiple regression model were not significant. The null hypothesis was retained.

Results of the regression model used to test Hypothesis 4 indicated that the frequency of the three types of moral distress (individual responsibility, not in the patient's best interest, and deception) experienced by registered nurses did not influence their likelihood of resigning, F (3,118) = 2.38, p = .07. Frequency of moral distress accounted for 5.7% of the variance in the nurses' likelihood of resigning. Results of the multiple linear regression conducted to test Hypothesis 4 is presented in Table 11.

Table 11. Multiple Linear Regression Using Frequency of Moral Distress to Predict Likelihood of Resigning

Variable	*B*	95% CI
Constant	2.29	[-2.47, 7.06]
Individual Responsibility [a]	1.97*	[.39, 3.55]
Not in the patient's best interest [a]	-1.76	[-3.59, .08]
Deception	-.17	[-.36, .03]
R^2	.057	
F	2.38	

Note. CI = Confidence Interval. a Natural logarithm transformed. *p < .05.

Hypothesis 5

To test Hypothesis 5 regarding the registered nurse's perception of the practice environment does influence their likelihood of resigning, a multiple linear regression was conducted. The five PES-NWI constructs of nurse participation in hospital affairs; nursing foundations for quality of care; nurse manager ability, leadership, and support of nurses; staffing and resource adequacy; and collegial nurse-physician relations, were used as interval level independent variables predicting the interval level dependent variable, likelihood of resigning. Results of the multiple regression model were not significant. The null hypothesis was retained.

Results of the regression model used to test Hypothesis 5 indicated that the combination of the five measures of the nurse's perception of the practice environment (nurse participation in hospital affairs; nursing foundations for quality of care; nurse manager ability, leadership, and support of nurses; staffing and resource adequacy; and collegial nurse-physician relations) did not influence their likelihood of resigning, $F(5,116) = 1.95$, $p = .09$. Combination of the five measures of perception of the practice environment accounted for 7.7% of the variance in the nurses' likelihood of resigning. Results of the multiple linear regression conducted to test Hypothesis 5 is presented in Table 12.

Table 12. Multiple Linear Regression Using Perception of Practice Environment to Predict Likelihood of Resigning

Variable	*B*	95% CI
Constant	5.53***	[2.82, 8.24]
Nurse participation in hospital affairs	-.62	[-2.00, .76]
Nursing foundations for quality of care	.30	[-1.23, 1.84]
Nurse manager ability, leadership, and support of nurses	-.73	[-1.65, .20]
Staffing and resource adequacy	.35	[-.63, 1.33]
Collegial nurse-physician relations	-.25	[-1.06, .55]
R^2	.077	
F	1.95	

Note. CI = Confidence Interval. *p < .001.

Summary

In summary, Chapter 4 presented the data analysis and findings for the study. The purpose of the study was presented and the results of the tested hypothesis.

Hypothesis 1 tested the intensity of moral distress experienced by registered nurses does influence their perception of the practice environment and found the results of the multiple regression model were significant. The null hypothesis was rejected.

Hypothesis 2 tested the frequency of moral distress experienced by registered nurses does influence their perception of the practice environment, a multiple linear

regression and fund the results of the multiple regression model were significant. The null hypothesis was rejected.

Hypothesis 3 tested the intensity of moral distress experienced by registered nurses does influence their likelihood of resigning and found the results of the multiple regression model were not significant. The null hypothesis was retained.

Hypothesis 4 tested the frequency of moral distress experienced by registered nurses does influence their likelihood of resigning and found the results of the multiple regression model were not significant. The null hypothesis was retained.

Hypothesis 5 tested that the registered nurse's perception of the practice environment does influence their likelihood of resigning and found the results of the multiple regression model were not significant. The null hypothesis was retained.

The final chapter presents the summary of results, discussion of results, discussion of conclusions, implications for practice, and limitations of the study. The significance of the study to the field of practice and recommendations for future study are also offered.

CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

Introduction

This final chapter presents the summary of purpose, statement of the problem, review of methodology, summary of results, discussion of results, discussion of conclusions, implications for practice, and limitations of the current study. Significance of the study to the field of practice and recommendations for future study are also offered.

Summary of Purpose

As noted in Chapter 1, the purpose of this non-experimental descriptive correlational quantitative study with convenience sampling was to examine the relationships between the moral distress experienced by professional registered nurses, perceived practice environment, and likelihood of resigning from a clinical position within the VHA system.

The following research questions were used to guide the study:

RQ1: To what extent does the intensity of moral distress experienced by registered nurses influence their perception of the practice environment?

RQ2: To what extent does the frequency of moral distress experienced by registered nurses influence the perception of the practice environment?

RQ3: To what extent does the intensity of moral distress experienced by registered nurses influence their likelihood of resigning?

RQ4: To what extent does the frequency of moral distress experienced by registered nurses influence their likelihood of resigning?

RQ5: To what extent does the registered nurses' perception of the practice environment influence their likelihood of resigning?

The five hypotheses tested included:

H10: The intensity of moral distress experienced by registered nurses does not influence their perception of the practice environment.

H1A: The intensity of moral distress experienced by registered nurses does influence their perception of the practice environment.

H20: The frequency of moral distress experienced by registered nurses does not influence their perception of the practice environment.

H2A: The frequency of moral distress experienced by registered nurses does influence their perception of the practice environment.

H30: The intensity of moral distress experienced by registered nurses does not influence their likelihood of resigning.

H3A: The intensity of moral distress experienced by registered nurses does influence their likelihood of resigning.

H40: The frequency of moral distress experienced by registered nurses does not influence their likelihood of resigning.

H4A: The frequency of moral distress experienced by registered nurses does influence their likelihood of resigning.

H50: The registered nurses' perception of the practice environment does not influence their likelihood of resigning.

H5A: The registered nurses' perception of the practice environment does influence their likelihood of resigning.

Statement of the Problem

The phenomenon of moral distress has been identified as a serious problem within the nursing profession. Moral distress is generally defined as the "ethically appropriate course of action is known but cannot be taken" (Elpern, Covert, & Kleinpell, 2005, p. 523). The authors of the AACN policy position paper (2008) expanded the definition to include nurses acting in a manner contrary to "personal and professional values", which then "undermines integrity and authenticity" (p. 1). Moral distress has been found to affect many variables including job satisfaction, retention, nurse turnover, burnout, stress, quality of patient relationships, cost of nursing care, loss of self-worth, interdisciplinary team relationships, physical symptoms, behavioral manifestations, spiritual suffering, and psychological effects.

Review of Methodology and Methods

The postpositivist social science approach was used as the methodological foundation for the current study. This philosophical approach sought to analyze quantitative data through surveys and describe the human behavior of nurses. A convenience sample of 124 RNs that were members of a professional nursing organization completed an anonymous online survey utilizing the MDS and the PES-NWI survey instruments. The MDS was scored for both intensity and frequency of moral distress experienced regarding each survey question. Three constructs were created each

for intensity and for frequency of moral distress experienced. These constructs included individual responsibility, not in patient's best interest, and deception. For the PES-NWI, six constructs were created from practice environment perceptions. These constructs included nurse participation in hospital affairs, nursing foundations for quality of care, nurse manager ability, leadership, and support of nurses, staffing and resource adequacy, collegial nurse-physician relations, and total PES-NWI. The likelihood of resigning variable was also measured. Interval level variables were used in the statistical analyses testing all hypotheses. Demographic characteristic questions were also included and analyzed for frequency distribution.

Summary of Results

Findings from this study indicate that nurses experience moral distress at varying degrees of intensity and frequency. The experience of moral distress in the workplace does influence nurse perception of the practice environment. In contrast, likelihood of resigning was not influenced by intensity or frequency involving moral distress experienced. Likewise, likelihood of resigning was not influenced by perception of the practice environment.

Discussion of Results

Moral Distress and Practice Environment

Hypothesis 1 and 2 tested the influence of moral distress intensity and frequency experienced regarding perception of the practice environment. Findings of the current study showed significant results indicating intensity and frequency of moral distress

experienced did influence nurse perception of the practice environment. Three MDS intensity constructs of individual responsibility, not in patient's best interest, and deception predicted the interval level dependent variable of PES-NWI overall practice environment for both hypotheses. Of the three constructs, only the MDS construct of personal responsibility significantly contributed to the model predicting perception of practice environment. In other words, situations in which the nurse was individually responsible that showed increase in perception of intensity and frequency of moral distress showed decrease in perception of the practice environment. These findings are unique to this study. No other research was found that identified a correlation between individual responsibility and perception of overall practice environment. Results of one study (McAndrew, Leske, & Garcia, 2011) that did correlate MDS and the PES-NWI responses of critical care nurses found intensity of moral distress negatively correlated to the PES-NWI subscale of medical doctor/registered nurse relationships. In addition, the study found frequency of moral distress negatively correlated to the all aspects of the PES-NWI except for foundations of care. This is in contrast to the current study's findings that determined intensity and frequency perceptions of three different constructs negatively correlated to perception of practice environment. In other words, the more intense and frequent the nurse experienced moral distress, the more negatively the practice environment was perceived regarding different moral distress constructs. Interestingly, a limited number of studies correlate moral distress to ethical climate (Corley et al., 2005; Pauly et al., 2009) but not to perception of practice environment.

Much attention has been paid to a healthy work environment or to magnet hospital attributes (AACN, 2005; AHRQ, 2007; Aiken, Havens, & Sloane, 2000; Erickson et al., 2004; Flynn & McCarthy, 2008; Hafner, 1989; Kramer & Schmalenberg, 2008; Kramer & Laschinger, 1989; Almost & Tuer-Hodes, 2003; Lundmark, 2008; McClure, Poulin, Sovie, & Wandelt, 2002; Middleton, Griffiths, Fernandez & Smith, 2008; Scott, Sochalski & Aiken, 1999; Sovie,1984; Valentine, 2007) but no studies were found that correlated those concepts to moral distress experienced by the nurse. This may be due to the fact that organizations are just becoming cognizant of the phenomenon of moral distress and may not have developed baseline knowledge in their own facility.

Moral Distress Constructs

As noted earlier in this study, moral distress has been researched in many different settings. There are similarities in other research findings that can be compared to results of the current study. In the current study, three constructs measured frequency as well as intensity of moral distress. These constructs consisted of individual responsibility, not in the patient's best interest, deception, and an overall measure of moral distress. Compared to other studies (Corley et al., 2000; Elpern, Covert, & Kleinpell, 2005; McAndrew, Leske, & Garcia, 2011; Pauly et al., 2009; Zuzelo, 2007), the current study showed lower results with frequency overall and in some instances, intensity. Previous studies revealed moral distress experienced by nurses occurred in a variety of settings but the different demographics of the sample compositions could account for differences in results. For example, the current study found intensive care units and palliative care units that typically care for patients where more frequent ethical issues occur accounted for only 12.9% of total areas worked. In addition, nurses in the

current study were among an older age group with 110 (88.2%) at or above the age of 40, consisted of *White* females 94 (75.8%), and only 13 were males (10.5%).

Regarding central tendency for the three MDS frequency and intensity constructs, deception was the lowest measure and the individual responsibility measure was highest. This mirrors the same rankings of the original study evaluating the moral distress scale (Corley et al., 2001) with intensity mean scores consistently higher than frequency mean scores. In contrast to the current study that did not correlate demographic variables, Corley et al. correlated demographic variables and found they did not predict the level of moral distress.

Results of other studies that utilized the MDS (Rice et al., 2008; Zuzelo, 2007) also found higher intensity mean scores compared to frequency mean scores. Likewise, results of the current study also showed averages of items used in each of the constructs indicated that frequency of moral distress was less than two for all MDS frequency constructs indicating nurses did not experience moral distress with much frequency. Situations that most frequently caused moral distress for nurses were those in which outcome was not in patient's best interest (M = 1.94, SD = 1.30), followed by those in which the nurse was individually responsible (M = 1.30, SD = .98), and finally those in which there was deception (M = .56, SD = 1.09). Noteworthy is the low measure of deception that was similar to one qualitative study by Teasdale and Kent (1995). Descriptions of incidents by 251 nurses showed only ten occasions of deception. Even then, some nurses explained their actions as acting under the principles of beneficence or non-maleficence. Their rationale was "to keep the patients from becoming more anxious about their condition, their treatment, or their family" (p. 80). None the less, negative

effects were seen when deception was discovered by the patient and had an adverse effect on the nurse-patient relationship. The authors note that the possibility of the deception being discovered cannot be predicted even if the intention is innocent. Interestingly, some nurses reported they would never mislead patients and would always disclose the truth while others felt family members have the right to decide what information to withhold.

Another conflicting view point can be seen in a hermeneutic study (Izumi, 2006) concerning honesty and 32 Japanese nurses. The author notes "none of the participants felt good about speaking dishonestly to patients" even though a common Japanese saying states "Circumstances may justify a lie" (p. 279). The study of a gap between abstract and universal ethics and practical and local ethics may be of interest in future studies of moral distress. Finally, regarding the current study, averages of all MDS intensity constructs indicated intensity of moral distress experienced in given situations was less than three and considered low but still higher than those of frequency constructs. Situations that caused greatest degree of intensity of moral distress were the same as the frequency constructs in which outcome was not in patient's best interest (M = 2.68, SD = 1.53), followed by those in which the participant was individually responsible (M = 2.15, SD = 1.30), and finally those in which there was deception (M = 1.05, SD = 1.61).

Practice Environment

Regarding perception of the practice environment, a total of six constructs were created from the PES-NWI items. These constructs consisted of nurse participation in hospital affairs; nursing foundations for quality of care; nurse manager ability, leadership,

and support of nurses; staffing and resource adequacy; collegial nurse-physician relations; and an overall measure of the practice environment. Overall, participants tended to disagree with the practice environment statements which indicated that the practice environment of participants lacked many of the items described in the questionnaire. This is reflected in averages between two and three for each of the five PES-NWI constructs. Highest average among the PES-NWI constructs was for collegial nurse-physician relations (M = 2.68, SD = .72), and lowest average was for nurse participation in hospital affairs construct (M = 2.19, SD = .66). These results are somewhat similar to studies that utilized the PES-NWI in researching magnet designated facilities (Aiken, Sloan, & Lake, 1997; Armstrong & Laschinger, 2006; Friese et al., 2008; Havens, 2001; Laschinger & Leiter, 2006; Laschinger, Almost, & Tuer-Hodes, 2003; Patrician, Shang, & Lake, 2010; Roche & Duffield, 2010;Thomas-Hawkins, Denno, & Currier, 2003) except the current study could not make that correlation since data was not collected from study participants regarding magnet designation for each particular facility.

Data collection regarding magnet status would have added important information to the current study regarding practice environment perception. It is interesting to note that requirements for magnet designation specify organizations focus on concepts of structure, process, and outcomes. Five magnet model components that require sources of evidence from an organization include transformational leadership; structural empowerment; exemplary professional practice; new knowledge, innovations, and improvements; and empirical outcomes. With this framework in place, healthcare facilities are considered to be providing the best practice environment for nurses.

Specifically, under exemplary professional practice for magnet facilities, the expectation is that the "organization's workplace advocacy initiatives for: care giver stress…" (ANCC, 2008, p. 19) are addressed and evidence is documented as well as visible. The ANCC defines care giver stress as also moral distress that is specifically "a response experience when a decision-maker's ability to carry out a chosen ethical or moral action is thwarted by an individual, institutional, or societal constraint" (p. 38). Lack of data regarding magnet designation for facilities in the current study could be seen as a limitation as well as a recommendation for future study.

Likelihood of Resigning Summary

In the current study, participants were asked to rate likelihood of resigning from their position because of their discomfort with the way patient care was handled at their institution. This was correlated to intensity and frequency of moral distress experienced as well as to perception of practice environment. Rating of 1 represented *never* and a rating of 10 represented *definitely*. Mean ratings of nurse likelihood of resigning from a clinical position for the last three hypotheses indicated that participants were not likely to resign from their position because of any discomfort with the way patient care was handled.

Likelihood of Resigning Correlation to Moral Distress

Likelihood of resigning was correlated to moral distress experienced by nurses utilizing a multiple regression model. One of the most significant findings of the current study showed results of testing Hypothesis 3 and Hypothesis 4 indicated that intensity and frequency of the three types of moral distress (individual responsibility, not in the patient's best interest, and deception) experienced by registered nurses did not influence

their intentions of resigning. These results were unexpected but similar to a comprehensive literature review conducted by Schluter et al. (2008) that notes no substantial research data exists to definitively state moral distress causes nurses to leave a workplace or the profession.

Other studies (Hamric & Blackhall, 2002; Wilkinson, 1988) also found no correlation to intent to leave or having left a clinical position. Interestingly, this is in contrast to studies (Corley, Minick, Elswick, & Jacobs, 2005; Mackusick & Milnik, 2010) that found moral distress experienced did correlate to intent to leave or actually resigning a clinical position. In addition, these previous studies found that even though the frequency may occur at a lower rate, the intensity may cause cumulative effects. Of note is the previously cited study (Corley et al., 2005) that showed positional turnover in previous positions correlated to moral distress but intensity of moral distress experienced correlated negatively with demographic of age. In other words, the intensity of moral distress was experienced less in the older the nurse.

Likelihood of Resigning Correlation to Practice Environment

To test the final Hypothesis 5 regarding the extent to which the registered nurse's perception of the practice environment influences their intentions of resigning, a multiple linear regression was conducted as was done with all previous hypotheses. As with Hypotheses 3 and 4, this also resulted in a significant finding. Results of the regression model indicated that the combination of the five measures of the nurse's perception of the practice environment (nurse participation in hospital affairs; nursing foundations for quality of care; nurse manager ability, leadership, and support of nurses; staffing and resource adequacy; and collegial nurse-physician relations) did not influence their

likelihood of resigning. In addition, the likelihood of resigning mean (3.39) was higher than the overall practice environment perception mean (2.38). This is a surprising finding in light of previous research that suggests lower intent to leave is attributable to positive perceptions of the practice environment. As mentioned previously, studies (Aiken, Havens, & Sloane, 2000; Kramer & Hafner, 1989; Laschinger, Almost, & Tuer-Hodes, 2003; Li et al., 2007) regarding characteristics of the practice environment involved magnet designated facilities and found higher job satisfaction, higher perceived quality of care by nurses, higher perception of empowerment, and lower intent to leave.

Discussion of Conclusions

Results of this current study suggest that moral distress continues to be experienced in many different hospital settings throughout the nation. Although frequency was considerably lower than other studies have shown, it appears intensity was more representative. In addition, frequency and intensity of moral distress seem to have a greater effect on perception of the practice environment than was previously known. The constructs of individual responsibility, not in patient's best interest, and deception speak to the foundation of nursing ethical teachings.

The ANA Code of Ethics for Nurses (2001; Fowler, 2008) asserts the code serves as "a succinct statement of the ethical obligations and duties of every individual who enters the nursing profession" (pg. 1). It further declares that the code is, "the profession's non-negotiable ethical standard" and "an expression of nursing's own understanding of its commitment to society" (pg. 1). This code of ethics guide outlines nine provisions of the nursing profession's moral norms and ideals which aids in

fostering nurse knowledge of the profession's goals, values, and obligations. In addition, early in a nurse's education, ethical obligations and duties are taught that focus on the primary obligation to the patient. Since nurses are considered moral agents and expected to examine their values (Davis et al., 1997), it is plausible to see why moral distress constructs regarding the current study surfaced.

As mentioned earlier, the ethical code that guides nursing practice contains nine provisions. Of those provisions, many pertain to the moral distress constructs created for the current study. These provisions include interpretive statements (Fowler, 2009) that discuss such issues as respect for human dignity, relationships to patients, primacy of patient interests, conflict of interest for nurses, collaboration, professional boundaries, standards and review mechanisms, acting on questionable practice, addressing impaired practice, acceptance of accountability and responsibility, accountability for nursing judgment and action, moral self-respect, professional growth and maintenance of competence, wholeness of character, and preservation of integrity. Admittedly, these interpretive statements place great responsibility on the nurse and provide multiple reasons or opportunities for possibly experiencing moral distress.

Likewise, the provisions also include interpretive statements regarding the practice environment. These statements give nurses the responsibility "to create, maintain, and contribute to environments that support the growth of virtues and excellence and enable nurses to fulfill their ethical obligations" (Fowler, p. 161). From the current study results it would be difficult to fulfill these obligations in light of the experienced moral distress and negative perception of the practice environment. For example, the item with the lowest average regarding practice environment perception was

nurse participation in hospital affairs (M = 2.19). Improving the practice environment to support growth of virtue and excellence requires nurse participation in such areas as policy development, ethics committees, collective bargaining, quality improvement, safety issues, and shared governance (Fowler, 2009; LaSala & Bjarnson, 2010; Nedd, 2006).

As mentioned previously, the most significant findings to emerge from this study concerned the likelihood of resigning a position. Current study results did not support the assumptions regarding intensity and frequency of moral distress experienced as well as perception of the practice environment. It is possible that the age (88.2% at or above age of 40) of nurses in the current study affected results. It is also possible that years of nursing experience (63% have over 20 years) and length of employment (61% have over 11 years within the VA system) influenced results. Nurses with a great length of employment are vested in the system and have invested in retirement. In light of those benefits, it is possible that nurses may have developed coping mechanisms and therefore have not considered leaving a clinical position. In addition, VA nurses may feel a loyalty to the Veteran patient population because of the sacrifices they have made for our country.

Implications for Practice

Implications for nursing practice include suggestions for nursing staff as well as nursing leadership. In light of the fact that important goals of nursing are to maintain competence, continue personal and professional growth, and maintain personal integrity (Fowler, 2009), the implications for practice are warranted. Although moral distress

occurs, as evidenced by the results of the current study, the experience can be reduced, managed, or eliminated with proper support.

The first implication for practice involves sharing the results of the findings with facility leadership. The current study added to the nursing body of knowledge that moral distress continues to be experienced by nurses in various settings. Therefore, it would be appropriate for healthcare organizations to assess the incidence of moral distress in their own facility. Recommendations have been made in the literature (AACCN, 2008; Foglia, Pearlman, Bottrell, Altemose, & Fox, 2009; LaSala & Bjarnason, 2010; Valentine, 2007) noting hospital leadership is responsible for creating a culture that reflects an atmosphere of trust, respect, communication and accountability. Even though the current study did not find likelihood of leaving a clinical position in the study sample, it did find incidence of moral distress experienced predicted a negative perception of the practice environment. Therefore, it is suggested that healthcare organizations eliminate barriers in the workplace to improve nurse satisfaction. Conducting facility employee surveys that focus on issues that have been found to be sources of moral distress such as ethical dilemmas, nurse-physician conflict, end-of-life challenges, disrespectful interactions, inappropriate use of healthcare resources, false hope given to patients, inadequate staffing, and inadequate pan relief given to patients would keep the phenomenon at the organization forefront.

Various interventions have been suggested in the literature to help decrease or eliminate the incidence of moral distress. Nurses who experience moral distress at any level should expect their level of moral distress to decrease with implementation of such concepts as shared governance, increased autonomy, improved staffing, better working

hours, stress reduction programs, moral distress education, work-site interventional programs, cultural sensitivity training, fostering of nurse-physician collaboration, provision of a counselor at the unit level, establishment of journal clubs, inclusion of staff nurses on hospital ethics committees, and establishment of separate nursing ethics committees (Andrews, 2004; Clark & Taxis, 2003: Hamric, 2002; Turner, 2003).

The second implication for nursing practice includes encouraging knowledge utilization of research findings to all nursing staff. Many times, findings are shared among researchers and not disseminated to the institutional clinician. Research findings that focus on creating a healthy work environment need to be implemented. Much of nursing research concerns the clinical practice of nursing but, findings regarding the psychological and emotional health of nurses are also important. Adopting a process such as Roger's theory of diffusion of innovations (Burns & Grove, 1997) would aid professional nursing regarding knowledge diffusion and utilization. Roger's defines an innovation as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (p. 674). Implementing education regarding moral distress (Matzo, Sherman, Nelson-Marten, Rhome, & Grant, 2004) for current staff as well as at nursing orientation for new employees could be considered an innovation. Educational programs such as, the 4A's to Rise above Moral Distress (AACN, 2009), define moral distress, identify sources of conflict, describe feelings of moral distress, and barriers to taking action when moral distress occurs. The 4A's refer to the stages of ask, affirm, assess, and act. The first stage, act, is to help with self-awareness and self-reflection regarding feelings of stress or suffering. The goal is to become aware that moral distress is present. The second stage, affirm, refers to making a commitment to self-care with a

goal to address the moral distress. The third stage, assess, refers to identifying the sources and severity of distress with the goal of creating an action plan. The final stage, act, requires the nurse to prepare to take action, take action, and maintain the desired change. The goal is to preserve self-integrity and authenticity. Implementing this kind of educational program would provide a process for diffusion that includes introducing an innovation, providing communication channels, providing time, and providing a social system.

The final implication for practice involves suggestions for the nurse at the unit level. Evidence from the current study found the incidence of moral distress was occurring but nurses were not likely to leave a clinical position. It was posited that age, years of experience, and years employed with the organization may have influenced the results. It is suggested that nurses investigate the possibility of moral distress within their own unit and determine if it may be affecting younger and less experienced nurses as well. Qualitative data would need to be collected to determine staff needs. Moral distress issues such as death and dying that are well documented in the literature (Berghs, et al., 2004; Brzostek et al., 2008; Erlen & Sereika, 1997; Thacker, 2008) could be addressed. Developing a unit support group or designating a moral distress champion may aid in providing support to nurses experiencing moral distress. For example, Brosche (2007) suggests developing a grief team to promote well-being of the nurse and minimize "the effects of compassion fatigue, moral distress, and the stress cascade" (p. 23). Determining the need for a grief team would be at the discretion of the staff and include support from management as well as hospital chaplain services. Establishment of the grief team would include development of practice guidelines, staffing and service

availability of team members, training through crisis management teams or bereavement counselors, marketing the service to staff, maintaining a database of the services provided, and evaluation of the program periodically to determine if needs have been met. The goal would be to provide a supportive and caring environment (Watson, 2008) for the nurse experiencing moral distress.

Limitations

A number of caveats need to be noted regarding the present study. First, the method of contacting the sample of nurses to participate in the study limited the responses. The invitation to participate was sent via e-mail by the professional organization to the membership. It was unknown how many participants had a personal valid e-mail or how often it was accessed. Due to concerns for member privacy, the professional organization gatekeeper would not allow the researcher access to the membership list. Gatekeeper control (Neuman, 2006) affected access to the participants which in turn may have affected representativeness of the sample. The use of both e-mail and postal services may have improved total number of responses.

Second, the convenience sample was of nurses from a government healthcare system. As such, the data may not be generalizable to all nursing populations. Disadvantages of convenience sampling include under-representation or over-representation of particular groups within the sample. This was evident in the demographic of age of the nurses. The sample was not chosen at random which means it is unlikely to be representative of the population being studied. This undermines the

ability to make generalizations from this sample to the population be studied (Burns & Grove, 1997).

Finally, other limitations included possible misunderstanding of the survey instrument and uneven sample groups regarding demographic differences. Uneasiness with computer use may also have caused a limitation for subjects. An attitude contrary to participating in research may have been a limitation and, also, possibly a cultural behavior. Inclusion of nurses from the ICUs may have influenced the findings regarding intensity and frequency of moral distress experienced due to the increased acuity of ICU patient care. Previous studies have shown higher incidence of moral distress in areas with higher patient acuity. In addition, as noted previously, the question was not asked whether the facility was Magnet designated and possibly influencing perceptions of the practice environment (Lundmark, 2008).

Recommendations for Further Research

According to Burns and Grove (1997), nursing research is a "scientific process that validates and refines existing knowledge and generates new knowledge that directly and indirectly influences nursing practice" (p. 4). Research within any discipline contributes in varying degrees to the body of knowledge. This current study has uncovered many areas in need of further investigation that will be discussed below.

Future Research Regarding Findings not Anticipated

Previous research aided in the selection of the study's variables (gender, age, ethnicity, education, years in VHA system, job position, type of unit, years in unit, moral

distress intensity and frequency, practice environment perception, and likelihood of resigning) but, did not address the unanticipated finding of the current study regarding likelihood of resigning. Further research needs to be done to establish whether the dependent variable likelihood of resigning is influenced by age, years of experience, or years of employment, such as a younger less experienced age group of nurses. In addition, future research might also explore other variables affecting likelihood of resigning such as economic factors, single-parent households, number of children, care-giver status, availability of employment, and distance to workplace. As noted previously, designing a specific study researching magnet versus non-magnet facilities regarding the perception of the practice environment may also show different results regarding likelihood of resigning from a clinical position.

Possible Studies Regarding Moral Distress

It is recommended future research be undertaken focusing on the specific measure of moral distress experienced in order to identify ways to influence the mitigation of intensity and frequency levels. Focusing on what is actually being done in specific organizations to assess or manage moral distress would be warranted. Research into nurse awareness of the process to request an ethics consult would be one way for organizations to discover gaps or flaws in their system. Because of the ever increasing diversity of the nursing workforce, it would be interesting to assess cultural barriers as well as non-western ethics education. What is now needed is research on predictors of moral distress that could lead to proactive methods to reduce the incidence as well.

If education programs such as the 4A's to Rise above Moral Distress (AACN, 2009) were implemented, research would be needed to determine the benefit of such programs. Likewise, it would be interesting to know previous ethics education of staff including time-frames of when learning occurred. Along the education line, research should be considered exploring what is being taught in nursing schools as well as how new nurses are being prepared to deal with moral distress.

Qualitative inquiry or a mixed methods approach should be included to investigate nurse perception regarding what is being done to alleviate moral distress at their organization or at the unit level. Future studies should account for a wider sampling of nurses to test congruence. Replicating the current study with a larger heterogeneous sample excluding intensive care nurses would add to the limited knowledge in that area. Research of nurse managers and their understanding of moral distress and how to assist staff is also needed. Other research considerations include determining the effects or impact of nurse moral distress on patient care as well as the impact on nurses euthanizing and hastening the death of a patient. Finally, revising the MDS instrument to include questions regarding changes to nursing practice that have occurred since the last revision would be appropriate.

In summary, several findings in this study have significance for healthcare organizations, nursing leadership, and nurses. The findings present opportunities for future research regarding moral distress, practice environment, and likelihood of resigning. Recommendations for further study have also been identified. The next section presents the conclusions of the study.

Conclusion

Results presented in this paper contribute to the current research available on moral distress experienced, perception of the practice environment, and likelihood of resigning. It is recognized that moral distress continues to be a major problem for nurses emotionally, spiritually, physically, and psychologically. Several relationships hypothesized in the conceptual model of the study are supported. It can be implied from these findings that nurses experience moral distress in a variety of settings and at various levels of intensity and frequency. The higher the intensity and frequency of moral distress experienced, the lower the perception of the practice environment. Initial findings support the null hypotheses that suggest that moral distress experienced as well as perception of the practice environment has no effect on likelihood of resigning a clinical position.

The findings of this paper lay the foundation for steps that can be taken by the healthcare organization, nursing leadership, or nurses to alleviate or eliminate the experience of moral distress. Dissemination of this current study and related research findings regarding moral distress, practice environment, and likelihood of resigning can raise awareness of nurses, nursing leadership, and healthcare organizations. Suggestions include assessing the incidence of moral distress within facilities, acknowledging the phenomenon, and providing education and resources. It is recognized that there is not one standardized definition of moral distress making it difficult to compare research findings. Failure to pursue an understanding of healthcare organization and nursing leadership responsibility regarding alleviation of moral distress may be responsible for unnecessary suffering of nurses.

REFERENCES

Agency for Healthcare Research and Quality (2007*). Patient safety and quality: An evidence-based handbook for nurses.* AHRQ Publication No. 08-0043. Agency for Healthcare Research and Quality, Rockville, MD.

Aiken, L., Havens, D., & Sloane, D. (2000). The magnet nursing services recognition program. *American Journal of Nursing, 100*(3), 26-35.

Aiken, L., & Sloane, D. (1997). Effects of specialization and client differentiation on the status of nurses: The case of AIDS. *Journal of Health and Social Behavior, 38*, 203-222.

Aiken, L., & Sloane, D. (1998). Advances in hospital outcomes research. *Journal of Health Services Research and Policy, 3*(4), 249-250.

Aiken, L. Sloane, D., & Lake, E. (1997). Satisfaction with inpatient AIDS care: A national comparison of dedicated and scattered bed units. *Medical Care, 35*, 948-962.

Aiken, L. H., Clarke, S. P., & Sloane, D. M. (2001). Nurses report of hospital care in five countries. *Health Affairs, 20*(1), 43–52.

Aiken, L.H., Clarke, S.P., Sloane, D.M., Sochalski, J.A., & Silber, J.H. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association, 288*(16), 1987-1993.

Aiken, L. H., & Patrician, P. A. (2000). Measuring organizational traits of hospitals: The revised Nursing Work Index. *Nursing research, 49*(3), 146-53.

American Association of Colleges of Nursing (2002). *Hallmarks of the professional nursing practice environment.* White Paper. Washington, DC: American Association of Colleges of Nursing.

American Association of Critical-Care Nurses (2005). *AACN standards for establishing and sustaining healthy work environments: A journey to excellence.* Aliso Viejo, CA: American Association of Critical Care Nurses.

American Association of Critical-Care Nurses (2008). *Moral distress position statement.* Aliso Viejo, CA: American Association of Critical Care Nurses.

American Nurses Association (2001). *Code of ethics for nurses with interpretive statements.* Silver Spring, MD: American Nurses Publishing.

American Nurses Credentialing Center (2008). *The magnet model components and sources of evidence: Magnet recognition program®.* Silver Spring, MD: American Nurses Credentialing Center.

Andrews, D.R. (2004). Fostering ethical competency: An ongoing staff development process that encourages professional growth and staff satisfaction. *Journal of Continuing Education in Nursing, 35*, 27-33.

Armstrong, K. J., & Laschinger, H. (2006). Structural empowerment, Magnet hospital characteristics, and patient safety culture: Making the link. *Journal of Nursing care Quality, 21*(2), 124-32.

Beauchamp, T. L., & Childress, J. F. (2009). *Principles of biomedical ethics* (6th ed.). New York: Oxford University Press.

Benton, T., & Craib, I. (2001). *Philosophy of social science: The philosophical foundations of social thought*. New York: Palgrave Macmillan.

Berghs, M., Dierckx, B., De Bal, N., de Casterlé, B., & Gastmans, C. (2004). The complexity of nurses' attitudes toward euthanasia: A review of the literature. *Nursing Ethics, 12*(1), 441-446.

Bowles, C., & Candela, L. (2005). First job experiences of recent RN graduates: Improving the work environment. *Journal of Nursing Administration, 35*(3), 130-137.

Boychuck-Dushcher, J., & Cowin, L. (2006). The new graduate's professional inheritance. *Nursing Outlook, 54*, 152-158.

Brosche, T. A. (2007). A grief team within a healthcare system. *Dimensions of Critical Care Nursing, 26*(1), 21-28.

Brzostek, T., Dekkers, W., Zalewski, Z., Januszewska, A., & Górkiewicz, M. (2008). Perception of palliative care and euthanasia among recently graduated and experienced nurses. *Nursing Ethics, 15*(6), 761-776.

Buerhaus, P. I., & Auerbach, D. I. (2011). The recession's effect on hospital registered nurse employment growth. *Nursing Economic$, 29*(4), 163-167.

Buerhaus, P. I., Auerbach, D. I., & Staiger, D. O. (2009). The recent surge in nurse employment: Causes and implications. *Health Affairs, 28*(4), 657-688.

Burns, N., & Grove, S. K. (1997). *The practice of nursing research: Conduct, critique, & utilization* (3rd ed.). Philadelphia: W. B. Saunders Company.

Clark, A. P., & Taxis, J. C. (2003). Developing ethical competence in nursing personnel. *Clinical Nurse Specialist, 17*, 236-237.

Clarke, S. P., & Aiken, L. H. (2008). An international hospital outcomes research agenda focused on nursing: Lessons from a decade of collaboration. *Journal of Clinical Nursing, 17*(24), 3317-3323. doi:10.1111/j.1365-2702.2008.02638.x

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112* (1), 155-159.

Cohen, J., & Erickson, J. (2006). Ethical dilemmas and moral distress in oncology nursing practice. *Clinical Journal of Oncology Nursing, 10*(6), 775-782. doi:10.1188/06.CJON.775-780

Corley, M. (2002). Nurse moral distress: A proposed theory and research agenda. *Nursing Ethics, 9*(6), 636-650.

Corley, M., Elswick, R. K., Gorman, M., & Clor, T. (2001). Development and evaluation of moral distress scale. *Journal of Advanced Nursing, 33*(2), 250-256.

Corley, M., Minick, P., Elswick, R., & Jacobs, M. (2005). Nurse moral distress and ethical work environment. *Nursing Ethics, 12*(4), 381-390.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative and mixed methods approaches*. Thousand Oaks, CA: Sage publications.

Crotty, M. (2003). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage.

Dahlqvist, V., Eriksson, S., Glasberg, A., Lindahl, E., Lützén, K., Strandberg, G., et al. (2007). Development of the perceptions of conscience questionnaire. *Nursing Ethics, 14*(2), 181-193.

Davis, A. J., Aroskar, M. A., Liaschenko, J., & Drought, T. S. (1997). *Ethical dilemmas and nursing practice*. Stamford, CT: Appleton & Lange.

Davis, B. A., Ward, C., Woodall, M., Shultz, S., & Davis, H. (2007). Comparison of job satisfaction between experienced medical-surgical nurses and experienced critical care nurses. *MEDSURG Nursing, 16*(5), 311-316.

Deady, R., & McCarthy, J. (2010). A study of the situations, features, and coping mechanisms experienced by Irish psychiatric nurses experiencing moral Distress. *Perspectives in Psychiatric Care, 46*(3), 209-220.

DHHS, Health Resources and Services Administration, Bureau of Health Professions (2002). *Projected supply, demand, and shortages of registered nurses: 2000–2020*. Available at http://bhpr.hrsa.gov/oldhealthworkforce/rnproject/default.htm/

Doutrich, D., Wros, P., & Izumi, S. (2001). Relief of suffering and regard for personhood: Nurses ethical concerns in Japan and the USA. *Nursing Ethics, 8*(5), 448-458.

Dunn, C.M., & Chadwick, G. L. (2002). *Protecting study volunteers in research*. Boston, MA: Centerwatch.

Elpern, E., Covert, B., & Kleinpell, R. (2005). Moral distress of staff nurses in a medical intensive care unit. *American Journal of Critical Care, 14*(6), 523-530.

Epstein, E.G., & Delgado, S. (2010). Understanding and addressing moral distress. OJIN: *The Online Journal of Issues in Nursing, 15*(3), Manuscript 1. doi:10.1111/j.1467-8519.2007.00520.x

Erlen, J. A. (2004). Wanted- nurses: Ethical issues and the nursing shortage. *Orthopaedic Nursing, 23*(4), 289-292.

Erlen, J., & Sereika, S. (1997). Critical care nurses, ethical decision-making and stress. *Journal of Advanced Nursing, 26*(5), 953-961. doi:10.1046/j.1365-2648.1997.00418.x

Erickson, J., Duffy, M., Gibbons, M., Fitzmaurice, J., Ditomassi, M., & Jones, D. (2004). Development and psychometric evaluation of the Professional Practice Environment (PPE) Scale. *Journal of Nursing Scholarship, 36*(3), 279-285.

Estryn-Behar, M., van der Hejiden, B., Fry, C., & Hasselhorn, H. (2010). Longitudinal analysis of personal and work-related factors associated with turnover among nurses. *Nursing Research, 59*(3), 166-177.

Fairchild, RM. (2010). Practical ethical theory for nurses responding to complexity in care. *Nursing Ethics, 17*(3), 353-362. doi:10.1177/0969733010361442

Flynn, M., & McCarthy, G. (2008). Magnet hospital characteristics in acute general hospitals in Ireland. *Journal of Nursing Management, 16*, 1002–1011.

Foglia, M., Pearlman, R. A., Bottrell, M., Altemose, J. K., & Fox, E. (2009). Ethical challenges within Veterans Administration healthcare facilities: Perspectives of managers, clinicians, patients, and ethics committee chairpersons. American *Journal of Bioethics, 9*(4), 28-36. doi:10.1080/15265160802716795.

Fowler, M. (2009). *Guide to the code of ethics for nurses: Interpretation and application*. Silver Spring, MD: American Nurses Publishing.

Friese, C. R., Lake, E. T., Aiken, L. H., Silber, J. H., & Sochalski, J. (2008). Hospital nurse practice environments and outcomes for surgical oncology patients. *Health Services Research, 43*(4), 1145-1163. doi:10.1111/j.1475-6773.2007.00825.x

Fuchs, S. (1993). *Three sociological epistemologies*. Social Perspectives, 36(1), 23-44.

Gallagher, A. (2010). Moral distress and moral courage in everyday nursing practice. The *Online Journal of Issues in Nursing, 16*(2).

Gallagher, R., & Gormley, D. K. (2009). Perceptions of stress, burnout, and support systems in pediatric bone marrow transplantation nursing. *Clinical Journal of Oncology Nursing, 13*(6), 681-685. doi:10.1188/09.CJON.681-685

Goldman, A., & Tabak, N. (2010). Perception of ethical climate and its relationship to nurses' demographic characteristics and job satisfaction. *Nursing Ethics, 17*(2), 233-246.

Gravetter, F. J., & Wallnau, L. B. (2000). *Statistics for behavioral sciences*. Belmont, CA: Wadsworth/Thomson Learning.

Gutierrez, K. M. (2005). Critical care nurses' perceptions of and response to moral distress. *Dimensions of Critical Care Nursing, 24*(5), 229-239.

Halcomb, E. J., Davidson, P. M., Caldwell, B., Salamonson, Y., & Rolley, J. X. (2010). Validation of the professional practice environment scale in Australian general practice. *Journal of Nursing Scholarship, 42*(2), 207-213. doi:10.1111/j.1547-5069.2010.01349.x

Hamric, A. B. (2002). Bridging the gap between ethics and clinical practice. *Nursing Outlook, 50*, 176-178.

Hamric, A. B., & Blackhall, L.J. (2002). Nurse-physician perspectives on the care of dying patients in intensive care units: Collaboration, moral distress, and ethical climate. *Critical Care Medicine, 35*, 422-429.

Hart, S. E. (2005). Hospital ethical climates and registered nurse' turnover intentions. *Journal of Nursing Scholarship, Second Quarter*, 173-177.

Havens, D. (2001). Comparing nursing infrastructure and outcomes: ANCC Magnet® and nonmagnet CNEs report. *Nursing Economic$, 19*(6), 258.

Hayne, A. N., Gerhardt, C., & Davis, J. (2009). Filipino nurses in the United States: Recruitment, retention, occupational stress, and job satisfaction. *Journal of Transcultural Nursing, 20*(3), 313-322.

House, R. J., & Rizzo, J. (1972). Role conflicts and ambiguity as critical variables in a model of organizational behavior. *Organizational Behavior and Human Performance, 7*, 467-505.

Institute of Medicine (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.

Izumi, S. (2006). Bridging western ethics and Japanese local ethics by listening to nurses' concerns. *Nursing Ethics, 13*(3), 275-283. doi:10.1191/0969733006ne874oa

Jameton, A. (1984*). Nursing practice: The ethical issues*. New York: Prentice Hall.

Jameton, A. (1993). Dilemmas of moral distress: Moral responsibility and nursing practice. *AWOHONNS Clinical Issues in Prenatal Women's Health Nursing, 4*, 542-551.

Jormsri, P., Kunaviktikul, W., Ketefian, S., & Chaowalit, A. (2005). Moral competence in nursing practice. *Nursing Ethics, 12*(6), 582-594. doi: 10.1191/0969733005ne828oa

Kane, R.L., Shamliyan, T., Mueller, C., Duval, S., Wilt, T. (2007). *Nursing staffing and quality of patient care. Evidence Report/Technology Assessment No. 151* (Prepared by the Minnesota Evidencebased Practice Center under Contract No. 290-02-0009.) AHRQ Publication No. 07-E005. Rockville, MD: Agency for Healthcare Research and Quality.

Kramer, M, & Hafner, L. (1989). Shared values: Impact on staff nurse job satisfaction and perceived productivity. *Nursing Research, 38*, 172-177.

Kramer, M., & Schmalenberg (2008). Confirmation of a healthy work environment. *Critical Care Nurse, 28*, 56-63.

Laabs, C.A. (2007). Primary care nurse practitioners' integrity when faced with moral conflict. *Nursing Ethics, 14*(6), 795-809. doi:10.111/j.1041-2972.2005.0014.x

Lachman, V. D. (2007). Moral courage: A virtue in need of development? *MedSurg Nursing Journal, 16*(2), 131-133.

Lachman, V. D. (2010). Strategies necessary for moral courage. *Online Journal of Issues in Nursing, 15*(3), 1.

Lake E. (2002). Development of practice environment scale of the nursing work index. *Research in Nursing &Health, 25*, 176–188.

Lake, E., & Friese, C. (2003). A good place for nurses to work: Nursing practice environments and staffing in hospitals. *Conference Papers -- American Sociological Association*, 1-19. doi: asa_proceeding_9531.PDF

Lang, G., Pfister, E. A., & Siemens, M. J. (2010). Nursing burnout: Cross-sectional study at a large army hospital. *Military Medicine, 175*(6), 435-441.

LaSala, C.A., Bjarnason, D. (2010). Creating workplace environments that support moral courage. *The Online Journal of Issues in Nursing, 15*(3). doi:10.3912/OJIN.Vol15No03Man04

Laschinger, H., Almost, J., & Tuer-Hodes, D. (2003). Workplace empowerment and magnet hospital characteristics: Making the link. *Journal of Nursing Administration, 33*, 410-422

Laschinger, H., & Leiter, M. (2006). The impact of nursing work environments on patient safety outcomes: The mediating role of burnout/engagement. *Journal of Nursing Administration, 36*, 259-267.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design* (8th ed.). Upper Saddle River, NJ: Prentice Hall.

Leiter, M., & Maslach, C. (2009). Nurse turnover: The mediating role of burnout. *Journal of Nursing Management, 17*(3), 331-339.

Li, Y., Lake, E., Sales, A., Sharp, N., Greiner, G., Lowy, E., et al. (2007). Measuring nurses' practice environments with the revised Nursing Work Index: Evidence from registered nurses in the Veterans Health Administration. *Research in Nursing & Health, 30*(1), 31-44.

Lindh, I., Severinsson, E., & Berg, A. (2009). Nurses' moral strength: A hermeneutic inquiry in nursing practice. *Journal of Advanced Nursing, 65*(9), 1882-1890. doi:10.1111/j.1365-2648.2009.05047.x

Lucero, R. J., Lake, E. T., & Aiken, L. H. (2009). Variations in nursing care quality across hospitals. *Journal of Advanced Nursing, 65*(11), 2299-2310. doi:10.1111/j.1365-2648.2009.05090.x

Lundmark, V. (2008). *Magnet environments for professional nursing practice.* Rockville, MD: Agency for Healthcare Research and Quality.

MacKusick, C., & Minick, P. (2010). Why Are Nurses Leaving? Findings from an initial qualitative study on nursing attrition. *MEDSURG Nursing, 19*(6), 335-340.

Matzo, M. I., Sherman, D. W., Nelson-Marten, P., Rhome, A., & Grant, M. (2004). Ethical and legal issues in end-of-life care: Content of End-of-Life Nursing Education Consortium curriculum and teaching strategies. *Journal for Nurses in Staff Development, 20*, 59-66.

McAndrew, N. S., Leske, J. S., & Garcia, A. (2011). Influence of moral distress on the professional practice environment during prognostic conflict in critical care. *Journal of Trauma Nursing, 18*(4), 221-230.

McClure, M., Poulin, M., Sovie, M., & Wandelt, M. (2002). Magnet hospitals: Attraction and retention of professional nurses (the original study). In M. McClure & A. Hinshaw (Eds), *Magnet hospitals revisited: Attraction and retention of professional nurses* (pp. 1-24). Washington, DC: American Nurses Publishing.

McNeese-Smith, D. (1999). A content analysis of staff nurse descriptions of job satisfaction and dissatisfaction. *Journal of Advanced Nursing, 29*(6), 1332-1341. doi:10.1046/j.1365-2648.1999.01018.x

Mertens, D. M. (2005). *Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Middleton, S., Griffiths, R., Fernandez, R., & Smith, B. (2008). Nursing practice environment: How does one Australian hospital compare with magnet hospitals? International *Journal of Nursing Practice, 14*(5), 366-372. doi:10.1111/j.1440-172X.2008.00708.x

Moorer, O., Meterko, M., Alt-White, A., & Sullivan, J. (2010). Adding a nursing information technology subscale to the Practice Environment Scale of the Nursing Work Index. *Research in Nursing & Health, 33*(1), 48-59. .doi:10.1002/nur.20360

Morgan, J., & Lynn, M. R. (2009). Satisfaction in nursing in the context of shortage. *Journal of Nursing Management, 17*(3), 401-410. doi:10.1111/j.1365-2834.2007.00842.x

Mrayyan, M. (2008). Hospital organizational climates and nurses' intent to stay: differences between units and wards. *Contemporary Nurse: A Journal for the Australian Nursing Profession, 27*(2), 223-236.

Murray, J.S. (2010). Moral courage in healthcare: Acting ethically even in the presence of risk. *The Online Journal of Issues in Nursing, 15*(3), Manuscript 2.

National Commission on VA Nursing, 2002-2004 (2004). *Caring for America's Veterans: Attracting and retaining a quality VHA nursing workforce*. Washington, DC: Department of Veterans Affairs.

Nedd, N. (2006). Perceptions of empowerment and intent to stay. *Nursing Economics, 24*(1), 13-19.

Neuman, W.L. (2006). *Social research methods: Qualitative and quantitative approaches* (6th ed.). Boston: Pearson Education.

Norman, L. D., Willis, G., Donelan, K., Williams, M., Buerhaus, P. I., Ulrich, B., & Dittus, R. (2005). The older nurse in the workplace: Does age matter? *Nursing Economic$, 23*(6), 282-289.

Nortvedt, P. (2001). Needs, closeness and responsibilities. An inquiry into some rival moral considerations in nursing care. *Nursing Philosophy, 2*(2), 112-121

O'Donnell, P., Farrar, A., BrintzenhofeSzoc, K., Conrad, A., Danis, M., Grady, C., et al. (2008). Predictors of ethical stress, moral action and job satisfaction in health care social workers. *Social Work in Health Care, 46*(3), 29-51. doi:10.1300/J010v46n03_02

Park, M., Kjervik, D., Crandell, J., & Oermann, M. (2012). The relationship of ethics education to moral sensitivity and moral reasoning skills of nursing students. *Nursing Ethics, 19*(4), 568-580. doi:10.1177/0969733011433922

Patrician, P. A., Shang, J., & Lake, E. T. (2010). Organizational determinants of work outcomes and quality care ratings among army medical department registered nurses. *Research Nursing Health, 33*(2). .doi:10.1002/nur.20370.

Pauly, B., Varcoe, C., Storch, J., & Newton, L. (2009). Determinants of moral distress in medical and surgical nurses at an adult acute tertiary care hospital. Journal of *Nursing Management, 16,* 360-373.

Pendry, P. S. (2007). Moral distress: Recognizing it to retain nurses. *Nursing Economics, 25*(4), 217-221.

Price, J.L. (2001). Reflections on the determinants of voluntary turnover. *International Journal of Manpower, 22*(7), 600-624.

Price, J.L., & Mueller, C.W. (1981). A causal model of turnover for nurses. *Academy of Management Journal, 24*(3) 543-565.

Rice, E. M., Rady, M. Y., Hamrick, A., Verheijde, J. L., & Pendergast, D. K. (2008). Determinants of moral distress in medical and surgical nurses at an adult acute tertiary care hospital. *Journal of Nursing Management, 16,* 360-373.

Roche, M. A., & Duffield, C. M. (2010). A Comparison of the Nursing Practice Environment in Mental Health and Medical-Surgical Settings. *Journal of Nursing Scholarship, 42*(2), 195-206. doi:10.1111/j.1547-5069.2010.01348.x

Rokeach, M. (1973). *The nature of human values*. New York: The Free Press.

Ruggiero, J.S. (2005). Health work variables, and job satisfaction among nurses. *The Journal of Nursing Administration, 35*(5), 254-263.

Schluter, J., Winch, S., Holzhauser, K., & Henderson, A. (2008). Nurses' moral sensitivity and hospital ethical climate: A literature review. *Nursing Ethics, 15*(3), 304-321.

Scott, J., Sochalski, J., & Aiken, L. (1999). Review of magnet hospitals research: Findings and implications for professional nursing practice. *Journal of Nursing Administration, 29,* 9-19. doi: 10.1111/j.1466-769X.2006.00270.x

Severinsson, E., & Kamaker, D. (1999). Clinical nursing supervision in the workplace-effects on moral stress and job satisfaction. *Journal of Nursing Management, 7*(2), 81-90. doi:10.1046/j.1365-2834.1999.00106.x

Silén, M., Kjellström, S., Christensson, L., Sidenvall, B., & Svantesson, M. (2012). What actions promote a positive ethical climate? A critical incident study of nurses' perceptions. *Nursing Ethics, 19*(4), 501-512. doi:10.1177/0969733011436204

Sourdif, J. (2004). Predictors of nurses' intent to stay at work in a university health center. *Nursing & Health Sciences, 6*(1), 59-68.

Sovie, M. D. (1984). The economics of Magnetism. *Nursing Economic$, 2*(2), 85-92.

Spangler, Z. (1992). Transcultural care values and nursing practices of Philippine-American nurses. *Journal of Transcultural Nursing, 3,* 28-37.

Sporrong, S., Höglund, A., & Arnetz, B. (2006). Measuring moral distress in pharmacy and clinical practice. *Nursing Ethics, 13*(4), 416-427. doi:10.1191/0969733006ne 880oa

Sproull, N. (2002). *Handbook of research methods: A guide for practitioners and students in the social sciences* (2nd ed.). Maryland: Scarecrow Press.

Takase, M., Maude, P., & Manias, E. (2005). Nurses' job dissatisfaction and turnover intention: Methodological myths and an alternative approach. *Nursing & Health Sciences, 7*(3), 209-217. doi:10.1111/j.1442-2018.2005.00232.x

Teasdale, K., & Kent, G. (1995). The use of deception in nursing. *Journal of Medical Ethics, 21*, 77-81.

Thacker, K. (2008). Nurses' advocacy behaviors in end-of-life nursing care. *Nursing Ethics, 15*(2), 174-185.

The Joint Commission (2009). *Implementation guide for the NQF endorsed Nursing-Sensitive Care Measure Set-Version 2.0*. Oakbrook Terrace, Illinois: The Joint Commission.

The Robert Wood Johnson Foundation (1996). *Chronic care in America: a 21st century challenge*. Princeton, NJ: The Robert Wood Johnson Foundation.

Thomas-Hawkins, C., Denno, M., Currier, H., & Wick, G. (2003). Staff nurses' perceptions of the work environment in freestanding hemodialysis facilities. *Nephrology Nursing Journal, 30*(4), 377-386.

Torjuul, K., & Sorlie, V. (2006). Nursing is different than medicine: Ethical difficulties in the process of care in surgical units. *Journal of Advanced Nursing, 56*(4), 404-413. doi:10.1111/j.1365-2648.2006.04013.x

Tourangeau, A. E., Cummings, G., Cranley, L. A., Ferron, E., & Harvey, S. (2010). Determinants of hospital nurse intention to remain employed: Broadening our understanding. *Journal of Advanced Nursing, 66*(1), 22-32. doi:10.1111/j.1365-2648.2009.05190.x

Tschudin, V. (2006). How nursing ethics as a subject changes: An analysis of the first 11 years of publication of the journal Nursing Ethics. *Nursing Ethics, 13*(1), 65-85. doi: 10.1191/0969733006ne850oa

Turner, M. H. (2003). A toolbox for ethics program development. *Journal of Nurses in Staff Development, 19*, 9-15.

Ulrich, C., Hamric, A., & Grady, C. (2010). Moral distress: a growing problem in the health professions? *Hastings Center Report, 40*(1), 20-22.

United States General Accounting Office (GAO). *Health care: VA's implementation of the Nurse Pay Act of 1990.* No. GAO-T-HRD-92-35 June 3, 1992.

United States General Accounting Office (GAO). *Nursing workforce: Emerging nurse shortages due to multiple factors.* Report to the Chairman, Subcommittee on Health, Committee on Ways and Means, House of Representatives, July 2001. No. GAO-01-944.

US Census Bureau (2010). *US Census, 2010*. Retrieved from http://2010.census.gov/2010census/about/interactive-form.php

Uustal, D. B. (1993). *Clinical ethics and values: Issues and insights in a changing healthcare environment*. East Greenwich, RI: Educational resources in Healthcare.

Valentine, N. (2007). Magnet recognition program: Building capacity for innovations in nursing. *Academic Medicine, 82*(12).

Varcoe, C., Pauly, B., Storch, J., Newton, L., & Makaroff, K. (2012). Nurses' perceptions of and responses to morally distressing situations. *Nursing Ethics, 19*(4), 488-500. doi:10.1177/0969733011436025

Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology, 82*(2), 247-252.

Warner, R. M. (2008). *Applied statistics: From bivariate through multivariate techniques.* Los Angeles, CA: Sage Publications.

Watson, J. (2008). *Nursing: The philosophy and science of caring*. Boulder, CO: The University Press of Colorado.

Weaver, K., Morse, J., & Mitcham, C. (2008). Ethical sensitivity in professional practice: concept analysis. *Journal of Advanced Nursing, 62*(5), 607-618. doi: 10.1111/j.1365-2648.2008.04625.x

Webster, G., & Bayliss, F. (2000). Moral residue. In S. Rubin, & L. Zoloth (Eds.), *Margin of error: The ethics of mistakes in the practice of medicine*. Hagerstown, MD: University Publishing Group, Inc.

Wiegand, D., & Funk, M. (2012). Consequences of clinical situations that cause critical care nurses to experience moral distress. *Nursing Ethics, 19*(4), 479-487. doi:10.1177/0969733011429342

Wilkinson, J. M. (1988). Moral distress in nursing practice: Experience and effect. *Nursing Forum, 23*(1), 16-29.

Wros, P. L., Doutrich, D., & Izumi, S. (2004). Ethical concerns: Comparison of values from two cultures. *Nursing and Health Sciences, 6*, 131-140. doi: 10.1111/j.1442-2018.2004.00184.x

Yarbrough, S., & Klotz, L. (2007). Incorporating cultural issues in education for ethical practice. *Nursing Ethics, 14*(4), 492-502.

Zori, S., Nosek, L. J., & Musil, C. M. (2010). Critical thinking of nurse managers related to staff RNs' perceptions of the practice environment. *Journal of Nursing Scholarship, 42*(3), 305-313. doi:10.1111/j.1547-5069.2010.01354.x

Zurmehly, J., Martin, P. A., & Fitzpatrick, J. J. (2009). Registered nurse empowerment and intent to leave current position and/or profession. *Journal of Nursing Management, 17*(3), 383-391. doi:10.1111/j.1365-2834.2008.00940.x

Zuzelo, P. (2007). Exploring the moral distress of registered nurses. *Nursing Ethics, 14*(3), 344-35