PSYCHOMETRIC EVALUATION OF THE MORAL COMFORT QUESTIONNAIRE AMONG HOSPITAL-BASED DIRECT-CARE REGISTERED NURSES

By

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ABSTRACT

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Moral comfort, an emerging concept in nursing, is defined as an individual's feelings of ease with decisions and actions related to a moral dilemma. Moral comfort for nurses is the positive outcome of a moral situation or dilemma, while moral distress, a widely explored issue in nursing, is the negative outcome. However, nursing literature on the concept of moral comfort is limited. While several instruments to measure moral distress exist, an instrument to measure moral comfort was not found. The Moral Comfort Questionnaire (MCQ) was theoretically developed. The purpose of this study was psychometric evaluation of this new 35-item instrument.

Direct-care hospital-based registered nurses (n = 466) participated from February 2019 to September 2019 in this IRB-approved study. Participants completed demographic information, the MCQ, and the Moral Distress Scale revised (MDSR). Psychometric evaluation included a priori content validation and multiple statistical

analyses: Cronbach's alpha, Spearman's correlation coefficient, weighted kappa, Bland-Altman analysis (B&A), discriminant validity, and confirmatory factor analysis (CFA).

Cronbach's alpha was .951, suggesting internal consistency. Spearman's correlation coefficient was .605 ($p < .001$) suggesting strong correlation between Time 1 and Time 2. Weighted kappa values for each item (range = .139 - .559) suggested slight to moderate agreement between responses over time. The B&A plot suggested agreement of responses over time. Discriminant validity results suggested no correlation between the MCQ and MDSR ($r =$ -.219), which was expected. CFA results suggest poor model fit of the proposed five-factor model. A post hoc hierarchical cluster analysis showed the presence of two clusters. A subsequent two-factor exploratory factor analysis showed items loading onto one of the two factors (internal and external).

Moral comfort in nurses is essential to promoting positive outcomes for nurses. An instrument to measure moral comfort in nurses is needed to gain further understanding of the concept. The MCQ was theoretically developed and psychometrically evaluated. Results suggest further revision and testing of the MCQ with a two-factor model. Knowledge acquired from studies using the MCQ could potentially be used to develop strategies to promote moral comfort in nurses, thereby promoting positive outcomes for nurses, patients, and healthcare organizations.

DEDICATION

This manuscript is dedicated to my understanding, patient, loving, amazing, and very supportive husband, Adriel, who has endured these many years of research with me. I also dedicate this work to my mother, without whose help and support I would not have been able to complete this work with a neat and tidy home. Lastly, I dedicate this manuscript to my entire family and my dearest friends and colleagues (you know who you are), whose support, patience, and, above all else, encouragement made it possible to accomplish this work, especially when it seemed impossible, with my sanity intact.

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CHAPTER 1. INTRODUCTION

Moral comfort is an understudied concept in nursing. It has been defined by Corley and Minick (2002) as

> an individual's feelings of ease with decisions and actions related to ethical problems. It occurs when the professional is able to make decisions in the best interest of patients, has his or her ideas about the patient considered in the plan of care, or is able to relieve or reduce the patient's pain and suffering. (p. 8)

In contrast, moral distress, a longstanding issue in nursing, has been defined as a nurse's feelings of frustration, anger, guilt, and powerlessness when ethical decisions cannot be translated into actions due to institutional or circumstantial constraints (Heinrich et al., 2017; Jameton, 1984; McCarthy & Gastmans, 2015; Wilkinson, 1987). These concepts, moral comfort and moral distress, represent two outcomes of moral situations or moral dilemmas for nurses. A moral situation is "the typical ethical concerns that arise from the daily decisions and circumstances of nurses (Jameton, 1992, p. 101). A moral dilemma arises "when two (or more) clear moral principles apply, but they support mutually inconsistent courses of action" (Jameton, 1984, p. 6). Within the context of moral situations or moral dilemmas, moral comfort is the positive outcome with positive consequences and moral distress the negative outcome with negative consequences. As the positive outcome of moral situations, exploration of moral comfort is warranted. Several instruments have been developed to measure moral distress; however, instruments to measure moral comfort are nonexistent. The purpose of this study was psychometric evaluation (i.e.,

reliability, validity, and factor structure confirmation) of a new 35-item Likert-type instrument, the Moral Comfort Questionnaire (MCQ). The specific aims of this study were to:

- Evaluate the reliability of the MCQ by evaluating the instrument's test-retest reliability (stability) and internal consistency (homogeneity),
- Evaluate the validity of the MCQ by evaluating the instrument's content validity and discriminant validity, and
- Examine the theoretical factor structure of the MCQ through confirmatory factor analysis.

Background

A literature search revealed the term moral comfort appeared in nursing, philosophical, and anthropological literature. In the nursing literature, its use was limited to theoretical publications related to moral situations or moral dilemmas in nursing in conjunction with the concept of moral distress. A definition of moral comfort was provided by Corley and Minick (2002); empirical literature on moral comfort was not found.

In the philosophical literature, moral comfort was used as alternate phrasing for philosopher Immanuel Kant's critical concept of the dynamically sublime, where sublime, in the context of humankind's inferiority to nature, is described as fear or frustration with nature but also with a feeling of pleasure or sense of elevation (Kravitz, 2018). Even though nature may pose a threat to humanity, such as earthquakes and other natural disasters, nature itself is seen as moral and as such cannot annihilate moral human beings. Thus, human beings experience moral elevation (moral comfort).

Lastly, the term moral comfort was used in an anthropological phenomenological study of victims in post-dictatorship, post-conflict Argentina in which Van Roekel (2018) analyzed trauma as a moral category. Argentinian victims' traumatic experience with violence and suffering (rape, physical torture, or assassinations) altered the way they engaged with and in the world, shattering their familiarity of everyday existence; furthermore, they were unable to verbalize the experience. Victims' reflection and verbalization of traumatic experiences were identified as an ethical performance of working through and dealing with the trauma, called "traumatic home" (Van Roekel, 2018, p. 537), or being at home in a familiar world, which helped victims reinstate a reflective moral disposition of everyday life. The ongoing expression of trauma was identified as the source of the victims' everyday moral comfort.

Moral Comfort in Nursing: What Is Known

In a qualitative study focusing on care of the dying patient, Wurzbach (1996) was the first to introduce the concept of moral comfort. Wurzbach described comfort as an ethical principle of doing and feeling. Doing was a nurse's ability to do the right thing for patients and families, thus bringing them comfort. Feeling was the nurse's sense of peace associated with their actions. Conversely, when nurses felt their actions did not align with the moral ideals of good nursing practice (i.e., the good nurse), they experienced moral discomfort (feelings of anger, guilt, difficulty sleeping, and not feeling at peace) and moral regret (reflecting on their less than ideal decisions and actions), contributing to moral distress (Wurzbach, 1996, 2008).

Corley (2002) incorporated the concept of moral comfort in nursing into a model for a theory of moral distress, identifying it as an alternate outcome of a moral problem or

dilemma (Figure 1). Corley identified attributes and consequences of moral comfort and moral distress arising from either the presence or absence of individual (internal) and/or environmental (external) factors or sources. Consequences of moral comfort and moral distress were categorized in relation to their positive or negative impact on nurses, as well as on patients and the healthcare organization. Corley asserted that the presence of individual factors such as moral competence, moral courage, and moral behavior (action) lead to moral comfort, and their absence leads to moral distress, as well as environmental factors (e.g., the work environment).

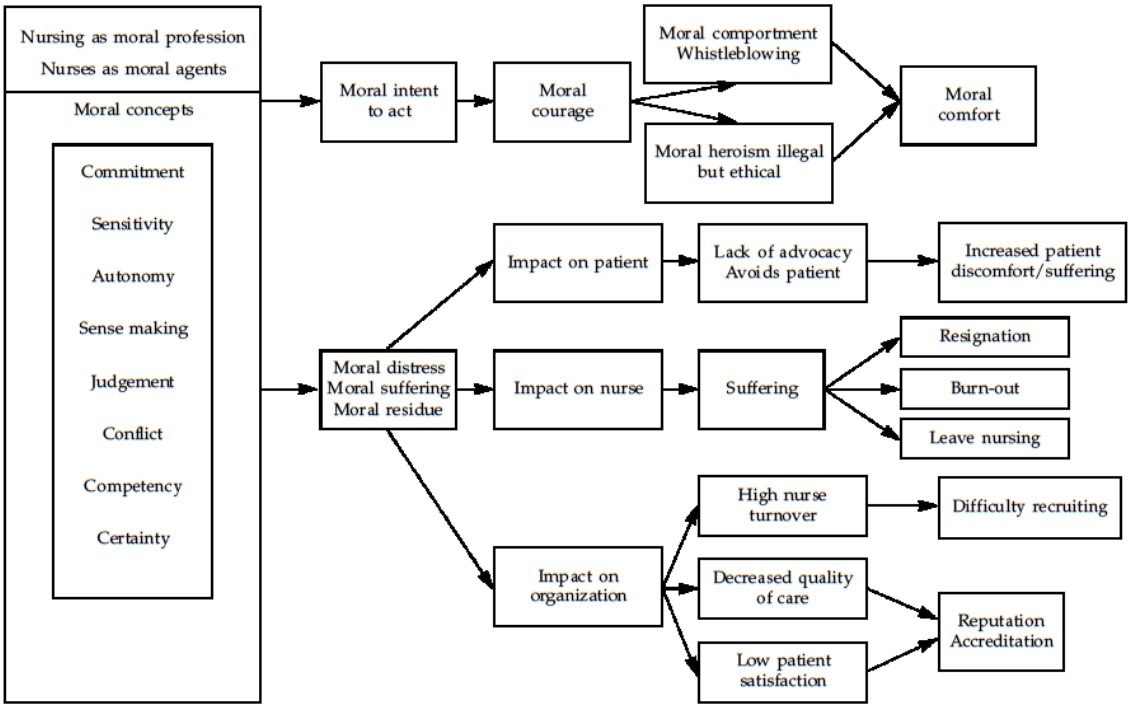

Figure 1. Corley's model for a theory of moral distress. This model has been included to demonstrate the presence of moral comfort within a moral distress model. Moral comfort is an alternative to moral distress based on the presence of moral intent and moral courage to act. Adapted from "Nurse Moral Distress: A Proposed Theory And Research Agenda," by M. C. Corley, 2002, *Nursing Ethics, 9*, p. 644.

Three perspectives that impact moral comfort have been proposed: individual (psychological), organizational, and societal (Corley & Minick, 2002). The individual

perspective includes advocating the right thing for patients, increasing nursing expertise, providing nursing role clarity, and possessing cultural competence. The organizational perspective includes employee's perceptions of an ethical work environment, as well as power and participation in decision-making. They identified four essential elements for providing employees with power: access to information; administrative support; resources; and opportunity for growth in professional power, strength, and confidence. Lastly, societal interventions include "encouragement of dialogue about values and identify sources of value conflict at a community, state, and national level" (Corley & Minick, 2002, p. 13). In addition to providing the three perspectives of moral comfort, Corley and Minick (2002) were the only nurse scholars to offer a definition, although they did not provide the method used to formulate their definition. Corley and Minick asserted that more research-based approaches to decrease moral distress by promoting moral comfort are needed; the purpose of this concept analysis supported this goal as well.

While moral comfort is the positive outcome for nurses of moral situations, with the exception of the literature contributed by Wurzbach (1996, 2008), Corley (2002), and Corley and Minick (2002), this concept has remained virtually unexplored and detrimentally undeveloped. More research studies focusing on moral comfort are needed. As such, a conceptual model for moral comfort has been developed, in addition to a new theoretically developed instrument to measure moral comfort, the MCQ. The purpose of this research study was psychometric evaluation (testing reliability, validity, and factor structure) of the MCQ. While moral comfort was the focus of this study, a discourse on what is known about moral distress was warranted to better understand the unexplored

concept of moral comfort. Further development of moral comfort will require a new instrument for use in future empirical studies.

Moral Distress in Nursing

Moral distress is a longstanding issue in nursing and has been widely studied quantitatively (Hamric, Borchers, & Epstein, 2012; Pauly, Varcoe, Storch, & Newton, 2009; Wocial & Weaver, 2013) and qualitatively (Deady & McCarthy, 2010; Heinrich et al., 2017; Varcoe, Pauly, Storch, Newton, & Mayeroff, 2012), as well as in several other healthcare-related disciplines (Austin, Kagan, Rankel, & Bergum, 2008; Dzeng et al., 2016; Fronek et al., 2017; Knapp, Gottlieb, Berman, & Handelsman, 2007; Schwenzer & Wang, 2006; Sporrong, Höglund, & Arnetz, 2006). Philosopher Andrew Jameton (1984) was the first to define moral distress and his definition is the most widely used in moral distress literature. According to Jameton, moral distress "arises when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" (p. 6). However, in 1993, Jameton determined that several of the events described by nurses were not moral dilemmas, but actually moral distress. The term moral dilemma is relative to concepts associated with bioethics, such as respect for autonomy, beneficence, nonmaleficence, and justice. Moral distress is associated with a different type of dilemma, knowing what to do but not able to act on it. Jameton posited that what some nurses described as a moral dilemma was actually an earlier phase of moral distress. He further elaborated on two phases of moral distress, distinguishing them as initial distress and reactive distress. Initial moral distress is the individual's feelings of "frustration, anger, and anxiety when faced with institutional obstacles and conflict with others about values" (Jameton, 1993, p. 544). Reactive distress is the "distress that people

feel when they do not act upon their initial distress" (Jameton, 1993, p. 544) and is physically manifested by crying, depression, nightmares, feelings of worthlessness, heart palpitations, diarrhea, and headaches. The inability to act is the essence of moral distress.

Contributing Factors of Moral Distress

Several factors are associated with a nurse's inability to act on a moral judgment contributing to moral distress. Corley (2002) described moral distress as existing within internal and external contexts: the internal context is a nurse's psychological responses to moral situations and the external context is the impact of the work environment on a nurse's physical responses (actions) to moral situations. Moral distress is influenced by internal (individual) and external (environmental) variables. Individual factors are typically within the control of the nurse, impacting ethical decision-making, while external factors are often not within the control of the nurse, creating barriers to moral action. While individual barriers may contribute to moral distress, Jameton (1984) and Corley (2002) largely focused their definitions and theory of moral distress on the environmental barriers (e.g., the work environment).

Internal factors/barriers. A lack of the following internal (individual) factors has been identified as contributors to moral distress: nurse's ability to identify a moral situation (moral sensitivity); knowledge on how to respond to a moral situation (moral competency and moral imagination); conviction to do the right thing regardless of consequences (moral certainty); the freedom, right, and responsibility to make choices (autonomy); willingness to act in the face of controversy regardless of consequences (moral courage); and taking action as a result of possessing all of the previous factors (moral agency) (Corely, 2002; McCarthy & Gastmans, 2015). Additional individual

barriers contributing to moral distress are power imbalances/inequalities, perceptions of powerlessness or lack of assertiveness affecting a nurse's willingness to speak up, lack of opportunity to voice concerns, lack of confidence, lack of nursing experience and expertise, insufficient clinical skills, and fear of taking action due to potential negative consequences (Hamric et al., 2012; McCarthy & Gastmans, 2015; Wilson, Goettemoeller, Bevan, & McCord, 2013).

External factors/barriers. External (environmental) factors contributing to moral distress may be related to a lack of administrative support, teamwork, and team support from peers, as well as a lack of an organizational ethical climate, one that is supportive of communication and collaboration between all healthcare staff, providing opportunities for openly discussing ethical dilemmas (Corley & Minick, 2002; McCarthy & Gastmans, 2015). Additional external barriers are institutional constraints related to organizational policies, legalities, and hierarchical power structures conflicting with patient care needs; professional and interprofessional conflicts and communication barriers (especially nurse-physician); perceived physician incompetence; lack of recognition of nursing expertise; inadequate staffing and increased workloads; lack of time, supplies, and resources; and cost-cutting measures for economic efficiencies (Corley, 2002; Gutierrez, 2005; Hamric et al., 2012; McCarthy & Gastmans, 2015; Wilkinson, 1987; Wilson et al., 2013). Specific clinical situations found to contribute to the development of moral distress are futile treatment, such as carrying out unnecessary tests or provision of aggressive treatment in patients with late-stage disease; lack of treatment; poor pain management; incompetent or inadequate care; deception (e.g., providing false hope); inadequate consent for treatment (the task of receiving informed consent); and

uncooperative behavior of a patient/family member (Ameri, Kavousi, & Safavibayatneed, 2016; McCarthy & Gastmans, 2015; Oh & Gastmans, 2015; Vaclavik, Staffileno, & Carlson, 2018).

Negative Consequences of Moral Distress

Moral distress in nursing has commonly been measured quantitatively by its frequency and its intensity. Oh and Gastmans (2015) conducted a literature review of quantitative studies on moral distress. They found that, while the overall frequency of moral distress was low, the intensity of the experiences was high. However, low frequency or intensity of moral distress does not indicate the absence of a problem. A morally distressing situation may only occur once, but with high intensity or impact. Alternatively, a nurse may be exposed to several morally distressing situations over time, each with low intensity. A solitary high-impact experience, repeated low-impact experiences, or any combination of experiences across the spectrum may lead to consequences of moral distress. These consequences are multifaceted, impacting nurses, patients, and healthcare organizations. Healthcare organizations are impacted by increases in nurse turnover and staffing shortages. Lack of patient advocacy and nurses' avoidance of patients in order to mitigate their own suffering leads to increased patient discomfort and suffering (Hunsaker, Chen, Maughn, & Heaston, 2015; Joinson, 1992). Moral distress has also been linked to other nursing issues such as missed nursing care (Kalisch, 2015) and compassion fatigue (Pauly et al., 2009). Combined, these issues potentially lead to substandard patient care, compromised patient safety, and poor patient outcomes.

Moral residue and the crescendo effect. A hazard of repeated episodes of moral distress is the accumulation of moral residue, negative feelings associated with unresolved moral distress, lingering for months or even years (Hamric et al., 2012; Savel & Munro, 2015; Webster & Baylis, 2000). Webster and Baylis (2000) described moral residue as "that which each of us carries with us from those times in our lives when in the face of moral distress we have seriously compromised ourselves or allowed ourselves to be compromised" (p. 218). Epstein and Hamric (2009) described the impact of the crescendo effect of moral residue and moral distress. The crescendo of moral distress rises as the event is occurring, then subsides after the situation ends. However, after the effects of moral distress have subsided, moral residue lingers, creating a lower threshold for future morally distressing events. As moral residue increases, moral distress increases. This is the crescendo effect. Epstein and Hamric believe the crescendo effect undermines the professional commitment and integrity of healthcare providers.

The vicious cycle of burnout. Moral distress has been strongly correlated with burnout (Espeland, 2006; Fenton, 1988; Jameton, 1992; Maslach, Schaufeli, & Leiter, 2001; Vahey, Aiken, Sloane, Clarke, & Vargas, 2004). Burnout is "a state of physical, emotional, or mental exhaustion combined with self-doubts about one's competence" (Kalisch, 2015, p. 213). Kalisch (2015) reported the results of a systematic review that examined the relationships between burnout and cognitive function. Thirteen of the 15 studies found an association between burnout and selective cognitive deficits that negatively impacts decision-making and subsequent actions. Ultimately, burnout leads to a cascade of issues that begins with nurses becoming emotionally detached and cynical and/or harboring feelings of incompetence and inadequacy, leading to issues such as

apathy, chronic fatigue, depression, compassion fatigue, and job dissatisfaction. This can result in increased intent-to-leave, increased nurse turnover rates, and inadequate staffing (e.g., staffing shortages) (Catlin et al., 2008; Cavaliere, Daly, Dowling, & Montgomery, 2010; Corley, 2002; Glasberg, Eriksson, & Norberg, 2008; Gutierrez, 2005; Hanna, 2004; Kalisch, 2015; Meltzer & Huckabay, 2004). Staffing shortages have been correlated with staff burnout (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002), resulting in a vicious cycle. Nurse staffing shortages have also been linked with increased 30-day patient mortality rates and increased probability of failure to rescue (Aiken, Clarke, Sloane, Lake, & Cheney, 2008; Aiken et al., 2002). The vicious cycle of burnout and staffing inadequacies related to moral distress negatively impacts the work environment. A large body of evidence has linked patient outcomes to the climate of the practice (work) environment (Aiken et al. 2011; Roche, Duffield, Aisbett, Diers, & Stasa, 2012; Twigg, Geelhoed, Bremmer, & Duffield, 2013; Van Bogaert, van Heusden, Timmermans, & Franck, 2014; You et al., 2013). The negative impact of moral distress on the work environment thereby contributes to substandard quality of nursing care, threatening patient safety and nurse-sensitive patient outcomes, including prevention of hospital-acquired conditions such as hospital-acquired pressure injuries, catheter-associated urinary tract infections, fall-related injuries, and central line-associated bloodstream infections.

Moral distress and missed nursing care. Missed nursing care is also a nursing issue that is related to moral distress, potentially impacting patient safety and patient outcomes. Missed nursing care has been defined as "any aspect of standard, required nursing care that is not provided" (Kalisch, 2015, p. 17), such as nourishment, ambulating

patients, turning and positioning patients, medication administration, hand washing, mouth care, emotional support, promoting sleep, discharge planning, and patient teaching. Kalisch (2015) found that missed nursing care is associated with inadequate labor resources, inadequate material resources, and poor communication and teamwork; moral distress was among some additional reasons contributing to missed nursing care. However, missed nursing care also contributes to moral distress. In two missed nursing care qualitative studies (Papastavrou, Andreou, & Vyronides, 2014; Winters & Neville, 2012), the nurses' descriptions of their experiences with their inability to provide complete care for their patients were consistent with the characteristics of moral distress. A neonatal intensive care unit case study related to palliative care also showed that missed opportunities to provide palliative care to neonatal patients contributed to nurses experiencing moral distress (Martin, 2013).

Moral distress and compassion fatigue. Moral distress has also been linked to contributing to compassion fatigue (Pauly et al., 2009). Compassion fatigue, also known as vicarious trauma or secondary traumatic stress, is described as "emotional, physical, and spiritual exhaustion from witnessing and absorbing the problems and suffering of others" (Hunsaker et al., 2015, p. 187) or the loss of ability to nurture patients (Joinson, 1992). Compassion fatigue has been associated with burnout, as well as being described as a unique type of burnout (Ledoux, 2015). Compassion fatigue leads to patient avoidance, depersonalization, detachment, stress-induced physical problems (e.g., gastrointestinal upset, muscle tension, sleep disturbances, general fatigue, or chest pain), and emotional problems (e.g., frustration, anger, apathy, depression, anxiety, irritability, mood swings, or substance abuse) (Lombardo & Eyre, 2011). Workplace consequences

of compassion fatigue include absenteeism, avoidance of patients and families, diminished performance, reduced output, and increased turnover (Abendroth & Flannery, 2006; Coetzee & Klopper, 2010; Hodge & Lockwood, 2013; Lombardo & Eyre, 2011). Moral distress and compassion fatigue have several common consequences. The combination of these common consequences places patients, nurses, and healthcare organizations at higher risk for compromised patient safety and negative patient outcomes.

Moral distress has several negative consequences. As such, studies investigating ways to prevent moral distress are required. Potential interventions may come from knowledge gained about moral comfort.

Coping with the Aftermath of Moral Distress Versus Promoting Moral Comfort

Oh and Gastmans (2015) recommended research to examine strategies to support nurses and to develop coping strategies to manage moral distress. However, allowing moral distress to occur at all increases the risk of its negative consequences. An alternative strategy also requiring further research is to examine interventions to prevent the occurrence of moral distress, thereby avoiding its negative consequences for patients, nurses, and healthcare organizations and the need to cope with its aftermath. Although assertions have been made that moral distress is unavoidable due to the reality that moral dilemmas will continually ensue (Epstein & Hamric, 2009; Rushton, 2016), efforts to decrease the incidence of moral distress must be explored. Investigation of moral comfort may offer insight that can assist with developing interventions to mitigate the incidence of moral distress. An abundance of qualitative and quantitative literature has uncovered factors associated with moral distress. However, literature on the prevention of moral

distress is sparse. Jameton (1984) stated "ideas are not solutions to ethical problems; new ways of life are" (p. xvii). Moral comfort in nurses may be the key to discovering a way of life that leads to a viable alternative to moral distress. Further exploration of moral comfort is needed as a stepping stone to pave the way towards investigating interventions to promote moral comfort through the development of a new instrument designed to measure moral comfort in nurses. Knowledge of the individual and environmental factors that contribute to moral distress was used to theoretically develop the instrument under the assumption that the factors contributing to moral distress prevent moral comfort.

Significance

Nurses are the largest group of healthcare professionals within the hospital setting. Their patient advocacy role and around-the-clock presence at the bedside places them at the center of patient care. As such, nursing practice within the hospital setting crucially impacts overall quality of care, thus influencing patient safety and nurse-sensitive patient outcomes such as patient satisfaction and prevention of avoidable hospital-acquired conditions and complications (Duffy, 2009; Schuelke, Young, Folkerts, & Hawkins, 2014). Consequently, quality of care, patient safety, and patient outcomes are critically impacted by nurses' moral judgments related to decision-making in delivery of nursing care and subsequent moral actions (American Nurses Association [ANA], 2015; Fowler, 2015).

Moral Comfort

Wurzbach (1996) first introduced the concept of moral comfort. Wurzbach claimed the ethical principle of comfort arose from the nurse's ability to do the right

thing for her or his patients, subsequently followed by experiencing a sense of peace related to her or his actions. Corley and Minick (2002) defined moral comfort as

> an individual's feelings of ease with decisions and actions related to ethical problems. It occurs when the professional is able to make decisions in the best interest of patients, has his or her ideas about the patient considered in the plan of care, or is able to relieve or reduce the patient's pain and suffering. (p. 8)

Corley (2002) essentially described moral comfort as the positive outcome of a moral dilemma and the opposite of moral distress.

Positive Consequences of Moral Comfort

Individual and/or environmental factors that hinder ethical judgment and moral actions and contribute to moral distress may negatively impact quality of nursing care, patient safety, and nurse-sensitive patient outcomes. On a fundamental level, issues such as moral distress disrupt the moral foundation of nursing, similar to the damaging and destructive effects of an earthquake on the earth's foundation. Situations that contribute to nurses' encounters with moral distress threaten nursing's core values and moral integrity, thereby disrupting ethical practice and nursing decisions and actions, potentially leading to negative patient outcomes and negatively impacting the profession of nursing as well as healthcare organizations at large (Burston & Tuckett, 2012).

Conversely, for nurses, moral comfort has been claimed to be the positive outcome of moral situations. Therefore, promotion of moral comfort may potentially positively impact outcomes for nurses, patients, and healthcare organizations. Theoretically, moral comfort is promoted by the presence of individual factors such as moral sensitivity, moral certainty, moral competence and moral imagination, moral

autonomy, and moral courage (Corley, 2002). Influencing environmental factors are supportive administrators, teamwork and team support from peers, positive ethical climate, appropriate staffing, adequate time and resources to complete tasks, establishment of organizational policies and equitable power structures congruent with patient care needs, positive professional and interprofessional relationships, effective communication between healthcare professionals, and recognition of nursing expertise. Individual and environmental factors supportive of moral comfort may possibly promote positive outcomes for nurses, patients, and organizations, such as retention of nursing staff, decreased instances of missed nursing care, and decreased compassion fatigue, thereby preventing negative outcomes such as moral residue and its crescendo effect, burnout, nursing turnover and staffing inadequacies, resulting in the avoidance of compromising patient safety and negative patient outcomes.

Moral comfort's potential for positive outcomes emphasizes the necessity for research studies focusing on moral comfort rather than on moral distress. Moral distress has been well studied and its existence and negative consequences within nursing and other healthcare professions have been well documented. The profession of nursing would be better served by increasing knowledge on moral comfort and its positive outcome of a moral dilemma. Strategies have been recommended for dealing with the aftermath of moral distress. However, studies examining concepts associated with methods or strategies to prevent moral distress are sparse. Examining the scarcely explored concept of moral comfort in nurses, as well as its related concepts, may offer insight to promoting moral comfort.

Moral Comfort and Its Related Concepts

While literature on interventions for preventing and decreasing the incidence of morally distressing situations is sparse (Musto & Rodney, 2016), two emerging concepts in nursing have recently been examined through concept analyses to guide development of sustainable solutions for preventing and/or decreasing moral distress: moral courage and moral resilience (Numminen, Repo, & Leino-Kilpi, 2017; Young & Rushton, 2017).

Moral courage. Moral courage, as defined by Savel and Munro (2015), is "feeling fear and acting anyway" (p. 277). While moral courage has been discussed since Florence Nightingale's era, the concept is not clear, leading to a concept analysis conducted by Numminen et al. (2017). In their review of 31 articles to find key attributes to define being and acting as a courageous nurse, Numminen et al. identified the following: true presence, moral integrity, responsibility, honesty, advocacy, commitment and perseverance, and personal sacrifice. They also identified ethical sensitivity, conscience, overcoming fear, and experience as antecedents to moral courage. Further descriptions of attributes and antecedents of moral courage are provided in Table 1.

Table 1

Manifestation of Moral Courage in Nursing: Antecedents and Attributes

Manifestations		
Antecedent	Descriptors	
Ethical Sensitivity	Consisted of a sense of moral burden, moral strength, and moral responsibility	
Conscience	The driving force behind courageous acts giving courage to discuss difficult subjects	
Overcoming Fear	Fearlessness allowed nurses to act courageously to take a stand to act regardless of criticism	
Experience	Provided nurses with the courage to voice their own needs and feelings to be able to endure morally difficult situations	
Attribute	"Being Courageous"	"Acting Courageous"
True Presence	Seeing patients fellow human beings Responding to patients' needs Creating interpersonal relationships Daring to be touched by patient's vulnerability Daring to admit one's own vulnerability Enduring ethical uncertainty Daring to face unpredictable care situations	Staying by the patient's side Listening Being open and true Being responsive Expressing one's own feelings Showing love, compassion, and empathy Breaking rules and conventions
Moral Integrity	Knowing own values Being true to self Not compromising or conforming to mainstream Mastering one's own life Feeling empowered Withstanding criticism	Committing to acting if needed Being open, trustworthy, patient, and persevering Resisting; staying firm Speaking out one's values and views
Responsibility	Aiming for excellence Commitment to patient's well-being Preserving patient's dignity Admitting mistakes and limitations Commitment to authentic leadership	Being available to patient Not losing control Enduring uncertainty Feeling empowered Managing consequences Being flexible, trustworthy, and honest

Table 1 (cont.)

Manifestations		
Attribute	"Being Courageous"	"Acting Courageous"
Honesty	Questioning one's own and others behavior/actions Admitting one's shortcomings and mistakes	Speaking up Reporting unsafe practices Being trustworthy and open Having a clear conscience
Advocacy	Staying on patient's side Focusing on the patient Preserving patient's dignity Responding to patient's needs and rights Intervening for and with the patient Encouraging the patient	Promoting/facilitating patient's courage Providing hope and optimism Speaking for the patient against others' humiliation and insults of human dignity Exceeding professional obligations Speaking up
Commitment and Perseverance	Identifying with self and the profession Committing to good care Recognizing professional boundaries Enduring strain Using resistance	Having personal confidence Avoiding superficiality in care Risk-taking to provide safe patient care
Personal Sacrifice	Standing alone Committing to care with one's whole being	Risking one's own reputation Reflecting one's own behavior Expressing personal feelings Seeing one's own vulnerability

Note. Adapted from "Moral Courage in Nursing: A Concept Analysis," by O. Numminen, H. Repo, & H. Leino-Kilpi, 2017, *Nursing Ethics, 24*, pp. 882-883.

Moral resilience. Moral resilience in nursing is a concept under construction (Young & Rushton, 2017). Moral resilience, as defined by Rushton (2016), is "the capacity of an individual to sustain or restore their integrity in response to moral complexity, confusion, distress, or setbacks" (p. 112). Moral resilience helps shift part of the burden of moral distress, affording one the opportunity to reconcile their integrity when desired outcomes are absent. A concept analysis of moral resilience in nursing conducted by Young and Rushton (2017) resulted in identification of general themes associated with antecedents, attributes, and consequences of moral resilience.

Antecedents that may lead to moral resilience are (a) ethics education or general education, (b) creating meaning in life, (c) understanding a diversity of core human values, (d) moral adversity, and (e) reducing ethical complexity and moral stressors. Moral resilience allows a person to navigate morally complex situations and reduces one's perceived moral distress by preserving nurses' moral integrity. Diverse consequences of moral resilience lead to positive outcomes such as increased moral agency, fostering professional growth, promoting nurses' health and well-being, and increased ability to enact professional values and create/sustain caring cultures.

While encouraging moral courage in nurses shows promise for preventing moral distress, the concept of moral resilience insinuates the presence of moral distress. Resilience has been defined as "the ability to recover from or adjust easily to misfortune" ("Resilience," n.d.). The goal of this research study was to test the reliability and validity of an instrument that measures moral comfort for use in future research studies to further explore of the concept in an effort to increase understanding and potentially identify ways to prevent moral distress by promoting moral comfort. However, it is unclear whether moral resilience is intended to prevent moral distress or lessen the negative repercussions of moral distress, or both. As such, further investigation of moral courage and moral resilience is needed; however, instruments for measuring these concepts have not been developed.

Moral Distress Instruments and the Moral Comfort Questionnaire

While the consequences of moral distress are serious and negatively impact patients, nurses, and healthcare organizations, research studies have primarily focused on measuring the frequency and intensity of moral distress in various nursing settings using

a variety of moral distress instruments. While several studies have included measuring organizational ethical climate and moral distress (Atabay, Cangarli, & Penbek, 2015; Hamric & Blackhall, 2007; Humphries & Wood, 2016; Pauly et al., 2009; Sauerland, Marotta, Peinemann, Berndt, & Robichaux, 2014; Silén, Svantesson, Kjellström, Sidenvall, & Christensson, 2011), instruments to assess and identify the multifaceted root causes of moral distress (e.g., individual and environmental factors) are scant. Corley, Elswick, Gorman, & Clor (2001) developed the Moral Distress Scale (MDS), originally a 32-item scale. A factor analysis identified three different factors, named as follows: (a) individual responsibility (Cronbach's $\alpha = .97$), (b) not in patient's best interest (Cronbach's $\alpha = .82$), and (c) deception (Cronbach's $\alpha = .84$). The MDS was tested and revised by Hamric et al. (2012), resulting in a 21-item scale (MDSR) with subscales specifically measuring the frequency and intensity of moral distress (Cronbach's $\alpha = .88$). Later, Eizenberg, Desivilya, and Hirschfeld (2009) developed the Moral Distress Questionnaire for Clinical Nurses (MDQCN), a 15-item measure, for measuring culturally sensitive moral distress among nurses in various practice settings (Cronbach's $\alpha = .804$). While each of these instruments identifies some factors related to root causes of moral distress, none provide a set of items that comprehensively assesses individual and environmental factors. While several instruments to measure moral distress were found and reviewed, no instruments to measure moral comfort were found. Therefore, the Moral Comfort Questionnaire (MCQ) was developed. The items on the MCQ were developed to incorporate the assessment of individual and environmental factors that contribute to achieving moral comfort.

Development of the Moral Comfort Questionnaire

The original 29-item MCQ was developed using Tappen's (2016) concept tree model. The concept tree model assists the researcher in moving concepts from abstract to concrete to facilitate the operationalization of items related to an abstract concept. It is comprised of components ranging from high to low levels of abstraction and includes a conceptual framework and/or grand theory, a midrange theory, propositions, constructs and/or concepts, dimensions, and operational indicators. The following is a detailed description of the framework for developing the MCQ. Figure 2 provides a visual representation of the MCQ concept tree model.

Conceptual framework. According to Tappen (2016), conceptual frameworks are the highest level, or top rung, of theoretical abstraction in research. They are comprised of the broadest of theories and serve as lenses through which we view the world. Ethical systems, a theory or system of ethical values supporting the concepts of right versus wrong, was selected as the conceptual framework for developing the measure for moral comfort. It served as a broad, foundational term encompassing several ethical/moral philosophies and theories such as virtue ethics, feminist moral philosophy, or social caring ethics.

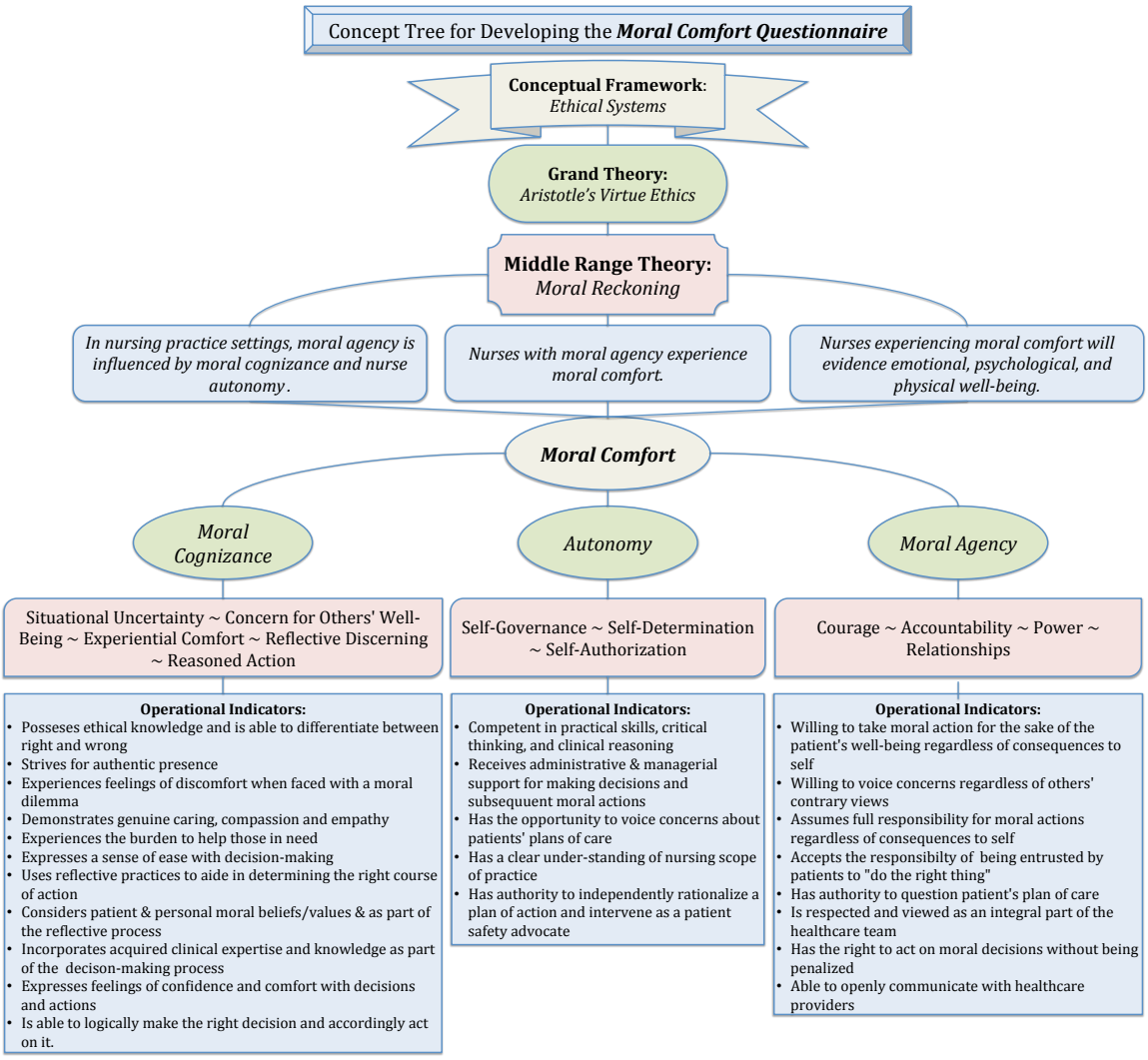

Figure 2. Concept tree for developing the Moral Comfort Questionnaire.

Grand theory. The next rung on the concept tree ladder of abstraction is the grand theory. This theory may be a nursing theory or a theory from another discipline (Tappen, 2016). The grand theory selected for this concept was Aristotle's (384-323 BC/1976) virtue ethics, which incorporates an individual's character as a major factor of moral/ethical decision-making. Beauchamp (2001) described the basis of Aristotle's virtue ethics as "excellence of character" (p. 187). As previously mentioned, this ethical viewpoint is grounded in the assumption that a virtuous person will make the right decision in any given ethical situation. Aristotle (384-323 BC/1976), the father of virtue

ethics, also known as Nicomachean ethics, conveyed in his writings that virtues are learned behaviors/skills that require practice to achieve excellence. He asserted that moral virtues are not innate, but people are open by nature to receive them and through habitual use and practice they become fully developed. The following is an abridged list of ethical virtues (characteristics of virtue ethics): benevolence, compassion, competence, courage, courtesy, deliberation, diligence, generosity, genuineness, honesty, imagination, integrity, justice, kindness, patience, perception, perseverance, self-reflection, tolerance, understanding, and veracity (Begley, 2005).

Middle range theory. Moving down the ladder of abstraction, following the grand theory is the middle range theory. The middle range theory serves as the connection between the conceptual framework and grand theory to the lower levels of the concept tree (Tappen, 2016). For nursing research, a middle range theory selected for a concept tree should be one developed specifically for nursing. The middle range theory selected for this concept tree was Nathaniel's (2003) grounded theory of moral reckoning, developed in response to providing a better understanding of moral distress. Nathaniel (2014) defined moral reckoning as taking account of one's moral decisions and actions. The mid-range theory describes a process during which nurses critically and emotionally reflect on motivations, choices, actions, and consequences of a particularly troubling patient care situation (Nathaniel, 2014). Nathaniel (2003) claimed that the theory of moral reckoning expounds on what is known about moral distress because it explores conditional precursors and long-term consequences while also explaining an individual's choices and actions. The four distinct stages of moral reckoning are ease, situational bind, resolution, and reflection (Nathaniel, 2014). Ease occurs with experience

and is characterized by being comfortable with rules and expectations. A situational bind occurs when an individual's core beliefs come into irreconcilable conflict with social or institutional norms, thus challenging the individual's moral agency. This stage disturbs the stage of ease. After the individual has made and acted upon a decision, the next stage of resolution begins. During this stage, beliefs, values, and actions are iteratively examined. This leads to the final phase, reflection. In moral reckoning, reflection is described as remembering, telling the story, examining conflicts, and living with the consequences.

Propositions. Development of propositions is the next rung on the concept tree ladder of abstraction. "Propositions are statements about a concept or several concepts" (Tappen, 2016, p. 30). These statements may include descriptors of the phenomenon or predict relationships between concepts. Corley (2002) concluded that nurses who demonstrate moral sensitivity (ability to recognize a moral conflict and knowledge to appropriately respond) and commitment but lacked autonomy, moral courage, and moral agency suffer from moral distress. Corley asserted that nurses with greater moral competence combined with moral courage who take morally appropriate actions are more likely to experience moral comfort. Based on Corley's conclusion, the following were the three propositions for this researcher's concept tree:

Proposition 1. In nursing practice settings, moral agency is influenced by moral cognizance and nurse autonomy.

Proposition 2. Nurses with moral agency experience moral comfort.

Proposition 3. Nurses experiencing moral comfort will evidence emotional, psychological, and physical well-being.

Constructs, concepts, and dimensions. Constructs and concepts are the next level on the ladder of abstraction. Waltz, Strickland, and Lenz (2017) stated concepts are "the basic building blocks of knowledge, thought, and communication" (p. 33) and "provide a language link between abstract thought and sensory experience" (p. 34). Constructs are more complex than concepts and inclusion of both constructs and concepts within a concept tree are not required (Tappen, 2016). The construct, moral comfort, has several associated concepts: moral cognizance, autonomy, and moral agency. Each construct or concept has specific dimensions. Dimensions provide meaning and substance through the assignation of attributes, characteristics, or features. The definitions of the construct and each of the concepts within the context of this concept tree follow, with each concept's dimensions discussed as well.

The construct of moral comfort. Nurses' moral decisions and actions associated with moral situations will result in one of two outcomes, moral distress (anxiety, pain, and suffering) or moral comfort (feelings of ease) (Corley, 2002). Moral comfort has been defined

> an individual's feelings of ease with decisions and actions related to ethical problems. It occurs when the professional is able to make decisions in the best interest of patients, has his or her ideas about the patient considered in the plan of care, or is able to relieve or reduce the patient's pain and suffering. (Corley & Minick, 2002, p. 8)

Moral comfort is sparsely found in the literature. Therefore, the internal and external factors that impact moral distress were used to identify the concepts and dimensions of moral comfort.

Moral cognizance and its dimensions. Development of the concept of moral cognizance, was guided by Smith and Liehr's (2014a) prescriptive10-step process: (a) write a practice story (past), (b) identify a central phenomenon, (c) choose a theoretical lens, (d) review related literature, (e) gather another person's current practice story (present), (f) reconstruct the story followed by writing a mini-saga, (g) define the core qualities, (h) define the working concept, (i) create a concept model, and (j) construct a mini-synthesis (p. 350). The practice story of a novice nurse who failed to recognize her wrong decision that led to a serious medication administration error and its potential adverse outcomes led to the identification of the central phenomenon of moral cognizance. Nathaniel's (2003, 2014) theory of moral reckoning was used as the theoretical lens for development of moral cognizance. The review of related literature led to the identification of the preliminary core qualities for further examination in the story-gathering phase: ease, reflection, moral maturity, and moral blindness (also known as moral/ethical insensitivity) (Hem, Halvorsen, & Nortvedt, 2015; Nathaniel, 2003, 2014; Shaw, 2014; Tsunematsu & Asai, 2014). Gathering a story entailed interviewing a direct care novice nurse with less than one year of experience. The preliminary core qualities and Smith and Liehr's (2014b) story path were used to develop the interview guide, leading to gathering a current practice story, development of a reconstructed story, and followed by the 50-word mini-saga (an abbreviated version of the reconstructed story):

> *L.S., a novice nurse, was uncomfortable with aggressive interventions knowing that J.B. was dying. The novice nurse feared voicing any concerns and sought guidance for affirmation. After J.B. died, L.S. reflected on actions taken and*

wished to have fought harder for less aggressive interventions in the last hours of J.B.'s life.

The next step of concept development was identifying and defining the core qualities of moral cognizance: situational uncertainty, concern for others' well-being, experiential comfort, reflective discerning, and reasoned action. Situational uncertainty is when an individual's core beliefs and values (right versus wrong) are challenged due to a questionable scenario. Concern for the well-being of others is an altruistic desire to do the right thing for someone else's benefit to optimize positive outcomes. Experiential comfort is a sense of ease grounded in knowledge and confidence acquired through experience over time. Reflective discerning is arriving at a decision and course of action with the intention of doing the right thing based on reflection of one's own personal beliefs/values. Reasoned action is doing something within an uncertain situation that has been logically established as the right course of action. Finally, the core qualities were included in defining the concept of moral cognizance:

Moral cognizance is concern for others' well-being grounded in experiential comfort when faced with situational uncertainty leading to reflective discerning and reasoned action.

Autonomy and its dimensions. Autonomy has been defined as "the quality or state of being self-governing" or "self-directing freedom and especially moral independence" ("Autonomy," n.d.). According to Bishop and Scudder (1987), autonomy is an essential condition to acting morally. In an integrative review exploring the relationship between moral agency and nursing autonomy, Bermudez (2018) also found that autonomy is an antecedent to moral agency, with independence and authority as its

key components. Additionally, a composite definition for autonomy in nursing was formulated as a result of the integrative review: the possession of knowledge to independently make decisions and the freedom and ability to take action within the scope of nursing practice while upholding the centrality of the patient and considering the interdependent nature of the healthcare team to provide safe, holistic care. Veltman and Piper (2014) outlined three major dimensions of autonomy congruous with independence and authority: self-governance, self-determination, and self-authorization. Self-governance involves having the skills and capacities to make choices and enact decisions that express or cohere with one's own identity. Self-determination is having the freedom and opportunities to make and enact choices of practical import to one's life; that is, choices about what to value, who to be, and what to do. Self-authorization involves regarding oneself as authorized to exercise practical control over one's life, to determine one's own reasons for action, and to define one's values and identity-shaping practical commitments.

Moral agency and its dimensions. Moral agency is an individual's ability to make moral judgments based on some notion of right and wrong and to be held accountable for these actions. Moral agency in nursing is the nurse's moral responsibility of making ethical decisions on behalf of patients and having the courage to act, taking full accountability for the consequences (Bermudez, 2018). Within the context of this concept tree, the dimensions of moral agency are ones that facilitate its execution – courage, accountability, power, and relationships (Corley, 2002; Newton, Storch, Makaroff, & Pauly, 2012; D. Raines, 1994; Yarling & McElmurry, 1986). Numminen et al. (2017) defined courage as "an attitude and a quality of mind that enables one to face

anything recognized as dangerous, difficult, or painful with firmness and without fear, instead of withdrawing from it" (p. 879). A moral agent requires courage to act as an advocate for his/her patients in situations where he/she finds a lack of beneficence or identifies a safety concern. Moral agents are willing to take responsibility (accountability) for their actions, regardless of outcomes or popularity of their decisions. Barrett (2015) defined power as "the capacity to knowingly participate in change" (p. 497) and "being aware of what one is choosing to do, feeling free to do it, and doing it intentionally" (p. 498). As an integral part of the healthcare team, a moral agent must be given power to independently make decisions on behalf of patients. Lastly, relationships between organizational leaders and moral agents are those where nurses are entrusted and empowered to be courageous and take accountability for their actions.

Operational indicators. The bottom rung of the concept tree ladder of abstraction is its operational indicators, which basically are how the latent variable, or concept, is measured (Tappen, 2016). Development of operational indicators provides direct guidance for writing the items for the instrument or measure. Twenty-five operational indicators were developed for the MCQ and guided the development of the original 29-item questionnaire.

Moral Comfort and Caring

Essentially, moral comfort is the positive outcome of a moral situation or dilemma, while moral distress is the negative outcome. Therefore, individual and environmental factors that contribute to moral distress prevent moral comfort and vice versa. This knowledge, in conjunction with Ray's (1989) theory of bureaucratic caring and the defining attributes (taking moral action [advocacy] and feeling at peace),

consequences, and empirical referents of moral comfort as identified through the concept analysis used to develop and revise the MCQ provided the foundation for developing a conceptual model for moral comfort.

Theory of Bureaucratic Caring

Jameton (1993) stated, "nurses sometimes encounter bureaucratic obstacles" (p. 544). The focus of the theory of bureaucratic caring is on "caring patterns of the nurse-patient relationship within the bureaucratic context of a hospital" (Ray & Turkel, 2015, p. 464). Ray's (1989) theory evolved from her initial substantive theory, differential caring, developed by exploring perceptions of caring among nurse and non-nurse administrators, clinical nurses, physicians, patients, and allied health professionals. Continued study and examination of the substantive theory led to its first evolution, becoming the grounded theory of bureaucratic caring. Ray found that caring within the organizational hospital system reached beyond the traditional, accepted humanistic characteristics of caring (physical, ethical, spiritual/religious, social-cultural, and educational). Caring in the hospital setting also encompassed the political, economic, legal, and technological aspects of a complex bureaucratic organization. Ray's research revealed that the caring aspects of bureaucracy were dominant within the hospital organization, with the economic and political being the most dominant, in comparison to the humanistic aspects of caring. Subsequently, the theory is considered paradoxical theory because of the melding of the thesis of caring (humanistic, social, educational, ethical, and religious) with the antithesis or bureaucratic aspect of caring (economic, political, technological, and legal). The theory is also considered paradoxical in nursing related to the struggles nurses encounter with serving humans (patients) through caring and serving the

bureaucratic hospital organization. Figure 3 depicts caring as the center surrounded by its equally weighted traditional caring and bureaucratic characteristics.

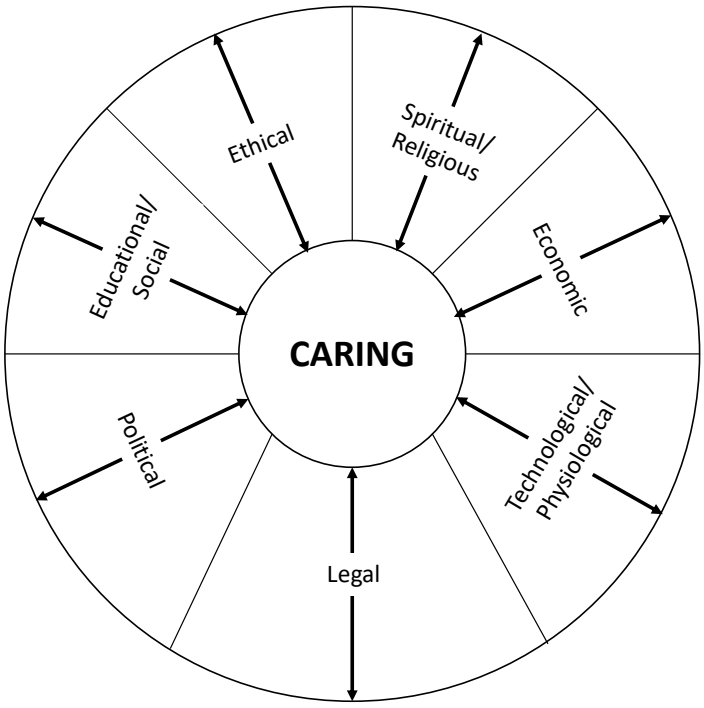

Figure 3. Grounded theory of bureaucratic caring. Adapted from *Nursing Theories and Nursing Practice* (4th ed.), by M. C. Smith & M. E. Parker, 2014, p. 463.

Nurse researcher, Dr. Marian Turkel, joined Ray in the theory's second evolution in which ideas of complexity science were incorporated, thus becoming the holographic theory of bureaucratic caring (Ray & Turkel, 2015). Complexity science is the science of change, interconnectedness, wholeness (holography), and emergence. Holography in the context of complexity science means the implicit order (the whole) and explicit order (the part) are interconnected, that everything is a whole in one context and a part in another, with each part being in the whole and the whole being in a part (Ray & Turkel, 2015; Turkel, 2007). Complexity science and holography are evident in the organizational hospital system's diverse and complex systems with interconnected working parts (the multidisciplinary team) constantly in a state of flux, thus requiring adaptation to the

emergence of new states and nurses and other health professionals remaining open to change.

The holographic theory of bureaucratic caring revolves around spiritual-ethical caring (the whole), integrated with physical, social-cultural, educational, political, economic, legal, and technological aspects (the parts) of a bureaucratic organization while simultaneously recognizing the reality of nursing practice (Ray & Turkel, 2015). Ray and Turkel (2015) claimed nursing is the work of the soul, which incorporates "understanding and engaging creatively, spiritually, and lovingly, and taking ethical responsibility for self and other and the organizational system" (p. 471). Spirituality of caring deals with the creativity, intimacy, and depth of human relationships, while the ethics of caring deals with moral accountability and caring for self. These qualities are essential to caring as the foundation of nursing (Boykin & Schoenhofer, 2001; Chinn & Watson, 1994; Duffy, 2015; Leininger, 1978; Turkel & Ray, 2004; Watson, 2008). In summary, ethical-spiritual caring is central to bureaucratic caring as a holographic theory with seven bidirectional interactive dimensions (thesis of caring and antithesis of caring); ethical-spiritual caring impacts the dimensions and the dimensions impact ethical-spiritual caring (Figure 4).

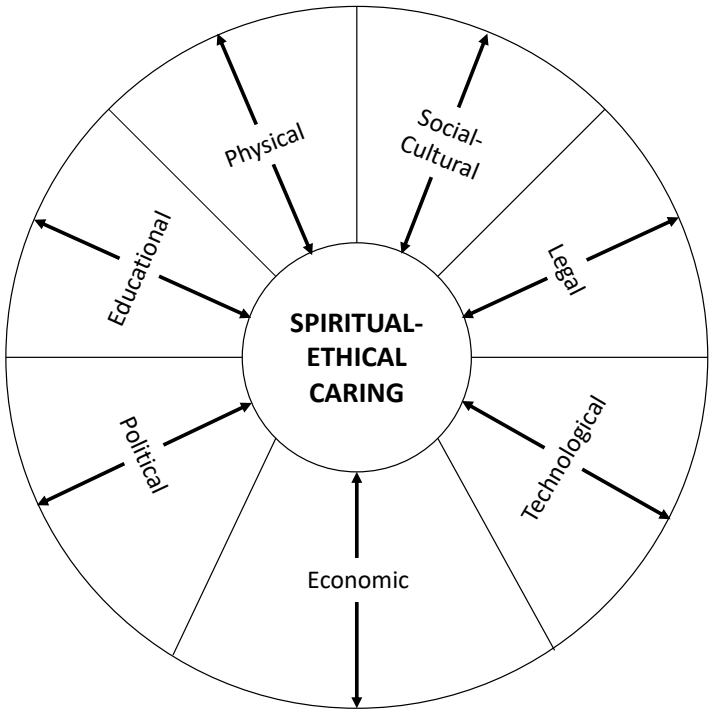

Figure 4. Holographic theory of bureaucratic caring. Adapted from *Nursing Theories and Nursing Practice* (4th ed.), by M. C. Smith & M. E. Parker, 2014, p. 463.

Moral Comfort and Bureaucratic Caring

Moral comfort in nursing aligns with the spiritual-ethical caring focus of bureaucratic caring. "Spiritual-ethical caring for nursing focuses on how the facilitation of choices for the good of others can or should be accomplished" (Turkel, 2007, p. 59). As such, the presence of all seven aspects of the thesis of caring (humanistic aspect: physical, social-cultural, educational) and antithesis of caring (bureaucratic aspect: economic, political, legal, technological) are required to achieve spiritual-ethical caring in nursing and moral comfort. Several of the obstacles that hinder moral comfort (and promote moral distress) are bureaucratic in nature, such as economic barriers that impact provision of human and material resources and organizational legal and political barriers that limit nurses' ability to respond and react to moral situations. While nurses focus on the humanistic aspect of nursing, organizational administrators should focus on ensuring

the bureaucratic aspects of caring are present and evident within their organizations. Ray and Turkel (2003) found that hospital organizations recognizing caring as a valued, integral part of nursing care had better patient and economic outcomes. Ensuring the presence of both humanistic and bureaucratic aspects of caring promotes the centrality of caring in nursing, thus playing an essential role in creating ethical work environments and promoting moral comfort.

The theory of moral reckoning's stages (ease, situational bind, resolution, and reflection) provided structure for delineating a pathway to achieving moral comfort. Ease and situational bind are represented by moral cognizance as the nurse recognizes and processes a moral situation. Moral cognizance is concern for others' well-being grounded in experiential comfort when faced with situational uncertainty, leading to reflective discerning and reasoned action (Bermudez, 2016). Situational uncertainty is when an individual's core beliefs and values (right versus wrong) are challenged due to a questionable scenario. Concern for others' well-being is an altruistic desire to do the right thing for someone else's benefit to optimize positive outcomes. Experiential comfort is a sense of ease grounded in knowledge and confidence acquired through experience over time. Reflective discerning is arriving at a decision and course of action with the intention of doing the right thing based on reflection of one's own personal beliefs/values. Reasoned action is deciding to do something within an uncertain situation that has been logically established as the right course of action. Moral cognizance is influenced by the following individual factors: moral sensitivity, moral imagination, moral competency, and nursing experience. Moral cognizance leads to a moral decision followed by a moral action representing the resolution phase of moral reckoning.

However, moral actions are influenced by individual and environmental factors. Individual factors influencing moral actions are autonomy (self-governance, self-determination, and self-authorization), courage (willingness to take risks and voice concerns regardless of consequences), and accountability (acceptance of responsibility associated with ethical decision-making). Environmental factors influencing moral actions are organizational relationships (administrative, managerial, and peer support, and open communication with the healthcare team) and power and authority (ability to freely voice concerns and the right to take action without penalty). Lastly, moral comfort is achieved as the nurse reflects and is satisfied with her/his moral decisions and moral actions. Figure 5 provides an illustration of the theoretical model for moral comfort.

Chapter Summary

Moral comfort, an emerging concept in nursing, is the positive outcome of a moral situation, potentially yielding positive consequences for nurses, patients, and healthcare organizations. In contrast, moral distress in nursing is a serious issue that negatively impacts nurses and healthcare organizations, potentially placing patients in harm's way. The theory of bureaucratic caring, in conjunction with the theory of moral reckoning, has been used as a lens to develop a conceptual model for moral comfort.

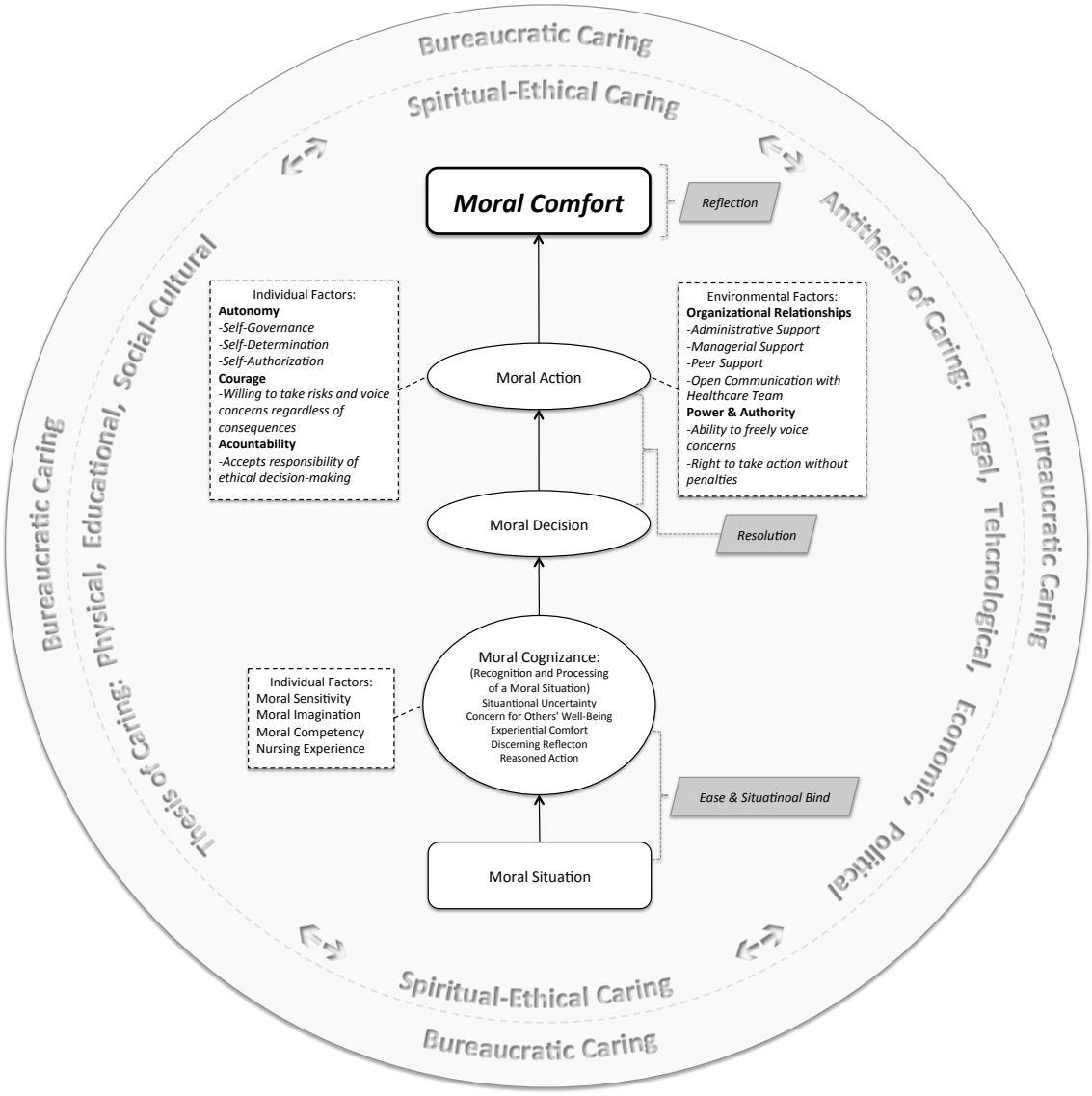

Figure 5. Theoretical model for moral comfort.

While moral distress is abundant in the nursing literature, including development of several instruments to measure moral distress, moral comfort has not been widely discussed or researched. Still an unexplored concept, literature on moral comfort is sparse. Additionally, instruments to measure moral comfort or related concepts of moral courage and moral resilience were not found, leading to the development of a new instrument to measure moral comfort and the purpose of this study – psychometric

evaluation of the Moral Comfort Questionnaire (MCQ). The specific aims of this study were to:

- Evaluate the reliability of the MCQ by evaluating the instrument's test-retest reliability (stability) and internal consistency (homogeneity),
- Evaluate the validity of the MCQ by evaluating the instrument's content validity and discriminant validity, and
- Examine the theoretical factor structure of the MCQ through confirmatory factor analysis.

Establishing reliability and validity of the new MCQ will provide an instrument for use in future research studies designed to gain further understanding of moral comfort in nurses and, as more is learned and understood, to identify interventions that foster moral comfort as a strategy to prevent moral distress.

CHAPTER 2. LITERATURE REVIEW

Moral distress in nursing is well documented in the literature. Jameton (1984) asserted that moral distress "arises when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" (p. 6). As a result, the negative impact of moral distress affects nurses, patients, and healthcare organizations, ultimately jeopardizing patient safety and patient outcomes. While several studies have focused on identifying the presence of moral distress (its frequency and intensity) and its impact on a nurse's intent to leave a position or having left a position and on nursing turnover rates, few studies have focused on identifying interventions for decreasing the incidence of moral distress to thereby deflect or avoid its negative impact. Moral comfort is an emerging concept that has been established as an alternative positive outcome of moral situations and a step in the direction for laying a foundation for conducting future studies investigating ways to avoid moral distress. Moral comfort has been defined as

> an individual's feelings of ease with decisions and actions related to ethical problems. It occurs when the professional is able to make decisions in the best interest of patients, has his or her ideas about the patient considered in the plan of care, or is able to relieve or reduce the patient's pain and suffering. (Corley & Minick, 2002, p. 8)

Logically, negative factors present in moral situations that result in moral distress, if avoided, would instead lead to moral comfort. An instrument, the MCQ, was theoretically

constructed using what is known about moral distress under the assumption it is the negative outcome of a moral situation or moral dilemma. The purpose of this study was to test the reliability and validity of the MCQ in a sample of direct-care registered nurses.

While instruments to measure moral comfort, or its related emerging concepts of moral courage and moral resilience, have not been found in the literature, several instruments for measuring moral distress have been developed and tested psychometrically for reliability and validity. Therefore, the literature reviewed for this study included studies focused on psychometric evaluation of instruments developed to measure moral distress and the application of these instruments to investigate moral distress in various nursing specialties and practice settings. The purpose of this literature review was to provide a critical synthesis of empirical literature on the development, testing, and application of nursing-specific moral distress-related instruments and of current literature exploring moral distress in nurses. The aims were to (a) evaluate the strengths and weaknesses of the reported reliability and validity testing of the instruments, (b) examine each study's results to determine common findings and factors contributing to moral distress, and (c) identify studies in which strategies for preventing or coping with moral distress were tested.

A literature search using CINAHL and PubMed/Medline was conducted using several combinations of the following key words: moral distress, moral distress scale, moral distress scale revised, moral distress thermometer, moral distress questionnaire, ethics stress scale, and nurs*. Some of the key words were selected based on the researcher's existing knowledge of moral distress and moral distress-related instruments. Additional search criteria included journal publications that were peer-reviewed research

articles written in English with available abstracts. Articles discussing initial psychometric evaluation of instruments were not restricted to a publication time frame. Following elimination of duplicates, the researcher reviewed all titles, abstracts, and content for relevance. Sixteen articles were included in the literature review (Table 2). Six studies reporting initial psychometric testing of instruments and two revised versions of one instrument were included regardless of publication dates. Eight current studies using at least one instrument to measure moral distress with reports of reliability and/or validity were included. These articles were described as moral distress instruments and related studies.

Moral Distress Instruments

Six instruments for measuring moral distress in nurses and other healthcare professions were found. The Ethics Stress Scale (ESS; M. Raines, 1994) was an early instrument that has been used to measure moral distress. The Moral Distress Scale (MDS) was developed by Corley et al. (2001). Corley, Minick, Elswick, and Jacobs (2005) and Hamric and Blackhall (2007) later revised the Moral Distress Scale, producing adapted and shortened versions. Eizenberg et al. (2009) developed the Moral Distress Questionnaire for Clinical Nurses (MDQCN). Hamric et al. (2012) developed the Moral Distress Scale – Revised (MDSR), another revised and abridged version of Corley et al.'s (2001) instrument. Shortly thereafter, Wocial and Weaver (2013) developed the Moral Distress Thermometer (MDT). Most recently, the Moral Distress Risk Scale (MDRS) was developed by Schaefer et al. (2017).

Table 2

Moral Distress Instruments: Initial Psychometric Evaluation and Use in Current Studies

Year (Country) Author(s)	Instrument Name	Type (No. Items)	Initial Psychometric Evaluation	Used in Recent Studies (2013 – 2018)
1994 (US) M. Raines	Ethics Stress Scale (ESS)	Self-report survey (43)	Test-Retest Reliability ($r = 0.82$, $p < .005$) Content Validity ($r = 0.89$, $p < .05$) Exploratory Factor Analysis with Convergent Validity (factor extraction not reported)	Dumouchel, Boytim, Gorman, and Weismuller (2015)
2001 (US) Corley et al.*	Moral Distress Scale (MDS)	Self-report survey (30)	Test-Retest Reliability ($r = 0.86$, $p < .01$) Content Validity (full agreement) Exploratory Factor Analysis (3-factor extraction) & Internal Consistency (Reliability) • Individual responsibility (Cronbach $\alpha = .97$) • Not in patient's best interest (Cronbach $\alpha = .82$) • Deception (Cronbach $\alpha = .84$) • Overall theta score = .97	Borhani, Abbaszaddeh, Mohamadi, Ghasemi, and Hoseinabad-Farahani (2017) Dyo, Kalowes, and Devries (2016) Wilson et al. (2013)
2009 (Israel) Eizenberg et al.	Moral Distress Questionnaire for Clinical Nurses (MDSCN)	Self-report survey (11)	Exploratory Factor Analysis (3-factor extraction) Discriminant Validity • Relationships ($t = 2.12$, $p < .05$) • Resources ($t = .17$, $p > .05$) • Time ($t = 2.21$, $p < .05$) Internal Consistency & Test-Retest Reliability • Relationships (Cronbach $\alpha = .85$); ($r = .62$, $p < .05$) • Resources (Cronbach $\alpha = .79$); ($r = .39$, $p < .05$) • Time (Cronbach $\alpha = .80$); ($r = .54$, $p < .01$) • Overall instrument (Cronbach $\alpha = .79$)	None

Table 2 (cont.)

Year (Country) Author(s)	Instrument Name	Type (No. Items)	Initial Psychometric Evaluation	Used in Recent Studies (2013 – 2018)
2012 (US) Hamric et al.	Moral Distress Scale – Revised (MDS-R)	Self-report survey (21)	Internal Consistency: • Nurses (Cronbach α = .89); Physicians (*n* = 37; Cronbach α = .67) • Combined (*n* = 206; Cronbach α = .88) Construct Validity (Hypothesis Testing) Content Validity: Interrater agreement = 88%	Ameri et al. (2016) de Boer, van Rosmalen, and van Dijk (2016) Lusignani, Gianni, Re, and Buffon (2017)
2013 (US); Wocial & Weaver	Moral Distress Thermometer (MDT)	Visual analog & numeric scale (1)	Concurrent Validity (Pearson's correlation) • MDT/MDS Adult, *r* = .404; MDT/MDS Pediatrics, *r* = .368 Convergent Validity	Powell, Engelke, and Swanson (2017)
2017 (Brazil) Schaefer, Zoboli, and Vieira	Moral Distress Risk Scale (MDRS)	Self-report survey (30)	Internal Consistency: Cronbach α = .913 Exploratory Factor Analysis (7-factor extraction) • Organizational/management issues (Cronbach α = .839) • Difficult to provide adequate end of life care (Cronbach α = .772) • Low professional autonomy (Cronbach α = .830) • Excessive workload (Cronbach α = .761) • Lack of professional security (Cronbach α = .657) • Lack of resources (Cronbach α = .572) • Conflicts in care (Cronbach α = .669)	None

Note. *MDS revised and expanded by Corley, Minick, Elswick, and Jacobs (2005). MDS revised and abridged by Hamric and Blackhall (2007).

Ethics Stress Scale

One of the earliest instruments used to measure the phenomenon of moral distress was the Ethics Stress Scale. M. Raines developed the ESS in 1992 as a component of her dissertation work, which was completed and published in 1994. M. Raines's dissertation chair, Alexander Tymchuk, collaborated in the development of the ESS, which is a 43-

item self-report Likert-type instrument designed to measure stress related to ethical decision-making in healthcare professionals, whereby lower scores equal higher ethics stress. The ESS is intended for multiple administrations over a one-year period of time to assess accumulation of ethics stress.

The instrument's psychometric properties were tested by multiple methods. Content validity was determined by content expert review (content validity index = .89, $p < .05$). A test-retest method was used to establish reliability ($r = .82$, $p < .005$). Testing for internal consistency, such as Cronbach's alpha, was not reported. A positive correlation between the ESS with another instrument used in the study, the Ways of Coping Questionnaire, whereby higher scores indicated higher use of coping strategies was reported (actual values were not reported). M. Raines (1994) indicated the ESS had subscales, but did not indicate a method for deriving the subscales, typically facilitated through exploratory factor analysis (EFA) combined with conceptual or theoretical grouping of items (Carmines & Zellar, 1979).

The ESS's reported reliability and validity are strong. While the ESS was psychometrically tested using multiple methods, M. Raines' (1994) economy of method description and psychometric results engender difficulty for confirming its reliability and validity. Additionally, the initial description indicated lower scores equal higher ethics stress. However, the explanation provided with the reported results claimed the opposite. Eighty percent of the respondents rated their ethics stress at 6 or higher on a scale of 0 to 10 with the explanation that higher scores equal higher levels of ethics stress (M. Raines, 1994). Increased detail of the ESS testing methods and results would contribute to

establishing stronger reliability and validity. Researchers utilizing the ESS in their studies should strongly consider additional tests of reliability and validity within their studies.

Moral Distress Scale

Corley et al. (2001) were the pioneers of instrument development for measuring moral distress in nursing. The Moral Distress Scale (MDS), originally a 32-item self-report Likert-type instrument, was developed to measure the degree of nurses' experiences with moral distress in hospital-based critical care units. Items on the scale are scored from 1 to 7 with higher scores indicating higher levels of moral distress. Initial MDS psychometric evaluation results suggested it was reliable and valid. Three experts in nursing ethics confirmed content validity of the MDS; interrater agreement was 100% for relevance of all items. Test-retest reliability in a convenience sample of 35 staff nurses yielded positive results ($r = 0.86$, $p < .01$). An exploratory factor analysis using data collected from 214 participants identified three factors (factor loadings > .40), conceptually named as follows: individual responsibility, or apprehension about taking individual responsibility or actions (Cronbach's $\alpha = .97$); not in patient's best interest, or acting in ways that nurses believe do not benefit the patient (Cronbach's $\alpha = .82$); and deception, or taking action to deceive or deception through failure to take action (Cronbach's $\alpha = .84$). Overall theta score was .96. Mean item scores ranging from 3.9 to 5.5 indicated moderately high levels of moral distress; demographic variables did not predict levels of moral distress. While initial MDS testing strongly suggested instrument reliability and validity, the study was limited to measuring moral distress in critical care nurses caring for adults; it was not found to be useful for measuring moral distress in nurses working in other settings or nursing roles.

Modified MDS versions. Corley et al. (2005) modified the MDS for a study that examined moral distress and the ethical work environment. Corley et al. noted items addressing pain management, managed care, and incompetent healthcare personnel were not included in the MDS. Additional items addressing these topics were added, resulting in a 38-item version of the MDS. Another factor, euthanasia, was also identified. Level of moral distress was measured in terms of frequency and intensity. Moral distress frequency is how often nurses encounter moral distress in their practice. Moral distress intensity is the perceived level of disturbance or severity of the morally distressing situation. A five-point Likert-type scale was used (0 = never occurs/not disturbing to 4 = very frequently/very disturbing). Reliability of the revised MDS was established using internal consistency: frequency scale (Cronbach's α = .90); intensity scale (Cronbach's α = .98).

Hamric and Blackhall (2007) also modified the MDS for use in a pilot study designed to compare perspectives of moral distress, ethical climate, nurse/physician collaboration, and satisfaction of quality of care in nurses and physicians in critical care settings. However, with the exception of reporting internal consistency (Cronbach's α = .83), rigorous psychometric evaluation of the 21-item MDS was not reported.

Moral Distress Questionnaire for Clinical Nurses

The Moral Distress Questionnaire for Clinical Nurses (MDQCN; Eizenberg et al., 2009), a 11-item Likert-type self-report instrument, was developed by combining data collected through qualitative inquiry of staff nurses and selected items from two existing non-nursing specific instruments: Moral Distress Questionnaire (MDQ; Sporrong et al., 2006) and Stress of Conscience Questionnaire (SCQ; Glasberg et al., 2006). The

researchers' intention was to develop a culture-sensitive instrument for measuring moral distress in Jewish and Muslim nurses working in various Israeli healthcare settings. The MDQCN was tested in a convenience sample of 179 nurses. Exploratory factor analysis to determine construct validity revealed three factors labeled as relationships (Cronbach's $\alpha = .851$), resources (Cronbach's $\alpha = .791$), and time (Cronbach's $\alpha = .804$). In the context of the Eizenberg et al. (2009) study, relationships referred to the perception of relationships between the nurse and members of the healthcare team (specifically physicians) and family members of patients. Resources was related to nurses' perceptions of limitations related to providing the appropriate level of care. Time was related to nurses' perceptions of limitations associated with time allotted to provide care or complete tasks.

Overall internal consistency of the MDQCN was 0.79. Discriminant validity was established by comparing responses between hospital nurses and community clinic nurses. Responses were evaluated by running *t*-tests for each factor. Results for relationships ($t = 2.17$) and time ($t = 2.21$) were statistically significant ($p < .05$); however, results were not statistically significant for resources ($t = .17$). Results of test-retest reliability were supportive of the instrument's stability (respondents, $n = 28$; relationships [$r = .62$, $p < .001$]; resources [$r = .39$, $p < .05$]; time [$r = .54$, $p < .01$]).

While Eizenberg et al. (2009) claimed cross-cultural usability of the MCQCN in Jewish and Muslim nurses, a limitation of this study was the cultural homogeneity of the majority of the sample; approximately 80% were Jewish, therefore limiting the instrument's use as cross-cultural. The advantage of the MDQCN is the instrument's brevity of items, promoting the probability of respondent participation with completion of

all survey items. However, the brevity may also serve as a limitation to accurately measuring a construct (DeVellis, 2017; Pett, Lackey, & Sullivan, 2003). While initial reliability and validity of the MCQCN have been established, no other studies using the instrument were found.

Moral Distress Scale – Revised

According to Hamric et al. (2012), reliable and valid instruments for measuring moral distress were scarce, hence requiring development and testing of new instruments and leading to their revision of Corley et al.'s (2001) MDS, thus birthing the Moral Distress Scale – Revised (MDS-R). Hamric et al. (2012) also identified the need to develop an instrument for measuring moral distress outside of the exclusivity of critical care settings. Additional objectives included identifying more root causes of moral distress and developing an instrument applicable in multiple healthcare disciplines. Therefore, they developed six versions of the MDSR: three adult versions and three pediatric versions, one for each of the following roles – nurse, physician, and other healthcare professional.

Initially, the 21-item Likert-type self-report MDSR (adult and pediatric versions) was psychometrically tested using 169 direct patient care nurses (131 adult; 38 pediatric) and 37 physicians (25 adult, 12 pediatric). A five-point Likert-type scale was used to rate moral distress frequency and intensity (0 = never occurs/not disturbing to 4 = very frequently/very disturbing). Psychometric testing of the adult and pediatric versions for other healthcare professional was not reported. Psychometric evaluation included tests of internal consistency, construct validity, and construct validity. The researchers did not utilize EFA. Content validity was established by content expert review of items resulting

in 88% interrater agreement. Internal consistency results were as follows: nurses (adult and pediatric), Cronbach's $\alpha = .89$; physicians (adult and pediatric), Cronbach's $\alpha = .67$; combined, Cronbach's $\alpha = .88$. Construct validity was established by hypothesis testing, yielding results supportive of all four of the research hypotheses: $\mathbf{H_1}$. Healthcare professional with more years of experience will have higher levels of moral distress; $\mathbf{H_2}$. Physicians will have lower levels of moral distress than nurses; $\mathbf{H_3}$. MDS-R scores will be negatively correlated with provider perceptions of their unit's ethical climate; and $\mathbf{H_4}$. Healthcare professionals contemplating leaving their position die to moral distress will have higher MDS-R scores. The correlation results supported three of the four hypotheses. The first hypothesis was only supported for nurses; results showed a statistically significant moderately weak relationship between moral distress levels and years of experience ($r = .22$, $p = .005$). Results showed a statistically significant difference between physicians' and nurses' moral distress levels ($t = -5.786$, $p < .0001$); nurses had higher scores than physicians (nurses, $M = 91.53$, $SD = 44.24$; physicians, $M = 62.58$, $SD = 21.91$). Results also showed a statistically significant strong negative relationship between ethical climate and moral distress ($r = -.402$, $p < .001$). Lastly, MDSR scores were significantly higher for clinicians considering leaving their jobs ($F[1,197] = 48.392$, $p < .001$). The reported limitations of this study were (a) low physician participation, which may explain the low Cronbach's alpha value; (b) use of one hospital site; and (c) participation limited to critical care units. This researcher's observed limitation of the study was the omission of using another reliability testing method, as recommended by Tappen (2016), in addition to testing internal consistency,

such as test-retest reliability (measures instrument stability), to strengthen the overall reliability of the instrument (Tappen, 2016).

Moral Distress Thermometer

Wocial and Weaver (2013) developed the Moral Distress Thermometer (MDT) with the objective for creating an instrument to measure real time moral distress. They postulated that identifying moral distress closer to the time it occurs, rather than reflecting on an event that may have occurred after a long period of time, would assist with accurately identifying its contributing factors (Wocial & Weaver, 2013).

The MDT is a single-item visual analog/numeric scale (Figure 6) picturing a thermometer with the following verbal and numeric experience qualifiers (bottom to top): none (0 to 1), mild (2 to 3), uncertain (4 to 5), distressing (6 to 7), intense (8 to 9), and worst possible (10); higher scores indicate higher levels of moral distress.

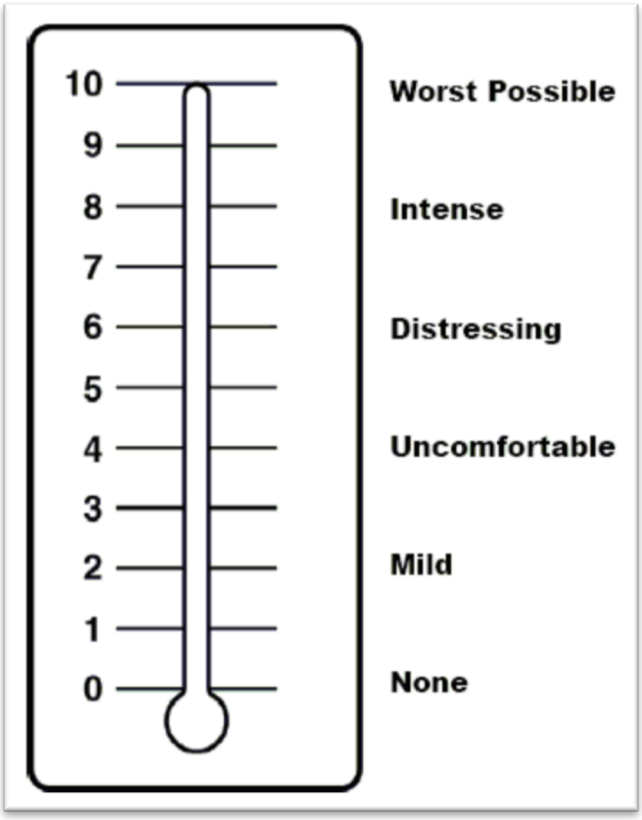

Figure 6. Moral distress thermometer. This is a visual analog scale designed to measure real time levels of moral distress at a maximum of two weeks from the time a nurse encounters a moral dilemma. Reprinted with permission (Appendix A).

The MDT was tested on 529 nurses working in hospital adult and pediatric units. Nurses were first provided with a definition for moral distress. They were then asked to indicate their levels of moral distress based on their practice for the past two weeks by circling a number on the MDT. Initial psychometric evaluation included two methods for testing construct validity: content validity and concurrent validity. Due to the nature of the single-item instrument, the test-retest method, which measures instrument stability (consistency of responses of the same participant measured on two separate occasions under similar conditions), was not appropriate since the instrument is designed to measure moral distress within two weeks of a specific event. Conditions are expected to be different when measuring MDT on a separate occasion; therefore consistent results

would not be expected. Convergent validity was established by calculating positive, moderately strong Pearson's correlation coefficients between the MDT and the MDS (adult and pediatric versions) (MDT and MDS adult, $r = .404$, $p < .001$; MDT and MDS pediatric, $r = .368$, $p < .001$). Welch's ANOVA was used to determine concurrent validity comparing MDT and MDS mean scores between three groups of nurse participants: nurses who never considered leaving a position; those who had left a position; and those who had considered leaving, but had never left. The ANOVA values reported showed a significant difference between means (MDT, $F = 26.8$, $df = 2, 264.1$, $p < .001$; MDS adult, $F = 21.8$, $df = 2, 357$, $p < .001$; MDS pediatric, $F = 11.4$, $df = 2, 170$, $p < .001$). The results suggest nurses who never considered leaving had statistically significant lower mean MDT and MDS scores (MDT = 2.20, MDS adult = 79.5, MDS pediatric = 65.2) than those who had left (MDT = 3.92, MDS adult = 116.1, MDS pediatric = 111.2) or considered leaving (MDT = 2.51, MDS adult = 122.1, MDS pediatric = 93.9).

Validity of the MDT has been established using multiple methods. However, reliability was not established (Tappen, 2016). Therefore, further psychometric evaluation to assess MDT reliability, such as single-item reliability testing as recommended by Wanous, Reichers, and Hudy (1997) is warranted, correlating the MDT with other instruments measuring moral distress using the formula for the correction of attenuation. Furthermore, while the MDT instrument differs from other moral distress instruments by measuring moral distress nearer to nurses' experiences of moral dilemmas, Wocial and Weaver's (2013) stated purpose of using the MDT to uncover new

factors contributing to moral distress did not differ from other moral distress instruments reviewed, nor was discovery of new contributing factors discussed.

Moral Distress Risk Scale

The most recently developed moral distress-related instrument in this literature search was the Moral Distress Risk Scale (MDRS; Schaefer et al., 2017). The researchers theoretically constructed the MDRS based on 38 international nursing studies on moral distress and leading to identification of 53 risk factors. An item was developed for each risk factor, resulting in a 53-item self-report Likert-type scale with responses ranging from 1 (always) to 4 (never), whereby a higher score equates to higher risk of moral distress: lower risk (1 to 2), moderate risk (2 to 3), and higher risk (3 to 4). Schaefer et al. (2017) claimed the MDRS differs from other moral distress instruments in its usefulness outside of the hospital setting.

The MDRS was administered to 268 Brazilian nurses working in hospital and primary healthcare settings based on a minimum of five participants per item. Exploratory factor analysis (EFA) was used to evaluate the instrument's psychometric properties. Overall Cronbach's alpha was .913. An EFA resulted in the extraction of seven factors: organizational and management issues: challenges in the workplace (M = 2.89; Cronbach's α = .839), difficult to provide adequate end of life care (M = 2.19; Cronbach's α = .772), low professional autonomy (M = 2.44; Cronbach's α = .830), excessive workload (M = 2.80; Cronbach's α = .761), lack of professional security (M = 2.00; Cronbach's α = .657), lack of resources (M = 2.62; Cronbach's α = .572), and conflicts in care (M = 2.57; Cronbach's α = .669). The overall mean MDRS score was

2.50, indicating a moderate risk for moral distress. No other methods for establishing reliability or validity were identified in this study.

While psychometric evaluation of the MDRS demonstrates reliability and validity, there is no evidence this instrument provides unique insight on the factors leading to moral distress. However, because the MDRS was developed using international studies, it may be appropriate for use in examining moral distress in nursing in various healthcare settings worldwide. Because it is a new instrument and has not been used in studies outside of its initial psychometric evaluation, knowledge of its general usefulness is limited.

Utilization of Moral Distress Instruments in Research Studies

Ethics Stress Scale

One study employing the ESS was found using the literature search parameters. Dumouchel et al. (2015) utilized the ESS in a mixed methods exploratory, descriptive study to measure and compare moral distress in a sample of 157 certified registered nurse anesthetists (CRNA) based on specific practice types: physician-supervised versus independent practice. Nathaniel's (2002) definition of moral distress was used to guide the study:

> the pain or anguish in relation to circumstances where an individual understands and is aware of a moral or ethical dilemma, but due to perceived constraints acts in a manner that is morally wrong even though s/he acknowledges what is morally right. (p. 203)

Lower scores on the ESS indicate higher levels of moral distress (scores less than or equal to 161 indicate low levels of moral distress, scores to 187 indicate moderate levels

of moral distress, and scores equal to or greater than 188 indicate high levels of moral distress). Results showed a range of ESS scores from 130 to 238 (median = 188). Results indicated physician-supervised practice CRNAs had high or moderately high levels of moral distress (X^2 = .034) compared to independent practice CRNAs, suggesting that autonomous practice impacted experiences of moral distress. Qualitative data collected in this study showed the presence of pressure to give anesthesia to high-risk patients, differences in opinions regarding anesthetic plans, dealing with end-of-life issues, coworker incompetence, differential care based on patient ability to pay, and CRNA-anesthesiologist-related struggles were the sources of CRNAs' moral distress. Dumouchel et al. suggested the following strategies for reducing CRNA moral distress regardless of practice setting: increased administrative support to create therapeutic working environments by increasing moral distress awareness to reduce burnout and promotion of proactive interventions, promotion of true collaboration between anesthesiologists and CRNAs through increased communication and reciprocated collegial respect, and CRNA representation on ethics committees to foster a positive organizational ethical climate.

While Dumouchel et al. (2015) reported ESS reliability and validity from M. Raines's (1994) study; reliability and validity were not evaluated for the Dumouchel et al. (2015) study. According to Waltz et al. (2017), "evidence of reliability and validity must be determined every time a given measure is employed" (p. 185). Considering the lack of descriptive reporting of the ESSs and initial reliability and validity and Dumouchel et al.'s (2015) omitted report of their own reliability and validity testing, this study's

quantitative results may not be reliable or valid. Further psychometric testing of the ESS is recommended.

Moral Distress Scale

The Moral Distress Scale (MDS; Corley et al., 2005) has been widely used in various research studies both in the United States and internationally. Corley et al.'s (2005) modified 21-item MDS was used in an exploratory, descriptive study to examine levels of moral distress and impact of coping strategies in a sample of 105 U.S. Midwestern nurses working on medical-surgical intensive care and transitional care units (MSICU and TCU, respectively) (Wilson et al., 2013). Levels of moral distress for individual items were obtained by multiplying the item frequency by the item intensity (ranging from 0 to 16 for each item). Composite scores were obtained by adding the product scores for each of the 38 items (ranging from 0 to 608) with the following parameters for grading moral distress levels: 0 to 154 (none to slight), 154 to 304 (mild), 304 to 508 (moderate), and 459 to 608 (severe). Wilson et al. (2013) did not disclose the method for categorizing the ranges. The results showed overall low levels of moral distress (range 10 to 253). Demographics and dimensions of situations contributing to moral distress, such as physician practice, nursing practice, institutional factors, futile care, deception, and euthanasia, were also examined. No significant differences were found between groups. A secondary survey instrument developed by Wilson et al., the Coping Strategies and Resource Questionnaire (CSRQ; Cronbach's $\alpha = .90$), was used to assess nurses' intention to leave a position, impact of coping strategies, impact on personal life, and impact on work performance. The CSRQ consists of the following four

items; the first item was adapted from Corley's (2005) MDS, with the others developed by the authors:

- Have you ever left or considered leaving a position?
- Rate the impact on your coping strategies.
- Rate the impact on your life.
- How likely are you to use resources that are or would be provided? (Wilson et al., 2013)

Questions two, three, and four were rated using the following scale: 0 – not impacted, 1 – slight, 2 – somewhat impacted, 3 – definitely impacted, or do not know. The results showed that when compared to TCU nurses, more MSICU nurses (18%) had left positions related to moral distress than TCU nurses (6%). However, less MSICU nurses (21%) considered quitting than TCU nurses (59%) and more MSICU nurses (61%) never considered quitting than TCU nurses (35%). Approximately 62% of the nurses reported that coping strategies somewhat or definitely impacted moral distress. Fifty percent reported definite or slight impact on their personal lives. Sixty-seven percent reported definite or slight impact on their work performance. Wilson et al.'s recommended strategies for coping with and addressing moral distress are the development of interventions designed to help nurses articulate their feelings of moral distress and cross-organization development of ethical environments. They also suggested the development of an instrument to measure work environment-specific moral distress (such as the MDSR and the MDT).

Dyo et al. (2016) conducted a descriptive, correlational study using Corley et al.'s (2005) modified 21-item MDS to assess the frequency and intensity of moral distress in a

sample of 426 critical care and non-critical care nurses. Relationships of nurse characteristics and moral distress with intention to leave were also explored. Results showed higher moral distress frequency and intensity in critical care nurses than non-critical care nurses; adult critical care nurses had higher levels than pediatric critical care nurses. A positive correlation was shown between moral distress frequency and nurses' intention to leave a position. Hispanic nurses had higher levels of moral distress intensity and frequency than other ethnic groups. Moral distress intensity and frequency were assessed for differences between certain situations; continuation of life support per family request and initiating extensive life-saving actions thought to prolong death ranked the highest. Dyo et al. (2016) recommended strategies aimed to assist nurses recognize and manage moral distress to promote job satisfaction and retention, thus positively impacting patient care.

Examining the relationship between moral distress and moral sensitivity (ability to recognize a moral conflict and knowledge to appropriately respond) was the focus of a study conducted by Borhani et al. (2017). The study was conducted in a sample of 153 Iranian critical care nurses using Corley et al.'s (2005) MDS (Cronbach's $\alpha = .87$) and the Modified Moral Sensitivity Questionnaire (MMSQ; Cronbach's $\alpha = .77$). While results showed no correlation between moral sensitivity and moral distress, several weak correlations with certain demographics were found: (a) increasing nurse age correlated with increased moral sensitivity scores ($r = .16$, $p = .04$), (b) increasing nurse age correlated with increased moral distress frequency ($r = .20$, $p = .01$) and increased moral distress intensity ($r = .16$, $p = .04$), and (c) increasing nurse work experience correlated with moral distress frequency ($r = .20$, $p = .01$) and moral distress intensity ($r = .13$, $p =$

.01). Borhani et al. (2017) did not make specific recommendations for managing or decreasing the incidence of moral distress.

Moral Distress Scale – Revised

The literature search revealed many studies using the Moral Distress Scale-Revised (MDS-R; Hamric et al., 2012). The literature selected for review were studies conducted in Italy, Iran, and the Netherlands in neonatal, medical, surgical, oncology, and intensive care units. De Boer et al. (2016) used a translated (Dutch), modified version of the MDS-R (18 of 21 items; Cronbach's $\alpha = .89$) to examine the impact of moral distress immediately following work shifts in 147 neonatal nurses and physicians and the relationship between moral distress and ethical climate. The level of moral distress was calculated by multiplying each item's frequency with the intensity using a range from 0 (low) to 16 (high). The Hospital Ethical Climate Scale (HECS; Olson, 1998), a 26-item self-report instrument, was used to measure ethical climate. The items on the HECS are scored from 1 (almost never true) to 5 (almost always true), with higher scores indicating better ethical climates. While the results showed statistically significant low levels of moral distress frequency ($M = .98$, $SD = .48$), its intensity was significantly high ($M = 2.21$, $SD = 1.55$). Nurses experienced higher levels of moral distress than physicians ($M = 2.40$, $SD = 1.68$ and $M = 1.68$, $SD = .98$, respectively). Overtreatment of patients, substandard care/lack of continuity, poor team communication, and unsafe staffing levels significantly contributed to moral distress intensity. Ethical climate was significant in moderating moral distress intensity ($p = .60$). Related to moral distress coping and prevention, de Boer et al. (2016) recommended creation and sustainment of positive ethical climates and interventions focused on promotion of provider care continuity and

safe staffing levels. Interventions for preventing or mitigating moral distress were not tested.

Ameri et al. (2016) used the original version of the MDS-R translated to Farsi (Cronbach's $\alpha = .88$) to examine moral distress in 148 Iranian nurses working in oncology units. Scores for each item ranged from 0 to 4 for individually rated frequency and intensity. Composite scores for each item (obtained by multiplying the frequency score by the intensity score) ranged from 0 to 16. Overall moral distress scores ranged from 0 to 336. Individual frequency and intensity scores for individual items were classified as follows: low (0 to 1), medium (1.01 to 2), high (2.01 to 3), and very high (3.01 to 4). Composite scores were classified as follows: low (0 to 4), medium (4.01 to 8), high (8.01 to 12), and very high (12.01 to 16). Classifications for overall moral distress scores were not provided. Results revealed that nurses who participated in the study had significantly high levels of moral distress (frequency, $M = 2.13$, $SD = .44$; intensity, $M = 2.08$, $SD = .36$). Situations identified as significantly contributing to moral distress were perceptions of ordering unnecessary tests for patients with late stages of cancer and the task of receiving informed consent. Ameri et al. made broad recommendations for managing moral distress, such as establishment of ethics committees inclusive of staff nurses to discuss morally distressing clinical situations, the need for morally supportive head nurses, and provision of ethical training with moral distress coping strategies. However, strategies were not tested.

Lusignani, Gianni, Re, and Buffon (2017) also used a modified version of the MDS-R, using only 18 of the 21 items and translated into Italian (Cronbach's $\alpha = .83$). The purpose of the study was to assess moral distress frequency and intensity levels in

283 medical, surgical and intensive care unit nurses. Individual frequency and intensity scores for individual items were classified as follows: low (0 to 1.33), moderate (1.34 to 2), and high (2.68 to 4). Composite scores were classified as follows: low (0 to 1.77), moderate (1.78 to 7.13), and high (7.14 to 16). While the overall average of frequency scores was moderate (1.51; range .92 to 2.1), overall average intensity scores were intensity scores were high (2.83; range 2.57 to 3.09). Clinical situations presenting the greatest frequency were performing tests and treatments; providing pain medication for terminally ill patients; maintaining life support against the best interests of the patient; and assisting a physician, who, in the opinion of the nurse, provided incompetent care (mean range of scores was 1.90 to 2.50). Results showed high levels of moral distress intensity were associated with observing or administering unnecessary tests and treatments administered to terminally ill patients (7.89), and low competency of practitioners (M = 3.05 to 3.19). The mean score for the overall level of moral distress was moderate (4.27). Multivariate stepwise regression analysis showed nurses on medical units (p = .012), nurses with less experience regardless of unit (p = .025), and nurses intending to leave their positions (p = .081) had the highest levels of moral distress. While Lusignani et al. indicated the need for strategies to alleviate moral distress, specific recommendations were not provided.

Moral Distress Thermometer

The literature search yielded one study utilizing the Moral Distress Thermometer (MDT; Wocial & Weaver, 2013) to determine the existence of moral distress in practicing school nurses (Powell, Engelke, & Swanson, 2017). The MDT and an instrument used to measure school nurse moral dilemmas (SNMD; Powell, Engelke, &

Neil, 2017) were administered to 307 school nurses. The 14-item SNMD, a five-point Likert-type instrument (1 – strongly disagree and 5 – strongly agree) was developed following a literature review and discussion with moral distress instrument authors, in addition to data collected from a previous qualitative study with school nurses (Powell, Engelke, & Neil, 2017). Experts in instrument development and school nurse volunteers reviewed the SNMD to establish content validity. The items on the SNMD are statements that reflect common moral dilemmas for school nurses:

- Not enough time to provide care to students with chronic illnesses.
- Pressure from administration.
- Unable to provide care due to workload.
- Unable provide care due to lack of time.
- Concern students with chronic illness do not receive needed care.
- Unable to address staff requests due to lack of time.
- Unable to address family requests due to lack of time.
- Pressured to not interrupt class to provide needed care.
- Unable to provide preventive care.
- Unable to provide care due to lack of school resources.
- Unable to provide care due to lack of referral services.
- Unable to provide case management due to workload.
- Unable to achieve goals for student due to family situation.
- Don't have a private space. (Powell, Engelke, & Swanson, 2017, p. 5)

Higher SNMD scores indicate higher levels of moral distress. Regarding the MDT, to differentiate between low and high levels of moral distress using the MDT, Powell,

Engelke, and Swanson (2017) classified levels less than 4 as low and greater than 5 as high (4 on the MDT indicates "uncomfortable").

Data collected from the MDT and SNMD were analyzed using correlation coefficients to identify statistically significant relationships. MDT results showing levels of moral distress as uncomfortable or higher (mean scores greater than 4 on a scale of 0 to 10; $n = 131$) were correlated with SNMD scores to identify relationships between high levels of moral distress and school nurse-specific moral dilemmas. Results showed significant correlations ($p < .001$) between high MDT scores and several of the school nurse moral dilemmas with very strong correlations to "unable to provide care due to workload" ($r = .58$), "not enough time to provide care to students with chronic illness" ($r = .58$), "unable to provide care due to lack of time" ($r = .60$), "unable to address family requests due to time" ($r = .51$), and "unable to address staff requests due to time" ($r = .50$). The researchers used these results to conclude moral distress exists among school nurses. Except for mentioning initial establishment of MDT validity, Powell, Engelke, and Swanson (2017) did not report previous psychometric evaluation of either instrument. Nor did their study results include a report of their own reliability testing of either instrument to determine reliability of the instrument within their sample of participants (DeVellis, 2017; Furr, 2018; Tappen, 2016).

Moral distress has not been widely studied in school nurses; therefore Powell, Engelke, and Swanson (2017) made recommendations for further studies. They also recommended the potential use of a coping strategy suggested by Wilson et al. (2013) – moral distress discussions and debriefings to promote a culture of care and to increase

nurse resilience. Addressing school nurse caseloads as a strategy to prevent moral distress was also recommended.

Discussion

The studies in this literature review demonstrated a wide variety of instruments for measuring moral distress in nursing across various nursing specialties and roles. The moral distress-related instruments developed have demonstrated usefulness in measuring levels of moral distress, as well as identifying its contributing factors (situations) or risk factors. Psychometric evaluation of each of the instruments showed adequate reliability and validity. Each of the research teams responsible for developing a moral distress instrument claimed to have provided a unique method for measuring moral distress. Yet, many of the items on each of the instruments are similar (Table 3).

Table 3

Moral Distress-Related Instruments: Sample Items with Scales

Instrument	Sample Items	Scale
Ethics Stress Scale (M. Raines, 1994)	• I have thought about leaving nursing because of ethical issues/dilemmas I face • I feel confident that I can justify my decisions regarding ethical issues • I have modified some of my clinical decisions regarding patients because of ethical issues	Most Stress No Stress Ever Experienced 0 1 2 3 4 5 6 7 8 9 10
Moral Distress Scale (Corley et al., 2001)	• Work in a situation where the number of staff is so low that care is inadequate • Carry out physicians' orders for unnecessary tests and treatment • Initiate extension life-saving actions when I think it only prolongs death	Little/Almost Never Great 1 2 3 4 5
Moral Distress Questionnaire for Clinical Nurses (Eizenberg et al., 2009)	• I do not have enough time to provide the patient with the care she/he deserves • I was forced to keep a patient, who needed a treatment, waiting, due to lack of time • I was forced to ignore the patient's family's questions because the physician was supposed to address them	Not at All Very Large Extent 1 2 3 4 5 6
Moral Distress Scale – Revised (Hamric et al., 2012)	• Witness healthcare providers giving "false hope" to a patient or family • Carry out the physician's orders for what I consider to be unnecessary tests and treatments • Work with levels of nurse or other care provider staffing that I consider unsafe	*Frequency*: Never Very Frequently 0 1 2 3 4 *Intensity*: None Great Extent 0 1 2 3 4
Moral Distress Thermometer (Wocial & Weaver, 2013)	• Visual/numeric analog scale rating real-time moral distress levels on a scale of 0 to 10 (higher numbers indicate higher levels)	none (0 to 1), mild (2 to 3), uncertain (4 to 5), distressing (6 to 7), intense (8 to 9), and worst possible (10)
Moral Distress Risk Scale (Schaefer et al., 2017)	• Lack of competence of other professionals • Excessive number of patients assigned to each nurse • Being required to provide inappropriate or unnecessary care	Never Always 1 2 3 4

Similarities are most likely attributed to the originating source of the adapted versions, Corley et al.'s (2001) Moral Distress Scale (MDS). While the Moral Distress Scale – Revised (MDS-R; Hamric et al., 2012) was one such instrument derived from the MDS,

it provided some diversity in comparison to other moral distress-related instruments. The MDS-R developers created six versions for use in all practice settings: MDS-R adult (nurse, physician, other healthcare professional) and MDS-R pediatric (nurse, physician, other healthcare professional), while the other instruments focused solely on nurses. The Moral Distress Thermometer (MDT) also had unique characteristics. Its visual/numeric analog, single-item design distinguished it from the other Likert-type self-report moral distress instruments. MDT is also a unique instrument because it measures real-time moral distress. However, regardless of the instrument, many of the studies' results were similar in regard to the situations that contributed to increased levels of moral distress regardless of the moral distress instrument that was employed. Furthermore, the relevancy of each of the instruments used in research studies, except for the ESS and MDS-R, is critical-care specific, therefore limiting their use in other practice areas; developing moral distress instruments specific to nursing areas of practice is recommended. A plethora of reliable and valid instruments are available for measuring moral distress levels; however, none exist for measuring moral comfort. An instrument to measure moral comfort may potentially provide valuable information that may be useful in developing interventions to promote moral comfort and subsequently prevent moral distress and its negative consequences.

Moral Distress: Common Precipitating Situations

Several common situations leading to moral distress, regardless of practice area or nursing role, were identified. The three most common situations were carrying out orders associated with futile care (Ameri et al., 2016; de Boer et al., 2016; Dumouchel et al., 2015; Dyo et al., 2016; Lusignani et al., 2017; Wilson et al., 2013), patient care issues

associated with low staffing (de Boer et al., 2016; Powell, Engelke, & Swanson, 2017; Schaefer et al., 2017), and coworker incompetence (Dumouchel et al., 2015; Schaefer et al., 2017). Other situations were conflicts or disagreements about care (Dumouchel et al., 2015; Schaefer et al., 2017), poor communication between healthcare professionals (de Boer et al., 2016; Dumouchel et al., 2015), and provision of substandard or high-risk care (de Boer et al., 2016; Dumouchel et al., 2015). These common situations contributed to increasing moral distress frequency and intensity levels.

Moral Distress and Nurse Turnover

Moral distress contributes to increasing nursing turnover rates, thus negatively impacting nurse staffing and thereby patient safety and outcomes. While none of the researchers in this review of studies directly examined the relationship between moral distress and negative patient outcomes, some examined relationships between moral distress and nurse turnover/intention to leave (Dyo et al., 2016; Lusignani et al., 2017; Wilson et al., 2013). The studies' results showed nurses with moderate to high levels of moral distress demonstrated a propensity for considering resignation or actual resignation from nursing positions, suggesting that moral distress negatively impacts turnover rates, thus potentially contributing to an existing nursing shortage crisis. Subsequently, nursing turnover contributes to high nurse-to-patient staffing ratios, leading to the potential for negatively impacting patient safety and patient outcomes.

Chapter Summary

Moral distress in nursing is a well-documented issue that leads to compromised nursing care, negatively impacting patient safety and patient outcomes. As such, several instruments to measure moral distress have been developed. A literature review was

conducted to identify moral-distress related instruments and their use in current studies. This review revealed that these instruments were psychometrically sound and the studies using these instruments yielded similar results regardless of practice specialty or role, corroborating the presence and negative impact of moral distress in nurses. Common situations contributing to moral distress were found: provision of futile care, nurse staffing issues, coworker incompetence, poor communication, conflicts/disagreements with care, and provision of substandard care. Moral distress has also been associated with negatively impacting nursing turnover rates, further compromising patient care. While some researchers suggested moral distress coping strategies such as debriefings or ethical training, these strategies have not been tested and are focused on dealing with the aftermath of moral distress rather than on prevention. A knowledge gap has been identified: while current research studies, regardless of the instrument used, have provided information on levels and some sources moral distress, little is known on moral comfort and the potential impact of its promotion on preventing moral distress. Even though Rushton (2016) has asserted that moral distress is unavoidable, this researcher disagrees. While moral distress may not be entirely eradicated, measures to prevent it can be taken to decrease its incidence or lessen its severity. Strategies for preventing moral distress require further investigation. This researcher proposed investigation of and gaining further understanding of moral comfort, incorporating knowledge gained towards developing future strategies. However, literature on the construct of moral comfort is sparse, requiring further development. Development and testing of the MCQ is the first step on the journey to understanding more about moral comfort in nurses, thus also providing an instrument for use in future research studies.

CHAPTER 3. RESEARCH METHODOLOGY

Moral comfort, defined as a nurse's feeling of ease with decisions and actions related to ethical problems (Corley & Minick, 2002), is an understudied concept in nursing. With the exception of work done by Wurzbach (1996, 2008), Corley (2002), and Corley and Minick (2002), literature on moral comfort is sparse. In contrast, moral distress in nursing, defined as a nurse's feelings of frustration, anger, guilt, and powerlessness when ethical decisions cannot be translated into actions due to institutional constraints (Heinrich et al., 2017; Jameton, 1984), and its negative impact on nurses have been widely studied. A better understanding of moral comfort may lead to evidence that helps develop strategies that promote moral comfort when nurses are faced with moral situations or moral dilemmas, thereby avoiding feelings and repercussions associated with moral distress. While several valid and reliable instruments have been developed to measure moral distress, none were found for measuring moral comfort. Additionally, the instruments designed to measure moral distress do not include assessing both internal and external factors associated with moral distress. As a result, a new theoretically derived instrument, the 35-item Moral Comfort Questionnaire (MCQ), was developed. The purpose of this study was to test the reliability and validity of the revised MCQ (Appendix B), including test-retest reliability (stability) and internal consistency (homogeneity), content validity, discriminant validity, and confirmatory factor analysis.

The MCQ was theoretically developed using concepts associated with moral distress. Tappen's (2016) concept tree model, which was discussed in Chapter 1, was the

theoretical framework used to develop the MCQ. The following is a synopsis of MCQ development:

- Conceptual framework: Ethical systems
- Grand theory: Virtue ethics (Aristotle, 384-323 BC/1976)
- Middle range theory: Nathaniel's (2003) theory of moral reckoning
- Construct: Moral comfort
- Propositions:
    - In nursing practice settings, moral comfort is influenced by internal and external factors.
    - Nurses experience moral comfort when they clearly understand their roles, use their nursing expertise to advocate for their patients, and feel at peace with their decisions and actions.
    - Nurses experience moral comfort when their organization, work environments, and policies support ethical practice.
    - Nurses experience moral comfort when they are supported and empowered to participate in decision-making.
- Concepts: Advocacy and role clarity, nursing expertise, peace, ethical environment, and power and participation in decision-making.
- Operational indicators: Twenty-five operational indicators guided MCQ item development.

Moral Comfort: Measuring a Latent Variable

Moral comfort, a latent variable and psychosocial construct, is not directly observable and is not constant, depending upon other variables associated within the

construct (DeVellis, 2017), therefore presenting a challenge for measuring it quantitatively. However, developing a robust quantitative instrument designed to measure a psychosocial construct is possible and begins with using a measurement theory or theoretical framework/model to guide development of items followed by rigorous psychometric testing (DeVellis, 2017; Furr, 2018; Waltz et al., 2017). Psychometrics is a field of study that is concerned with measuring psychosocial and social phenomena with variables that are part of a broad theoretical framework (DeVellis, 2017). The purpose of psychometric evaluation of psychological and social instruments is to establish reliability and validity. Reliability is the extent to which an instrument produces the same results on repeated trials (Carmines & Zeller, 1979). Validity is the extent to which the instrument measures the construct it is intended to measure (Carmines & Zeller, 1979; Tappen, 2016). Prior to the current psychometric evaluation study of the 35-item MCQ, a pilot study was conducted on the original instrument as discussed in the next section.

Pre-Dissertation Pilot Testing of the Moral Comfort Questionnaire

The 28-item MCQ was pilot tested, impacting its revision and resulting in the current 35-item version of the MCQ that was evaluated in this dissertation study. An exploratory psychometric research design was used in a pilot study to initially test the reliability and validity of the revised 28-item MCQ. The purpose of this pilot study was the development and psychometric evaluation of the new MCQ. Specific aims were to test the MCQ's reliability using the test-retest method and Cronbach's alpha coefficient, and to test the MCQ's validity using content validity, concurrent validity, and construct validity (exploratory factor analysis). A PhD Student Research Grant from the Versant Center for the Advancement of Nursing funded this pilot study. The study was conducted

in two phases: (a) content expert evaluation and revision of the MCQ, and (b) recruitment, data collection, and data analysis.

The pilot study was approved by the institutional review boards of Florida Atlantic University (Appendix C) and the hospital system where the study was conducted (Appendix D). The study purpose, procedure, risks and benefits, affirmation of confidentiality, and participant compensation were provided in writing to the study participants. Completion of the surveys indicated consent to participate.

Prior to recruiting participants, three content experts in the field of nursing ethics and moral distress evaluated the original 29-item MCQ (Appendix E) to establish content validity. The experts were provided with the purpose of the study, a summary of the framework used to develop the MCQ, definitions of key terms, and instructions for evaluating the MCQ. The experts were asked to rate the relevance of each item (1=Not Relevant, 2=Somewhat Relevant, 3=Quite Relevant, 4=Very Relevant), with the goal of obtaining a combined content validity index (CVI) average of 75% or greater. Individual content expert ratings were 90% (expert rater 1), 72% (expert rater 2), and 90% (expert rater 3), with a combined CVI of 84% agreement between the experts (Table 4).

Table 4

Pilot Study: Content Validity Index for the Original 29-Item MCQ with Three Expert Raters: Individual and Combined

	Items Rated 1 or 2	Items Rated 3 or 4	CVI*
Expert Rater 1	3	26	0.90
Expert Rater 2	8	21	0.72
Expert Rater 3	3	26	0.90
Combined CVI*			0.84

Note. 1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, 4 = very relevant.
* indicates the CVI for items given an expert rating of 3 or 4

The content experts were also provided with the opportunity to provide specific comments for each item, as well as a section to provide general comments. As a result of the evaluation, 12 items were reworded for clarity (Table 5). Item 7 was removed due to unanimous content expert agreement of the item's irrelevancy to the instrument. The revised 28-item MCQ was sent to the content experts for secondary evaluation. No changes were made to the instrument thereafter.

Table 5

Evolution of the Moral Comfort Questionnaire: Revision and Addition of Items Based on Moral Comfort Literature and Content Expert Evaluation and Recommendations

Version 1 (Original 29 Items)	Version 2 (Revised 28 Items)	Version 3 (Revised 35 Items)
1. When faced with an ethical situation, I am comfortable with identifying right versus wrong.	1. When faced with a moral dilemma, I am confident I can distinguish between right and wrong and make a moral decision.	1A. I felt comfortable making decisions in relation to this moral situation.
2. I feel uneasy when I am involved in questionable ethical situations.	2. I often feel uneasy with making decisions in unethical situations.	2A. I was confident in my ability to distinguish between right and wrong in making a moral decision.
3. My co-workers and patients would describe me as being caring, compassionate, and empathetic.	3. I have a genuine concern for others' well-being.	3A. I was concerned for the well-being of my patient.
4. I present myself as being genuinely supportive of all my patients and their families.	4. One of my core values is being genuinely supportive of my patients' decisions even when they differ from my own.	1B. I can be supportive of my patients' decisions even if they differ from my own.
5. It is my obligation to help others, especially patients, when they are in need of assistance.	5. No change	4A. I had an obligation to help.

Table 5 (cont.)

Version 1 (Original 29 Items)	Version 2 (Revised 28 Items)	Version 3 (Revised 35 Items)
6. I consider myself an expert nurse that incorporates both knowledge and experience into clinical decision-making.	6. My experience and clinical expertise give me confidence when ethical decision-making is required.	5A. My nursing expertise gave me confidence with making this ethical decision.
7. I feel comfortable making clinical decisions.	Deleted	Not applicable
8. Prior to taking action, I reflect on my past experiences to guide my decision-making.	7. Prior to taking action, I reflect on my past experiences with moral dilemmas to guide my decision-making.	6B. I reflect on my past experiences with moral dilemmas to guide my decision-making.
9. I consider my patients' preferences and concerns in my decisions.	8. No change	6A. I considered my patients' preferences in my decisions.
10. I consider my personal beliefs and values when making decisions for my patients.	9. I am aware of and reflect on my own moral beliefs and values, at the same time being respectful of my patients' moral beliefs and values.	2B. I reflect on my personal moral beliefs and values. 3B. I am respectful of my patients' moral beliefs and values.
11. I make ethically based decisions that lead to morally based actions.	10. No change	7A. My actions were ethically based.
12. I am usually confident and comfortable with my patient care decisions and subsequent actions.	11. No change	13A. I feel that I made the right decision.
13. I clearly understand the nursing scope of practice.	12. No change	4B. No change
14. I am a knowledgeable nurse with excellent critical thinking abilities.	13. I have excellent critical thinking abilities.	5B. I am usually able to think through situations.

Table 5 (cont.)

Version 1 (Original 29 Items)	Version 2 (Revised 28 Items)	Version 3 (Revised 35 Items)
15. I practice in an environment that enables me to openly voice my concerns regarding patient's medical and nursing plans of care.	14. No change	7B. I am empowered to openly voice my concerns regarding patients' medical plans of care.
16. My nurse manager supports my decisions and moral actions.	15. No change	8B. My boss supports my decisions and moral actions.
17. I have authority to independently create a plan of action for my patients.	16. No change	9B. I have authority to independently create nursing plans of care for my patients.
18. I am competent in the area of clinical reasoning.	17. No change	10B. No change
19. Nursing administrators are supportive of nurses' decisions and moral actions.	18. My nursing administrator(s) is(are) supportive of staff nurses' decisions and moral actions.	11B. The nursing administrators in my hospital are supportive of staff nurses' decisions.
20. I have authority to be my patients' advocate in all situations.	19. No change	12B. I have authority to be my patients' advocate.
21. I am willing take a stand, regardless of the consequences, when I know my action is the right thing to do.	20. I am willing to take a stand for doing the right thing that is in my patient's best interest, regardless of the consequences.	8A. I was willing to take a stand for my patient's best interest, regardless of the consequences.
22. I am willing to voice my concerns about a patient's plan of care even though others may not agree with my point of view.	21. No change	9A. I was willing to voice my concerns even though others did not agree with me.
23. I take full responsibility for my actions.	22. No change	10A. I was willing to take full responsibility for my actions.

Table 5 (cont.)

Version 1 (Original 29 Items)	Version 2 (Revised 28 Items)	Version 3 (Revised 35 Items)
24. I understand that patients count on me to do the right thing.	23. No change	13B. My patients count on me to do the right thing.
25. I am able to act on my moral decisions without fear of being penalized.	24. No change	11A. I was able to act on my moral decisions without fear of being penalized.
26. I have full control of my nursing practice.	25. No change	14B. No change
27. I am allowed to question the patient's plan of care.	26. No change	15B. I am supported when I question a physician's orders.
28. I feel that I am able to openly communicate with all healthcare providers.	27. I believe I am able to openly communicate with all healthcare providers.	12A. I was able to openly raise questions with all healthcare providers.
29. I feel that I am a respected member of the healthcare team.	28. I believe that I am a respected member of the healthcare team.	16B. I am a respected member of the healthcare team.
Not applicable	Not applicable	14A. I did everything I could to ensure my patient received good care.
Not applicable	Not applicable	15A. I am at peace with how I handled the situation.
Not applicable	Not applicable	17B. My nurse colleagues are supportive of my decisions and actions.
Not applicable	Not applicable	18B. My organization promotes an ethical culture.
Not applicable	Not applicable	19B. In my organization, good nursing care is more important than avoiding lawsuits.

Table 5 (cont.)

Version 1 (Original 29 Items)	Version 2 (Revised 28 Items)	Version 3 (Revised 35 Items)
Not applicable	Not applicable	20B. My organization's policies promote good nursing care. `
Not applicable	Not applicable	21B. What could be done to improve/increase moral comfort where you work? (Open-ended)

Acute care staff nurses employed within a not-for-profit South Florida community hospital and a not-for-profit South Florida hospital system with both Magnet-designated and non-Magnet-designated hospitals were recruited to complete the 28-item MCQ (Appendix F) and 21-item revised Moral Distress Scale - Revised (MDSR; Appendix G); permission was obtained to use the MDSR (Appendix H.). The target sample size was 150 participants (140 nurses participated in the study). Recruitment methods included using posters (Appendix I), announcing at staff meetings, electronic mail (Appendix J), and personal invitation. The target population was nurses providing direct care to patients in an acute-care setting at least 50% of the time. Agency nurses, nurses working in outpatient settings, primary charge nurses, and nurses in managerial or administrative roles were excluded from the study. Participants' descriptive statistics were as follows: age ranged from 22 to 62 years (M = 36.6, SD = 12.148); years of experience ranged from less than one year to 41 years (M = 8.6, SD 9.431); 89.6% were females (n = 93) and 10.6% were males (n = 11); highest nursing education: 36% associate degrees (n = 37), 56% bachelor's degrees (n = 58), and 9% master's degrees (n = 9). Participants' specialty area of practice and religious preference were also collected (Table 6).

Table 6

Pilot Study: Participants' Specialty Nursing Unit and Religious Preference

Demographic	*n*	%
Specialty Nursing Unit		
Telemetry	29	27.9
Medical-Surgical/Oncology	15	14.4
Post-Partum/Maternity	8	7.7
Emergency Department	11	10.6
Clinical-Surgical/Orthopedics	9	8.7
Critical Care	7	6.7
Neonatal Intensive Care Unit	2	1.9
Medical-Surgical/Telemetry	3	2.9
Pediatrics	2	1.9
Cardiovascular Telemetry/CVICU	2	1.9
Orthopedics	1	1
Labor & Delivery	2	1.9
Medical-Surgical	9	8.7
Neuroscience	3	2.9
Step-down	1	1
Religious Preference		
Christian (Protestant)	28	26.9
Catholic	15	14.4
Jewish	4	3.8
Agnostic	3	2.9
Taoism	1	1
Atheist	1	1
No Response	25	24

Note. $N = 104$.

Participants were given the option to complete paper surveys or an online version of the surveys using SurveyMonkey (www.surveymonkey.com). Upon completion, each

participant received a $15 Amazon gift card as compensation for time spent completing the surveys (completion time was estimated at 20 minutes). However, one hospital system did not allow its nurse participants to receive compensation due to policy restrictions. Nurses from the original sample were recruited to take the MCQ a second time within at least two weeks of the first time. Thirty-two nurses responded; each received an additional $15 Amazon gift card as compensation for their time; nurses from the hospital system where compensation was restricted were not recruited to participate in the secondary survey.

The pilot study data analysis plan included multiple tests of reliability (test-retest method and Cronbach's alpha value) and validity (content validity, discriminant validity, and exploratory factor analysis). Data were analyzed using Version 24 of SPSS. Results to establish the MCQ's internal consistency showed a Cronhach's alpha value of .831; deleting item 2 resulted in a Cronbach's alpha value of .851. The MCQ was administered twice, at least two weeks apart, to 32 participants from the original sample to establish test-rest reliability. Pearson's correlation coefficient results showed a strong positive correlation between Time 1 and Time 2 ($r = .769$, $p < .001$). Initially, the researcher intended to use concurrent validity for validity testing. However, the researcher determined that the MCQ and MDSR were measuring unrelated constructs, resulting in the use of discriminant validity instead. Discriminant validity between the MCQ and MDSR was established by calculating Pearson's correlation coefficients; results showed a weak negative relationship between the MCQ and MDSR frequency ($r = -.193$, $p = .055$) and no relationship between the MCQ and MDSR intensity ($r = .085$, $p = .402$). The lack of relationship between the instruments supports discriminant validity because a

relationship was not expected. Using SPSS 25, a principal components exploratory factor analysis (EFA) using Varimax rotation and five-factor solution was run, using a minimum factor loading of .4. The Kaiser-Meyer-Olkin KMO was .741, indicating middling sample size adequacy (valid responses, n = 121). All 28 items loaded onto one of the five factors with factor loadings ranging from .46 to .76; Eigenvalues greater than 1 accounted for 51.2% of the variance. Ten items loaded onto Factor 1 with an Eigenvalue of 5.88 and Cronbach's alpha = .860. Six items loaded onto Factor 2 with an Eigenvalue of 3.03 and Cronbach's alpha of .507 (deleting item 2 resulted in an increased Cronbach's alpha of .784). Five items loaded onto Factor 3 with an Eigenvalue of 2.10 and Cronbach's alpha of .617. Four items loaded onto Factor 4 with an Eigenvalue of 1.83 and Cronbach's alpha of .644. Lastly, 2 items loaded onto Factor 5 with an Eigenvalue of 1.50 and Cronbach's alpha of .671. Factors were not named as the items within each factor did not all align theoretically. Table 7 provides the exploratory factor analysis results, which includes item factor loadings, eigenvalues, communalities, and percentages of variance.

Table 7

Pilot Study: Factor Loadings From Principal Component Factor Analysis: Eigenvalues, Communalities, and Percentages of Variance for Items of the Moral Comfort Questionnaire

	Factor Loading					
Item	1	2	3	4	5	Communalities
14. I practice in an environment that enables me to openly voice my concerns regarding patients' medical and nursing plans of care.	**.75**	-.07	.10	.08	.05	.58
15. My nurse manager supports my decisions and moral actions.	**.66**	-.02	.04	.25	-.14	.52
16. I have authority to independently create a plan of action for my patients.	**.56**	.03	-.04	.01	.14	.37
18. My nursing administrator(s) is(are) supportive of staff nurses' decisions and moral actions.	**.76**	-.10	.03	.14	.09	.66
19. I have authority to be my patients' advocate in all situations.	**.63**	.11	.09	.05	.361	.55
24. I am able to act on my moral decisions without fear of being penalized.	**.65**	.21	.06	.04	.15	.49
25. I have full control of my nursing practice.	**.59**	.21	.08	-.06	-.02	.40
26. I am allowed to question the patient's plan of care.	**.49**	-.04	.15	.14	.40	.43
27. I believe I am able to openly communicate with all healthcare providers.	**.52**	.20	.01	-.10	.32	.42
28. I believe that I am a respected member of the healthcare team.	**.76**	.14	.03	-.09	.01	.61
1. When faced with a moral dilemma, I am confident I can distinguish between right and wrong and make a moral decision.	-.03	**.51**	.28	.32	.15	.46
2. I often feel uneasy with making decisions in unethical situations.	.05	**-.48**	.03	.30	< .01	.32
6. My experience and clinical expertise give me confidence when ethical decision-making is required.	.10	**.69**	.16	.19	-.27	.62
11. I am usually confident and comfortable with my patient care decisions and subsequent actions.	.15	**.64**	.01	-.05	.27	.50

Table 7 (cont.)

Item	Factor Loading 1	2	3	4	5	Communalities
12. I clearly understand the nursing scope of practice.	.20	**.61**	.08	.16	.16	.47
13. I have excellent critical thinking abilities.	.04	**.77**	.11	.07	-.01	.62
17. I am competent in the area of clinical reasoning.	.08	**.70**	.03	.05	.04	.51
3. I have a genuine concern for others' well-being.	-.09	< -.01	**.68**	-.19	.05	.51
4. One of my core values is being genuinely supportive of my patients' decisions even when they differ from my own.	.20	.15	**.46**	.03	.34	.39
5. It is my obligation to help others, especially patients, when they are in need of assistance.	.12	.14	**.85**	-.02	-.09	.77
22. I take full responsibility for my actions.	.11	.07	**.57**	.21	.19	.42
23. I understand that patients count on me to do the right thing.	.09	.15	**.67**	.31	-.07	.58
7. Prior to taking action, I reflect on my past experiences with moral dilemmas to guide my decision-making.	.01	.04	.04	**.68**	-.16	.49
8. I am aware of and reflect on my own moral beliefs and values, at the same time being respectful of my patients' moral beliefs and values.	.07	-.05	.02	**.60**	.13	.38
9. I consider my patients' preferences and concerns in my decisions.	.12	.06	.06	**.65**	.26	.50
10. I make ethically based decisions that lead to morally based actions.	-.01	.28	.04	**.73**	.06	.62
20. I am willing to take a stand for doing the right thing that is in my patient's best interest, regardless of the consequences.	.11	.14	-.02	.09	**.72**	.56
21. I am willing to voice my concerns about a patient's plan of care even though others may not agree with my point of view.	.20	< .01	.14	.11	**.73**	.60
Eigenvalues	5.88	3.03	2.10	1.83	1.50	
% of variance	20.99	10.81	7.51	6.52	5.36	
α	.860	.507	.617	.644	.671	

Further exploration of the concept of moral comfort is needed as a stepping stone to investigating ways to promote moral comfort in nurses. The MCQ provides an instrument that may be used in future research studies designed to explore moral comfort in nurses. Factors 1, 2, 4, and 5 aligned theoretically with moral comfort dimensions found in the literature; however, factor 3 did not. An imbalance of the number of items loading onto each factor was noted, potentially requiring further evaluation of redundant items (i.e., inter-item correlation) for factors with more items and the addition of items to factors with less items. Revision, addition, and deletion of items were made prior to further testing of the MCQ. The small sample size was a limitation of this pilot study. Results support the need for further psychometric testing that includes confirmatory factor analysis of a revised version of the MCQ on a larger sample size (minimum 10 participants per item) following review and revision of items. Following another a priori content expert evaluation, the MCQ was revised, resulting in a 35-item two-part instrument, the focus of this dissertation study as described in the subsequent section.

Methodology of the Current Dissertation Study

Research Design

A psychometric research design was used for the current dissertation study to establish reliability and validity of the revised 35-item MCQ, a new instrument. To account for measurement errors that are present in all instruments, psychometric analysis of the MCQ included multiple measures to determine the instrument's reliability (by establishing its stability and internal consistency) and validity (by using content, divergent, and construct validity methods) (DeVellis, 2017; Tappen, 2016). This is further explained in the data analysis section.

Instruments

Moral Comfort Questionnaire (Revised). The overall purpose of the Moral Comfort Questionnaire (MCQ) is to measure nurses' moral comfort and to identify factors impacting moral comfort (both negatively and positively). The MCQ was theoretically constructed using Tappen's (2016) concept tree model as a framework. The 28-item MCQ was pilot tested with further revision thereafter. Following content expert review of the 28-item MCQ by two doctorally prepared content experts in the fields of relatd concepts and instrument development, several revisions were made based on their recommendations. A six-month time frame for reflecting on nursing practice was added to encourage participants to focus on the recent past rather than reflecting on their long-term practice. The items were also divided into two parts: (a) the first part includes items that are pertinent to reflection on a specific patient encounter with a moral situation within the past six months and (b) the second part includes items that are pertinent to participants' general practice within the past six months. The revision included rewording 19 items for brevity and clarity, in addition to revising several double-barreled items (6, 8, and 11 were reworded; item 10 was divided into two items). Additionally, the moral comfort concept tree was revised and items were categorized to represent the proposed theoretically derived five dimensions of moral comfort based on the work of Wurzbach (1996, 2008), Corley (2002), and Corley and Minick (2002) (Table 8).

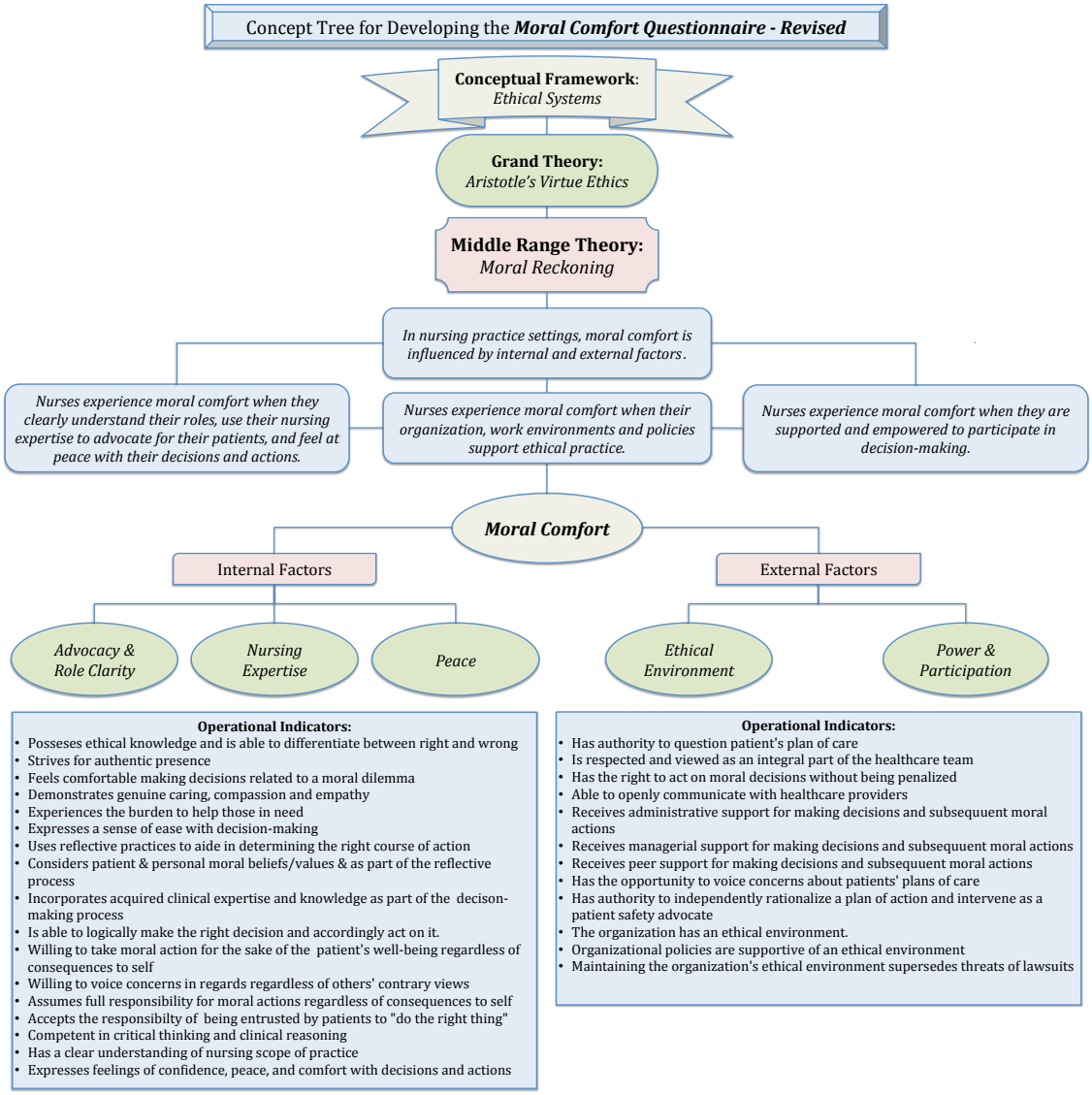

Figure 7. Revised concept tree for developing the Moral Comfort Questionnaire.

Table 8

Moral Comfort Questionnaire Items: Dimensions of Moral Comfort

Internal (Individual) Factors			External (Environmental) Factors		
Factor	Item	Reference	Factor	Item	Reference
Nursing Expertise	1A	Corley, 2002	Ethical Environment	11A	Corley & Minick, 2002
	2A	Corley, 2002		12A	Corley & Minick, 2002
	3A	Corley, 2002		11B	Corley & Minick, 2002
	4A	Corley, 2002		16B	Corley & Minick, 2002
	5A	Corley & Minick, 2002		18B	Corley & Minick, 2002
	6A	Corley & Minick, 2002		19B	Corley & Minick, 2002
	7A	Corley, 2002		20B	Corley & Minick, 2002
	1B	Corley & Minick, 2002	Power and Participation	7B	Corley & Minick, 2002
	2B	Corley & Minick, 2002		8B	Corley & Minick, 2002
	3B	Corley & Minick, 2002		9B	Corley & Minick, 2002
	5B	Corley & Minick, 2002		12B	Corley & Minick, 2002
	6B	Corley & Minick, 2002		14B	Corley & Minick, 2002
	10B	Corley & Minick, 2002		15B	Corley & Minick, 2002
Advocacy and Role Clarity	8A	Corley, 2002		17B	Corley & Minick, 2002
	9A	Corley, 2002			
	10A	Corley, 2002			
	4B	Corley & Minick, 2002			
	13B	Corley & Minick, 2002			
Peace	13A	Corley & Minick, 2002; Wurzbach, 1996, 2008			
	14A	Wurzbach, 1996, 2008			
	15A	Corley & Minick, 2002; Wurzbach, 1996, 2008			

The five dimensions are:

- Nursing expertise: development of expertise and understanding of the patient's and family's needs and desires may contribute preventing moral distress and achieve moral comfort (Corley & Minick, 2002).

- Advocacy and role clarity: understanding one's role and what can be reasonably be accomplished within that role contributes to moral comfort (Corley & Minick, 2002). Advocacy requires taking risks that go above and beyond organizational policies; by taking risks for patients nurses will eventually achieve moral comfort (Corley & Minick, 2002).
- Peace: Comfort, as an ethical principle, is described as doing and feeling. Doing is a nurse's ability to do the right thing for patients and families, thus bringing them comfort. Feeling is the nurse's sense of peace associated with their action (Wurzbach, 1996).
- Ethical environment: An ethical environment is one in which the organization demonstrates support of ethical behavior and practices and clearly conveys and lives up to the expectations of ethical behavior through its mission, vision, and core values (Corley & Minick, 2002).
- Power and participation in decision-making: Power, proportionate with one's role and position, is a necessary factor for achieving moral comfort. Four structural factors contribute to power are access to: (a) administrative support, (b) resources, (c) information, and (d) opportunities to discuss ethical problems (Corley & Minick, 2002).

The dimensions were also divided into internal factors (nursing expertise, advocacy and role clarity, and peace) and external factors (ethical environment and power and participation in decision-making). A total of six items were added to the revised version of the MCQ to ensure all dimensions were represented: ethical environment (n = 3 [items 18B, 19B, and 20B]); peace (n = 2 [14A and 15A]); and power

and participation in decision-making (*n* = 1 [17B]). The most current revision of the MCQ has resulted in the two-part 35-item MCQ that was evaluated in this current dissertation study.

The MCQ is a 35-item self-report Likert-type instrument intended to measure the construct of moral comfort in nurses. As previously mentioned, the MCQ is a two-part questionnaire: Part 1: Specific Situation and Part 2: General Experience. In the first part, participants are asked to reflect on their practice within the past six months to identify a specific patient encounter in which he/she faced a moral situation or moral dilemma (definitions provided) and rate 15 statements using a 4-point scale (1 = Strongly Disagree; 2 = Somewhat Disagree, 3 = Somewhat Agree, 4 = Strongly Agree). The second part included asking participants to reflect on their general practice within the past six months and rate 20 statements using a 4-point scale (1 = Strongly Disagree; 2 = Somewhat Disagree, 3 = Somewhat Agree, 4 = Strongly Agree). Higher overall score averages indicate higher levels of moral comfort and, inversely, lower overall score averages indicate lower levels of moral comfort with a range of 35 to 140. Additionally, individual items or clusters of items on the MCQ can be examined to identify specific factors that either promote or threaten moral comfort for an individual participant or group of participants by assessing high-scoring and low-scoring trends. The results of the MCQ may lead to providing increased understanding of moral comfort and the factors that critically impact it related to nurses' ethical decision-making and subsequent moral actions. This knowledge can then be used to develop strategies to promote moral comfort in nurses, yielding positive outcomes for nurses, and, by proxy, positively impacting patients and healthcare organizations at large.

Moral Distress Scale – Revised (Adult). The Moral Distress Scale – Revised (MDSR) was developed by Hamric et al. (2012). The MDSR is a 21-item self-report instrument. Item ratings are based on a 5-point Likert scale. While the MDSR is one instrument, it measures two distinct aspects of moral distress using differing scale descriptors: (a) frequency ("never" equals 0 and "very frequently" equals 4) and (b) intensity or level of disturbance ("none" equals 0 and "very disturbing" equals 4). Six versions of the MDSR are available for measuring moral distress in healthcare professionals: MDSR (adult) for nurses, MDSR (pediatric) for nurses, MDSR (adult) for physicians, MDSR (pediatric) for physicians, MDSR (adult) for other healthcare professional, and MDSR (pediatric) for other healthcare professional. The MDSR's reported combined Cronbach's alpha was .88. While there are six versions of this instrument, only the adult version for nurses was used in this study since only nurses were included as participants. In addition to measuring moral distress frequency and intensity, the MDSR (adult) for nurses also assesses nurses' intention to leave a position or actually having left a position related to moral distress using two additional multiple-choice and dichotomous-type (yes or no) questions following completion of the frequency and intensity scales.

Ethical Considerations

Approval from Florida Atlantic University's Institutional Review Board (IRB) was obtained prior to commencing the study (Appendix K). In addition, the primary investigator (PI), dissertation chair, and committee members were required to submit Collaborative Institutional Training Initiative (CITI) program training certificates. The PI

provided proof of attendance of the Responsible Conduct of Research (RCR) training offered by the university's graduate research department.

The study purpose, procedure, risks and benefits, affirmation of confidentiality, and participant compensation were provided in writing to the study participants (Appendix L). The PI provided the opportunity for participants to ask questions regarding the study via electronic mail or telephonically. Participants' concerns and questions were addressed prior to survey completion. Consent was inferred by participant completion of the survey. Participants were able to withdraw from the study at any time without penalty. All study proceedings were under the guidance and supervision of the PI and dissertation chair.

Sampling, Recruitment, and Setting

The population of interest for this study was direct-care hospital registered nurses. Purposive homogenous sampling and snowball sampling were used to recruit direct-care registered nurses on in-patient units; nurses in managerial and administrative positions were excluded.

The following were the inclusion/exclusion criteria:

Inclusion criteria:

- Direct-care staff nurse on an in-patient unit.
- Direct-care staff nurse who intermittently serves as a relief (as needed) charge nurse, providing direct patient care at least 50% of the time.
- Employed either as full-time or part-time status.
- Employed as per diem status, working a minimum of one shift per week.
- Willingness to participate in the study.

Exclusion criteria:

- Serves as a primary charge nurse, or equivalent role, providing less than 50% direct patient care.
- Per diem nurse working less than one shift per week.
- Serves in a managerial or administrative capacity.
- Employed in an outpatient or procedural department.
- Employed as a contract or per diem agency nurse.

Potential participants determined their eligibility to participate based on the inclusion/exclusion criteria, which were included on recruitment flyers and electronic mail and postings.

Additionally, the PI reviewed participant demographics to determine participants' eligibility for participation; ineligible participants' data were excluded from the study. The minimum target sample size for testing the 35-item MCQ was 350 participants; the minimum sample recommendation for establishing reliability and validity of new instruments was at least 10 participants per item (Field, 2013; Kellar & Kelvin, 2013; Nunnally, 1978). Since obtaining a minimum sample is never guaranteed, the PI used multiple online platforms as well as a recruitment table at a nursing conference to recruit participants to increase the probability of meeting the recommended minimum sample size. A minimum of 100 original participants were recruited for re-administration of the MCQ to establish test-retest reliability, which is discussed in a subsequent section. The participants indicated their willingness to participate in the second administration of the MCQ by answering "yes" to the demographic item assessing secondary participation and providing their contact information (electronic mail address) on a space provided on the

initial survey. Secondary completion of the MCQ occurred at least two weeks after the initial MCQ completion date. The PI sent the web address link via electronic mail to the participants who agreed to complete the MCQ a second time. The instructions and consent process were identical to the initial participation process (with the exception of the MDSR survey). The setting for this study was exclusively Internet-based. To encourage participation, the PI ensured the survey was easily accessible and was designed for brevity and ease of use. Participants did not receive any compensation associated with participation in this study.

After obtaining IRB approval of the study protocol from Florida Atlantic University, the PI began the recruitment process. The PI used an electronic, Internet-based platform to recruit participants and collect data. Specific hospital sites were not used for this research study. The PI used professional nursing organizations and social media for recruiting participants. The PI obtained permission from professional nursing organizations to use online recruitment resources for posting calls for research study participation on their websites and/or distribute electronic mail invitations prepared by the PI (Appendix M) to their members. After obtaining IRB approval, recruitment of participants was primarily electronically based using social media (i.e., Facebook, LinkedIn, and Twitter) to post weekly calls for research study participation. The PI also collaborated with professional nursing organizations for posting calls for research study participation on their websites and/or delivery via electronic mail to its members. Florida Nurses Association (FNA) posted the call for research study participation on their website and sent electronic mail messages to its members on a monthly basis as requested by the PI. Sigma Theta Tau International (STTI) allowed the PI to post calls for research

study participation on their Global Member Forum site. The American Association of Critical-Care Nurses (AACN) posted a call for research on their Participate in Research Studies site. The PI was also permitted to recruit participants on site at AACN's annual conference, National Teaching Institute and Exposition (NTI), in Orlando (Florida) in May 2019. The PI was provided with a table located in the evidence-based practice and research poster presentation gallery. Potential participants were provided with a card that included research study information as well as the survey URL address and a quick-response (QR) code for easy access to the study; participants were encouraged to share the card with their colleagues (NTI snowball).

Data Collection Protocol

The only source for data collection was Internet-based. The 35-item MCQ and the 21-item MDSR (Adult) surveys were available electronically to participants, using REDCap (www.project-redcap.org) as the on-line survey platform, for completion at a time and location of their choosing. The initial page of the electronic survey included the purpose of the surveys, informed consent (procedure, risks and benefits, and affirmation of confidentiality), instructions for accurately completing the surveys (including definitions for morality and ethics), and research team contact information. Completion of the surveys indicated consent to participate. The following participant demographic factors were collected: age, gender, years of experience, nursing specialty, shift, religious preference, level of education, ethnicity and current geographic location (Appendix N). Geographic location was included because, while the nurses' organizations that were used as recruitment platforms are based in the United States, their membership may include international nurses or U.S. nurses working abroad. The approximate time to

complete both surveys was estimated at 17 minutes. Participants did not receive compensation for the time spent participating in this study. Participants were asked for their willingness to participate in completing the MCQ a second time; if they responded yes, they were asked to provide an electronic mail address to be contacted within a minimum of two weeks with instructions for accessing the MCQ survey (also using REDCap). Upon completion of the surveys, responses were automatically recorded and stored in REDCap (password-protected); the PI received automated notifications of survey completion. Data were collected over a seven-month period from February 2019 to August 2019.

Data management plan. The PI maintained a password-protected electronic record of the participants' electronic mail addresses for those who completed the MCQ twice in order to track and match each participant's administration Time 1 (initial completion of the MCQ) to Time 2 (completion of the MCQ within at least two weeks of the initial time) (specifically for test-retest reliability). De-identified data were transferred to Version 25 of SPSS; all SPSS files are password-protected. Access to the PI's personal computer and laptop was also password-protected. Only the PI and dissertation chair were privy to the passwords. The PI shared de-identified data with other members of the dissertation committee as needed for assistance with data analysis. All data will be retained for a minimum of three years after completion of the study.

Data Analysis

Reliability testing. Tappen (2016) recommended using more than one measure of reliability; therefore, the plan for testing this measure included tests for measuring stability and homogeneity (internal consistency). For content validity, two doctorally

prepared content experts in the field of instrument development independently reviewed the MCQ for evaluation of items and recommendations for revision. Stability was measured by conducting test-retest reliability. For this type of testing, the measure was administered on two separate occasions, Time 1 and Time 2, to the same set of participants, at least two weeks apart. The assumption underlying this reliability test is that the phenomenon will not fluctuate from one day to the next (Tappen, 2016). While moral comfort may change over an extended period of time, it was not expected to change from day-to-day, thus justifying the use of this reliability test. An associated issue of test-retest reliability testing is the possibility that participants would remember the questions from the previous assessment, known as the practice effect, possibly affecting the outcome and accuracy of the test. For the MCQ, this was not an issue because it was not designed to assess knowledge. The MCQ is an affective measure designed to examine nurses' values and attitudes related to moral comfort (Waltz et al., 2017). The intended use of the MCQ is to evaluate participants' levels of moral comfort derived from rating each item/statement on the measure. Remembrance of items will not affect test-retest reliability.

A weighted kappa analysis was also conducted. The weighted kappa measures the level of disagreement between raters. According to Fleiss and Cohen (1973), a weighted kappa is "interpretable as the proportion of weighted agreement corrected for chance" (p. 614). A weighted kappa analysis assigns different weights based on the seriousness of the disagreements; more credits are assigned to more serious disagreements while less credits are assigned to less serious disagreements (Waltz et al., 2017). For example, using an instrument with a 4-point scale of 1 through 4, an intrarater response of 3 and 4 on the

same item at two different intervals is weighted less than an intrarater response of 2 and 4 on the same item at two different intervals. The weighted kappa value ranges for classifying agreement between factors is as follows: near perfect reliability > .80, substantial reliability = .61 to .80, moderate reliability = .41 to .60, fair reliability = .21 to .40, and slight reliability ≤ .20 (Landis & Koch, 1977).

In addition to the weighted kappa analysis, a Bland-Altman (B&A) analysis was also conducted to examine agreement between Time 1 and Time 2 by plotting the differences between Time 1 and Time 2 values (*y*-axis) against the averages of Time 1 and Time 2 (*x*-axis) (Altman & Bland, 1983; Bland & Altman, 1999, 2010). A one-sample *t*-test was calculated. The mean difference and standard deviation (*SD*) values of the *t*-test were used to calculate the upper and lower plotting limits (mean difference ± [*SD* x 1.96]). A non-statistically significant *t*-test *p* value indicates no significant difference between Time 1 and Time 2 responses. The B&A analysis also included conducting a linear regression with particular attention to the coefficients mean value and its associated *p* value to also examine for proportional bias. The coefficients mean value should be close to 0, with a non-statistically significant *p* value (greater than .05) indicating agreement between the two measurements.

According to Waltz et al. (2017), internal consistency is the most frequently used reliability test for cognitive measures when one single instrument is employed to test one group. Internal consistency establishes the homogeneity, or intercorrelations, of items on an instrument measuring a single phenomenon (DeVellis, 2017; Waltz et al., 2017). The alpha coefficient, commonly known as Cronbach's coefficient alpha, is used to measure internal consistency. "Alpha represents the extent to which performance on any one item

on an instrument is a good indicator of performance on any other item in the same instrument" (Waltz et al., 2017, p. 188). Cronbach's coefficient alpha is sensitive to the number of items on an instrument; higher numbers of items result in higher alpha values if the instrument items are homogenous. The 35-item MCQ is intended for single administration to a single group; therefore a Cronbach's coefficient alpha value was calculated and used to examine the MCQ's internal consistency with a goal of achieving a minimum of .70, which represents a modest degree of homogeneity and is acceptable for a new instrument (Nunnally & Bernstein, 1994). Additionally, running this type of reliability analysis provides information to assist the instrument developer determine the effect of a single item on the overall internal consistency of the instrument. Items that have lower intercorrelation values will decrease the overall Cronbach's coefficient alpha value (DeVellis, 2017). Removal of any item will be considered dependent on its overall impact on the Cronbach's alpha coefficient.

Validity testing. The methods of validity testing that were selected were content validity by expert review, discriminant validity, and construct validity using confirmatory factor analysis. Two content experts in the field of instrument development, not previously included in the pilot study, independently reviewed the MCQ for their evaluation and recommendations. The content expert candidates were members of the PI's dissertation committee. Revisions were made based on content expert feedback resulting in the current two-part, 35-item MCQ.

Discriminant validity was measured by calculating Spearman's correlation coefficient values between the MCQ and MDSR frequency scale and the MCQ and MDSR intensity scale using the total number of participant responses received. The

principle of this type of validity is based on the concept that instruments measuring similar or related constructs should highly correlate, providing convergent evidence, but instruments measuring different or unrelated constructs should not correlate, providing discriminant (or divergent) evidence (Furr, 2018; Nunnally & Bernstein, 1994; Waltz et al., 2017). The MCQ measures moral comfort, while the MDSR measures moral distress. These concepts are different and should not be related; therefore statistical analyses were expected to yield weak correlation coefficients (less than ± .30) between the MCQ and the MDSR frequency and intensity scales.

Using IBM SPSS Amos (Version 26), confirmatory factor analysis (CFA) was run on the MCQ's 35 items to establish construct validity. The purpose of CFA is to "hypothesize or define the factors directly and then determine how well the defined measurement model fits the observed data" (Waltz et al., 2017, p. 218). DeVellis (2017) indicated that CFA is theory driven, allowing researchers to use theoretical knowledge to test the construct validity of an instrument. The MCQ factors that were tested and the model specification were theoretically derived from Wurzbach's (1996, 2008), Corley's (2002), and Corley and Minick's (2002) work on moral comfort. The theoretical mapping (factor structure) is illustrated in Figure 8.

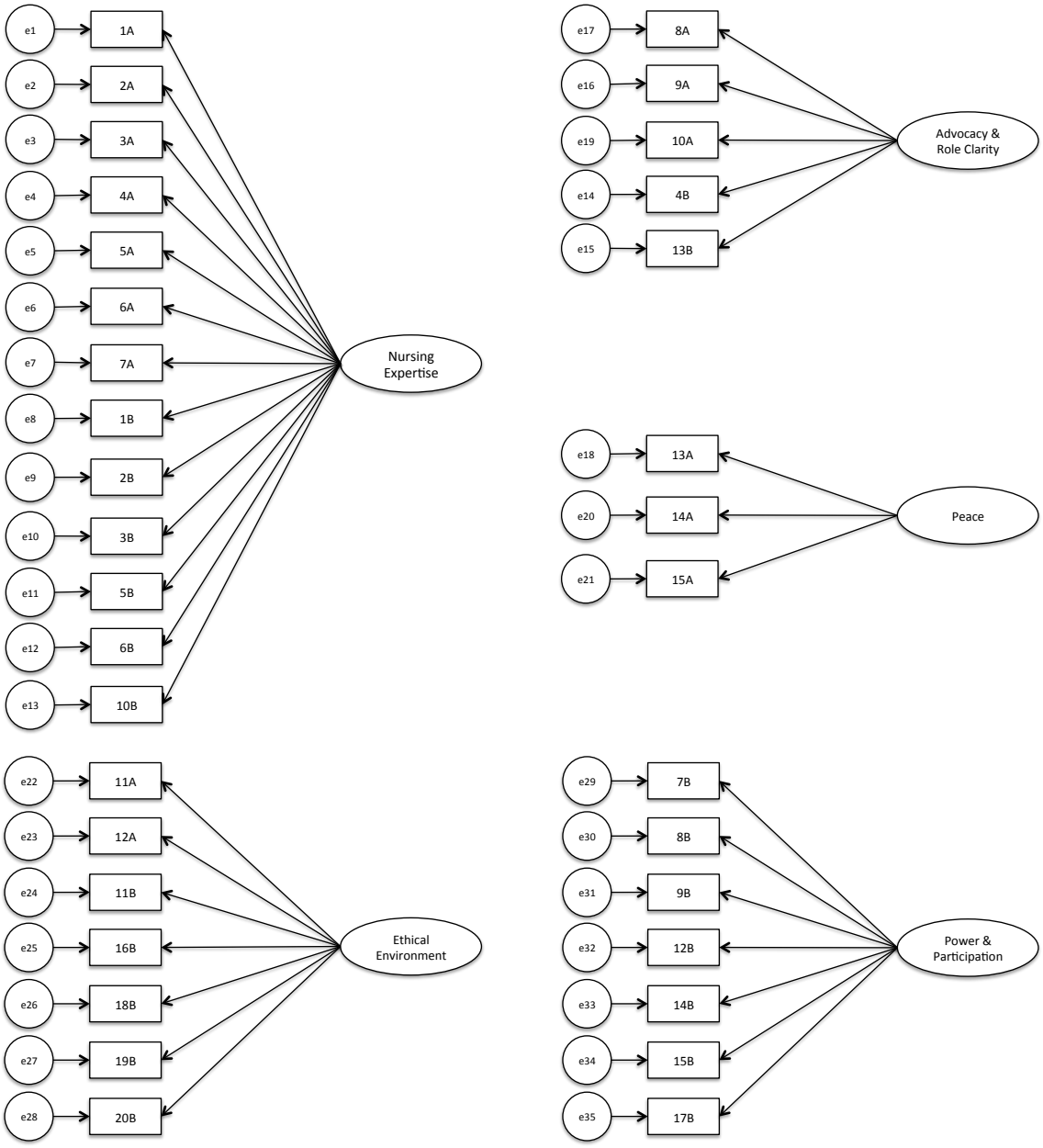

Figure 8. Confirmatory factor analysis hypothesized theoretical mapping of the moral comfort and its constructs of moral cognizance, autonomy, and moral agency and their concepts and indicators.

The CFA results should be congruent with the predicted theoretical mapping and factor structure, thereby providing confirmation (DeVellis, 2017; Furr, 2018; Tappen, 2016). Accurate factor analyses results are highly dependent on the sample size. There is no agreement among researchers regarding an adequate or minimum sample size. One

commonly used method for determining a minimum sample is using 10 participants per item on an instrument (Field, 2013; Kellar & Kelvin, 2013; Nunnally, 1978). Therefore, a target minimum sample size of 350 participants is acceptable for using CFA to establish construct validity of the 35-item MCQ.

Chapter Summary

Moral distress is a serious issue that negatively impacts nurses and the work environment, ultimately placing patients in harm's way. Research studies to investigate interventions to prevent or decrease moral distress are limited. Investigating moral comfort may provide insight to developing interventions that bolster moral comfort in nurses, thereby preventing and diminishing the frequency of moral distress. However, presently little is known about moral comfort in nurses and there is no instrument to measure moral comfort. Therefore, a new instrument has been developed, the Moral Comfort Questionnaire (MCQ). The methodology for testing the psychometric properties of the new 35-item MCQ has been conducted, inclusive of multiple tests of reliability (test-retest reliability and internal consistency) and validity (content validity, discriminant validity, and construct validity). Establishing reliability and validity of the MCQ will provide an instrument for use in future research studies designed to further our understanding of moral comfort in nurses and investigate interventions to prevent moral distress.

CHAPTER 4. RESULTS

Moral comfort is an emerging concept in nursing. It is defined as a nurse's feeling of ease with decisions and actions related to ethical problems and is considered the positive outcome of moral situations and dilemmas (Corley & Minick, 2002). Promotion of moral comfort in nurses may contribute to fostering positive outcomes for nurses, patients, and healthcare organizations. As such, a better understanding of moral comfort in nursing is warranted. A literature search revealed there are no instruments to measure moral comfort; however, several instruments to measure moral distress were found. The primary investigator (PI) of this study used Tappen's (2016) concept tree framework to theoretically develop an instrument to measure moral comfort – the Moral Comfort Questionnaire (MCQ). The original 28-item MCQ was pilot tested resulting in its revision to the current 35-item MCQ. The purpose of this study was to test the reliability and validity of the 35-item MCQ. The specific aims of this study were to:

- Evaluate the reliability of the MCQ by evaluating the instrument's test-retest reliability (stability) and internal consistency (homogeneity),
- Evaluate the validity of the MCQ by evaluating the instrument's content validity and discriminant validity, and
- Examine the theoretical factor structure of the MCQ through confirmatory factor analysis.

Population, Setting, and Data Collection

Data were collected from February 2019 through September 2019. The target population for this study was direct-care hospital-based registered nurses. A sample of 466 registered nurses responded to the survey. The majority of the sample was recruited from social media (n = 160, 35%), the NTI conference (n = 48, 11%), and NTI snowball (n = 160, 35%).

Description of Participants

The participants' ages ranged from 20 to 71 years (M = 41.63, SD = 11.98); participants' years of experience ranged from less than one year to 53 years (M = 14.95, SD = 12.64). Ninety-one percent (n = 426) of the participants were female and 9% (n = 42) were male. Hospital-based areas of practice varied with the majority practicing in critical care/intensive care units (n = 151, 33%), medical surgical units (n = 64, 14%), and medical telemetry or cardiac telemetry units (n = 48, 10%). Twenty-one percent (n = 97) reported their area of practice as "other" without specification. Participants reported practicing in various geographic locations throughout the United States (38 states). The majority of the participants were from Illinois (n = 198, 42%) and Florida (n = 102, 22%). Twenty percent (n = 92) reported serving as a primary charge nurse, 34% (n = 158) reported serving as a relief (part-time) charge nurse, and 46% (n = 216) reported they were neither. Two percent (n = 10) of the participants had diplomas in nursing, 25% (n = 115) had associate's degrees, 58% (n = 270) had bachelor's degrees, 14% (n = 65) had master's degrees, and less than 2% (n = 8) had doctorate degrees in nursing (doctorate of nursing practice/doctor of philosophy or equivalent). Approximately 47% (n = 221) reported Protestant Christian as their religious affiliation, 17% (n = 80) were

Catholic, 2.5% (*n* = 12) were agnostic or atheist, and 29% (*n* = 137) reported "none/not applicable" or did not respond. Other religious affiliations were reported, but were each less than 1%.

Table 9 shows participants' ages and years of experience, while Table 10 highlights their demographic characteristics.

Table 9

Participant Age and Years of Experience

Demographic	Min - Max	*M*	*SD*
Age (years)	20 to 71	41.63	11.98
Nursing experience (years)	<1 to 53	14.95	12.64

Note. $N = 466$.

Table 10

Demographic Characteristics of Participants

Demographic	*n*	%
Sex		
Female	426	91
Male	42	9
No Response	1	<1
Area of Practice		
Critical Care/Intensive Care	151	33
Emergency Department	35	8
Medical Surgical	64	14
Medical/Cardiac Telemetry	48	10
Mother-Baby/Post-Partum	19	4
Neonatal ICU	4	1

Table 10 (cont.)

Demographic	*n*	%
Oncology	11	2.5
Orthopedics	9	2
Progressive Care	21	4.5
Pediatrics/PICU	6	1
Other	97	21
No Response	2	<1
Charge Nurse Status		
Primary Charge RN	92	20
Relief-PRN Charge RN	158	34
Neither Type of Charge RN	213	46
No Response	3	< 1
Highest Nursing Degree		
Diploma	10	2
Associate's	115	25
Bachelor's	266	58
Master's	65	14
DNP or equivalent	3	<1
PhD or equivalent	5	1
No Response	1	<1
Religious Affiliation		
Christian (Protestant)	221	47
Catholic	80	17
Jewish	3	<1
Buddhist	2	<1
Agnostic/Atheist	12	2.5
Wiccan	1	<1
Pagan	1	<1
Secular Humanist	1	<1
Nazarene	1	<1

Table 10 (cont.)

Demographic	*n*	%
Jehovah's Witness	1	<1
Omnism	2	<1
Mormon	2	<1
Muslim	1	<1
Other	3	<1
None or N/A	80	17
No Response	55	12
Geographic Location		
Alabama	3	<1
Alaska	1	<1
Arizona	4	1
California	7	2
Colorado	2	<1
Connecticut	6	1.5
Florida	102	22
Georgia	4	<1
Idaho	1	<1
Illinois	198	42
Indiana	6	1
Iowa	3	<1
Kentucky	6	1
Louisiana	2	<1
Maine	4	1
Maryland	3	<1
Massachusetts	5	1
Michigan	2	<1
Minnesota	2	<1
Missouri	3	<1
Nevada	2	<1

Table 10 (cont.)

Demographic	*n*	%
New Hampshire	2	<1
New Jersey	3	<1
New York	8	2
North Carolina	5	1
Ohio	5	1
Oklahoma	5	1
Oregon	3	<1
Pennsylvania	6	1.5
Rhode Island	1	<1
South Carolina	2	<1
Tennessee	2	<1
Texas	13	3
Vermont	1	<1
Virginia	5	1
Washington	1	<1
Wisconsin	10	2
Wyoming	1	<1
United States (non-specific)	25	5
No Response	2	<1
Recruitment Site		
AACN Website	21	4.5
AACN NTI Conference	48	11
AACN NTI Snowball	164	35
FNA Website	14	3
FNA E-mail	58	12.5
STTI Global Member Forum	2	<1
Social Media	160	35
No Response	1	<1

Table 10 (cont.)

Demographic	*n*	%
Repeat MCQ Survey		
Yes	334	71
No	133	29
No Response	2	< 1

Note. $N = 466$.

Missing Data Analysis

Several participants did not provide responses for all items on the MCQ. Data were trimmed to exclude participants who did not complete parts one and two of the MCQ ($n = 19$). Using SPSS Version 26, a missing data analysis of responses to the MCQ of the remaining 450 participants' data was run indicating a low percentage of randomly missing values (0.5%; 79 out of 15,750 values), therefore negating the need for running multiple imputations to replace missing data. The missing data analysis also revealed that 30 of the 35 items (86%) had missing values; only 59 of 450 participants' cases (13%) had missing values. The missing data analysis results indicate multiple imputation of missing data was not necessary. Data results were reported based on valid responses; only participant data that included responses to all items were included in the analysis (Part 1, $n = 422$; Part 2, $n = 414$; and Overall, $n = 391$).

Data were further trimmed to exclude participants who did not complete both subscales of the MDSR ($n = 101$). Using SPSS Version 26, a missing data analysis of responses to the MDSR of the remaining 365 participants' data was run, indicating a low percentage of randomly missing values (1.9%; 284 out of 15,046 values), therefore negating the need for running multiple imputations to replace missing data. The missing data analysis also revealed that 41 of the 42 items (98%) had missing values; only 93 of 365 participants' cases (26%) had missing values. The missing data analysis results

indicate multiple imputation of missing data was not necessary. Data results were reported based on valid responses; only participant data that included responses to all items were included in the analysis (n = 320).

Reliability Testing

The MCQ's reliability was examined using several tests of reliability. Cronbach's alpha was used to examine internal consistency. Test-retest reliability was estimated using Spearman's correlation coefficient, weighted kappa analysis, and a Bland-Altman analysis.

Internal Consistency

The MCQ's internal consistency was measured using Cronbach's alpha. The MCQ is one measure, consisting of 35 items, that is divided into two parts: Part 1 has 15 items and Part 2 has 20 items. In building the web-based surveys on REDCap, each part of the MCQ was created as an individual survey. Therefore, participants were allowed to answer the MCQ in parts. While 466 participants responded to the surveys, only responses without missing data (i.e., valid responses) were included in the data analysis. The Cronbach's alpha for Part 1 of the MCQ (15 items) was .920 (n = 422). The Cronbach's alpha for Part 2 of the MCQ (20 items) was .923 (n = 414). The overall Cronbach's alpha (35 items) was .951 (n = 391). Cronbach's alpha values for the MCQ were above the target of .70, which is the acceptable minimum level for new instruments (Nunnally & Bernstein, 1994). This reliability analysis also showed removal of items did not significantly increase or decrease the Cronbach's alpha values, ranging from .949 to .951. The results of the internal consistency analysis suggest stability of the MCQ. The inter-item correlation output suggests little redundancy of items (M = .376, minimum r =

.065, maximum r = .721). The correlation value of .721 between two items (13A and 15A) suggests potential redundancy. No other correlation values were greater than .70.

Test-retest Reliability

Upon initial participation in this study, participants were queried regarding their willingness to participate in taking the survey a second time. Participants who responded "yes" also provided their electronic mail addresses to which a message was sent within two weeks of initial participation with instructions for accessing the MCQ for secondary completion; 338 participants responded "yes" and were sent electronic messages. One hundred and forty-eight of the participants indicating "yes" completed the MCQ a second time (44% response rate). Participants were not required to complete both Part 1 and Part 2 of the MCQ for either Time 1 or Time 2. Of the 148 participants who agreed to complete the survey a second time, 146 participants completed both parts of Time 1 MCQ and 2 participants completed Part A only. For completion of Time 2 MCQ, 123 participants completed both parts, 4 participants completed Part A only and 21 participants completed Part B only. However, due to missing data, only 94 participant completions of both parts of the MCQ for Time 1 and Time 2 were valid, 114 participant completions of only Part 1 for Time 1 and Time 2 were valid, and 122 participant completions of only Part 2 for Time 1 and Time 2 were valid. Several analyses were used to examine test-retest reliability between Time 1 and Time 2 of the MCQ: Spearman's correlation coefficient, weighted kappa statistic, and Bland-Altman analysis.

Spearman's correlation coefficient. According to Kellar and Kelvin (2013), correlation coefficient values greater than or equal to ±.5 indicate substantial or strong relationships. Spearman's correlation coefficient (r) was used to analyze the relationship

between participant responses between Time 1 and Time 2 administrations of the MCQ. Time 1/Time 2 MCQ showed Spearman's r values as follows: Part 1, r = .537 ($p < .001$); Part 2, r = .706 ($p < .001$); and Part 3, r = .605 ($p < .001$). The results suggest a substantial relationships between Time 1 and Time 2 administrations of the MCQ.

Spearman's correlation coefficients were also calculated between Time 1 and Time 2 administrations for each item individually. Values ranged from .194 ($p = .030$) to .660 ($p < .001$); all values were statistically significant. According to Salkind (2007), the coefficient correlation (r) value ranges for classifying relationships between factors is as follows: very strong relationship = .80 to 1, strong relationship = .60 to .80, moderate relationship = .40 to .60, weak relationship = .20 to .40, and weak/no relationship = .0 to .20. Three items showed a strong relationship between Time 1 and Time 2. Fourteen items showed a moderate relationship between Time 1 and Time 2. Seventeen items showed a weak relationship between Time 1 and Time 2. One item showed no relationship between Time 1 and Time 2. The results suggest some significant differences between Time 1 and Time 2 responses.

Weighted kappa statistic. Weighted kappa statistic was calculated between Time 1 and Time 2 administrations for each MCQ item individually. Values ranged from .139 ($p = .051$) to .559 ($p < .001$); all values were statistically significant. According to Landis and Koch (1977), the weighted kappa (K_w) value ranges for classifying agreement between factors is as follows: near perfect reliability > .80, substantial reliability = .61 to .80, moderate reliability = .41 to .60, fair reliability = .21 to .40, and slight reliability $\leq$ .20. Twelve items showed a moderate reliability between Time 1 and Time 2. Twenty-one items showed a fair reliability between Time 1 and Time 2. Two items showed a

slight reliability between Time 1 and Time 2. These results suggest slight to moderate agreement between Time 1 and Time 2 responses.

Table 11 illustrates the Spearman's correlation coefficients and weighted kappa between Time 1 and Time 2 administrations of the MCQ.

Table 11

Spearman's Correlation Coefficients and Weighted Kappa (K_w) Between Time 1 and Time 2 Administrations of the Moral Comfort Questionnaire

			Spearman's Correlation		Weighted Kappa	
Item #	Item	*n*	*r*	*p*	K_w	*p*
Mcq1a	I felt comfortable making decisions in relation to this moral situation.	125	.344	< .001	.348	< .001
Mcq2a	I was confident in my ability to distinguish between right and wrong in making a moral decision.	125	.344	< .001	.290	< .001
Mcq3a	I was concerned for the well-being of my patient.	124	.353	< .001	.312	< .001
Mcq4a	I had an obligation to help.	125	.372	< .001	.139	.051
Mcq5a	My nursing expertise gave me confidence with making this ethical decision.	126	.194	.030	.204	.005
Mcq6a	I considered my patients' preferences in my decisions.	124	.252	< .001	.154	.028
Mcq7a	My actions were ethically based.	124	.227	.011	.226	.001
Mcq8a	I was willing to take a stand for my patient's best interest, regardless of the consequences.	125	.512	< .001	.414	< .001
Mcq9a	I was willing to voice my concerns even though others did not agree with me.	126	.323	< .001	.278	< .001
Mcq10a	I was willing to take full responsibility for my actions.	126	.415	< .001	.320	< .001
Mcq11a	I was able to act on my moral decisions without fear of being penalized.	126	.529	< .001	.401	< .001
Mcq12a	I was able to openly raise questions with all healthcare providers.	126	.420	< .001	.335	< .001
Mcq13a	I feel that I made the right decision.	126	.322	< .001	.275	< .001
Mcq14a	I did everything I could to ensure my patient received good care.	124	.400	< .001	.274	< .001

Table 11 (cont.)

Item #	Item	*n*	Spearman's Correlation		Weighted Kappa	
			r	*p*	K_w	*p*
Mcq15a	I am at peace with how I handled the situation.	122	.280	.002	.215	.002
Mcq1b	I can be supportive of my patients' decisions even if they differ from my own.	138	.447	< .001	.387	< .001
Mcq2b	I reflect on my personal moral beliefs and values.	142	.310	< .001	.303	< .001
Mcq3b	I am respectful of my patients' moral beliefs and values.	142	.397	< .001	.310	< .001
Mcq4b	I clearly understand the nursing scope of practice.	142	.476	< .001	.420	< .001
Mcq5b	I am usually able to think through situations.	143	.282	.001	.237	.001
Mcq6b	I reflect on my past experiences with moral dilemmas to guide my decision-making.	141	.269	.001	.221	.002
Mcq7b	I am empowered to openly voice my concerns regarding patients' medical plans of care.	142	.408	< .001	.408	< .001
Mcq8b	My boss supports my decisions and moral actions.	143	.638	< .001	.559	< .001
Mcq9b	I have authority to independently create nursing plans of care for my patients.	142	.541	< .001	.454	< .001
Mcq10b	I am competent in the area of clinical reasoning.	140	.317	< .001	.263	< .001
Mcq11b	The nursing administrators in my hospital are supportive of staff nurses' decisions.	143	.660	< .001	.543	< .001
Mcq12b	I have authority to be my patients' advocate.	143	.563	< .001	.498	< .001
Mcq13b	My patients count on me to do the right thing.	142	.475	< .001	.374	< .001
Mcq14b	I have control of my nursing practice.	142	.408	< .001	.375	< .001
Mcq15b	I am supported when I question a physician's orders.	143	.570	< .001	.499	< .001
Mcq16b	I am a respected member of the healthcare team.	141	.373	< .001	.330	< .001
Mcq17b	My nurse colleagues are supportive of my decisions and actions.	143	.355	< .001	.323	< .001
Mcq18b	My organization promotes an ethical culture.	140	.626	< .001	.537	< .001
Mcq19b	In my organization, good nursing care is more important than avoiding lawsuits.	140	.560	< .001	.473	< .001
Mcq20b	My organization's policies promote good nursing care.	140	.540	< .001	.451	< .001

Bland-Altman analysis. The Bland-Altman analysis was conducted to examine agreement of participant responses between Time 1 and Time 2. The first step in the Bland-Altman analysis was to examine the results of t tests for each Time 1 and Time 2 variable to calculate the mean difference, standard deviation (SD), and statistical significance (p). The mean difference and SD were used to calculate the upper and lower limits of agreement for the Bland-Altman plot. The p value determined whether there was proportional bias. The t test results for Time 1/Time 2 were as follows: Part 1 (mean difference = .36, SD = 10.29, and p = .710), Part 2 (mean difference = .33, SD = 8.95, and p = .686), and overall (mean difference = 1.45, SD = 18.84, and p = .458. The results of the non-significant p values for each of the Time 1 and Time 2 variables suggest there is no significant difference between Time 1 and Time 2.

The next step in the Bland-Altman analysis was to run a linear regression. The purpose of the linear regression was to examine the data for proportional bias by analyzing the significance (*p*) values of the results. The non-statistically significant *p* values of the linear regression between Time 1 and Time 2 suggest there was no proportional bias: Part 1 (t = -.800, p = .426), Part 2 (t = .261, p = .794), and overall (t = -.243, p = .809).

The last step of the Bland-Altman analysis was plotting the Time 1/Time 2 mean differences (*x*-axis) and Time 1/Time 2 mean averages (*y*-axis) to determine whether they were within the calculated limits of agreement (upper limit = mean difference + [*SD* x 1.96]; lower limit = mean difference – [*SD* x 1.96]).

Figures 9, 10, and 11 show the Bland-Altman plots with upper and lower limits of the analysis for Part 1, Part 2, and overall Time 1/Time 2 responses for the MCQ. The majority of the data points cluster near the mean difference line and fall within the upper and lower limits. The results of the Bland-Altman plot suggest agreement between Time 1 and Time 2.

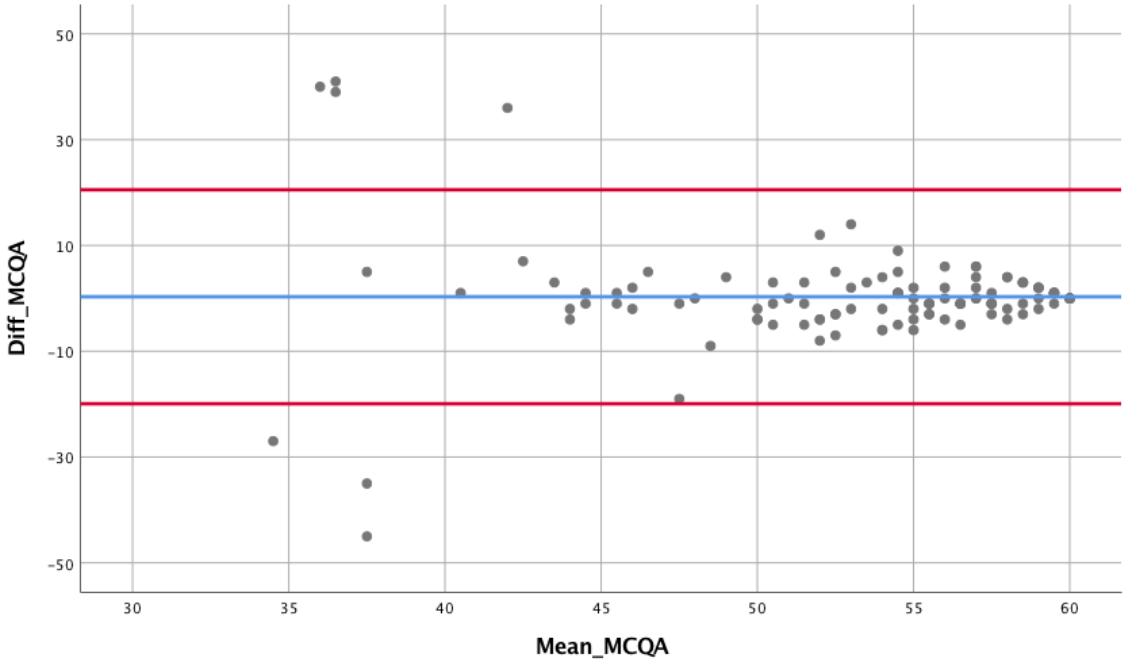

Figure 9. Bland-Altman plot for Time 1/Time 2 MCQ Part 1 (15 items). Mean difference = .36, upper limit of agreement = 20.53, lower limit of agreement = -19.81. The majority of the data points are clustered near the mean difference (blue line) and fall within the upper and lower limits (red lines).

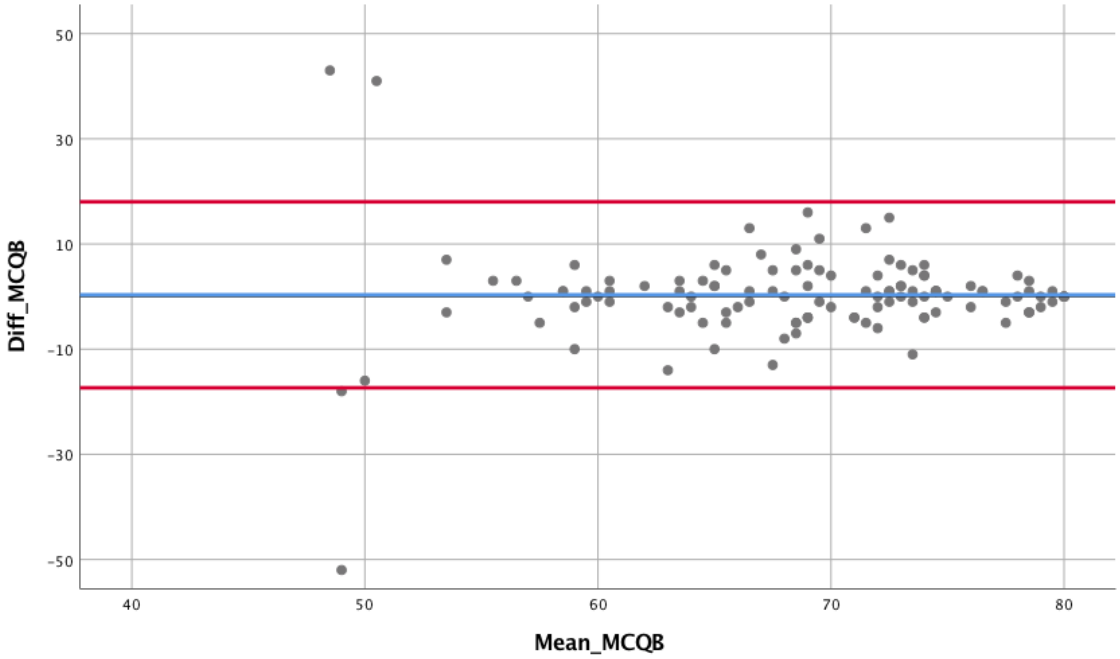

Figure 10. Bland-Altman plot for Time 1/Time 2 MCQ Part 2 (20 items). Mean difference = .33, upper limit of agreement = 17.87, lower limit of agreement = -17.21. The majority of the data points are clustered near the mean difference (blue line) and fall within the upper and lower limits (red lines).

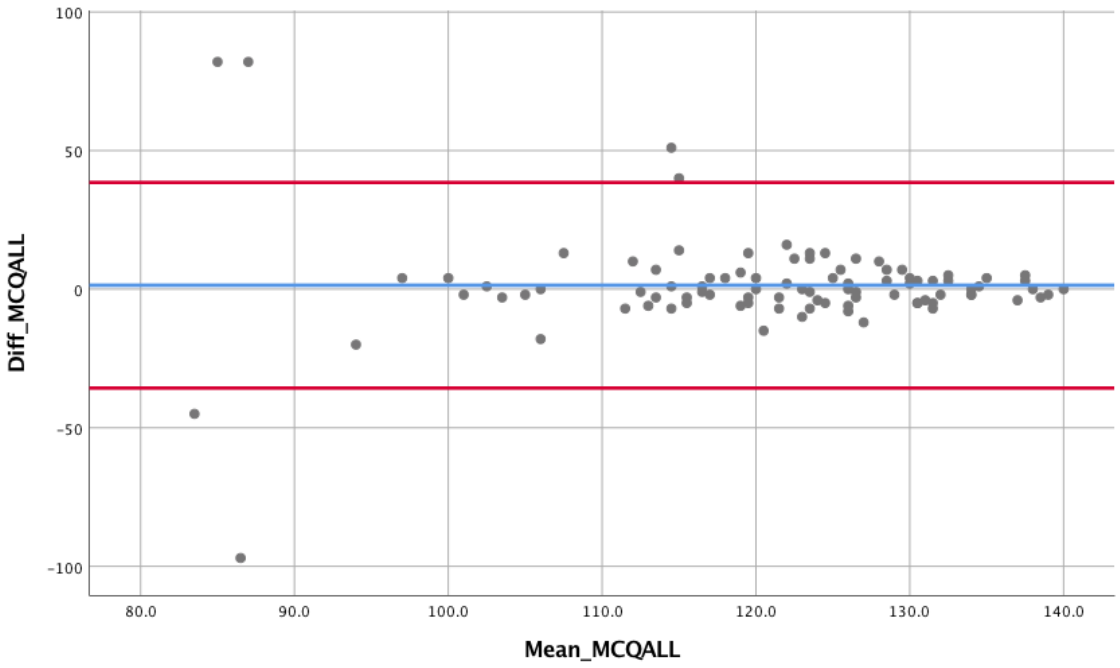

Figure 11. Bland-Altman plot for Time 1/Time 2 MCQ Overall (35 items). Mean difference = 1.45, upper limit of agreement = 38.38, lower limit of agreement = -35.48. The majority of the data points are clustered near the mean difference (blue line) and fall within the upper and lower limits (red lines).

Validity Testing

The MCQ's validity was examined using discriminant validity and confirmatory factor analysis.

Discriminant Validity

Discriminant validity was established between the overall scores of the Moral Comfort Questionnaire (MCQ) and Corley's (2012) revised Moral Distress Scale (MDSR). Using the total scores of the MCQ and MDSR, Spearman's correlation coefficients were calculated. The results showed weak or no relationships (correlation coefficients less than or equal to ± .3) between MCQ and the MDSR; the correlation coefficient was -.219 (n = 320). The results suggest establishment of discriminant validity between the MCQ and the MDSR.

A post hoc analysis of participants' levels of moral distress and moral comfort was conducted. The mean moral distress (MD) score for the overall sample was 85.52 on a scale from 0 to 336 (higher scores indicate higher levels of MD), suggesting overall lower levels of moral distress. The mean moral comfort score was 123.04 on a scale of 4 to 140 (higher scores indicate higher levels of moral comfort), suggesting overall higher levels of moral comfort. A one-way ANOVA showed a significant difference in MD scores between Illinois (M = 75.74, n = 105) and Florida (M = 91.90, n = 62) (p = .002) and between Illinois (M = 75.74, n = 105) and all other geographic locations (M = 92.37, n = 92) (p < .001). There was no significant difference between Florida and all other geographic locations (p = .930). There were no significant differences in moral comfort scores between Illinois (M = 124.54, n = 155) and Florida (M = 123.02, n = 82) (p = .397). There was no significant difference between Florida and all other geographic

locations (M = 121.43, n = 143) (p = .379). However, results suggest a significant difference in moral comfort levels between Illinois and all other geographic locations (p = .041). The mean difference for Illinois was higher (MD = 3.115) than all other geographic locations. These results support the results of discriminant validity analysis.

Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) was used to test the fit of the proposed five-factor model (Figure 12). SPSS Amos Version 26 was used to run the analysis for 466 responses. The proposed model fit was evaluated using the following CFA output: (a) normed chi-square ($\chi 2/df$ ratio), (b) comparative fit index (CFI), (c) normed fit index (NFI), (d) Tucker-Lewis index (TLI), and (e) root mean square error of approximation (RMSEA). The normed chi-square value ($\chi 2/df$ ratio = 3.62) was calculated by dividing the chi-square value ($\chi 2$ = 1989.7) by the degrees of freedom (df = 550). A normed chi-square, or relative chi-square, less than 3.0 indicates good model fit; however, consensus of an acceptable value has not been reached with values of 3.0, 4.0, and 5.0 having been reported as good fit (Bollen, 1989; Mueller, 1996; Munro, 2005). The following were the results of the model fit indices: CFI = .848 (good fit > .95) (Schreiber, Stage, King, Nora, & Barlow, 2006), NFI = .804 (good fit > .95) (Schreiber et al., 2006; Waltz et al., 2017), TLI = .826 (good fit > .95) (Schreiber et al., 2006), and RMSEA .075 (good fit < .06 – .08) (Schreiber et al., 2006). Cronbach alpha values were calculated for each of the subscales: nursing expertise (α = .904, item n = 13), advocacy and role clarity (α = .840, item n = 5), power and participation in decision-making (α = .871, item n = 7), ethical environment (α = .871, item n = 7), and peace (α = .876, item n = 3). The results suggest moderate model fit.

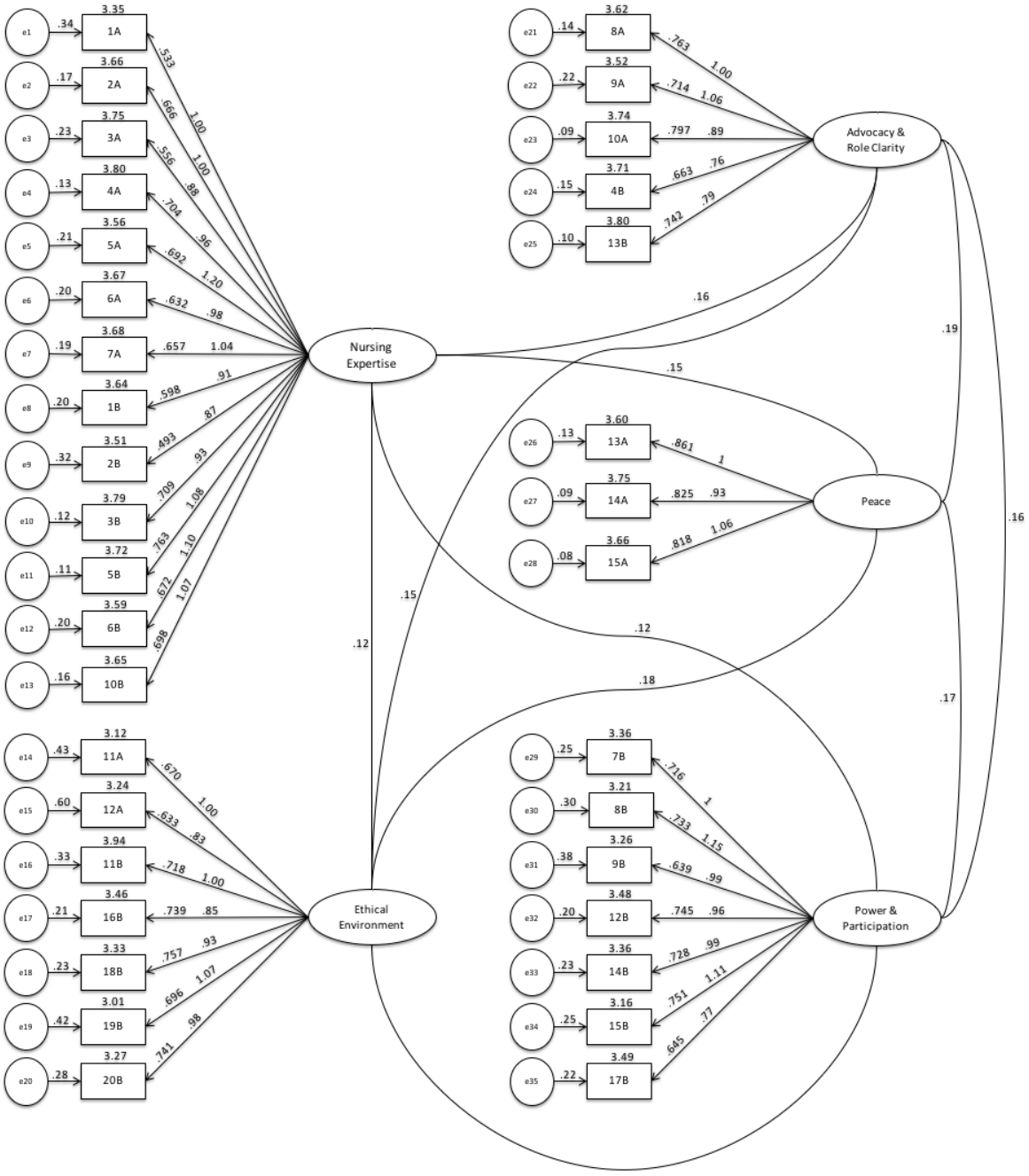

Figure 12. Proposed five-factor model for confirmatory factor analysis with error estimates and standardized regression weights. The theoretically developed five-factor model is comprised of the following dimensions: nursing expertise (13 items), advocacy and role clarity (5 items), power and participation in decision-making (7 items), ethical environment (7 items), and peace (3 items).

Post Hoc Hierarchical Cluster Analysis and Exploratory Factor Analysis

The CFA results of the MCQ led to further post hoc exploration using a hierarchical cluster analysis of the items. The post hoc hierarchical cluster analysis showed clustering of data into two clusters as evidenced in the plotted agglomeration schedule data (Figure 13) leading to a two-factor exploratory factor analysis (EFA). The two-factor EFA showed all items loading onto one of the two factors, with 21 items loading onto one factor and 14 items loading onto the other factor. Analysis of the items within each factor showed the 21 items in factor one related to morally related individual factors and the 14 items in factor two related to organization/environment-related external factors. Reliability analysis of factor one and factor two showed Cronbach's alpha values of .938 and .920, respectively. Deletion of items neither positively or negatively affected the values. Table 12 shows the two-factor EFA results with factor loadings and Cronbach's alpha values.

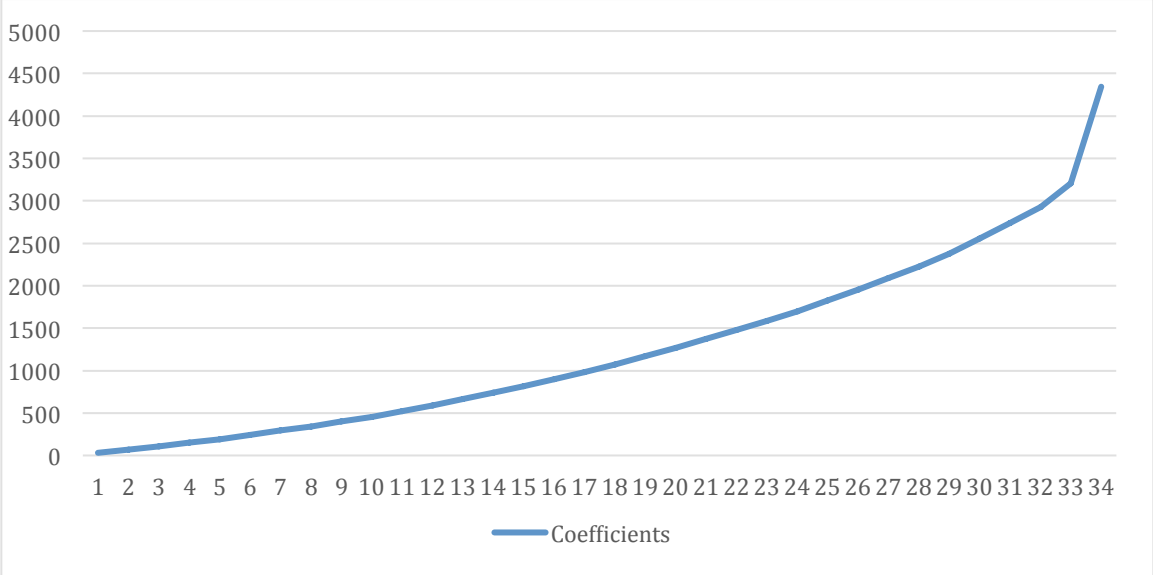

Figure 13. Hierarchical cluster analysis agglomeration table plot. The marked elbow of the curve is at 33, indicating a major coefficient difference. Therefore, 33 is subtracted from the total number of variables (35), resulting in 2 clusters.

Table 12

Post Hoc Two-Factor Exploratory Factor Analysis with Chronbach's Alpha Values and Factor Loadings

Factor 1 Cronbach's alpha = .938	Factor Loading	Factor 2 Cronbach's alpha = .920	Factor Loading
1A. I felt comfortable making decisions in relation to this moral situation.	.499	11A. I was able to act on my moral decisions without fear of being penalized.	.630
2A. I was confident in my ability to distinguish between right and wrong in making a moral decision.	.666	12A. I was able to openly raise questions with all healthcare providers.	.535
3A. I was concerned for the well-being of my patient.	.589	7B. I am empowered to openly voice my concerns regarding patients' medical plans of care.	.595
4A. I had an obligation to help.	.705	8B. My boss supports my decisions and moral actions.	.744
5A. My nursing expertise gave me confidence with making this ethical decision.	.611	9B. I have authority to independently create nursing plans of care for my patients.	.573
6A. I considered my patients' preferences in my decisions.	.663	11B. The nursing administrators in my hospital are supportive of staff nurses' decisions.	.784
7A. My actions were ethically based.	.687	12B. I have authority to be my patients' advocate.	.662
8A. I was willing to take a stand for my patient's best interest, regardless of the consequences.	.697	14B. I have control of my nursing practice.	.677
9A. I was willing to voice my concerns even though others did not agree with me.	.665	15B. I am supported when I question a physician's orders.	.782
10A. I was willing to take full responsibility for my actions.	.763	16B. I am a respected member of the healthcare team.	.657
13A. I feel that I made the right decision.	.712	17B. My nurse colleagues are supportive of my decisions and actions.	.524
14A. I did everything I could to ensure my patient received good care.	.699	18B. My organization promotes an ethical culture.	.755
15A. I am at peace with how I handled the situation.	.607	19B. In my organization, good nursing care is more important than avoiding lawsuits.	.741
1B. I can be supportive of my patients' decisions even if they differ from my own.	.567	20B. My organization's policies promote good nursing care.	.743

Table 12 (cont.)

Factor 1 Cronbach's alpha = .938	Factor Loading	Factor 2 Cronbach's alpha = .920	Factor Loading
2B. I reflect on my personal moral beliefs and values.	.509		
3B. I am respectful of my patients' moral beliefs and values.	.651		
4B. I clearly understand the nursing scope of practice.	.636		
5B. I am usually able to think through situations.	.680		
6B. I reflect on my past experiences with moral dilemmas to guide my decision-making.	.609		
10B. I am competent in the area of clinical reasoning.	.625		
13B. My patients count on me to do the right thing.	.688		

Chapter Summary

The results of the internal consistency and test-retest analyses suggest stability of the MCQ (overall Cronbach's alpha = .951). The results of Spearman's correlation coefficients examining MCQ scores suggest significant substantial relationships between Time 1 and Time 2 administrations of the MCQ. The results of Spearman's correlation coefficients examining relationships between individual MCQ items, however, suggest significant differences between Time 1 and Time 2 responses. The weighted kappa results suggest slight to moderate agreement between Time 1 and Time 2 responses. The Bland-Altman analysis showed agreement between Time 1 and Time 2 administrations of the MCQ. Discriminant validity was established between the MCQ and the MDSR (*r* value was -.219). The results of the confirmatory factor analysis showed moderate fit of the proposed model. Lastly, the findings of the post hoc hierarchical cluster analysis and subsequent two-factor exploratory factor analysis support further exploration and testing of a two-factor model of the MCQ. Psychometric evaluation, using several tests of

reliability and validity, has been completed for this study, meeting the specific goals as outlined.

CHAPTER 5. DISCUSSION

Moral comfort, defined as a nurse's feelings of ease with decisions and actions related to a moral dilemma (Corley & Minick, 2002), is an emerging concept essential to nursing practice. However, moral comfort in nursing has not been widely explored, unlike its negative counterpart – moral distress. What is known about moral comfort in nursing is that it is the positive outcome of moral situations or moral dilemmas, and several internal and external factors contribute to the achievement of moral comfort. As the positive outcome, further exploration and knowledge on moral comfort is needed. Enhancing and promoting moral comfort in nurses may be the key to addressing and decreasing moral distress in nurses, an abundantly identified issue in nursing literature for more than 40 years. Moral distress has been associated with negative outcomes such as nursing burnout, increased nurse turnover rates, missed nursing care, and compassion fatigue, which negatively impact nurses, patients, and healthcare organizations (Aiken et al., 2008; Aiken et al., 2002; Catlin et al., 2008; Cavaliere et al., 2010; Corley, 2002; Glasberg et al., 2008; Gutierrez, 2005; Hanna, 2004; Kalisch, 2015; Meltzer & Huckabay, 2004; Papastavrou et al., 2014; Pauly et al., 2009; Winters & Neville, 2012). Several instruments to measure moral distress in nursing have been developed, while instruments to measure the concept of moral comfort in nursing were not found, thus leading the researcher of this study to develop the new Moral Comfort Questionnaire (MCQ). The instrument was developed theoretically using moral comfort literature, as well as what is known about moral distress. The MCQ has undergone two revisions with

previous pilot psychometric testing of the 28-item second version. The 35-item two-part third version was psychometrically tested as part of this current dissertation study, which included a proposed five-factor model of the MCQ.

Psychometric evaluation is essential for testing the reliability and validity of new instruments to establish scientific acceptance for use in research studies (Carmines & Zeller, 1979; Waltz et al., 2017). Psychological testing in general imparts robust implications, thereby requiring the strongest tools and procedures (Furr, 2018). The purpose of this study was to test the reliability and validity of the new 35-item MCQ including test-retest reliability (stability), internal consistency (homogeneity), content validity, discriminant validity, and confirmatory factor analysis of the proposed five-factor model. The findings of this study showed alignment and misalignment with accepted parameters for establishing reliability and validity of the MCQ.

Summary of Results

Cronbach's coefficient alpha is widely used as the preferred measure for establishing reliability for evaluation of an instrument's internal consistency (DeVellis, 2017; Waltz et al., 2017). The MCQ's Cronbach's coefficient alpha values were consistent with establishing strong internal consistency of the MCQ. The values for MCQ Part 1, MCQ Part 2, and MCQ Combined were .920, .923, and .951, respectively; a minimum of .70 is acceptable for new measures (Nunnally & Berstein, 1994). Additionally, the reliability analysis showed no redundancy of items, with no indications for deletion of any items. These results suggest strong internal consistency of the MCQ, supporting the instrument's homogeneity and relevance of all of the items in the measurement of moral comfort.

While the MCQ's internal consistency was strong, test-retest reliability results to establish the MCQ's stability over time were inconclusive for correlation and agreement between Time 1 and Time 2 administrations of the instrument. The Bland-Altman analysis showed strong agreement between Time 1 and Time 2, while Spearman's correlation coefficients and weighted kappa analyses showed weak to moderate correlation and agreement, respectively.

Content validity evaluates the extent to which an instrument measures a specific domain or construct (Carmines & Zellers, 1979; DeVellis, 2017). Content validity of the MCQ was established a priori by expert content review. Two doctorally prepared content experts in the field of instrument development independently reviewed the MCQ for evaluation of items and recommendations for revision. Revisions of existing items were made and inclusion of additional items based on content expert feedback resulted in the current two-part, 35-item MCQ. Following revision of the instrument, the content experts agreed that all items were relevant to measuring moral comfort in nurses.

Discriminant validity between the MCQ and the revised Moral Distress Scale (MDSR) was used as a validity measure. Discriminant evidence was found between the MCQ and the MDSR (r = -.219). The target maximum for establishing discriminant evidence was ± .3. These results suggest the MCQ and MDSR measured different concepts, as evidenced by the low correlation value, which is consistent with establishing discriminant validity of the MCQ. A one-way ANOVA examining differences in moral comfort and moral distress levels between geographical groups showed there were no differences between groups, suggesting there was no bias, thus supporting discriminant validity.

Confirmatory factor analysis (CFA) results either support or reject a priori theoretically derived CFA models. Although the CFA results showed moderate fit, the proposed five-factor model is nonetheless rejected. Several statistical analyses were examined to evaluate potential rationales contributing to the rejection of the model. Review of the inter-item correlation matrix and Cronbach's alpha values showed no indication of specific items that may have impacted rejection of the proposed MCQ CFA model. Post hoc analyses (hierarchical cluster analysis and subsequent exploratory factor analysis) supported a two-factor MCQ model, which were identified as internal factors and external factors.

Discussion

The Cronbach's alpha reliability analysis showed strong internal consistency. However, stability of the MCQ is inconsistent. The differences in the test-retest analyses results may be attributed to the design of the instrument. The MCQ is a two-part instrument requiring reflection on patient encounters and general practice. The first part consists of 15 items for which participants are asked to reflect on a specific patient encounter within the past six months in which he/she faced a moral situation or moral dilemma. The second part consists of 20 items asking participants to reflect on their general practice within the past six months. The discrepancies of Part 1 responses between Time 1 and Time 2 may have been influenced by participants' use of differing patient encounters at different time intervals. Several of the items in Part 2 were related to the participants' work environment, healthcare institution, or nursing leadership. While these factors may be stable over time, the potential exists for fluctuations in the working environment, institutional conditions, and/or nursing leadership between Time 1 and

Time 2, leading to differing responses to the items in Part 2. As such, further testing of the MCQ's reliability using alternative methods will be considered. For example, instructing participants to use the same patient encounter for both Time 1 and Time 2 may help establish the instrument's stability.

Another possibility is the erroneous use of test-retest reliability in this study. As discussed previously, moral comfort is an emerging concept with limited availability of literature and knowledge on the concept. As such, a question has arisen that would impact reliability testing as it relates to stability: is moral comfort a trait or a state? If moral comfort is a trait, then it is a characteristic that is possessed by an individual. While traits, or characteristics, may change over long periods time, they are generally stable or remain the same over short periods of time. However, as a state, moral comfort would be situationally based and therefore subject to change over a short period of time. Corley and Minick's (2002) definition of moral comfort supports moral comfort as a state – an individual's feeling of ease with one's decision related to a moral dilemma. However, this leads to an additional question: is moral comfort a state that is impacted by a combination of possession of specific traits (internal factors) and external factors? Moral comfort as the positive outcome of a moral situation is also suggestive of it as a state, not a trait. As there is little empirical literature on moral comfort, at this time there are no definitive answers to these questions; therefore further exploration of moral comfort both qualitatively and quantitatively is warranted. Conducting quantitative or mixed-methods studies using the MCQ, the only measure of its kind, may potentially assist with answering these questions regarding moral comfort as a trait or a state.

Rejection of the proposed five-factor model of the MCQ, based on the results of the confirmatory factor analysis, led to further post hoc analyses and the discovery of a two-factor model of the MCQ with good fit statistically (two-factor EFA results), as well as theoretically and conceptually. As a result of the two-factor EFA results, a retrospective review of what is known about moral comfort and the revised MCQ concept tree, led to the discovery that the five factors, or concepts, adequately fit into two theoretically outlined factors: morally related internal factors and organization/environment-related external factors (Corley, 2002). Individual factors are usually within the control of the nurse, impacting ethical decision-making, while external factors (e.g. administrative support or organizational ethical climate) are often not within the control of the nurse, impacting the nurse's ability to take moral action. While the researcher included internal and external factors as part of the revised Moral Comfort Questionnaire concept tree and while grouping the MCQ items into the five dimensions of the proposed five-factor MCQ model, a priori proposal of a two-factor model for confirmatory factor analysis testing was not considered. Further psychometric testing of the two-factor model is warranted.

Study Limitations

Limitations of this study included self-reporting and Internet-based survey design. Internet-based survey design may have prohibited eligible participants from participating based on their access to technology or their encountering technical difficulties while taking the electronic surveys, potentially curtailing generalizability or external validity. Self-report instruments create the potential to influence social desirability, or the participant's tendency to respond to items based on how he/she thinks one should

respond, especially when associated with topics of a sensitive nature (Waltz et al., 2017), thus potentially introducing bias. Self-report instruments may also contribute to missing data; due to ethical implications participants in this study were not required (i.e., forced) to respond to each item. Therefore, randomly missing data, or incomplete responses, was another limitation. An additional study limitation potentially contributing to missing data was the two-part design of the instrument allowing participants to complete only one of the two parts. A missing value analysis showed the percentage of missing data was not significant (0 to 5.5%) with no pattern to the missing data. Lastly, length of the surveys, the 35-item MCQ and the 21-item revised Moral Distress Scale, which measured two dimensions (frequency and intensity) for each item, was a limitation to this study, potentially contributing to missing data or willingness to participate.

Implications for Research

Moral comfort is a concept in nursing that has not been empirically explored. The MCQ will provide an instrument for conducting empirical studies. However, based on the results of its psychometric evaluation, further conceptual work on the concept and instrument and subsequent testing of the MCQ are warranted. Establishment of the MCQ's reliability and validity will afford the opportunity for utilizing the instrument in empirical studies. As its negative counterpart, moral distress can be concurrently studied with moral comfort, potentially providing a better understanding of both concepts individually and comparatively in various healthcare settings (e.g., not-for-profit versus for-profit, Magnet-designated versus non-Magnet-designated, acute care versus long-term care), nursing specialties, and even within interdisciplinary healthcare professions. Comparative studies may also be conducted to investigate potential differences in moral

comfort levels between distinct nursing demographics and characteristics such as age or generational group, gender, race/ethnic background, years of experience, etc. Use of the MCQ to explore moral comfort in nurses and the relationships between organizational culture and individual nursing factors may help organizations develop and implement policies and strategies to promote moral comfort in nurses, which may potentially have a positive impact on nursing care and patient outcomes.

Implications for Nursing Practice

Moral comfort in nursing has been described as the positive outcome of moral dilemmas with moral distress as the negative outcome. While there is substantial nursing literature on moral distress and instruments to measure moral distress (Corley et al., 2001; Corley et al., 2005; Eizenberg et al., 2009; Hamric & Blackhall, 2007; Hamric et al., 2012; M. Raines, 1994; Schaefer et al., 2017; Wocial & Weaver, 2013), there is a paucity of literature on moral comfort. The development of a reliable and valid instrument to measure moral comfort may prove useful in conducting research to examine the concept and provide a greater understanding of moral comfort, while also shedding light on moral distress. As individuals, nurses may be able to use results from the MCQ to help identify possession of internal factors necessary for experiencing moral comfort, while also identifying internal factors that may need development or improvement. Nurses may also use the results to evaluate the impact of their work environment, nurse leaders, and ethical environment on their experience of moral comfort. Leaders in healthcare organizations may potentially use MCQ to evaluate moral comfort in their nurses. The findings may help development of strategies to promote moral comfort within their institutions. Lastly, promotion of moral comfort in nurses

within healthcare organizations may positively impact nursing care and patient outcomes. However, literature on the impact of moral distress and moral comfort in nurses on patient outcomes is limited. Using the MCQ to assess nurses' moral comfort levels may potentially be linked to data regularly collected by healthcare organizations to measure nurse-sensitive quality indicators (NQI) as established by The Joint Commission (n.d.) and the Agency for Healthcare Research and Quality (AHRQ, n.d.). Healthcare organizations are required to publicly report the incidence of patient outcomes directly impacted by nursing care, which may include the number of patient falls and certain hospital-acquired conditions (e.g., central line-associated bloodstream infections, catheter-associated urinary tract infections, hospital-acquired pressure injuries). The efficacy of strategies and interventions implemented to promote moral comfort can be tested by conducting studies to investigate NQIs and levels of moral comfort in nurses may provide insight on the impact of moral comfort in nurses on nurse-specific patient outcomes.

Conclusion

Moral comfort is an understudied concept in nursing. Corley and Minick (2002) provided a definition for moral comfort –

> an individual's feelings of ease with decisions and actions related to ethical problems. It occurs when the professional is able to make decisions in the best interest of patients, has his or her ideas about the patient considered in the plan of care, or is able to relieve or reduce the patient's pain and suffering. (p. 8)

Corley (2002) further described moral comfort as the positive outcome of a moral dilemma and the opposite of moral distress. Promoting moral comfort in nursing may

potentially have a positive impact on nurses' responses to and outcomes related to moral dilemmas, thereby positively impacting healthcare organizations in general and patient outcomes. Therefore, a better understanding of moral comfort in nursing is necessary. In response to this necessity for increased knowledge, a unique instrument to measure moral comfort in nurses, the 35-item Moral Comfort Questionnaire (MCQ), was theoretically developed and psychometrically evaluated to establish its reliability and validity. The specific aims of this study were met. The MCQ's reliability and validity were evaluated by testing the instrument's internal consistency (Cronbach's alpha), test-retest reliability (Spearman's correlation coefficient, weighted kappa, and Bland-Altman analysis), discriminant validity, and theoretical factor structure through confirmatory factor analysis, with additional post hoc analyses (hierarchical cluster analysis and subsequent two-factor exploratory factor analysis).

The results of this study were supportive of establishing the MCQ's internal consistency, content validity, and discriminant validity. Although confirmatory factor analysis (CFA) was initially intended for establishing construct validity, the theorized five-factor model was rejected. A post hoc hierarchical cluster analysis led to a two-factor exploratory factor analysis of the items, resulting in identification of the two factors as morally related internal factors and organization/environment-related external factors. Test-retest reliability results were inconclusive for establishing stability between Time 1 and Time 2 administrations of the MCQ; the results of the Spearman's correlation coefficient and weighted kappa analysis contradicted the results of the Bland-Altman analysis.

Further psychometric testing of the MCQ, the only instrument designed to measure moral comfort, on a different sample of participants is warranted to confirm the exploratory factor analysis results supportive of a two-factor model of the MCQ and to further analyze test-retest reliability. In addition to including psychometric evaluation measures that have yielded results supportive of the MCQ's reliability and validity, the following considerations should be taken when designing the methodology of the subsequent study: (a) tertiary content expert review, (b) confirmatory factor analysis of the two-factor model, and (c) participants willing to participate in Time 1 and Time 2 of the study should be asked to use the same specific patient encounter and general practice scenarios when responding to Time 1 and Time 2. Increased consideration should be taken when designing the electronic surveys to promote participants' completion of the surveys in their entirety. Lastly, exploration of moral comfort as a trait versus a state is recommended.

Moral comfort is an important concept in nursing. While complete eradication of moral distress is unrealistic, understanding and promoting moral comfort may decrease the incidence of moral distress, potentially yielding positive implications for nurses, patients, and healthcare organizations at large. Therefore, a reliable and valid instrument is needed for conducting empirical studies on moral comfort in nurses, while also concurrently evaluating moral distress. supporting the need for further revision and psychometric evaluation of the Moral Comfort Questionnaire. Use of the exclusive MCQ in future quantitative, comparative, or mixed-methods research studies will help broaden the body of knowledge on moral comfort by exploring the positive side of a negative

issue in nursing, inciting positive changes in nurses, patient outcomes, and healthcare organizations at large.

APPENDICES

Appendix A. Permission to Reprint the Moral Distress Thermometer

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Mar 22, 2020

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Licensed Content Author	Michael T. Weaver, Lucia D. Wocial
Licensed Content Date	May 20, 2012
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Appendix B. Moral Comfort Questionnaire – Revised

2018.10.14

Moral Comfort Questionnaire – Revised
Part 1: Specific Situation

Reflecting on your nursing practice within the past 6 months, *please **identify a patient encounter*** in which you were faced with a moral situation* or moral dilemma** and rate how much you agree or disagree with each of the following statements:	**Strongly Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Strongly Agree**
	1	**2**	**3**	**4**
1A. I felt comfortable making decisions in relation to this moral situation.				
2A. I was confident in my ability to distinguish between right and wrong in making a moral decision.				
3A. I was concerned for the well-being of my patient.				
4A. I had an obligation to help.				
5A. My nursing expertise gave me confidence with making this ethical decision.				
6A. I considered my patients' preferences in my decisions.				
7A. My actions were ethically based.				
8A. I was willing to take a stand for my patient's best interest, regardless of the consequences.				
9A. I was willing to voice my concerns even though others did not agree with me.				
10A. I was willing to take full responsibility for my actions.				
11A. I was able to act on my moral decisions without fear of being penalized.				
12A. I was able to openly raise questions with all healthcare providers.				
13A. I feel that I made the right decision.				
14A. I did everything I could to ensure my patient received good care.				
15A. I am at peace with how I handled the situation.				

16A. What made you the most uncomfortable in this situation?

***Moral situation:** An everyday patient-care situation in which the nurse is aware of an issue related to basic patient care (such as, but not limited to, a wrong medication dose) requiring an intervention for correction and prevention of potential patient harm.

****Moral dilemma:** Occurs when the nurse is confronted with a conflict of values or a conflict of obligations that pose conflicting courses of action potentially leading to patient suffering or harm.

Moral Comfort Questionnaire – Revised
Part 2: General Experience

Reflecting on your nursing practice ***in general*** over the past 6 months, please rate how much you agree or disagree with each of the following statements:	**Strongly Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Strongly Agree**
	1	**2**	**3**	**4**
1B. I can be supportive of my patients' decisions even if they differ from my own.				
2B. I reflect on my personal moral beliefs and values.				
3B. I am respectful of my patients' moral beliefs and values.				
4B. I clearly understand the nursing scope of practice.				
5B. I am usually able to think through situations.				
6B. I reflect on my past experiences with moral dilemmas to guide my decision-making.				
7B. I am empowered to openly voice my concerns regarding patients' medical plans of care.				
8B. My boss supports my decisions and moral actions.				
9B. I have authority to independently create nursing plans of care for my patients.				
10B. I am competent in the area of clinical reasoning.				
11B. The nursing administrators in my hospital are supportive of staff nurses' decisions.				
12B. I have authority to be my patients' advocate.				
13B. My patients count on me to do the right thing.				
14B. I have control of my nursing practice.				
15B. I am supported when I question a physician's orders.				
16B. I am a respected member of the healthcare team.				
17B. My nurse colleagues are supportive of my decisions and actions.				
18B. My organization promotes an ethical culture.				
19B. In my organization, good nursing care is more important than avoiding lawsuits.				
20B. My organization's policies promote good nursing care.				

21B. What could be done to improve/increase moral comfort where you work?

Appendix C. IRB Approval: Pilot

Institutional Review Board
Division of Research
777 Glades Rd.
Boca Raton, FL 33431
Tel: 561.297.1383
fau.edu/research/researchint

Charles Dukes, Ed.D., Chair

DATE:	August 23, 2017
TO:	Ruth Tappen
FROM:	Florida Atlantic University Social, Behavioral and Educational Research IRB
PROTOCOL #:	1071175-1
PROTOCOL TITLE:	[1071175-1] Psychometric Evaluation of the Moral Comfort Questionnaire among Acute Care Staff Nurses: A Pilot Study
SUBMISSION TYPE:	New Project
REVIEW CATEGORY:	Exemption category # *A3*
ACTION:	DETERMINATION OF EXEMPT STATUS
EFFECTIVE DATE:	August 22, 2017

Thank you for your submission of New Project materials for this research study. The Florida Atlantic University Social, Behavioral and Educational Research IRB has determined this project is EXEMPT FROM FEDERAL REGULATIONS. Therefore, you may initiate your research study.

We will keep a copy of this correspondence on file in our office. Please keep the IRB informed of any substantive change in your procedures, so that the exemption status may be re-evaluated if needed. Substantive changes are changes that are not minor and may result in increased risk or burden or decreased benefits to participants. Please also inform our office if you encounter any problem involving human subjects while conducting your research.

If you have any questions or comments about this correspondence, please contact Danae Montgomery at:

Institutional Review Board
Research Integrity/Division of Research
Florida Atlantic University
Boca Raton, FL 33431
Phone: 561.297.1383
researchintegrity@fau.edu

* Please include your protocol number and title in all correspondence with this office.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within our records.

Appendix D. IRB Approval: Study Site

[redacted] [redacted]

DATE: May 14, 2018

TO: Natalie Bermudez, PhDc
FROM: [redacted]

STUDY TITLE: [1182793-1] Psychometric Evaluation of the Moral Comfort Questionnaire amongst Acute Care Staff Nurses: A Pilot Study

REFERENCE #:
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: May 13, 2018
EXPIRATION DATE: May 12, 2019
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # *(7)*

Thank you for your submission of New Project materials for this study. [redacted] IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. The study was approved with a waiver of signed consent. All research must be conducted in accordance with this approved submission.

Documents Reviewed:

- Advertisement - MCQ Email Recruitment (UPDATED: 01/24/2018)
- Advertisement - MCQ Recruitment Flyer (UPDATED: 01/24/2018)
- [redacted] (UPDATED: 04/15/2018)
- Consent Form - Informed Consent, Procedures, Instructions, etc. (UPDATED: 03/27/2018)
- Letter - FAU IRB Approval Letter (UPDATED: 04/10/2018)
- Letter - [redacted]
- Letter - [redacted]
- Letter - Vcan Grant Contract (UPDATED: 01/14/2018)
- Other - Research Compliance Email (UPDATED: 05/4/2018)
- Other - [redacted] (UPDATED: 02/22/2018)
- Other - [redacted] (UPDATED: 02/18/2018)
- Other - [redacted](UPDATED: 02/18/2018)
- Other - [redacted] (UPDATED: 02/18/2018)
- Other - [redacted] (UPDATED: 02/7/2018)
- Protocol - [redacted] (UPDATED: 04/15/2018)
- Questionnaire/Survey - Moral Distress Scale - Revised (UPDATED: 01/14/2018)
- Questionnaire/Survey - Moral Comfort Questionnaire (UPDATED: 01/14/2018)

Attached is a stamped approved consent form (information sheet). .

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review on an annual basis. If continuing review approval is not granted before the expiration date of May 12, 2019, approval of this study expires on that date.

In conducting this study you are required to follow the requirements listed in the [redacted]

If you have any questions, please contact the B[redacted] Please include your study title and/or IRBNet ID in all correspondence with the IRB.

Sincerely,

[redacted]
IRB Chair

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within [redacted] records.

Appendix E. Moral Comfort Questionnaire: Content Expert Evaluation

Moral Comfort Questionnaire: Content Expert Evaluation

- **Please complete this form electronically.**
- **Please "click" on the box below the number that corresponds with your evaluation of the MCQ item. Please make only one selection per item.**
- **A space below each item has been provided for specific comments/feedback/suggestions.**

Rate the following statements:

1 = Not Relevant, 2 = Somewhat Relevant, 3 = Quite Relevant, 4 = Very Relevant

Statements:		**1**	**2**	**3**	**4**
1.	When faced with an ethical situation, I am comfortable with identifying right versus wrong.	☐	☐	☐	☐
	Comments: Type Here				
2.	I feel uneasy when I am involved in questionable ethical situations.	☐	☐	☐	☐
	Comments: Type Here				
3.	My co-workers and patients would describe me as being caring, compassionate, and empathetic.	☐	☐	☐	☐
	Comments: Type Here				
4.	I present myself as being genuinely supportive of all my patients and their families.	☐	☐	☐	☐
	Comments: Type Here				
5.	It is my obligation to help others, especially patients, when they are in need of assistance.	☐	☐	☐	☐
	Comments: Type Here				
6.	I consider myself an expert nurse that incorporates both knowledge and experience into clinical decision-making.	☐	☐	☐	☐
	Comments: Type Here				
7.	I feel comfortable making clinical decisions.	☐	☐	☐	☐
	Comments: Type Here				
8.	Prior to taking action, I reflect on my past experiences to guide my decision-making.	☐	☐	☐	☐
	Comments: Type Here				
9.	I consider my patients' preferences and concerns in my decisions.	☐	☐	☐	☐
	Comments: Type Here				
10.	I consider my personal beliefs and values when making decisions for my patients.	☐	☐	☐	☐
	Comments: Type Here				
11.	I make ethically based decisions that lead to morally based actions.	☐	☐	☐	☐
	Comments: Type Here				
12.	I am usually confident and comfortable with my patient care decisions and subsequent actions.	☐	☐	☐	☐
	Comments: Type Here				
13.	I clearly understand the nursing scope of practice.	☐	☐	☐	☐
	Comments: Type Here				

18.	I am competent in the area of clinical reasoning.	☐	☐	☐	☐
	Comments: Type Here				
19.	Nursing administrators are supportive of nurses' decisions and moral actions.	☐	☐	☐	☐
	Comments: Type Here				
20.	I have authority to be my patients' advocate in all situations.	☐	☐	☐	☐
	Comments: Type Here				
21.	I am willing take a stand, regardless of the consequences, when I know my action is the right thing to do.	☐	☐	☐	☐
	Comments: Type Here				
22.	I am willing to voice my concerns about a patient's plan of care even though others may not agree with my point of view.	☐	☐	☐	☐
	Comments: Type Here				
23.	I take full responsibility for my actions.	☐	☐	☐	☐
	Comments: Type Here				
24.	I understand that patients count on me to do the right thing.	☐	☐	☐	☐
	Comments: Type Here				
25.	I am able to act on my moral decisions without fear of being penalized.	☐	☐	☐	☐
	Comments: Type Here				
26.	I have full control of my nursing practice.	☐	☐	☐	☐
	Comments: Type Here				
27.	I am allowed to question the patient's plan of care.	☐	☐	☐	☐
	Comments: Type Here				
28.	I feel that I am able to openly communicate with all healthcare providers.	☐	☐	☐	☐
	Comments: Type Here				
29.	I feel that I am a respected member of the healthcare team.	☐	☐	☐	☐
	Comments: Type Here				

Appendix F. Moral Comfort Questionnaire

Moral Comfort Questionnaire

Reflecting on your nursing practice within the past 12 months, please rate the following statements:

1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Somewhat Agree, 4 = Strongly Agree

	Statements:	1	2	3	4
1.	When faced with a moral dilemma, I am confident I can distinguish between right and wrong and make a moral decision.	☐	☐	☐	☐
2.	I often feel uneasy with making decisions in unethical situations.	☐	☐	☐	☐
3.	I have a genuine concern for others' well-being.	☐	☐	☐	☐
4.	One of my core values is being genuinely supportive of my patients' decisions even when they differ from my own.	☐	☐	☐	☐
5.	It is my obligation to help others, especially patients, when they are in need of assistance.	☐	☐	☐	☐
6.	My experience and clinical expertise give me confidence when ethical decision-making is required.	☐	☐	☐	☐
7.	Prior to taking action, I reflect on my past experiences with moral dilemmas to guide my decision-making.	☐	☐	☐	☐
8.	I am aware of and reflect on my own moral beliefs and values, at the same time being respectful of my patients' moral beliefs and values.	☐	☐	☐	☐
9.	I consider my patients' preferences and concerns in my decisions.	☐	☐	☐	☐
10.	I make ethically based decisions that lead to morally based actions.	☐	☐	☐	☐
11.	I am usually confident and comfortable with my patient care decisions and subsequent actions.	☐	☐	☐	☐
12.	I clearly understand the nursing scope of practice.	☐	☐	☐	☐
13.	I have excellent critical thinking abilities.	☐	☐	☐	☐
14.	I practice in an environment that enables me to openly voice my concerns regarding patients' medical and nursing plans of care.	☐	☐	☐	☐
15.	My nurse manager supports my decisions and moral actions.	☐	☐	☐	☐
16.	I have authority to independently create a plan of action for my patients.	☐	☐	☐	☐
17.	I am competent in the area of clinical reasoning.	☐	☐	☐	☐
18.	My nursing administrator(s) is(are) supportive of staff nurses' decisions and moral actions.	☐	☐	☐	☐
19.	I have authority to be my patients' advocate in all situations.	☐	☐	☐	☐
20.	I am willing to take a stand for doing the right thing that is in my patient's best interest, regardless of the consequences.	☐	☐	☐	☐
21.	I am willing to voice my concerns about a patient's plan of care even though others may not agree with my point of view.	☐	☐	☐	☐
22.	I take full responsibility for my actions.	☐	☐	☐	☐
23.	I understand that patients count on me to do the right thing.	☐	☐	☐	☐
24.	I am able to act on my moral decisions without fear of being penalized.	☐	☐	☐	☐
25.	I have full control of my nursing practice.	☐	☐	☐	☐
26.	I am allowed to question the patient's plan of care.	☐	☐	☐	☐
27.	I believe I am able to openly communicate with all healthcare providers.	☐	☐	☐	☐
28.	I believe that I am a respected member of the healthcare team.	☐	☐	☐	☐

Appendix G. MDS-R Nurse Questionnaire (Adult)

MDS-R
NURSE QUESTIONNAIRE (ADULT)

Moral distress occurs when professionals cannot carry out what they believe to be ethically appropriate actions because of internal or external constraints. The following situations occur in clinical practice. If you have experienced these situations they may or may not have been morally distressing to you. Please indicate how frequently you experience each item described and how disturbing the experience is for you. If you have never experienced a particular situation, select "0" (never) for frequency. Even if you have not experienced a situation, please indicate how disturbed you would be if it occurred in your practice. Note that you will respond to each item by checking the appropriate column for two dimensions: *Frequency* and *Level of Disturbance*.

	Frequency					Level of Disturbance				
	Never				Very frequently	None				Great extent
	0	1	2	3	4	0	1	2	3	4
1. Provide less than optimal care due to pressures from administrators or insurers to reduce costs.										
2. Witness healthcare providers giving "false hope" to a patient or family.										
3. Follow the family's wishes to continue life support even though I believe it is not in the best interest of the patient.										
4. Initiate extensive life-saving actions when I think they only prolong death.										
5. Follow the family's request not to discuss death with a dying patient who asks about dying.										
6. Carry out the physician's orders for what I consider to be unnecessary tests and treatments.										
7. Continue to participate in care for a hopelessly ill person who is being sustained on a ventilator, when no one will make a decision to withdraw support.										
8. Avoid taking action when I learn that a physician or nurse colleague has made a medical error and does not report it.										
9. Assist a physician who, in my opinion, is providing incompetent care.										
10. Be required to care for patients I don't feel qualified to care for.										
11. Witness medical students perform painful procedures on patients solely to increase their skill.										

	Frequency					Level of Disturbance				
	Never				Very frequently	None				Great extent
	0	1	2	3	4	0	1	2	3	4
12. Provide care that does not relieve the patient's suffering because the physician fears that increasing the dose of pain medication will cause death.										
13. Follow the physician's request not to discuss the patient's prognosis with the patient or family.										
14. Increase the dose of sedatives/opiates for an unconscious patient that I believe could hasten the patient's death.										
15. Take no action about an observed ethical issue because the involved staff member or someone in a position of authority requested that I do nothing.										
16. Follow the family's wishes for the patient's care when I do not agree with them, but do so because of fears of a lawsuit.										
17. Work with nurses or other healthcare providers who are not as competent as the patient care requires.										
18. Witness diminished patient care quality due to poor team communication.										
19. Ignore situations in which patients have not been given adequate information to insure informed consent.										
20. Watch patient care suffer because of a lack of provider continuity.										
21. Work with levels of nurse or other care provider staffing that I consider unsafe.										
If there are other situations in which you have felt moral distress, please write them and score them here:										

Have you ever left or considered quitting a clinical position because of your moral distress with the way patient care was handled at your institution?

No, I've never considered quitting or left a position _____
Yes, I considered quitting but did not leave _____
Yes, I left a position _____

Are you considering leaving your position now? Yes No

Appendix H. Permission to Use MDS-R Nurse Questionnaire (Adult)

From: Ann Hamric <abhamric@vcu.edu>
Date: March 16, 2019 at 11:53:16 EDT
To: Natalie Bermudez <nbermude@health.fau.edu>
Subject: Re: Permission

You are welcome. Good luck, and I will be interested in your results,
Ann

On Sat, Mar 16, 2019, 11:51 AM Natalie Bermudez <nbermude@health.fau.edu> wrote:
Dr. Hamric,

I will most certainly review the new instrument. But you are correct in that I would prefer to use the previous version in order to maintain consistency between my pilot and this study.

Thank you very much for granting permission.

Most sincerely,
Natalie Bermudez

Sent from my iPhone
Please excuse my typos!

On Mar 16, 2019, at 11:39, Ann Hamric <abhamric@vcu.edu> wrote:

Dear Natalie,

Thank you for writing. I am no longer recommending the MDS-R, as we have developed a substantial revision, the Measure of Moral Distress for Healthcare Professionals (MMD-HP). The article describing this instrument is in press. I've attached the instrument so you can take a look at it.

The problem is if you need to use the older instrument because of comparison with your pilot data. If that is the case, you can certainly still use the MDS-R. Let me know what you want to do.

Best wishes,

Ann
****
Ann B. Hamric, PhD, RN, FAAN
Professor Emeritus, School of Nursing
Virginia Commonwealth University

Richmond, VA
****

On Mon, Mar 4, 2019 at 9:26 AM Natalie Bermudez <nbermude@health.fau.edu> wrote:
Greetings Dr. Hamric,

I would like to request permission to use your instrument, the Moral Distress Scale Revised (adult), for my dissertation research. You previously granted permission for my pilot study in 2017 for testing of my new instrument, the Moral Comfort Questionnaire (MCQ). I am now moving forward with further psychometric testing of my instrument on a larger sample which will include confirmatory factor analysis. My intent is to test divergent validity by having nurses complete the MDS-R (adult), in addition to the MCQ.

Please kindly let me know if I have permission. I'm looking forward to your response.

Kind Regards,
Natalie Bermudez MSN RN PCCN-K
PhD Candidate
Florida Atlantic University
Christine E. Lynn College of Nursing

Sent from my iPhone
Please excuse my typos!

Appendix I. Recruitment Flyer

FLORIDA ATLANTIC UNIVERSITY

NURSES WANTED!

Research Study Name: Psychometric Evaluation of the Moral Comfort Questionnaire

PhD Student Investigator: Natalie Bermudez MSNed RN PCCN; **Faculty Investigator:** Ruth M. Tappen EdD RN FAAN

Aim: The aim of this pilot study is to test the reliability and validity of a new measure, Moral Comfort Questionnaire (MCQ).

Potential participants must be full-time, part-time, or per diem staff nurses working on in-patient units. Staff nurses on procedural units, charge nurses, and non-staff nurses are not eligible to participate in this study.

Important Information:

- Participants will be asked to complete 2 surveys (paper or on-line available)
  - *Some participants may be asked to voluntarily take the survey again within 2 weeks of the first time*
- Compensation for Time (approx. 20 minutes) = $15 Amazon Gift Card
- Contact Person: Natalie Bermudez
  - E-mail: nbermude@health.fau.edu; Phone: [redacted]

If interested in participating in this study by completing the 2 questionnaires, or for more information, please contact Natalie Bermudez

FAU Institutional Review Board

1071175-1	
Approved On:	August 22, 2017
Expires On:	N/A

Appendix J. Pilot Recruitment Letter

Subject Line: Pilot Study – Nurses Needed!

Message:

Dear Nurse Colleague,

My name is Natalie Bermudez. I am currently conducting a pilot study, with the guidance of Dr. Ruth M. Tappen from Florida Atlantic University, to test a new research survey that I have developed called Moral Comfort Questionnaire (MCQ). I am in need of acute care staff nurse participants to complete 2 surveys, the MCQ and the revised Moral Distress Scale (MDS-R). Completion of the survey takes approximately 20 minutes and participants will be compensated for their time with a $15 Amazon gift card. If you are willing to participate and meet the inclusion/exclusion criteria below, or would like more information regarding the pilot study and surveys, please click on the link below.

Inclusion Criteria:

- Acute care staff nurse on an in-patient unit or the emergency department
- Employed either as a full-time, part-time status, or per diem status
- Age range of 20 to 75 years
- Willingness to participate in the study

Exclusion Criteria:

- Serves as a primary charge nurse (or equivalent)
- Serves in a managerial or administrative capacity
- Employed in an outpatient or procedural department
- Employed as a seasonal contract or per diem agency nurse

Thank you for your time and consideration of participating in this pilot study.

Click This Link: https://www.surveymonkey.com/r/MCQMDS2017

Warm Regards,
Natalie Bermudez MSNed RN PCCN
PhD Student
Florida Atlantic University
Christine E. Lynn College of Nursing
nbermude@health.fau.edu
[redacted]

Appendix K. IRB Approval: Study

Institutional Review Board
Division of Research
777 Glades Rd.
Boca Raton, FL 33431
Tel: 561.297.1383
fau.edu/research/researchint

Charles Dukes, Ed.D., Chair

DATE:	December 5, 2018
TO:	Ruth Tappen, EdD RN FAAN
FROM:	Florida Atlantic University Social, Behavioral and Educational Research IRB
PROTOCOL #:	1340609-1
PROTOCOL TITLE:	[1340609-1] Psychometric Evaluation of the Moral Comfort Questionnaire among Hospital-Based Direct-Care Registered Nurses
SUBMISSION TYPE:	New Project
REVIEW CATEGORY:	Exemption category # *A3*
ACTION:	DETERMINATION OF EXEMPT STATUS
EFFECTIVE DATE:	December 4, 2018

Thank you for your submission of New Project materials for this research study. The Florida Atlantic University Social, Behavioral and Educational Research IRB has determined this project is EXEMPT FROM FEDERAL REGULATIONS. Therefore, you may initiate your research study.

We will keep a copy of this correspondence on file in our office. Please keep the IRB informed of any substantive change in your procedures, so that the exemption status may be re-evaluated if needed. Substantive changes are changes that are not minor and may result in increased risk or burden or decreased benefits to participants. Please also inform our office if you encounter any problem involving human subjects while conducting your research.

If you have any questions or comments about this correspondence, please contact Donna Simonovitch at:

Institutional Review Board
Research Integrity/Division of Research
Florida Atlantic University
Boca Raton, FL 33431
Phone: 561.297.1383
researchintegrity@fau.edu

* Please include your protocol number and title in all correspondence with this office.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within our records.

Appendix L. Completion of Surveys: Instructions and Information

Information for Study Participants

Purpose: The purpose of this study is to test the reliability and validity of the new Moral Comfort Questionnaire.

Informed Consent, Confidentiality, & Compensation:

1. You are consenting to participate in this pilot study by completing the survey. If you choose, you keep this page containing the consent statement for your personal records.
2. Participation in this study is your choice. It will take approximately 17 minutes to complete the survey.
3. Benefits: May result in self-identification of traits that promote moral comfort.
4. Risks: No foreseeable physical risks are associated with this study. However, you may experience uncertainty or discomfort by recalling situations when you experienced moral distress.
5. You may discontinue participation in this study at any time without penalty.
6. All data and information collected for this study will remain private and confidential. Data and information will only be shared with the individuals conducting the study.
7. Participants will not receive compensation for participating in this study.
8. If you experience problems or have questions regarding your rights as a research subject, contact the Florida Atlantic University Division of Research at (561) 297-1383. For other questions about the study, you should call the student investigator or faculty mentor (see next page for contact information)

Researcher Contact Information:

- Natalie Bermudez, MSN, RN, PCCN
  - Phone #: [redacted]; E-mail: nbermude@health.fau.edu
- Dr. Ruth M. Tappen, EdD, RN, FAAN
  - Phone #: (561) 297-3188; E-mail: rtappen@health.fau.edu

Important Definitions:

This questionnaire includes the use of terms such as ethics (or ethical) and moral (or morality). These terms are very often used interchangeably. While they are related, their meanings are different. For the purposes of this questionnaire, they are defined below. A definition for moral dilemma and moral distress are also provided.

- **Ethics:** 1) *knowing* what is right or wrong, 2) thinking process between right and wrong
- **Morality:** 1) *doing* what is right or wrong, 2) the activity of right versus wrong.
- **Moral situation:** An everyday patient-care situation in which the nurse is aware of an issue related to basic patient care (such as, but not limited to, a wrong medication dose) requiring an intervention for correction and prevention of potential patient harm.
- **Moral dilemma:** Occurs when the nurse is confronted with a conflict of values or a conflict of obligations that pose conflicting courses of action potentially leading to patient suffering or harm.

Appendix M. Study Recruitment Letter

Subject Line: Research Study – Nurse Participants Needed
Message:

Dear Nurse Colleague,

My name is Natalie Bermudez. I am currently conducting a research study, with the guidance of Dr. Ruth M. Tappen from Florida Atlantic University, to test a new research survey that I have developed called the Moral Comfort Questionnaire (MCQ). I am in need of hospital-based direct-care registered nurse participants to complete 2 surveys, the MCQ and the revised Moral Distress Scale (MDS-R). Completion of the survey takes approximately 17 minutes. If you are willing to participate and meet the inclusion/exclusion criteria below, or would like more information regarding the pilot study and surveys, please click on the URL link or scan the QR code below:

URL Link: https://redcap.fau.edu/surveys/?s=DRFM78NPR8

Inclusion Criteria:

- Direct-care registered nurse working on an in-patient unit
- Direct-care registered nurse that intermittently serves as a relief (as needed) charge nurse, providing direct patient care at least 50 percent of the time
- Employed either as full-time or part-time status
- Employed as per diem status working a minimum of one shift per week
- Willingness to participate in the study

Exclusion Criteria:

- Serves as a primary charge nurse, or equivalent role, providing less than 50 percent direct patient care)
- Per diem registered nurse working less than one shift per week
- Serves in a managerial or administrative capacity
- Employed in an outpatient or procedural department
- Employed as a contract or per diem agency registered nurse

Thank you for your time and consideration of participating in this study. Please invite your nurse colleagues to also participate in this very important study.

Please feel free to contact me with any questions regarding this pilot study via telephone or e-mail (contact information is below).

Warm Regards,
Natalie Bermudez, MSN, RN, PCCN-K
PhD Candidate
Florida Atlantic University
Christine E. Lynn College of Nursing
nbermude@health.fau.edu; [redacted]

Appendix N. Participant Demographic Information

1. Please provide your age:_____
2. Please indicate your gender:
   - ☐ Male ☐ Female ☐ Prefer not to answer
3. How long have you been a nurse (approximate years)?_____
4. Please select that which best describes your area of practice:

☐ Critical Care/Intensive Care	☐ Neonatal ICU
☐ Emergency Department	☐ Oncology
☐ Medical Surgical	☐ Orthopedics
☐ Medical Telemetry	☐ Progressive Care
☐ Cardiac Telemetry	☐ Pediatrics
☐ Mother-Baby/Post-Partum	☐ Pediatric ICU
	☐ Other

5. Do you serve as a charge nurse (primary or as needed)?
   - ☐ Yes
   - ☐ No
6. Please indicate your highest nursing degree earned:
   - ☐ Diploma
   - ☐ Associate's
   - ☐ Bachelor's
   - ☐ Master's
   - ☐ DNP or equivalent
   - ☐ PhD or equivalent
7. Religious Preference/Affiliation:_____
8. Which country are you currently living in?_____
9. How did you learn about this study?
   - ☐ AACN website ☐ ANA email
   - ☐ NTI Research Recruitment Table ☐ ANA website
   - ☐ STTI "Global Member Forum" ☐ FNA e-mail
     - ☐ From a colleague ☐ FNA website
     - ☐ Other

<u>Secondary Completion of the MCQ Survey:</u>

1. Are you willing to complete the survey a second time? ☐ Yes ☐ No
2. If yes, please provide an email address so that you may be contacted within at least 2 weeks with instructions on accessing the MCQ survey a second time:

REFERENCES

Abendroth, M., & Flannery, J. (2006). Predicting the risk of compassion fatigue: A study of hospice nurses. *Journal of Hospice and Palliative Nursing, 8*, 346-356.

Agency for Healthcare Research and Quality. (n.d.). *Home page.* Retrieved from www.ahrq.gov.

Aiken, L. H., Cimiotti, J. P., Sloane, D. M., Smith, H. L., Flynn, L., & Neff, D. F. (2011). Effects of nurse staffing and nurse education on patient deaths in hospitals with different nurse work environments. *Medical Care, 49*(12), 1047-1053.

Aiken, L. H., Clarke, S. P., Sloane, D. M., Lake, E. T., & Cheney, T. (2008). Effects of hospital care environment on patient mortality and nurse outcomes. *Journal of Nursing Administration, 38*(5), 223-229. doi:10.1097/01.NNA.0000312773.42352.d7

Aiken, L., H., Clarke, S. P., Sloane, D. M., Sochalski, J., & Silber, J. H. (2002). Hospital nurse staffing and patient morality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association, 288*(16), 1987-1993. doi:10.1001/jama.288.16.1987

Altman, D. G., & Bland, J. M (1983). Measurement in medicine: The analysis of method comparison studies. *The Statistician, 32*, 307-317.

Ameri, M., Kavousi, A., & Safavibayatneed, Z. (2016). Moral distress of oncology nurses and morally distressing situations in oncology units. *Australian Journal of Advanced Nursing, 33*(3), 6-12.

American Nurses Association. (2015). *Code of ethics for nurses with interpretive statements.* Silver Spring, MD: Author.

Aristotle. (1976). *The ethics of Aristotle: The Nicomachean ethics* (J. A. K. Thomson, Trans.). London, England: The Penguin Group. (Original work written between 384-323 BC).

Atabay, G., Cangarli, B. G., & Penbek, S. (2015). Impact of ethical climate on moral distress revisited: Multidimensional view. *Nursing Ethics, 22*(1), 103.116. doi:10.1177/0969733014542674

Austin, W. J., Kagan, L., Rankel, M., & Bergum, V. (2008). The balancing act: Psychiatrists' experience of moral distress. *Medicine, Health Care and Philosophy, 11,* 89-97. doi:10.1007/s11019-007-9083-1

Autonomy. (n.d.). In *Merriam-Webster's online dictionary*. Retrieved from https://www.merriam-webster.com/dictionary/autonomy

Barrett, E. A. M. (2015). Barrett's theory of power as knowing participation in change. In M. C. Smith & M. E. Parker (Eds.), *Nursing theories and nursing practice* (pp. 495-508). Philadelphia, PA: F. A. Davis Company.

Beauchamp, T. L. (2001). *Philosophical ethics: An introduction to moral philosophy* (3rd ed.). Boston, MA: McGraw-Hill.

Begley, A. M. (2005). Practising virtue: A challenge to the view that a virtue centered approach to ethics lacks practical content. *Nursing Ethics, 12*(6), 622-637. doi:10.1191/0969733005ne832oa

Bermudez, N. (2016). *Building the concept of moral cognizance.* Unpublished manuscript. Christine E. Lynn College of Nursing, Florida Atlantic University, Boca Raton, FL.

Bermudez, N. (2018). *Exploring the relationship between autonomy and moral agency in nursing practice: An integrative review.* Manuscript submitted for publication.

Bishop, A. H., & Scudder, J. R. (1987). Nursing ethics in an age of controversy. *Advances in Nursing Science, 9*(3), 34-43.

Bland, J. M., & Altman, J. M. (1999). Measuring agreement in method comparison studies. *Statistical Methods in Medical Research, 8*(2), 135-160.

Bland, J. M., & Altman, J. M. (2010). Statistical methods for assessing agreement between two methods of clinical measurement. *International Journal of Nursing Studies, 47*(8), 931-936. doi:10.1016/j.i.jnurstu.2010.03.004

Bollen, K. A. (1989). *Structural equations with latent variables.* New York, NY: John Wiley & Sons.

Borhani, F., Abbaszaddeh, A., Mohamadi, E., Ghasemi, E., & Hoseinabad-Farahani, M. J. (2017). Moral sensitivity and moral distress in Iranian critical care nurses. *Nursing Ethics, 24*(4), 474-482. doi:10.1177/09697330156404700

Boykin, A., & Schoenhofer, S. O. (2001). *Nursing as caring: A model for transforming practice* [Kindle edition]. Retrieved from http://www.amazon.com

Burston, A. S., & Tuckett, A. G. (2012). Moral distress in nursing: Contributing factors, outcomes and interventions. *Nursing Ethics, 20*(3), 312-324. doi:10.1177/0969733012462049

Carmines, E. G., & Zellar, R. A. (1979). *Reliability and validity assessment*. Thousand Oaks, CA: Sage.

Catlin, A., Armigo, C., Volat, D., Vale, E., Hadley, M. A., Gong, W., … Anderson, K. (2008). Conscientious objection: A potential neonatal nursing response to care orders that cause suffering at the end of life? Study of a concept. *Neonatal Network, 27*(2), 101-108. doi:10.1891/0730-0832.27.2.101

Cavaliere, T. A., Daly, B., Dowling, D., & Montgomery, K. (2010). Moral distress in neonatal intensive care RNs. *Advances in Neonatal Care, 10*(3), 145-156. doi:10.1097/ANC.0b013e3181dd6c48

Chinn, P., & Watson, J. (1994). *Art and aesthetics in nursing.* New York, NY: National League for Nursing.

Coetzee, S. K., & Klopper, H. C. (2010). Compassion fatigue within nursing practice: A concept analysis. *Nursing and Health Sciences, 12,* 235-243. doi:10.1111/j.1442-2018.2010.00526.x

Corley, M. C. (2002). Nurse moral distress: A proposed theory and research agenda. *Nursing Ethics, 9*(6), 636-650. doi:10.11191/0969733002ne557oa

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

Corley, M. C., & Minick, P. (2002). Moral distress or moral comfort. *Bioethics Forum, 18*(1/2), 7-14.

Corley, M. C., Minick, P., Elswick, R. K., & Jacobs, M. (2005). Nurse moral distress and ethical work environment. *Nursing Ethics, 12*(4), 381-390. doi:10.1191/0969733005ne809oa

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. doi:10.1111/j.1744-6163.2010.00260.x

de Boer, J., van Rosmalen, J., & van Dijk, M. (2016). Appropriateness of care and moral distress among neonatal intensive care unit staff: Repeated measurements. *British Association of Critical Care Nurses, 21*(3), e19-e27. doi:10.1111/nicc.12206

DeVellis, R. F. (2017). *Scale development: Theory and applications* (4th ed.). Thousand Oaks, CA: Sage.

Duffy, J. R. (2009). *Quality caring in nursing: Applying theory to clinical practice, education, and leadership.* New York, NY: Springer.

Duffy, J. R. (2015). Joanne Duffy's quality-caring model. In M. C. Smith & M. E. Parker (Eds.), *Nursing theories and nursing practice* (pp. 393-410). Philadelphia, PA: F. A. Davis Company.

Dumouchel, M., Boytim, M., Gorman, N., & Weismuller, P. (2015). Does moral distress differ between California certified registered nurse anesthetists in independent versus medically supervised practice: An exploratory study. *AANA Journal, 83*(3), 203-209.

Dyo, M., Kalowes, P., & Devries, J. (2016). Moral distress and intention to leave: A comparison of adult and paediatric nurses by hospital setting. *Intensive and Critical Care Nursing, 36*, 42-48. doi:10.1016/j.iccn.2016.04.003

Dzeng, E., Colaianni, A., Roland, M., Levine, D., Kelly, M., Barclay, S., … Smith, T. J. (2016). Moral distress amongst physician trainees regarding futile treatments at the end of life: A qualitative study. *Journal of General Internal Medicine, 31*(1), 93-99. doi:10.007/s11606-015-3505-1

Eizenberg, M. M., Desivilya, H. S., & Hirschfeld, M. J. (2009). Moral distress questionnaire for clinical nurses: Instrument development. *Journal of Advanced Nursing, 65*(4), 885-892. doi:10.1111/j.1365-2648.2008.04945.x

Epstein, E. G., & Hamric, A. B. (2009). Moral distress, moral residue, and the crescendo effect. *Journal of Clinical Ethics*, *20*(4), 330-342.

Espeland, K. E. (2006). Overcoming burnout: How to revitalize your career. *Journal of Continuing Education in Nursing, 37*(4), 178-184.

Fenton, M. (1988). Moral distress in clinical practice: Implications for the nurse administrator. *Canadian Journal of Nursing Administration, 1*(3), 8-11.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Thousand Oaks, CA: Sage.

Fleiss, J. L., & Cohen, J. (1973). The equivalence of weighted kappa on the intraclass correlation coefficient as measures of reliability. *Educational and Psychological Measurement, 33,* 613-619.

Fowler, M. D. M. (2015). *Guide to the code of ethics for nurses with interpretive statements: Development, interpretation, and application* (2nd ed.). Silver Spring, MD: American Nurses Association.

Fronek, P., Briggs, L., Kim, M. H., Han, H. B., Val, Q., Kim, S., & McAuliffe, D. (2017). Moral distress as experienced by hospital social workers in South Korea and Australia. *Social Work in Health Care, 56*(8), 667-685. doi:10.1080/00981389.2017.1347596

Furr, R. M. (2018). *Psychometrics: An introduction* (3rd ed.). Thousand Oaks, CA: Sage.

Glasberg, A. L., Eriksson, S., Dahlquist, V., Lindahl, E., Strandberg, G., Sörderber, A., … Norberg, A. (2006). Development and initial validation of the stress of conscience questionnaire. *Nursing Ethics, 13*(6), 633-648. doi:10.1177/0969733006069698

Glasberg, A. L., Eriksson, S., & Norberg, A. (2008). Factors associated with 'stress of conscience' in healthcare. *Scandinavian Journal of Caring Sciences, 22*(2), 249-258.

Gutierrez, K. (2005). Critical care nurses' perceptions of and responses to moral distress. *Dimensions of Critical Care Nursing, 24*(5), 229-241.

Hamric, A. B., & Blackhall, L. J. (2007). Nurse-physician perspectives on the care of dying patients in intensive care units: Collaboration, moral distress, and ethical climate. *Critical Care Medicine, 35*(2), 422-429. doi:10.1097/01.CCM.0000254722.50608.2D

Hamric, A. B., Borchers, C. T., & Epstein, E. G. (2012). Development and testing of an instrument to measure moral distress in healthcare professionals. *AJOB Primary Research, 3*(2)*,* 1-9. doi:10.1080/21507716.2011.652337

Hanna, D. R. (2004). Moral distress: The state of the sciences. *Research and Theory for Nursing Practice. 18*(1), 73-93. doi:10.1891/rtnp.18.1.73.28054

Heinrich, N. J., Dodek, P. M., Gladston, E., Alden, L., Keenan, S. P., Reynolds, S., & Rodney, P. (2017). Consequences of moral distress in the intensive care unit: A qualitative study. *American Journal of Critical Care, 26*(4), e48-e57. doi:10.4037/ajcc2017786

Hem, M. H., Halvorsen, K., & Nortvedt, P. (2015). Altruism and mature care: Some rival moral considerations in care ethics. *Nursing Ethics, 21*(7), 794-802. doi:10.1177/0969733014521094

Hodege, L., & Lockwood, S. (2013). Meaningfulness, appropriateness and effectiveness of structured interventions by nurse leaders to decrease compassion fatigue in healthcare providers, to be applied in acute care oncology settings: A systematic review. *JBI Database of Systematic Reviews and Implementation Reports, 11*(12), 81-93.

Humphries, A., & Woods, M. (2016). A study of nurses' ethical climate perceptions: Compromising in an uncompromising environment. *Nursing Ethics, 23*(3), 265-276. doi:10.1177/0969733014564101

Hunsaker, S., Chen, H., Maughan, D., & Heaston, S. (2015). Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in

emergency department nurses. *Journal of Nursing Scholarship, 47*(2), 186-194. doi:10.1111/jnu.12122

Jameton, A. (1984). *Nursing practice: The ethical issues.* Englewood Cliffs, NJ: Prentice Hall.

Jameton, A. (1992). Nursing ethics and the moral situation of the nurse. In E. Friedman (Ed.), *Conflicts and choices: Explorations in health care ethics* (pp. 101-109), Chicago, IL: American Hospital Association.

Jameton, A. (1993). Dilemmas of moral distress: Moral responsibility and nursing practice. *AWHONN's Clinical Issues, 4*(4), 542-550.

Joinson, C. (1992). Coping with compassion fatigue. *Nursing, 22*(4), 116-121.

The Joint Commission. (n.d.). *National patient safety goals.* Retrieved from www.jointcommission.org

Kalisch, B. J. (2015). *Errors of omission: How missed nursing care imperils patients.* Springfield, MD: American Nurses Association.

Kellar, S. P., & Kelvin, E. A. (2013). *Munro's statistical methods for healthcare research* (6th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Knapp, S., Gottlieb, M., Berman, J., & Handelsman, M. M. (2007). When laws and ethics collide: What should psychologists do? *Professional Psychology, Research and Practice, 38*(1), 54-59. doi:10.1037/0735-7028.38.1.54

Kravitz, A. (2018). Moral comfort versus tragic downfall – Kant's concept of the dynamically sublime and Schelling's tragic alternative. *Journal of the History of Ideas, 79*(4), 613-634. doi:10.1353/jhi.2018.0037

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33,* 159-174.

Ledoux, K. (2015). Understanding compassion fatigue: Understanding compassion. *Journal of Advanced Nursing, 71*(9), 2041-2050. doi:10.1111/jan.12686

Leininger, M. (1978). Essential transcultural nursing care concepts, principles, examples, and policy statements. In M. Leininger & M. R. McFarland (Eds.), *Transcultural nursing: Concepts, theories, research, and practice* (3rd ed., pp. 45-69). New York, NY: McGraw-Hill.

Lombardo, B., & Eyre, C. (2011). Compassion fatigue: A nurse's primer. *Online Journal of Issues in Nursing, 16*(1), 3. doi:10.3912/OJIN.Vol16No01Man03

Lusignani, M., Gianni, M. L., Re, L. C., & Buffon, M. L. (2017). Moral distress among nurses in medical, surgical, and intensive-care units. *Journal of Nursing Management, 25,* 477-485. doi:10.1111/jonm.12431

Martin, M. (2013). Missed opportunities: A case study of barriers to the delivery of palliative care on neonatal intensive care units. *International Journal of Palliative Nursing, 19*(5), 251-256.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52,* 397-422.

McCarthy, J., & Gastmans, C. (2015). Moral distress: A review of the argument-based literature. *Nursing Ethics, 22*(1), 131-152. doi:10.1177/0969733014557139

Meltzer, L. S., & Huckabay, L. M. (2004). Critical care nurses' perceptions of futile care and its effect on burnout. *American Journal of Critical Care, 13*(3), 202-208.

Mueller, R. O. (1996). *Basic principles of structural equation modeling: An introduction to LISREL and EQS.* New York, NY: Springer-Verlag.

Munro, B. H. (2005). *Statistical methods for health care research* (5th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Musto, L. C., & Rodney, P. A. (2016). Moving from conceptual ambiguity to knowledgeable action: Using a critical realist approach to studying moral distress. *Nursing Philosophy, 17*(2), 75-87. doi:10.1111/nup.12104

Nathaniel, A. (2002). Moral distress among nurses. *Ethics and Human Rights, 1*(3), 3-8.

Nathaniel, A. (2003). A grounded theory of moral reckoning in nursing (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3142913)

Nathaniel, A. (2014). Theory of moral reckoning. In M. J. Smith & P. R. Liehr (Eds.), *Middle range theory for nursing* (3rd ed.; pp. 329-346). New York, NY: Springer.

Newton, L., Storch, J. L., Makaroff, K. S., & Pauly, B. (2012). Stop the noise: From silence to voice. *Nursing Research, 25*(1), 90-104.

Numminen, O., Repo, H., & Leino-Kilpi, H. (2017). Moral courage in nursing: A concept analysis. *Nursing Ethics, 24*(8), 878-891. doi:10.1177/0969733016634155

Nunnally, J. C. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory.* New York, NY: McGraw-Hill.

Oh, Y., & Gastmans, C. (2015). Moral distress experienced by nurses: A quantitative literature review. *Nursing Ethics, 22*(1), 15-31. doi:10.1177/0969733013502803

Olson, L. L. (1998). Hospital nurses' perceptions of the ethical climate of their work setting. *Journal of Nursing Scholarship, 30*(4), 345-349.

Papastavrou, E., Andreou, P., & Vyronides, S. (2014). The hidden ethical element of nursing care rationing. *Nursing Ethics, 21*(5), 583-593. doi:10.1177/0969733013513210

Pauly, B., Varcoe, C., Storch, J., & Newton, L. (2009). Registered nurses' perceptions of moral distress and ethical climate. *Nursing Ethics, 16*(5), 16-23. doi:10.1177/0969733009106649

Pett, M. A., Lackey, N. R., & Sullivan, J. J. (2003). *Making sense of factor analysis: The use of factor analysis for instrument development in health care research.* Thousand Oaks, CA: Sage.

Powell, S. B., Engelke, M. K., & Neil, J. A. (2017). Seizing the moment: Experiences of school nurses caring for students with overweight and obesity. *The Journal of School Nursing, 34*(5), 380-389. doi:10.1177/1059840517717318

Powell, S. B., Engelke, M. K., & Swanson, M. S. (2017). Moral distress among school nurses. *The Journal of School Nursing, XX*(X), 1-8. doi:10.1177/1059840517704965

Raines, D. A. (1994). Moral agency in nursing. *Nursing Forum, 29*(1), 5-11.

Raines, M. L. (1994). *Psychological variables in nurses' ethical decision-making: The relationships among moral reasoning, coping styles, and ethics stress* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. (9431187)

Ray, M. A. (1989). The theory of bureaucratic caring for nursing practice in the organizational culture. *Nursing Administration Quarterly, 13*(2), 31-42.

Ray, M. A., & Turkel, M. C. (2003). [Economic and patient outcomes of the nurse-patient relationship]. Unpublished raw data.

Ray, M. A., & Turkel, M. C. (2015). Marilyn Anne Ray's theory of bureaucratic caring. In M. C. Smith & M. E. Parker (Eds.), *Nursing theories and nursing practice* (pp. 461-482). Philadelphia, PA: F. A. Davis Company.

Resilience. (n.d.). In *Merriam-Webster's online dictionary*. Retrieved from https://www.merriam-webster.com/dictionary/resilience

Roche, M., Duffield, C., Aisbett, C., Diers, D., & Stasa, H. (2012). Nursing work directions in Australia: Does evidence drive this policy. *Collegian, 19*(4), 231-238. doi:10.1016/j.colegn.2012.03.006

Rushton, C. H. (2016). Moral resilience: A capacity for navigating moral distress in critical care. *AACN Advanced Critical Care, 27*(1), 111-119. doi:10.4037/aacnacc2016275

Salkind, N. J. (2007). *Statistics for people who (think they) hate statistics* (3rd ed.). Thousand Oaks, CA: Sage.

Sauerland, J., Marotta, K., Peinemann, M. A., Berndt, A., & Robichaux, C. (2014). Assessing and addressing moral distress and ethical climate, part 1. *Dimensions of Critical Care Nursing, 33*(4), 234-246. doi:10.1097/DCC.0000000000000050

Savel, R. H., & Munro, C. L. (2015). Moral distress, moral courage. *American Journal of Critical Care, 24*(4), 276-278. doi:10.4037/ajcc2015738

Schaefer, R., Zoboli, E. L., & Vieira, M. M. (2017). Psychometric evaluation of the Moral Distress Risk Scale: A methodological study. *Nursing Ethics, 26*(2), 434-442. doi:10.1177/0969733017707347

Schreiber, J. B., Stage, F. K., King, J., Nora, A., & Barlow, E. A. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research, 99*(6), 323-337.

Schuelke, S., Young, S., Folkerts, J., & Hawkins, P. (2014). Nursing characteristics and patient outcomes. *Nursing Economics, 32*(1), 26-31.

Schwenzer, K. J., & Wang, L. M. A. (2006). Assessing moral distress in respiratory practitioners. *Critical Care Medicine, 34*(12), 2967-2973. doi:10.1097/01.CCM.0000248879.19054.73

Shaw, E. (2014). Relational ethics and moral blindness: Startling incongruities in couple and family life. *Australian & New Zealand Journal of Family Therapy, 35,* 493-509. doi:10.1002/anzf.1080

Silén, M., Svantesson, M., Kjellström, S., Sidenvall, B., & Christensson, L. (2011). Moral distress and ethical climate in a Swedish nursing context: Perceptions and instrument usability. *Journal of Clinical Nursing, 20*(23-24), 2483-3483. doi:10.1111/j.1365-2702.2011.03753.x

Smith, M. J., & Liehr, P. R. (2014a). Concept building for research. In M. J. Smith & P. R. Liehr (Eds.), *Middle range theory for nursing* (pp. 349-360). New York, NY: Springer.

Smith, M. J., & Liehr, P. R. (2014b). Story theory. In M. J. Smith & P. R. Liehr (Eds.), *Middle range theory for nursing* (pp. 225-252). New York, NY: Springer.

Sporrong, S. K., Höglund, A. T., & Arnetz, B. (2006). Measuring moral distress in pharmacy and clinical practice. *Nursing Ethics, 13*(4), 416-427. doi:10.1191/0969733006ne880oa

Tappen, R. M. (2016). *Advanced nursing research: From theory to practice* (2nd ed.). Sudbury, MA: Jones and Bartlett Publishing.

Tsunematsu, K., & Asai, A. (2014). Analysis of "care" and "justice" involved in moral reasoning of nurse based on the Gilligan theory: A literature review using the Gilligan's protocol. *Open Journal of Nursing, 4,* 101-109. doi:10.4236/ojn.2014.42014

Turkel, M. C. (2007). Dr. Marilyn Ray's theory of bureaucratic caring. *International Journal for Human Caring, 11*(4), 57-67.

Turkel, M. C., & Ray, M. A. (2004). Creating a caring practice environment through self-renewal. *Nursing Administration Quarterly, 28*(4), 249-254.

Twigg, D. E., Geelhoed, E. A., Bremmer, A. P., & Duffield, C. M. (2013). The economic benefits of increased levels of nursing care in the hospital setting. *Journal of Advanced Nursing, 69*(10), 2253-2261. doi:10.1111/jan.12109

Vaclavik, E. A., Staffileno, B. A., & Carlson, E. (2018). Moral distress: Using mindfulness-based stress reduction interventions to decrease nurse perceptions of distress. *Clinical Journal of Oncology Nursing, 22*(3), 326-332. doi:10.1188/18.cjon.326-332

Vahey, D., Aiken, L., Sloane, D., Clarke, S., & Vargas, D. (2004). Nurse burnout and patient satisfaction. *Medical Care, 42*(2), II57-II66. doi:10.1097/01.mlr.0000109126.50398.5a

Van Bogaert, P., van Heusden, D., Timmermans, O., & Franck, E. (2014). Nurse work engagement impacts job outcomes and nurse-assessed quality of care: Model testing with nurse practice environment and nurse work characteristics as predictors. *Frontiers in Psychology, 5,* 1261. doi:10.3389/fpsyg.2014.01261

Van Roekel, E. (2018). Traumatic home: Argentinian victimhood and the everyday moral comfort of trauma. *Ethos*, *46*(4), 537-556. doi:10.1111/etho.12218

Varcoe, C., Pauly, B., Storch, J., Newton, L., & Mayeroff, K. (2012). Nurses' perception of and responses to morally distressing situations. *Nursing Ethics, 19*(4), 488-500. doi:10.1177/096973301

Veltman, A., & Piper, M. (2014). *Autonomy, oppression, and gender.* New York, NY: Oxford University Press.

Waltz, C. F., Strickland, O. L., & Lenz, E. R. (2017). *Measurement in nursing and health research* (5th ed.). New York, NY: Springer.

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.

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

Webster, G., & Baylis, F. (2000). Moral residue. In S. B. Rubin & L. Zoloth (Eds.), *Margin of error: The ethics of mistakes in the practice of medicine* (pp. 217-230), Hagerstown, MD: University Publishing Group.

Wilkinson, J. M. (1987). Moral distress in nursing practice: Experience and effect. *Nursing Forum, 23*(1)*,* 16-29. doi:10.1111/j.1744-6198.tb00794.x

Wilson, M. A., Goettemoeller, D. M., Bevan, N. A., & McCord, J. M. (2013). Moral distress: Levels, coping and preferred interventions in critical care and transitional care units. *Journal of Clinical Nursing, 22,* 1455-1466. doi:10.1111/jocn.12128

Winters, R., & Neville, S. (2012). Registered nurse perspectives on delayed or missed nursing cares in a New Zealand hospital. *Nursing Praxis in New Zealand, 28*(1), 19-28.

Wocial, L. D., & Weaver, M. T. (2013). Development and psychometric testing of a new tool for detecting moral distress: The moral distress thermometer. *Journal of Advanced Nursing, 69*(1), 167-174. doi:10.1111/j.1365-2648.2012.06036.x

Wurzbach, M. E. (1996). Comfort and nurses' moral choices. *Journal of Advanced Nursing, 24*(2), 260-264.

Wurzbach, M. E. (2008). Moral conviction, moral regret, and moral comfort – Theoretical perspectives. In W. J. Ellenchild Pink & A. M. Haddad (Eds.), *Nursing and health care ethics: A legacy and a vision* (pp. 57-66). Silver Spring, MD: American Nurses Association.

Yarling, R. R., & McElmurry, B. J. (1986). The moral foundation of nursing. *Advances in Nursing Science, 8*(2), 63-73.

You, L., Aiken, L. H., Sloane, D. M., Liu, K., He, G., Hu, Y., … Sermeus, W. (2013). Hospital nursing, care quality, and patient satisfaction: Cross-sectional surveys of nurses and patients in hospitals in China and Europe. *International Journal of Nursing Studies, 50*(2), 154-161. doi:10.1016/j.ijnurstu.2012.05.003

Young, P. D., & Rushton, C. H. (2017). A concept analysis of moral resilience. *Nursing Outlook, 65*(5), 579-587. doi:10.1016/j.outlook.2017.03.009