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Moral Sensitivity: A Comparative Analysis of Undergraduate and Graduate Nursing Students

By

Rhonda L. Bishop

A Dissertation Submitted to the School of Graduate Studies
in Partial Fulfillment of the Requirements for the Degree of
Doctorate in Education

Western Connecticut State University
Danbury, Connecticut
December 17, 2015

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Western Connecticut State University
Division of Graduate Studies
Doctor of Education Nursing Education

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Moral Sensitivity: A Comparative Analysis of Undergraduate and Graduate Nursing
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ABSTRACT

This study examined the relationship of undergraduate and graduate-level nursing student self-reported moral sensitivity and social desirability. Kohlberg's Theory of Moral Development, Gilligan's Ethics of Care, and Rest's Four Component Model provide the conceptual framework. Using a correlational exploratory design, this study examined the influence of academic preparation and social desirability on nursing student self-reported moral sensitivity. A purposive sample of undergraduate and graduate-level nursing students from two public universities participated in this study. The survey instrument included Comrie's (2005) Modified Moral Sensitivity Questionnaire for Nursing students, Ray's short version of the Marlowe-Crown Social Desirability Scale, and the Nursing Student Demographic Survey created by the researcher. Through exploratory and parametric analyses of the data, the findings suggest that experience as a registered nurse and social desirability are predictors of self-reported nursing student moral sensitivity.

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ACKNOWLEDGEMENT

Completing the requirements of a doctoral degree has been achieved with the assistance and support of others. First, I want to thank the members of my dissertation committee. I have much gratitude for the time consideration, guidance, and support provided by Dr. Ellen Abate, my dissertation chair. Her confidence in me while I struggled to define and redefine my dissertation topic powerfully guided my thoughts. Her support and active involvement in the whole dissertation process is the reason for my success. I also want to express my appreciation to my other committee members, Dr. Andrea O'Connor and Dr. Jeannette Lupinacci, for their insightful comments and constructive criticism. I also extend special recognition to Dr. Mary Nelson for her assistance with statistical analysis; her expertise was priceless.

I also wish to recognize the support of my classmates in Connecticut and my faculty peers at Ferris State University. Joanne Nanavity and Kathy Hopkins, your listening ears and words of reassurance during difficult times have bridged the distance between us. The sharing of successes and support during stressful times were important motivating factors that helped me stay on track. Lisa Singleterry and Susan Owens, your friendship and mentoring through many challenges have been a constant source of encouragement and strength.

Finally, and certainly the most important, Bill, your unfailing love and support during our 32 years of marriage has been transformational. You always believed in me. Without you my confidence and stamina would have waned. Thank you for protecting me and my time. You will always be my tall, dark, and handsome! Joshua, Jordan, and Benjamin; you have transformed into men with families during this process. Your understanding and support of my goal has been immeasurable. To my "daughters" Sarah, Whitney, and Danielle: Thank you for loving my "boys" and tolerating my absence and preoccupation during this process. To my grandchildren, Seth, Peter, Patty Jo, and Haven, your births have reminded me of what is important.

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CHAPTER 1: INTRODUCTION

The purpose of this quantitative non-experimental study is to explore moral sensitivity of nursing students. How a nursing student's moral reasoning matures during academic preparation is important to understand so that learning strategies can be used that will promote the development of principled thinking in nursing students. Exploring moral sensitivity of nursing students will aid in closing the gap in the body of knowledge regarding the development of moral reasoning in nursing students.

Kohlberg's Theory of Moral Development and Rest's Four Component Model provide the conceptual framework that this study builds upon. Kohlberg's theory provides a lens for viewing the maturational nature of principled thinking. Rest's model broadens this lens by interpreting moral behavior as a process of logical analysis and action. Gilligan's Ethic of Care provides an additional theoretical lens to view ethical thinking. Gilligan argues that moral development and female thinking are different than, but not inferior to that of men. Gilligan's perspective on female ethical development and thinking is a particularly applicable lens for viewing the female-dominated profession of nursing.

This chapter introduces the purpose and rationale for researching moral sensitivity of nursing students. A discussion of professional nursing values and value-based behavior is presented followed by the relevancy of these to ethical nursing practice. Next this chapter identifies the problem statement and presents the research questions that guided this study. Chapter One also defines the key terms used throughout the study. The research instrument subscales are also defined, providing clarity as to what each instrument is measuring. The conceptual framework introduced in this chapter provides the lens through which moral sensitivity is viewed. The key concepts and constructs of Kohlberg's theory of moral

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development, Gilligan's Ethics of Care, and Rest's Four Component Model are identified, providing the study boundaries. Chapter One concludes with identification of this researcher's assumptions and study limitations.

Professional Values and Value-Based Behavior

Graduates of a nursing program are expected to demonstrate "professional values and value-based behavior" (American Association of Colleges of Nursing [AACN], 2011, p. 28). Nursing curriculums are designed to meet this standard by promoting nursing student development of a professional ethical framework for the purpose of recognizing and navigating the numerous dilemmas that arise in nursing practice. As never before, the complexities of healthcare delivery demand that nursing students are prepared for ethical professional practice. Highlighting ethical decision-making as an essential component of nursing practice, the American Nurses Association (ANA) declared 2015 as the *Year of Ethics* with renewed focus on ethical nursing practice and a revised code of ethics (American Nurses Association [ANA], 2015). The ANA Code of Ethics (2015) outlines the principles of ethical nursing practice, thus establishing the standards and values of the profession's ethical framework. This framework is essential to the process of ethically principled decision-making (moral reasoning), which relies on recognizing, analyzing, and acting upon real and potential ethical issues (Numminen & Leino-Kilpi, 2007). Ethical decision-making requires the internalization of standards and values that comprise an ethical framework. As nursing students are socialized into the profession, they must internalize the nursing profession's values and develop the ability to recognize and mediate ethical situations.

The many roles of a nurse require embracing ethical principles and values that uphold the rights and interests of the patient across health care settings (American Nurses Association

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[ANA], 2015). One such role is that of patient advocate. How nurses develop advocacy skill is not fully understood; some researchers suggest clinical exposure and experience, while others propose formal ethics education (Bu & Jezewski, 2007; Thacker, 2008; Hanks, 2008, 2010; Arbour & Wiegand, 2014). Bu and Jezewski (2007) stress that nurses' advocacy behaviors are context-based, suggesting that patient advocacy is a complex skill characterized by sensitivity to, interpretation of, and responsiveness to patient needs created by interaction with the healthcare system. In the provision of health care, nurse behaviors that act on the patient's behalf and safeguard their self-determination assist patients and families to navigate healthcare issues and decisions (Bu & Jezewski, 2007). Mastering the ability to identify and mediate ethical issues is foundational to proactively preventing their occurrence (Epstein, 2012; Prince-Paul & Daly, 2010). However, sensitivity to ethical issues does not predicate action; rather it is a process of judgments, motivation, and action that equates to resolution of issues. In taking action to resolve ethical issues, one must make a judgment about the issue and the needed action, be motivated, and have the courage to act (Rest & Narvaez, 1994). Since moral reasoning influences behavior (Turiel & Rothman, 1972; Rothman, 1976; Rest & Narvaez, 1994), one can infer that nursing advocacy behaviors result from moral reasoning. Considering the complexity of the current healthcare environment, the need for moral reasoning as an essential component of nursing practice has never been greater. Nurses and students alike must strive to attain and demonstrate the values and value-based behaviors required for competent practice. Thus, the moral development of nursing students across educational levels must be fully understood.

Rationale for Topic Selection

The complexity of ethical issues in modern health care delivery demands that nurses possess moral reasoning. Moral reasoning is a cognitive skill that is built on an ethical

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framework and influenced by personal values and experiences. Sociologists maintain that individuals are conditioned by social experiences to respond in an approved manner (Kohlberg, 1984; Crowne & Marlowe, 1964). This social conditioning is powerful, yet different from socialization (Mooney, 2007). Socialization is a process of adopting norms, customs, and ideologies of a culture, producing skills to participate meaningfully in that society. From this perspective, it is believed that moral reasoning is influenced by formal ethics education (Dierckx de Casterle, Grypdonck, & Janssen, 1996; Auvinen, Suominen, Leino-Kilpi, & Helkama, 2004; Park, Kjervik, Crandell, & Oermann, 2012). Cognitive and behavioral theorists have long established the social nature of learning. Thus, the presence of ethics content in nursing programs of study is important for socialization into the profession of nursing. Ethics education produces a practitioner with the skills to navigate ethical implications of healthcare delivery.

An aim of undergraduate nursing education is to produce graduates with the competencies to provide care across settings and the lifespan; nursing academia seeks to challenge the psychological, social, cultural, behavioral, ethical, and spiritual development of undergraduate nursing students (AACN, 2008). A liberal undergraduate nursing education provides broad exposure to multi-disciplinary ways of knowing, promoting the development of a personal values system (AACN, 2008, p. 11). Through multi-disciplinary application of inquiry, analysis, and critical thinking, a liberal education lays the foundation for professional nursing practice. Building on this foundation, nursing coursework and clinical experiences facilitate professional knowledge and skill development while integrating pre-requisite theories and concepts. An emphasis of baccalaureate nurse preparation is the development of a personal values system upon which the new nurse can make ethical

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judgments (AACN, 2008). However, accreditation standards requiring the presence of ethics content do not dictate how this content is operationalized. Two strategies for including ethics in a liberal education are as a prerequisite general education or a nursing-specific course. Within a professional sequence program in which general education courses are required before admission, two models for the inclusion of nursing ethics are the offering of a separate course or integrating ethics throughout the curriculum. At present, the current state of either approach is unclear since the presence of ethics in undergraduate nursing curricula in the United States has not been examined in the last two decades. Studies on ethics in undergraduate nursing curricula have been conducted in Korea and Turkey, revealing that ethics education in these countries tends to be integrated content throughout a curriculum (Gorgulu & Dinc, 2007; Choe, Kang, & Lee, 2013).

Graduate-level nursing education builds upon baccalaureate preparation and serves to prepare advanced practice nurses for leadership roles across the healthcare system. Equipping nurses with valuable knowledge and skills, master's degree programs are a critical component in addressing the growing health care needs of consumers. Master's degree programs use a variety of theories and frameworks from nursing and other sciences to analyze clinical problems, illness prevention, and health promotion strategies (AACN, 2011). In a study on ethics content in Master of Science in Nursing (MSN) programs, Burkemper, DuBois, Lavin, Meyer, and McSweeney (2007) found 72% of 172 respondents required an ethics course, while the remaining 28% of respondents required a course with formal ethics content. Of the 87 syllabi analyzed for ethics topics, the two most common topics included ethical theory and ethical reasoning and problem solving (Burkemper et al., 2007).

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The many ethical issues associated with care delivery can be challenging for both the novice and expert nurse alike. Nurses across care delivery settings face ethical issues involving the beginning or end of life, treatment options in vulnerable children, adults, and elderly, as well as issues involving other provider behaviors and actions, and constraining organizational policies. The ethical issues nurses face are often emotionally charged and complicate the already challenging circumstances surrounding some healthcare situations. Ethical healthcare issues can contradict one's value system, raise personal questions about the meaning of life (Basu, 2013), produce fear of the inability to cope or care for patients (Cavaye & Watts, 2012), and result in negative feelings about healthcare delivery and one's job or career. In particular, care issues involving unexpected death or medical futility can cause conflict within one's own moral framework (Ferrell, 2006). Unconsciously, nurses may apply personal beliefs, values, and experiences to ethical situations, influencing the care delivered, and causing personal conflict. However, a responsibility of the nurse is to set aside bias and act in the best interest of the patient.

The many roles of a nurse require decision making based on ethical principles and a professional moral framework. Across care settings, nurses must function in multiple roles with a competence that extends beyond knowledge and skill to include values, attitudes, and the ability to identify and manage ethical situations (Bjorkstrom, Athlin, & Johansson, 2008). However, research suggests that new graduates are ill-prepared to navigate the numerous dilemmas that arise in nursing practice (Theisen & Sandau, 2013; Cavaye & Watts, 2012). Research suggests that lack of confidence to intervene in ethical situations in the undergraduate nursing student may transfer as a lack of courage to stand up for values as the new graduate enters professional practice (Clark-Callister, Luthy, Thompson, & Memmott, 2009).

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Additionally, the inexperience and task-orientation of new graduates may preclude their ability to address the ethical challenges associated with complex care delivery issues. Difficulty in determining the right thing to do because of conflicting values, interpretations, and possibilities can lead to internal conflict in both the inexperienced and experienced nurse. Research also suggests that practicing nurses may require years of care delivery experience before feeling competent in navigating ethical care delivery issues (Benner, 1982).

Significance

The purpose of this study was to determine the influence of academic preparation on the development of nursing student moral sensitivity, building on the moral sensitivity work of Comrie. Comrie (2012) studied the moral sensitivity of nursing students at one university in the United States. No other studies have sought to replicate the study or validate its findings. The moral sensitivity of nursing students in the United States is poorly understood. This study sought to identify the moral sensitivity of nursing students at various levels of education at multiple sites in the United States. Furthermore, this study also has the potential to identify the influence of social desirability on the self-reported moral sensitivity of nursing students, which no other national or international moral sensitivity study reported in the literature has undertaken.

Problem Statement

Nurses at all levels of practice confront situations with ethical implications on a daily basis. Awareness of the ethical implications embedded in health care situations is a critical element in moral reasoning. A person's moral reasoning ability develops over time (Kohlberg & Hersh, 1977). Ethics education plays an important role in the development of moral reasoning (Dierckx de Casterle, Grypdonck, & Janssen, 1996; Auvinen, Suominen, Leino-Kilpi, & Helkama, 2004; Juujarvi, 2006; Park, Kjervik, Crandell, & Oermann, 2012). While nurses may

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develop moral sensitivity as a result of engaging ethical challenges presented in daily practice, the literature suggests that nursing students are also capable of recognizing ethical implications of situations in clinical practice (Erdil & Korkmaz, 2009). Awareness of the ethical implications of situations is the first step in moral reasoning, and influences judgment about choices, motivation to act, as well as action. Comrie (2012) found nursing students at different academic levels perceive moral issues differently, suggesting that moral sensitivity can be learned. Whether taught, learned, or innate, nursing students must develop moral sensitivity as they prepare for professional practice (Comrie, 2012). Thus, there is a need to examine moral sensitivity in nursing students at all levels of academia. Knowledge of nursing student moral sensitivity will heighten awareness for ethics content in nursing curricula and how it is operationalized, which may help determine strategies to cultivate moral sensitivity in nursing students.

Research Questions

This research study was guided by the following questions:

1. What are the demographic characteristics of the nursing students participating in this study?
2. What is the level of nursing student moral sensitivity in patient care situations, as measured by the total moral sensitivity score and the seven designated subscales?
3. What is the relationship between social desirability and self-reported moral sensitivity of nursing students?
4. How do demographic characteristics influence the relationship between social desirability and moral sensitivity of nursing students?

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Definitions

Ethics: A branch of inquiry that focuses on understanding the concepts of and distinguishing between right and wrong (Bu & Jezewski, 2007). There are two branches of ethics: descriptive and prescriptive (Chinn & Kramer, 2004, p. 161). Descriptive ethics seeks to define and categorize what people believe and how they behave. Prescriptive ethics is concerned with the “oughts” of behavior and developing codes, duties, or principles that reflect standards for behavior (Chinn & Kramer, 2004).

Ethical Issue: A situation requiring a person to choose between options that must be evaluated as right (ethical) or wrong (unethical) (Butts & Rich, 2013; Westrick, 2014).

Experiencing Moral Conflict: A subscale of the Modified Moral Sensitivity Questionnaire for Nursing Students (MMSQ-SN) that evaluates a subject’s experience of moral conflict based on the premise that “in order for moral sensitivity to be expressed one needs to first experience moral conflict; a potential or existing moral issue must first be identified. Experience refers to feelings and intuition as well as the cognitive perception of a moral issue and what ‘ought’ to be done” (Comrie, 2006, p. 97).

Expressing Benevolence: A subscale of the MMSQ-SN that evaluates a subject’s willingness to act on behalf of another, which Comrie (2006) defined as “a moral motivation to do ‘good’ or act in the best interest of the patient” (p.97).

Modifying Autonomy: A subscale of the MMSQ-SN that evaluates a subject’s behaviors related to patient autonomy, or “strategies taken when the practitioner perceives the need to limit a patient’s autonomy but is also aware of the principle of self-choice. This often occurs in a situation in which there is a need to protect the patient from self-harm or harming others, either psychologically or physically” (Comrie, 2006, p.97).

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Interpersonal Orientation: A subscale of the MMSQ-SN that evaluates a subject's relationships with others that "focuses on building a trusting relationship with the patient and finding ways of responding to his or her perceived needs" (Comrie, 2006, p. 97).

Morals: Morals are the firmly embedded beliefs about good and bad that influence one's character, behavior, and actions (Chinn & Kramer, 2004; Bu & Jezewski, 2007).

Moral Reasoning: Moral reasoning is the cognitive process of determining right from wrong when considering equally competing options (Kohlberg & Hersh, 1977; McLeod-Sordjan, 2013). Moral reasoning includes recognition of ethical issues, the process of reasoning using ethical principles, and the actual decision-making event (Fry, 1989; Kohlberg, 1981; Numminen & Leino-Kilpi, 2007).

Moral Sensitivity: Moral sensitivity is the ability to "recognize when an act, situation, or certain aspects of a situation have moral implications" (Jaeger, 2001, p. 132), understand a patient's vulnerability, and "have insight into the ethical consequences of decisions made on behalf of another person" (Lutzen, Nordstrom, & Everston, 1995, p. 132).

Nursing Ethics: An interdependent branch of applied ethics that examines ethical and behavioral issues from the perspective of nursing theory and practice (Bu & Jezewski, 2007; Lutzen, 1997).

Social Desirability: Social desirability, as measured by Crowne and Marlow (1964), is defined as the tendency of respondents to provide responses that are congruent with prevailing social or professional values, so that they will be viewed favorably by others (Polit & Beck, 2012).

Structuring Moral Meaning: A subscale of the MMSQ-SN that evaluates a subject's "process of reflection in deriving moral meaning for decisions made and actions taken, even if these may limit the patient's self-choice" (Comrie, 2006, p. 97).

Conceptual Framework

Theory of Moral Development

Kohlberg. Moral development, initially defined by Piaget and refined by Kohlberg's research, refers to the transformation that occurs in a person's structure of thought over time (Kohlberg & Hersh, 1977). Initially only using male subjects, Kohlberg's theory of moral development evolved to describe how the principle of justice develops as an individual interacts with their environment. These cognitive-developmental changes occur at three levels and six stages of moral thinking (Kohlberg & Hersh, 1977). The pre-conventional level of moral thinking includes stages one and two, and is most commonly seen in young children. Stage one focuses on obedience and consequences of action, while stage two is concerned with self-interest. The conventional level of moral thinking is typical of teens and adults (Kohlberg, 1981). This level focuses on conformity and loyalty to rules. In stage three, behavior is judged by intention, while stage four is rule-oriented and focused on the maintenance of social order. The post-conventional level represents principled thinking (Kohlberg & Hersh, 1977). In stage five, law is perceived in terms of a social contract and achieving the greatest good for the most people. Stage six is characteristic of moral reasoning using universal ethical principles (Kohlberg & Hersh, 1977). As one moves through these stages there is less concern with self and personal welfare and more focus on universal principles of justice in terms of rights and standards held by society. However, some individuals do not achieve the full spectrum of moral thinking, getting "stuck" at a level lower than stage five and six.

Fundamentally conceived to be the responsibility of the home and church, Kohlberg and Hersh (1977) insist that educational institutions inherently assume a role in the moral development of students. Moral development is not a reflection of an increase in the content of

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thinking but rather a qualitative transformation of the individual's thought or action. The baccalaureate nursing student's ethical development should be considered from this perspective. As a maturing young adult, the traditional baccalaureate nursing student is evolving toward the conventional level of moral reasoning as they are challenged by educators and other professionals who are presumed to have achieved a higher level of moral reasoning (Kohlberg, 1981; Baxter & Boblin, 2007). According to Kohlberg and Hersh (1977), the conventional stage of moral development is rule-oriented, demonstrates respect for authority, and seeks to maintain social order by doing one's duty well, which is consistent with Benner's (1982) novice stage of development. It should be noted that applicability of Kohlberg's theory to the female-dominated nursing profession may be limited. Kohlberg believed that women tend to remain at level three, focusing on maintaining relationships and promoting the welfare of family and friends, while men are likely to progress to the more abstract principles consistent with post-conventional reasoning.

Gilligan. Gilligan (1982) argued that Kohlberg's research and justice perspective on moral development is guided by abstract rules, principles and universal impartiality and, by excluding the female ways of moral reasoning, devalues sensitivity to context. Gilligan (1982) found the moral development of females to be characterized by a distinct moral language that sets them apart from males. The use of such words as *selfish* and *responsible* characterizes a focus on relationships. Females tend to base their moral actions on caring and responsibility toward others that develops over time, rather than on the abstract principles identified by Kohlberg. Gilligan (1993) describes female ethics of care as the sequential development of awareness of the interdependence of self and others, characterized by transitions between each perspective. The ethics of care may aid in understanding undergraduate nursing student

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advocacy skills from the perspective of self and others. A nursing student with a less-developed moral framework may focus on self rather than feeling compelled to intervene and act on behalf of or for the good of others.

Rest. Rest's Four Component Model of Moral Behavior expands Kohlberg's theory, representing the full process of a moral act. While Kohlberg's theory conveys a maturational process of moral development, Rest and Narvaez (1994) interpret moral behavior as a "logical analysis of what it takes to behave morally" (p. 24). Rest determined the process of a moral act to include moral sensitivity, moral judgment, moral motivation, and moral character (Rest & Narvaez, 1994). Although independent, there are complex interactions among the components. Component I, moral sensitivity, involves interpreting a situation and having an awareness of how one's actions affect other people. Component II, moral judgment, was the focus of Kohlberg's work. After weighing possible courses of action, moral judgment is deciding upon the morally ideal course of action. Component III, moral motivation, is the "importance given to moral values in competition with other values" (Rest & Narvaez, 1994, p. 24). Component IV of Rest's model is moral character. Moral character is carrying out the morally correct action. Moral character includes ego strength, perseverance, strength of conviction, and courage (Rest & Narvaez, 1994).

Assumptions and Limitations

Assumptions are postulates or premises about the study that are accepted as truth and may be based on personal beliefs or values (Meleis, 2012). Assumptions are somewhat out of the researcher's control, but if they did not exist the study would be irrelevant (Simon & Goes, 2013). Thus, it is important to the integrity of the study that assumptions be clearly outlined.

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Assumptions

For the purpose of this study, the following assumptions were made:

1. Moral sensitivity is learned through personal and professional experiences, and is a prerequisite of moral reasoning.
2. Both undergraduate and graduate nursing students have had multiple opportunities to provide patient care in a hospital or home setting.
3. Moral sensitivity is an element of moral reasoning that can be individually measured.
4. Nursing students have the ability to identify ethical situations.
5. Nursing students desire to portray attributes and behaviors of professional nurses.
6. The desire to be perceived favorably by others influences individual behavior choices.
7. Nursing students across similar programs do not differ in terms of moral sensitivity.

Limitations

Limitations are those elements of the study that may affect interpretation of outcomes or the generalizability of the study (Lunenburg & Irby, 2008). Limitations may arise from the methodology, data, or method of analysis. The following limitations may influence the data results and the generalizability of the results to the general population of nursing students.

1. The sample of participants may or may not be representative of the general population of nursing students, as they are a convenience sample rather than a random sample.
2. The participants may provide survey answers they believe are wanted or that make the participant look more favorable, rather than answers that reflect their actual thinking.

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3. The participant responses may only be a snapshot of their attitudes and beliefs at the time of taking the survey or the conditions in which the survey is taken.

Summary

The current health care environment presents a multitude of ethical issues that can be challenging for the expert and novice nurse alike. While undergraduate nursing students have limited clinical experience and may not participate in the resolution of ethical dilemmas, they do have the capacity to identify situations with ethical implications. Practicing nurses face situations that require an ethically clear course of action as a response to the dilemma (Butts & Rich, 2013). Arriving at that decision requires a logical process of principled thinking that begins with moral sensitivity. Each nurse brings to practice his or her own values, morals, and life experiences, which are integral to a professional ethical framework (Butts & Rich, 2013). However, ethical decision-making cannot be based on personal values, opinions, or even intuition. It is important that nurses develop mature moral sensitivity. Through the application of ethical concepts, principles, approaches, and theories, ethics education assists the nurse to identify and analyze issues and dilemmas that are relevant to nursing practice (Crishman, 1981; Butts & Rich, 2013). This research study sought to determine the relationship of educational preparation to the moral sensitivity of nursing students.

CHAPTER 2: REVIEW OF THE LITERATURE

The purpose of this study was to explore the influence of academic preparation and social desirability on the self-reported moral sensitivity of undergraduate and graduate nursing students. Nurses are challenged with controversial and sensitive ethical issues on a daily basis. It is of importance that graduates at all levels of nursing academia be prepared to examine ethical issues, and make appropriate judgments and decisions in the delivery of care. Thus, it is important to understand how moral reasoning matures during academic preparation so that learning strategies can be employed that will promote the development of principled thinking in aspiring and advancing nursing students. Exploring moral sensitivity of nursing students will aid in closing the gap in the body of knowledge regarding the development of moral reasoning in nursing students.

This chapter presents background information on nursing ethics and a synthesis of the research literature on moral reasoning and sensitivity. At the onset is a discussion on the history and evolution of nursing ethics. Next, the chapter moves to a review of the literature on moral reasoning and sensitivity of nurses and nursing students. Awareness of this information is necessary to clearly identify what is currently known about nursing ethics, moral reasoning, and moral sensitivity, and what still needs to be learned. The chapter concludes with an analysis of Kohlberg's theory of moral development, Gilligan's Ethics of Care, and Rest's Four Component Model of moral behavior, which provided the theoretical framework for this research study.

Nursing Ethics

Nursing ethics is an interdependent branch of applied ethics that examines ethical and behavioral issues from the perspective of nursing theory and practice (Bu & Jezewski, 2007; Lutzen, 1997). Nursing theory and practice are founded in the profession's metaparadigm core

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principles: person, environment, health, and nursing. These principles are fundamental to a universal code of ethics, which guides the profession's members and acts a social contract with those whom the profession serves (ANA, 2015). The ANA is a professional organization recognized to represent the professional interests of registered nurses in the United States. The ANA advances the nursing profession and quality health care delivery by fostering high standards for nursing practice.

The ANA *Code of Ethics* (2015) is recognized as the standard that embodies the nonnegotiable moral values that underpin professional nursing practice in the United States. Provisions 2 and 3 of the *Code of Ethics* (2015) provide the framework for the nurse-patient relationship (ANA, 2015). Provision 2 speaks to the nurse's commitment to the patient and a central concern for their rights, while Provision 3 establishes the nurse's moral responsibility to protect and respect patient autonomy (ANA, 2015). No matter the reason a patient requires nursing care, the development of a nurse-patient relationship ensues. The nurse-patient relationship is founded on trust, respect, and empathy while engaging a professional intimacy.

However, the nurse-patient relationship is also defined by a power inequity that results from the patient's vulnerable state. Patients present to the healthcare system with a variety of antecedents that complicate their ability to represent and protect their own interests and autonomous decision-making. Patients with varying literacy levels experience illnesses and health disparities that, when thrust into a system of specialized knowledge and access to privileged information, creates a knowledge differential between the patient and the health system (Butts & Rich, 2013). The authority and influence of the nurse within the healthcare system creates a responsibility to act on behalf of those less powerful in the nurse-patient relationship (Butts & Rich, 2013).

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An important role of the nurse is to advocate for patients. This role requires the ability to identify real and potential ethical issues that impact patients and the management of their care. The ability to identify ethical issues requires knowledge of a moral standard by which to judge the issue and sensitivity to the situations broader implications. Nursing students enter educational programs with a set of values and beliefs developed from previous experiences. During academic preparation, nursing students are exposed to the values and beliefs held by educators and the profession, fostering further development of values and beliefs. As students learn to recognize ethical issues and implications, they become better prepared to apply principled thinking in the context of both routine and unique care delivery situations.

In a concept analysis of advocacy, Bu and Jezewski (2007) performed an extensive literature search, narrowing the primary sources to three dissertations and 217 advocacy articles published between 1974 and 2006. The dissertations and articles identified nurses' advocacy roles in the USA, United Kingdom, Sweden, Australia, Canada, Ireland, New Zealand, Finland, Turkey, and Japan. In synthesizing and analyzing the literature, Bu and Jezewski (2007) proposed a patient advocacy theory viewed as a process or strategy consisting of a series of nursing behaviors and actions. Bu and Jezewski's (2007) proposed theory identifies three defining attributes of the nurse as advocate: safeguarding patient autonomy, acting on behalf of patients, and championing social justice. In safeguarding patient autonomy, the nurse respects and promotes patient self-determination (Bu & Jezewski, 2007). When acting on behalf of patients, the nurses' actions preserve and represent patients' values, benefits, and rights when the patient is unable (Bu & Jezewski, 2007). In championing social justice, the nurse strives for change on behalf of individuals, communities, and society (Bu & Jezewski, 2007). Bu and

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Jezewski (2007) found that advocacy behaviors are presupposed by sensitivity to an individual's need or vulnerability.

Hanks (2008) performed a concept analysis of barriers to nursing advocacy. Hanks (2008) performed an extensive literature search using six databases for articles from 1963 – 2005 with the key words of patient advocacy, nursing, subservience, and barriers. A review of 55 abstracts resulted in 36 articles used for the analysis. Hanks (2008) found variations in the definition of advocacy, but all definitions defined identifying a need in another person and acting to meet that need. However, Hanks (2008) did not find barriers defined in the literature. Hanks (2008) found the defining attributes of barriers to nursing advocacy to be conflict of interest between responsibility to the patient and duty to the institution, lack of support and power, lack of education and time, and threats of punishment. Hanks (2008) concluded that education, time, and threats of punishment were clearly barriers to nurse advocacy behaviors. Implications for nursing education identify the link between both formal and informal education of nurses could contribute to nurse sensitivity to the need for advocacy behaviors (Hanks, 2008).

Nurses face many situations across care delivery settings that create conflict and require a choice between competing options. Both clinical and organizational situations can challenge personal and professional values. At the forefront are those situations involving patient rights, autonomy, and best interest decisions (ANA, 2015). Scenarios involving surrogate decision-making for children generate considerable emotion, while those involving older adults may produce paternalism and less concern for autonomy (Butts & Rich, 2013). Circumstances involving confidentiality and violation of privacy have a direct effect on trust in healthcare providers. Issues encompassing physical and psychological maltreatment of patients range from ignoring needs to exploiting a vulnerable person (Butts & Rich, 2013). When suspicions of

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maltreatment involve family and friends, careful consideration of ethical values within different cultures challenges respect for cultural norms (Butts & Rich, 2013). Patient and family dynamics rarely have simple right or wrong answers. Patient care situations involving limitation or withdrawal of care often have unclear boundaries (Butts & Rich, 2013). Truth-telling and healthcare team conflict can create conflict between personal and professional ethics (Butts & Rich, 2013). Issues of disclosure and informed consent imply decision-making capacity, requiring judgments about one's ability to understand relevant information and communicate choice (Butts & Rich, 2013). Paternalism can limit autonomy in decision making of individuals with dementia, mental illness, or developmental disabilities (Butts & Rich, 2013). Thoughtful exploration of situations and how to make good choices and act on these are central to resolution of the many ethical situations confronted in nursing practice.

The nurse role of patient advocate is two-fold: 1) proactively identify common triggers and intervene to prevent ethical conflict, and 2) reactively mediate ethical situations. In either situation, the nurse acts on behalf of the patient (Butts & Rich, 2013). These actions are reflective of not only knowledge and skill, but also a basic value for human dignity. More than intuition and acting in the moment, morally reasoned action is being aware of a situation and its implications and action options. Morally reasoned action allows for judgments about right and wrong options, is motivated to engage the morally right action, and demonstrates strength of character to carry out the morally right action (Rest, 1984).

Moral Reasoning

Lawrence Kohlberg (1981) and his colleagues sought to understand the moral development of individuals from childhood to adult by interviewing a group of 50 boys, ages 10 – 28 years, every three years over a period of 18 years. The Moral Judgment Interview (MJI)

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involved presenting hypothetical moral situations or dilemmas and then asking questions to elicit a specific course of action in each situation and why the actions were perceived as morally just or preferred. Kohlberg (1981) found the subjects' moral reasoning progressed at varying rates through a sequence of stages that tended to coincide with physical maturation. Kohlberg's (1981) analysis of the interview findings concluded that moral reasoning is a moral judgment process in which an individual's perception and judgment of justice is influenced by interactions with their environment, suggesting that moral development is constructivist in nature.

Rest, Cooper, Coder, Masanz, and Anderson (1974) continued researching the cognitive developmental process of moral reasoning by developing the Defining Issues Test (DIT), a quantitative instrument to measure moral reasoning. The instrument used Kohlberg's hypothetical scenarios, but was administered and scored electronically. Rest et al., (1974) piloted the DIT with a sample of 193 junior high, senior high, college, and graduate-level students from the St. Paul, Minnesota area. A second and third sample was chosen to replicate the study. Sample 2 included nine junior high, 42 senior high, nine undergraduate, and five graduate students. Sample 3 consisted of 85 nonstudent adults; 57 from a moral education class in a Catholic church and 28 from a Protestant moral education class. In addition to the DIT, the Comprehension of Social-Moral Concepts Test and the Law and Order Attitude Test were administered. The Comprehension of Social-Moral Concepts Test determines subject understanding and interpretation of a paragraph's main idea. The Law and Order Attitude Test determines subject sensitivity to Kohlberg's stage four law orientation and stages five and six principled morality. The DIT consists of reading six moral dilemmas and evaluating 12 corresponding issues that have bearing to the situation. Participants rated each issue on a Likert scale for importance in deciding a course of action. Each issue is assigned a *P*-score (the

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Principled thinking score) between one and six, which correlates with Kohlberg's stages of moral development. Total *P* scores can range from 0 to 95, with higher scores indicating higher moral judgment development. The participants also ranked their first four choices. Test-retest data were gathered on 28 ninth grade students resulting in a Pearson correlation of .81. In addition, Rest et al. (1974) gathered written responses to four moral dilemmas from 47 subjects from samples one and two. The written responses were analyzed using Kohlberg's scoring system and compared to the participant's corresponding DIT score, producing a correlation of .68, suggesting a substantial correlation to Kohlberg's moral judgment scale. Analysis of the various student group scores showed different DIT scores. The DIT scores increased with academic levels, and were significantly higher for groups of students at the graduate level of education. The study resulted in two conclusions: the DIT is a reliable instrument that is correlated to Kohlberg's Moral Judgment scale, and differences in judgment among the groups of participants appeared to be developmental in nature (Rest et al., 1974).

Two years later, Rest (1975) solicited 59 junior high and 74 senior high subjects from the pilot study to participate. The final subject pool consisted of 50 former junior high and 38 former senior high students: 47 were female and 41 were male. The subjects responded to the same three tests included in the pilot study: the DIT, the Comprehension of Social-Moral Concepts Test, and the Law and Order Test Attitude Test. All groups of students demonstrated significant upward movement on all three measures. Both younger and older students demonstrated increases in principled thinking. Younger students demonstrated a shift from pre-conventional thinking to the conventional stage of development. Additionally, subjects who advanced to college were compared to those who did not enter college. In the pilot study, college-bound subjects did not differ on any of the three measures. Although both groups

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demonstrated gains in the follow-up study, the college group showed greater gains than the non-college group. The subject pool was also asked to estimate experiences that most affected their thinking in the last two years. The subjects' answers were analyzed for themes, resulting in seven categories: formal instruction, reading or studying; maturation, age, or "growing up"; an expanding social world; new real-world responsibilities; religious experience or instruction; direct involvement in the community or first-hand experiences; and no change in thinking. Rest (1975) reported significant correlations with changes in subject test measure and attribution of change to reading and formal education or real-world responsibilities.

In a 20-year longitudinal study of 58 boys, Colby, Kohlberg, Gibbs, and Lieberman (1983) also found a positive relationship between moral reasoning and education. The original subject pool consisted of 85 boys aged 10, 13, and 16 at the onset of the study, representing two levels of social class from two suburban Chicago school systems. The study consisted of administering the MJI six times at three- to four-year intervals. All but three of the subjects who completed the study were interviewed at least three times. Analysis and scoring of the interview results demonstrate a clear relationship (correlation of .78) between age and moral judgment stage. The study findings strongly suggested two periods of substantial moral development. The greatest period of growth was between ages 29 to 33, while the second greatest period of growth was between ages 21 and 25. Secondary analysis of the demographic data determined formal education to be the strongest correlate ($r = .54$) to higher levels of moral reasoning (Colby et al., 1983). Of greater interest was the finding that educational experience, rather than educational level, demonstrated the strongest positive correlation ($r = .45$) to higher levels of moral judgment (Colby et al., 1983). These findings are significant in light of the present research study, which compares the moral sensitivity of undergraduate and graduate-level nursing students.

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Influenced by Kohlberg's theory, Crishman (1981) used Rest's DIT as a prototype to develop a tool to specifically measure nurse moral judgment. From interviews of 130 staff nurses, Crishman (1981) identified 21 recurrent nursing moral dilemmas. The moral dilemmas were then grouped into four ethical themes: "deciding right to know and determining right to decide, defining and promoting quality of life, maintaining professional and institutional standards, and distributing nursing resources" (Crishman, 1981, p.106). Six recurring nursing moral dilemmas were selected for the pilot studies. Crishman (1981) interviewed an undisclosed number of staff nurses to determine the major considerations for each of the six dilemmas. Moral judgment experts classified the moral issues according to Rest's stage definitions. From the major considerations identified from the nurse interviews, each dilemma was assigned three tasks that represented the stages of moral development. The final form of the tool, the Nursing Dilemma Test (NDT), consisted of three tasks for each dilemma, which the participant was asked to rank in order of importance. Following construction of the NDT and a series of pilot tests, Crishman (1981) administered both the NDT and DIT to compare moral judgment of staff nurses, pre-licensure nursing students, expert nurses, and non-nurses. The staff nurse sample (n = 146) was drawn from five large metropolitan general hospitals, and included nurses with associate (n = 59) and baccalaureate (n = 87) preparation. The pre-nursing sample (n = 38) included senior students enrolled in a baccalaureate nursing program at a private liberal arts college. The expert nurse sample (n = 10) included faculty from a metropolitan school of nursing who held a master's degree in nursing and practiced as nurse practitioners. The non-nurse group consisted of 38 graduate students in education from a metropolitan university. Scoring of the NDT used the same index as the DIT. Cronbach alpha across the NDT items ranged from .26 to .57. Although a low positive correlation was found between the subjects'

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moral judgment about hypothetical dilemmas and moral judgment about real-life nursing dilemmas, Crishman (1981) found those subjects familiar with the real-life dilemmas of the NDT scored higher than those who had no experience with the dilemmas. Additionally, those subjects more familiar with the hypothetical situations of the DIT scored higher than those not familiar with the hypothetical situations. Comparative analysis of the data determined that increase in moral judgment corresponded with increased professional experience and education (Crishman, 1981). Expert nurses scored significantly higher on both the NDT and DIT than the other groups of subjects with less nursing education and less nursing responsibility. These findings significantly relate to the purpose of the present study, which sought to understand the influence of education on the moral sensitivity (the first component of moral reasoning) of nursing students at varied levels of education.

Ketefian (1981) sought to describe the relationship between critical thinking, educational preparation, and levels of moral reasoning among nurses. The sample ($N = 79$) consisted of 36 practicing nurses with diploma or associate degree preparation and 43 with baccalaureate or higher degree employed by three major medical centers. A majority of the nurses were female with practice experience ranging from less than one year to over 10 years. Sixty percent of the nurses practiced in medical-surgical areas, while the remaining nurses practiced in intensive care, maternal-child health, obstetrics, and mental health areas. Ketefian (1981) administered the DIT and the Critical Thinking Appraisal Form ZM. With a reliability coefficient of .77 to .83, the Critical Thinking Appraisal Test is a 100-item tool that measures a subject's cognitive ability to solve problems, interpret, and evaluate statements and arguments similar to those encountered in everyday life. Subject scores for the DIT scores were calculated using Rest's scoring manual, adding together the number of correct answers in each category and summing each category

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calculated critical thinking scores. Critical thinking scores were calculated by adding together the number of correct answers in each category and summing each category. Ketefian (1981) found that both professional education and critical thinking were associated with higher levels of moral reasoning. An *F* ratio of 18.38 indicated education and critical thinking accounted for 33% of the variance in moral judgment. This finding suggests there is a difference between the moral reasoning of nurses with varying levels of education. Ketefian (1981) concluded that nurses with advanced professional education have higher levels of critical thinking and moral judgment. These findings are significant to determining the effect of education on moral sensitivity of nursing students at varying levels of academic preparation.

Blasi (1980) performed a critical review of the moral reasoning literature to determine the relationship between moral reasoning and moral action. Empirical literature meeting the following criteria was included: studies that included some measure of moral reasoning, had a method of behavioral measurement, in both published and unpublished work. The measures for moral reasoning varied greatly in the concept measured, so there was little comparability across the studies. Blasi (1980) found 12 studies of behavioral measures that related moral reasoning to specific behaviors or to habitual action in real life, and, thus, were relevant to the purpose of relating moral reasoning to moral actions. Blasi (1980) found strong support for the relationship between higher levels of moral reasoning and greater resistance to pressure to conform to others' views. Blasi (1980) also found support for a positive, yet less strong, relationship between higher levels of moral reasoning and honesty and altruism. However, the researcher also determined that the expectation that individuals who functioned at the highest levels of moral reasoning could resist social pressure to conform their actions more than others at lower levels of moral reasoning was not supported. Until the scrutiny of Blasi (1980), research on moral

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reasoning as a cognitive process focused on moral judgment, suggesting that moral judgment was the primary determinant of behaviors and actions. However, Blasi (1980) surmised a gap existed between reasoning and action that needed further investigation using Kohlberg's model.

In summarizing the extensive research using the DIT, Rest (1986) concluded that moral judgment was a necessary component of, but was insufficient to explain moral action. Rest (1986) noted that moral judgment development accounted for only 11% of the behavioral variance in DIT scores. It was not until Rest was commissioned to author a chapter on morality that he closely scrutinized the existing literature for information that identified predictors of moral action. In analyzing the literature, Rest (as cited in Thoma & Bebeau, 2013) deduced four processes occur in moral behavior: moral sensitivity, moral judgment, moral motivation, and moral character. These processes provide the framework for Rest's Four Component Model of moral behavior, which is discussed at length later in this chapter. Concluding that moral judgment processes were only one component of the moral reasoning process, Rest (1986) aligned Kohlberg's moral reasoning stages with moral judgment, the second component of the model. However, each component influences the other, and failure within a component can result in failure to make a moral decision. Identification of the four components of moral behavior laid the foundation for exploring moral sensitivity, moral motivation, and moral character as determinants of moral action. Rest's Four Component Model transitioned the field of research from a global model to a multi-process view of moral action, pushing researchers to explore how each of the processes contributes to moral action (Thoma & Bebeau, 2013). For the purposes of the present study, Component 1(moral sensitivity) is further explored.

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Moral Sensitivity

In a summary of the extensive research (over 500 studies) conducted using the DIT, Rest (1986) identified moral sensitivity as the initial process that occurs in moral reasoning. Moral sensitivity involves recognizing a moral situation, weighing the consequences of possible actions, and reconciling one's own feelings regarding the situation (Rest, 1986). Rest (1986) determined that moral sensitivity involves both cognitive and affective processes. The cognitive process of moral sensitivity is related to the ability to sense the needs of others and interpret situations, while the affective process is related to the emotions evoked by situations (Rest, 1986). The interconnection of cognition and affect is realized when feelings about a situation are aroused and become a part of the situation that needs to be interpreted (Rest, 1986).

More recent research by Decety, Michalska, and Kinzler (2012) supports the interconnectedness of affective and cognitive processes in moral sensitivity. Decety, Michalska, and Kinzler (2012) studied neurophysiological and behavioral measures to assess affective and moral judgments across ages. One hundred and two participants of the 126 individuals solicited from the communities surrounding the University of Chicago completed the study. The participants ranged in age four to 37 (ages 4 – 7, n = 21; ages 8 – 12, n = 30; ages 13 – 17, n = 21; ages 18 – 37, n = 30). The participants viewed digital color pictures or video clips that depicted moral and non-moral transgressions with intentional or unintentional actions to cause harm or damage to people and objects (Decety, Michalska, & Kinzler, 2012). Before and during the stimuli Magnetic Resonance Imaging (MRI) provided high-resolution images of brain activity. Eye-tracking measures provided eye gaze fixation and pupil dilation data. After the scanning session, participants viewed the stimuli again and rated each situation as intentional or not intentional. Participants then responded to five questions that probed moral judgment, using

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a computer-based visual analogue scale. The data were analyzed using the Bryant Empathy Index (BEI) and the Interpersonal Reactivity Index (IRI), which compared the participant emotional responsiveness to another person's sadness. In order to assess the relationship between the BEI and IRI scores and the brain activity, correlation analysis was performed. The data revealed several important findings. First, empathetic sadness increased ($r = .36$) with age in girls, while it decreased ($r = -.44$) with age in boys. This finding may support Gilligan's claim that moral reasoning in females occurs through a caring lens. Second, participant reports of greater emotion (sad: $F = 187.45$; upset: $F = 300.59$) when watching intentional harm coincided with reports of stronger emotional response and a stronger neural response on MRI imaging. When observing morally laden scenarios, younger participants experienced more emotion (sad: $F = 185.42$; upset: $F = 117.70$) and enhanced neural activity in the emotion areas of the brain, while older participants demonstrated enhanced activity in the decision-making area of the prefrontal cortex. These findings provide strong evidence that the impact of affect changes as moral development advances (Decety, Michalska, & Kinzler, 2012). Overall, the study findings document the neurodevelopment changes that are associated with sensitivity to moral situations as a component process of moral reasoning (Decety, Michalska, & Kinzler, 2012).

Moral Sensitivity in Health-Related Professions

Bebeau, Rest, and Yamoor (1985) developed the Dental Ethical Sensitivity Test (DEST) to simulate frequently occurring dilemmas in the dental profession. The DEST consists of four dramatizations which students listen to while imagining themselves in the dentist role (Bebeau, Rest, & Yamoor, 1985). At a designated point, students assume the dentist role and carry on the dialogue as if they were actually in the situation (Bebeau, Rest, & Yamoor, 1985). Following the role-play, students respond to probing questions that require articulation of the assumptions and

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perspectives underlying the student's response to the patient. Assessment of the DEST is based on scoring of the responses to the scenarios. The devised scoring scheme for the DEST, developed by dental practitioners and dental faculty, yields a score for ethical sensitivity. Bebeau, Rest, and Yamoor (1985) piloted the DEST with 104 third-year University of Minnesota dental students, who completed the DEST during a three-day seminar on practice management, providing responses via tape recording (n=30) or in writing (n=74). Participant responses were transcribed and scored by dental professionals and dental faculty using pre-defined scoring criteria. Twenty-six of the 30 oral student responses to one of the dramas were complete and usable for comparison with 30 randomly selected written responses. The responses were compared to determine if moral sensitivity could be inferred from the written responses. Scorers achieved an interrater reliability of 0.86, but noted 16 of the 30 written responses had insufficient detail to infer moral sensitivity and were thus assigned lower scores. Based on analysis of these findings test instructions and scoring criteria were revised (Bebeau, Rest, & Yamoor, 1985).

In a second sampling, 145 first-year and 130 third-year dental students completed both the revised DEST and the DIT as a requirement prior to taking a beginning (freshmen students) or advanced (junior students) professional problem-solving course (Bebeau, Rest, & Yamoor, 1985). The DIT was delivered electronically and computer scored. The DEST scenarios were either listened to by audio recording or viewed on video, and participant responses were tape-recorded. The DIT results were given to the students, along with suggestions for personal study. The DEST student responses were transcribed and scored using the pre-defined scoring criteria, but the results were withheld from the participants to allow for post-intervention testing. Ten student responses were used to determine an interrater reliability of 0.87. In analysis of the study data, Bebeau, Rest, and Yamoor (1985) found participant scores range from 49 to 82.5.

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Junior-level students had higher sensitivity scores (mean 70.9) than freshmen students (mean 69.0), even though ethics content had not been added to the curriculum prior to completing the DEST and DIT. These findings suggest that 1) ethical sensitivity is a construct that can be measured, and 2) as students are socialized to a profession through academic preparation they become more sensitive to the professions ethical situations.

Subsequent ethical sensitivity research in the health professions has demonstrated similar findings as Bebeau's initial research. Harvan's (1993) dissertation examined the relationship between discipline-specific knowledge and ethical sensitivity among various health professionals. Harvan (1993) administered the DEST to 57 senior students at a New Jersey university from dentistry (n = 30), surgical technology (n = 9), respiratory therapy (n = 10), and medicine majors (n = 8). The students represented certificate, associate, and post-baccalaureate levels of education. The dental students were assigned to group I, while the non-dental students were assigned to group II. Upon data analysis, the overall range and average ethical sensitivity scores were comparable to the norms established in previous research. Descriptive analysis of student DEST scores revealed a mean score of 69.6, which is comparable to the mean score found by Bebeau, Rest, and Yamoore. Harvan (1993) found no difference in the ethical sensitivity scores of dental and non-dental student groups. This finding supports the conclusion that ethical sensitivity is not related to type of technical competence. However, Harvan (1993) also found the ethical sensitivity of students at the various levels of education differed significantly. These findings are consistent with the findings of Rest and Bebeau, and support the belief that academic preparation facilitates higher levels of ethical sensitivity. Harvan's (1993) findings also suggest that ethical concepts are common across health-care disciplines and sensitivity to these concepts could be assessed with an interdisciplinary tool.

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In an interventional study of ethical sensitivity, Green, Miller, and Routh (1995) designed a workshop in psychiatric ethics for final-year medical students attending a series of psychiatric lectures. In part one of the workshop, students viewed four videotape segments of historical and current abuses in psychiatry for the purpose of introducing a variety of issues for discussion. In the second part of the workshop, medical students were divided into groups of three or four members and given a printed dilemma scenario to discuss for 20 minutes (Green, Miller, & Routh, 1995). Each group was charged to develop and justify a policy to solve the situation. The effectiveness of the workshop was assessed through qualitative course evaluation and comparative pre-post intervention data using the Toronto Ethical Sensitivity Instrument (TESI). The TESI consists of four vignettes; after viewing the vignettes participants are asked to identify the ethical issues in each scenario. Responses were scored according to predefined criteria (Green, Miller, & Routh, 1995). Thirty-three students were assigned to the intervention group and 33 students were assigned to a control group. The control group took the TESI at the same intervals during the same course six weeks later, but attended a seminar on stress management rather than on ethics. Those who attended the ethics educational program had a more significant increase in pre- to post-ethical sensitivity scores (7.36 compared to 9.90; $p \leq 0.002$) than the control group (7.09 compared to 7.39; $p < 0.33$) (Green, Miller, & Routh, 1995). The reported results, which are consistent with previous research, suggest that ethics education increases participant ethical sensitivity.

Moral Sensitivity in Nursing

Lutzen (1990) first identified the concept of moral sensing as a doctoral student when she sought to understand the concept of therapeutic relationship as experienced by psychiatric nurses. Using a phenomenological approach, Lutzen (1990) conducted fieldwork at a large

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county psychiatric hospital in Sweden. Using limited interaction so not to disturb the ward routine, Lutzen (1990) observed the nurse-patient relationship and conducted interviews in the beginning of the study and as themes began to emerge as the study progressed. Using constant comparative analysis of the interview transcripts, Lutzen (1990) gathered data until no new information was obtained. Eight categories emerged from the data collection: expressing, personal value judgments, following written rules, following unwritten rules, limiting the patient's autonomy, enhancing the patient's autonomy, disagreeing with institutional ideology, expressing emotional conflict, and group alliance. Lutzen (1990) noted the eight categories possess overlapping properties, so began the process of collapsing and abstracting the categories into two core concepts: moral sensing and ideological conflict. As theoretical development evolved Lutzen (1990) described moral sensing as process of moral reasoning in which the nurse examines a situation, and analyzes, justifies, chooses, and evaluates decisions. Moral sensing is the "nurse's awareness of the patient's needs and her responsibility to respond to those needs in a way that does not jeopardize his autonomy" (Lutzen, 1990, p. 74). Nurses experienced ideological conflict when personal values and attempts to enhance patient autonomy were inconsistent and even contradicted by organizational rules and practices. Lutzen (1990) determined ideological conflict inhibited moral sense, causing ethical issues to arise. Lutzen's (1990) research established the concept of moral sensing and the need to further explore how it influences the nurse-patient relationship. Lutzen's (1990) research also highlights the need to explore how ethical decision making affects the nurse-patient relationship.

Lutzen and Nordin (1993a; 1993b) explored the experience of moral decision making from the nurse perspective using a grounded theory approach, but reported the findings in two separated publications. Through a purposive selected sample, 14 experienced psychiatric nurses

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(11 women and three men) from various psychiatric Swedish settings were interviewed (1993a; 1993b; 1994). The study findings generated the core category of structuring moral meaning (described in the following paragraph), modifying autonomy (described in a later paragraph), and a subcategory of benevolence. Lutzen and Nordin (1993a) defined benevolence as the intention underlying the nurse's action to do good for the patient. Two dimensions of benevolence evolved from analysis of the interview transcripts: sensing the patient's vulnerability and responding to that vulnerability. Lutzen and Nordin (1993a) defined vulnerability as being exposed or unprotected, which implies unequal status between the patient and nurse. In sensing patient vulnerability, the nurse evaluates and interprets the moral meaning of the situation from the patient perspective (Lutzen & Nordin, 1993a). Because nurses must weigh the context of the patient situation, making a choice between promoting patient autonomy and using force to meet patient needs creates moral conflict (Lutzen & Nordin, 1993a). The findings of this study provide another lens for which to view moral decision making. When rules and principle justify action, a rational argument can be made to support the act of benevolence.

In the same study, Lutzen and Nordin (1993b) discovered the core concept of structuring meaning, which consisted of three interrelated properties: perceiving, knowing, and judging. Lutzen and Nordin (1993) defined structuring moral meaning as a "spontaneous process aimed at solving a moral conflict" (p.177), which for the psychiatric nurses in the study meant a focus on "maintaining a trusting relationship with the patient" (p.177). Lutzen and Nordin (1993b) further analyzed the interrelated properties of structuring moral meaning. Perceiving is a cognitive ability to discern the meaning of observations so as to comprehend the full reality of the situation. Nurses in the study referred to this discernment as intuition and feelings rather than theories or principle-based reasoning (Lutzen & Nordin, 1993b). Knowing, the second property

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of structuring moral meaning, is an indirect way of comprehending and arriving at a decision in which the main concern is patient welfare. Knowing does not rely on rules, theory, or advice in understanding the meaning of the nurse-patient relationship (Lutzen & Nordin, 1993b). Judging, the third property of structuring moral meaning, involves weighing options and their moral meaning in order to justify one's action. Lutzen and Nordin (1993b) also identified three subsidiary concepts that are linked to structuring moral meaning: moral sensing, expressing benevolence, and modifying autonomy.

In a subsequent publication, Lutzen and Nordin (1994) report the findings regarding the concept of modifying autonomy identified in the previous grounded theory study (Lutzen & Nordin, 1993a). The authors defined modifying autonomy as adjusting the meaning of self-choice to suit the perceived needs of the patient when there is conflict. In this study, nurses reported using persuasion, manipulation, and taking over to meet patient needs when the patient did not make a rational choice to meet their own needs. Such actions limit patient self-choice and impact the patient's trust in the nurse, but were considered necessary for patient safety or well-being (Lutzen, 1994). An element of modifying autonomy identified in this study was sense of caring as motivation in modifying autonomy. In this study, the concept of modifying autonomy is linked to the ability of the nurse to sense patient vulnerability and to make a decision to act.

Lutzen, Nordin, and Brolin (1994) continued exploring moral sensitivity with the development of the Moral Sensitivity Questionnaire (MSQ). The MSQ is a 35-item, self-report questionnaire developed from six aspects of moral sensitivity identified in the previous reported grounded theory study (Lutzen & Nordin, 1993a; 1993b; 1994). The MSQ uses a 7-point Likert scale (1 = completely disagree, 7 = completely agree) to measure expressing benevolence,

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structuring moral meaning, modifying autonomy, interpersonal orientation, experiencing conflict, and reliance on physician's knowledge of psychiatric nurses. Six nurses experienced in ethics and psychiatry reviewed the MSQ for relevancy. After revisions, item-sampling adequacy was achieved by consensus among the reviewers. The MSQ was distributed to all nurses ($n = 118$) employed for more than one year at a Swedish psychiatric community clinic and an inpatient psychiatric ward. Of the 84 returned questionnaires, 79 were considered valid and included in the pilot study of the instrument. Using Likert's method of correlating each item with the computed total score, Pearson's correlation coefficient ranged from -0.35 to 0.56. Item analysis using Cronbach's alpha revealed 30 items were positively correlated, two negatively correlated items, and three others with a correlation of less than 0.11. Since correlation between variable should range between 0.10 and 0.40, five items were eliminated from the questionnaire increasing the Cronbach's alpha from 0.64 to 0.73 (Lutzen, Nordin, & Brodin, 1994). The variability in internal consistency and low correlation coefficient suggested the MSQ needed further refinement.

Lutzen, Nordstrom, and Evertzon (1995) modified the MSQ and continued research in a study comparing the moral sensitivity of Swedish nurses in psychiatric and medical-surgical settings. Face validity of the modified the MSQ was confirmed with six orthopedic nurses (Lutzen, Nordstrom, & Evertzon, 1995). The revised 30-item MSQ was distributed to 419 registered nurses, of which 307 (73%) were returned to the researchers and 295 were considered valid. The respondent pool consisted of 150 medical-surgical nurses and 145 psychiatric nurses. The ages of members of the sample groups differed significantly; medical-surgical nurses had a mean age of 37.9 while psychiatric nurses had a mean age of 43.2. Eight-five percent of the participants were female, 10% were male, and 5% left this item blank (Lutzen, Nordstrom, &

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Everston, 1995). Descriptive and comparative analysis of the data revealed that in this study, the 30-item MSQ demonstrated a Chronbach's alpha coefficient of 0.78. However, the relatively low Chronbach's coefficient alpha of each category (Relation: 0.36; Meaning: 0.67; Benevolence: 0.47; Autonomy: 0.51; Conflict: 0.61; Rules: 0.72) can be interpreted as the MSQ statements are related to the same topic, supporting the unidimensionality of the scale (Lutzen, Nordstrom, & Everston, 1995). These findings also demonstrate the MSQ could be used in non-psychiatric settings. Comparing the demographic data to the questionnaire suggested that the length of experience and education influences moral sensitivity, but that age is an influencing factor as well (Lutzen, Nordstrom, & Everston, 1995).

In another study, Lutzen, Johansson, and Nordstrom (2000) administered the 30-item MSQ to compare the moral sensitivity of nurses and physicians in situations where coercion was used to force patients to take medications. The sample consisted of 113 medical care physicians, 665 psychiatrists, 150 general medical nurses, and 145 psychiatric nurses. Data from the four groups were statistically compared using the *t* test. The authors found significant differences between the groups. Nurses and physicians from general care settings compared to those from psychiatric settings agreed more with the assumptions associated with meaning and autonomy, suggesting greater value for sovereignty of patient decision making. Lutzen, Johansson, and Nordstrom (2000) also found a significant difference in the moral orientation between all physicians and all nurses with regards to benevolence, suggesting that acts of paternalism are more acceptable to physicians than nurses. Female and male participants in this study also differed significantly with regard to the act of coercion to elicit patient compliance, indicating that females more than males regarded beneficence and supporting patient integrity as important. Lutzen, Johansson, and Nordstrom (2000) reasoned that although work setting and health-care

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role (physician versus nurse) influences moral sensitivity, females generally have a different moral orientation than males.

You, Maeda, and Bebeau (2011) performed an extensive analysis of the existing literature to determine if data supported claims of differences in moral sensitivity between the genders. Of the 61 potential empirical studies that were identified, 19 primary studies met the defined inclusion criteria: use of Rest's definition of moral sensitivity and gender as a variable, and provided sufficient data for analysis of gender differences in moral sensitivity. The identified 19 studies allowed comparison of the moral sensitivity of approximately 2,000 male and 2,000 female participants using a meta-analytic technique. Regardless of the moral sensitivity scales used in the studies and irrespective of academic preparation level of the participants, "on average women tend to score higher on moral sensitivity measures than men" (You, Maeda, & Bebeau, 2011, p. 278). You, Maeda, and Bebeau (2011) speculate that socialization to roles in society may explain the difference between female and male responses to moral issues. These findings may be of significance for future research of moral sensitivity in nurses. The growing number of males entering the nursing profession, although still female-dominated, could impact the overall moral sensitivity within the profession and the strategies used to promote its development. You, Maeda, and Bebeau (2011) also observed the variety of instruments used to study moral sensitivity were discipline-specific, highlighting the need for a generic measure of moral sensitivity across disciplines.

Moral Sensitivity in Nursing Students

Since the literature indicates moral reasoning develops over time and as a result of education, the development of moral sensitivity of students has important implications for academia and clinical practice. Comrie (2006) pioneered this work in her dissertation research

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involving multiple academic levels of nursing students. Using a mixed method research design, Comrie (2006) sought to measure the moral sensitivity of junior, senior, and graduate-level nursing students. Through structured interviews using patient care vignettes, nursing students' current attitudes, beliefs, or opinions regarding moral issues in nursing practice were solicited (Comrie, 2006). Comrie (2006) determined nursing students at all levels demonstrated awareness and attentiveness to the ethical issues embedded in the vignettes. The original MSQ (Lutzen, Nordin, & Brodin, 1994) was modified to facilitate quantitative measurement of moral sensitivity of nursing students. The Modified Moral Sensitivity Questionnaire for Nursing Students (MMSQ-SN) uses a Likert-type multi-item questionnaire to measure the extent to which a student agrees or disagrees with a moral issue item. There were 250 participants: 177 baccalaureate and 73 graduate students. The mean ages fell into two ranges: undergraduate students ranged 21-23 and graduate students ranged from 31-35 years of age. The results of the survey suggest that moral sensitivity of junior, senior, and graduate-level students differs. All students ranked the structuring moral meaning category highest, which is related to consideration of the ethical implications of decisions made and action taken. Students also identified relational orientation as very important. This finding aligns with building trusting relationships with patients, and an ethic of care. Comrie (2006) found decision making of younger students to be rule-oriented, while graduate-level students relied on professional judgment. Additionally, graduate students were found to more often identify that situations contain moral dilemma. This finding suggests that moral sensitivity increases with education and experience. Statistical analysis of the data revealed important insight about the reliability of the MMSQ-SN. According to Polit and Beck (2012) Cronbach's alpha is a reliability measure of consistency which indicates the degree to that items in a scale are related to one another, and therefore measure a similar

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concept. Statistically significant values range from 0.70 to 0.95. The MMSQ-SN Cronbach's alpha is 0.64. While Comrie (2005) interprets this finding as low and indicating a flaw in the instrument, the MMSQ-SN has not been used in research since her dissertation research (R.Comrie, personal communication, December 16, 2014). Therefore, the Cronbach's alpha score may be a reflection of the specific sample in the original research. Further research using the MMSQ-SN will need to measure Cronbach's alpha again to validate the internal consistency of the tool and the research findings.

To date only one other study has explored ethical sensitivity in nursing students. Park, Kjervik, Crandell, and Oermann (2012) used a translated version of Lutzen's MSQ and Rest's DIT to study the impact of ethics education on the moral reasoning and moral sensitivity of 506 freshmen and 440 senior Korean nursing students using a cross-sectional design. The findings of this descriptive study suggest a significant relationship exists between level of education and hours of ethics content and higher levels of moral reasoning in nursing students. Of interest in this study is the finding that a higher number of non-lecture ethics content hours corresponded to lower levels of moral reasoning. The non-lecture methods of teaching varied in this study, but included group discussion, case studies, clinical conference, role-plays, and self-reflection. With each additional hour of non-lecture ethics content there was a 0.42 point decrease in stage 4 scores, and a 0.49 point increase stage 3 scores. Park, Kjervik, Crandell, and Oermann (2012) also found no difference in the levels of principled thinking between freshmen and senior nursing students. The findings of this study must be considered in the context of the Korean culture, which could influence the moral sensitivity and moral reasoning of the general population but could also influence how ethics education is operationalized in Korean higher education.

Social Desirability

Social desirability is the tendency of respondents to provide exaggerated or minimized responses, or responses that are congruent with prevailing social or professional values, so that they are viewed favorably by others. Social desirability can result in misleading, suppressed, or moderated correlations between variables, and threaten the validity of the research (King & Bruner, 2000). Data collection using a self-report measure has significant susceptibility to social desirability bias (Polit & Beck, 2012). When conducting research, the researcher must acknowledge the potential threat of social desirability, control for its bias, or test its effect on the validity of response data (Polit & Beck, 2012). Comrie's (2005) MMSQ-SN is a self-report questionnaire instrument to gather data. Although Comrie (2005) acknowledged the susceptibility of the MMSQ-SN to the risk of response bias, it was not controlled for nor was its effect measured. Thus, the inclusion of a social desirability measure in the present research study acknowledged its potential presence and sought to understand its effect on the research findings.

The Marlowe-Crowne Social Desirability Scale (MCSDS) (Crowne & Marlowe, 1964) is a commonly used instrument in clinical and research settings that has undergone extensive testing. The MCSDS is a 33-item instrument that assesses response bias in self-reports (Crowne & Marlowe, 1964). The MCSDS items require true-false responses that measure common desirable and undesirable personal and interpersonal behaviors (Crowne & Marlowe, 1964). Eighteen of the items make up the attribution scale and support items representing socially approved but uncommon behaviors. True responses indicate a stronger tendency to respond in a socially desirable way and are awarded one point. The remaining 15 items make up the denial scale and consist of are socially disapproved but common behaviors. A false response is

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assigned one point and indicates a tendency to deny socially disapproved but common behaviors. Scoring ranges from 0 to 33, with higher scores indicating a greater need for approval (Crowne & Marlowe, 1964). The MCSDS was given to 57 subjects on two different occasions at a one-month interval. Internal consistency coefficient for the MCSDS is .88, with a test-retest correlation of .89 (Crowne & Marlowe, 1964).

Believing that the original MCSDS contained items that were irrelevant to the overall measure of social desirability, Strahan and Gerbasi (1972) set out to develop a shorter form of the MCSDS that maintained psychometric adequacy. Strahan and Gerbasi (1972) distributed the original MCSDS to 500 students from private, academically select universities, who were enrolled in an introductory psychology course. Usable questionnaires were returned from 360 students, 176 male and 185 female. Through principal component analysis of the results, Strahan and Gerbasi (1972) used two criteria for identifying items to retain in a short-form scale. Size of loading was the primary criterion. The range of absolute loading for all items was .11 to .54, with a mean of .35. The second criterion was to attain a balance of positive and negatively keyed items. Using these primary criterion, Strahan and Gerbasi (1972) identified two 10-item scales that when combined created a 20-item scale using original scale items. The selected 20 items had an absolute loading of .28 to .54, with a mean of .42. These shortened forms became known as the Crowne-Marlowe Forms X1, X2, and XX. To determine generalizability, Strahan and Gerbasi (1972) then administered the three short forms and the MCSDS to four participant pools: males (n = 64) and females (n = 34) from a private, academically select university (n = 64), females from a Catholic liberal-arts college for women (n = 130), and a heterogeneous sample of college student and non-student British males from London (n = 44). The first three pools completed the questionnaires anonymously, while the British males were asked to sign their

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names to the questionnaire. Strahan and Gerbasi (1972) report symmetric distribution of the descriptive statistics for each of the scales, but do not report the data. Reliability coefficients for the three new scales were calculated and compared to the original MCSDS. Correlations between the two 10-item scales were .55 for university males, .75 for university females, .67 for college females, and .67 for British males (Strahan & Gerbasi, 1972). The correlations between each of the 10-item scales and the MCSDS were .80 and .90, and correlation between the 20-item scale and the MCSDS was .90. Both the 10-item short versions and the longer combined 20-item version demonstrate internal consistency, and are reasonably parallel in results. Thus, when administration of a social desirability scale is limited by time, the shortened versions may provide reasonably reliable results (Strahan & Gerbasi, 1972).

Greenwald and Satow (1970) proposed that converting the dichotomous 33-item MCSDS into a Likert format could produce a shortened desirability scale with higher precision and internal consistency than previously proposed short versions. The dichotomous and Likert format MCSDS's, along with five author-developed questionnaire statements that were judged to reflect boasting (20 judges) and the desire to look good (46 judges), were administered to 103 Boston University journalism and social psychology course students 90 minutes apart (Greenwald & Satow, 1970). To control for order effect, 54 participants took the Likert format first and the remaining 49 participants took the dichotomous format first. The total score for the dichotomous and Likert formats correlated highly ($r = .87, p = .0001$). Individual correlations of the Likert items with the total score ranged from .20 to .62. Individual correlations of the dichotomous items with the total score ranged between .20 and .49. Greenwald and Satow (1970) paired positive and negative Likert items from highest to lowest correlations, resulting in 19 paired items. As each pair was added to the inventory of pair items the correlation coefficient

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was calculated, yielding a correlation coefficient that rose rapidly with the first six pairs (.74, .80, .86, .87, .90, and .92 respectively); thereafter as pairs were added the rise in correlations tapered off (Greenwald & Satow, 1970). In comparison, the correlation coefficients of the same Likert pairs were calculated as dichotomous pairs. The resulting pattern was parallel but produced correlation coefficients .12 - .13 points lower. Conclusively, a shortened form of the MCSDS containing up to the first 12-paired items is capable of reliably gauging social desirability in participants (Greenwald & Satow, 1970).

Questioning the reliability of Strahan and Gerbasi's (1972) MCSDS short forms, Ray (1984) used the analysis of Greenwald and Satow (1970) to develop a more reliable abbreviated version of the MCSDS. Ray (1984) selected eight items (6, 13, 15, 16, 19, 21, 34, and 35) from the original MCSDS, five of which were included in Strahan and Gerbasi's versions. The eight-item version was piloted concurrently with Ray's Directiveness scale and the Eysenck Neuroticism scale in a research study of authoritarian personality. The combined questionnaire was administered to a random sample of 95 individuals living in the metropolitan area of Sydney, Australia. Upon parametric analysis of the data, the sample generated a Cronbach's alpha of .77 for Ray's MCSDS short scale. Ray determined there was similarity between four items in the social desirability scale, and thus eliminated two items (35 and 15). Ray (1984) re-administered the social desirability scale in a multi-tool questionnaire by random mailing to 500 residents of New South Wales in a research study of A-B personality types and the risk for coronary heart disease. Parametric analysis of the returned surveys ($n = 122$) generated a Cronbach's alpha of .60 for the six-item social desirability scale. Ray (1984) revised the wording of the six-item scale before it was administered as part of a multi-tool questionnaire by students in his sociology course. A quota sample ($n = 87$) of individuals from Sydney, Australia

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in manual and non-manual occupations completed the survey in a research study of authoritarian personality types. Parametric analysis of the data revealed a Cronbach's alpha of .77. Ray (1984) added back in and revised the wording of the eliminated two items, and mailed a multi-tool questionnaire including the revised eight-item scale to 950 randomly selected registered voters in New South Wales in a research study of male and female sex roles. Of the returned surveys, 214 (88 men, 126 women) were considered valid. The revised eight-item social desirability scale yielded a Cronbach's alpha of .74. In another multi-tool questionnaire in which the eight-item scale was presented in a block, Ray (1984) solicited data from 200 people in a random door-to-door survey in a research study on attitude toward abortion, life, and conservatism among residents of Sydney, Australia. In this study, the eight-item social desirability scale produced a Cronbach's alpha of .74 again. With a test-retest reliability coefficient of .74, Ray's short Social Desirability scale possesses greater reliability than previous short versions with more items.

The presence of social desirability in a self-report measure, as used in this study, can influence the validity and generalizability of research study findings. The inclusion of a social desirability measure can aid in controlling the effect of individual desire to be perceived in a positive manner. The original 33-item MCSDS has a reliability coefficient of .88, while Ray's short Social Desirability scale has a reliability coefficient of .74. Although a high reliability coefficient is desirable, it does not conclusively mean a high degree of internal consistency because it is an estimate of reliability (Tavakol & Dennick, 2011). Reliability is also affected by the length of the test. If the length of the test is too short, the reliability coefficient will be lower, as is seen in Ray's short Social Desirability scale. Ray's short Social Desirability scale does include eight items from the original MCSDS that possess high discrimination values, increasing

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the reliability of Ray's short version. Thus, Ray's short Social Desirability scale possesses adequate reliability (.74) for the purpose of inclusion in a multi-tool questionnaire with numerous items to be answered. To maximize attention to questionnaire items and reduce potential of fatigue, Ray's short Social Desirability scale reduced the participant time in responding to the multi-tool questionnaire. In addition, Ray's short Social Desirability scale is readily available for public use, making the instrument easy and cost-effective to use. Thus, Ray's (1984) short version was incorporated in this study to aid in understanding the relationship between nursing student moral sensitivity and social desirability bias.

Theoretical Framework

Kohlberg's Theory of Moral Development

The research on moral development dates back to the early 1930's when Piaget's cognitive development research explored how children develop moral judgment (Miller, 2011). Expanding on Piaget's thoughts, Kohlberg (1981) believed moral development was a constructivist cognitive process that continues over one's lifetime. Thus, Kohlberg believed moral reasoning is influenced by cognitive development, and is perhaps dependent on the development of logic. In his seminal work, Kohlberg (1981) designed the Moral Judgment Interview (MJI) and studied 72 American males from the Chicago metropolitan area who ranged in age from 10 to 28 over a period of several years. Using the hypothetical moral dilemmas of the MJI, Kohlberg (1981) interviewed participants with open-ended probing questions to draw out a response each respondent believed to represent what one should do in the situation. Fifty-eight of the original male subjects participated in follow-up interviews at three-year intervals for 20 years. This longitudinal data provided the framework for the creation of Kohlberg's theory, which asserts moral reasoning is based on a justice orientation that stresses rules and rights.

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Kohlberg (1981) found the participants to progress through the same sequential stages at various rates. He deduced these stages represented a developmental sequence that could not be skipped. Although some participants reached higher stages of moral development than others, Kohlberg found all participants continued to move toward a higher stage and, as reasoning progressed through stages, a new level replaced the earlier stage of thinking. As Kohlberg's (1981) work continued, his method of assessment used the hypothetical moral dilemmas in the Moral Judgment Interview (MJI). Colby and Kohlberg (1987) later described the scoring system used to analyze the interview data in an 800+ corresponding manual. Based on findings of reasoning at a given age, Kohlberg's normative theory emerged. The underlying tenets of Kohlberg's theory are the concepts of fairness and individual rights, and that dilemmas can be resolved conceptually and deductively using universal moral principles.

Kohlberg's Theory of Moral Development has three distinct, universal levels of moral thinking and two corresponding sub-stages that people pass through in the development of moral reasoning (Kohlberg, 1984). Combined, these levels and sub-stages represent six distinguishable stages of moral development. The pre-conventional level of moral thinking includes stages one and two, and is most commonly seen in young children (Kohlberg, 1984). At this level of moral development, the child from birth to nine years is responsive to cultural right and wrongs. Moral dilemmas are seen in terms of individual needs, and conflict causes these needs to collide (Kohlberg, 1984). Stage one focuses on obedience and physical consequences of punishment, equating good with avoiding punishment (Kohlberg, 1984). The self-interest of stage two is concerned with rewards for obedience. The self-interest of the child at this stage includes elements of fairness, reciprocity, and equal sharing, while occasionally focuses on the needs of others (Kohlberg, 1984). The conventional level of moral thinking is typical of teens and adults,

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ages nine to 20, centering on conformity and loyalty to rules (Kohlberg, 1984). Moral conflicts are now seen and resolved from the perspective of group or social terms. Stage three behaviors are judged by intention, and seek to earn approval from others by being the “nice boy” or “nice girl” (Kohlberg, 1984). Stage four is oriented to fixed rules and authority while seeking maintenance of social order. The post-conventional level is known by the principled thinking of those over 20 years of age (Kohlberg, 1984). Post-conventional thinking holds clearly defined moral values and principles. Stage five perceives law in terms as a social contract and greatest good for the most people (Kohlberg, 1984). Although there is a relativism of personal values, there is a corresponding emphasis on group consensus. Stage six is characteristic of moral reasoning using universal ethical principles, such as the *Golden Rule* (Kohlberg, 1984). As one moves through these stages there is less concern with self and personal welfare and more focus on universal principles of justice in terms of rights and standards held by society. Appendix A provides a table detailing each stage of Kohlberg’s theory.

Rest continued to build on Kohlberg’s theory with the development of the Defining Issues Test (DIT1) in 1979. The DIT is a multiple-choice test that can be individually or group administered and computer scored (Rest, 1986). Some of the same hypothetical moral dilemmas from the MJI were included in the DIT1. However, the participant task is not to produce reasons for an action, but to evaluate and rate the considerations raised by questions or statements corresponding to the moral dilemmas (Rest, 1986). The participant is asked to rate the relative importance of each statement using a 5-point Likert scale and then rank the statements from most important to least important. It is assumed that participant selection indicates their developmental level (Rest, 1986). In early research Rest found different groups of participants preferred different items, with age and education accounting for nearly 50% of the variance

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(Rest, 1986). In an analysis of several longitudinal studies, Rest (1986) concluded there is a developmental trend in moral judgment, providing further support for Kohlberg's developmental stages.

Kohlberg's theory is useful in understanding how moral reasoning develops progressively through stages and has been used to develop tools to measure moral judgment. However, Kohlberg's theory may not fully explain the process of reasoning that occurs within the nurse-patient relationship. The justice orientation of Kohlberg's theory may have limited applicability to a female-dominated profession that esteems caring as a core value. Gilligan's ethic of care offers a different perspective on moral development.

Gilligan's Ethics of Care

As a graduate assistant to Kohlberg, Gilligan (1977) proposed that females have a distinct moral orientation toward relationships, caring, and sensitivity to the needs of others. Noting that even Freud expressed the ethical norm for woman was different from that of men, Gilligan (1977) criticized Kohlberg's justice-based theory for representing only male moral development. In a qualitative, descriptive study, Gilligan (1977) interviewed several college-aged women in her initial research, surmising that a morally good person is one who helps others, and meets their obligation and responsibility toward others without sacrifice of self. According to Kohlberg's stages, this caring orientation is characteristic of the third stage of moral judgment, which he claimed to be functional and adequate for resolving the moral conflicts females encountered. However, Gilligan (1977) argued against the developmental inferiority of women, noting that moral judgments of women are linked to "empathy and compassion, and are more concerned with resolution of real-life problems than hypothetical dilemmas" (p. 490). According

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to Gilligan (1977) the real conflicts women face between compassion and autonomy, and between virtue and power, must be resolved in such a way that no one is hurt.

In a second study, Gilligan (1977) focused on the choices associated with abortion as the basis of her research on the moral judgment of women. Gilligan interviewed 29 women, 15 - 30 years of age, during the first trimester of a confirmed pregnancy that they were considering aborting. In the initial part of the interview, Gilligan (1977) investigated the women's choice and feelings of conflict regarding the pregnancy. In the second part of the interview, moral judgment was assessed using Kohlberg's hypothetical dilemmas for resolution. Gilligan (1977) found the women to progress through Kohlberg's three levels, but also revealed a distinct female moral language of selfishness and responsibility, which Gilligan described as a moral orientation toward concern for not hurting others. Gilligan inferred the moral judgment of the women progressed toward relationships and the inherent responsibility that existed in the relationships.

As a result of this early research, the developmental sequence Gilligan identified evolved into her own stage theory of moral development of women. The *Ethic of Care* is characterized by stages and transitions that are fueled by changes in the sense of self, rather than the cognitive capability changes described by Kohlberg. Level one is characterized by individual survival, caring for oneself. The first transition is entered as one begins to criticize the selfishness of level one and begins to understand the responsibility to others. In level two moral good is equated with caring for others. However, caring for others at the expense of caring for self can cause conflict in relationships, which causes the woman to scrutinize the logic of self-sacrifice versus the responsibility of serving others. In level three, the internal conflict between selfishness and responsibility resolves. This final level is characterized by an understanding of the dynamics of

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relationships and ‘care becomes a universal obligation’ (Gilligan, 1977, p. 504). Appendix B provides a concise description of Gilligan’s Ethics of Care.

Rest's Four Component Model

As Rest continued his research on moral development he was commissioned to author a chapter in Mussen’s Handbook of Moral Psychology (Thoma & Bebeau, 2013). In reviewing the literature for this task, Rest discovered four clusters of findings that represented conceptually independent processes that occur in moral decision-making and behavior that extend beyond cognitive and physical development (Thoma & Bebeau, 2013). With the discovery of these four concepts, moral reasoning became defined as a process of decision-making characterized by recognizing ethical issues, weighing options, making judgments, and arriving at a decision when faced with equally competing options (Rest, 1994). Thus, the four conceptual processes of moral sensitivity, moral judgment, moral motivation, and moral character ultimately became Rest’s Four Component Model (Thoma & Bebeau, 2013). Appendix C provides a concise description of the processes of Rest’s Four Component Model.

Rest’s (1986) Four Component Model is intended to portray an analytical model of the four processes that occur in moral behavior, not that moral behavior is a linear progression through each component. Rest argued that although each process has distinct functions with different cognitive-affective interactions, each component could influence another (1986).

Component I. Moral sensitivity is characterized by the ability to interpret a situation by thinking about the possible courses of action and the consequences of how those actions affect the welfare of others (Rest, 1986). In Component I the individual recognizes the moral problem and considers the specific moral principles that apply to the situation (Rest, 1986). The underlying element in moral sensitivity is that the person realizes their actions, right or wrong,

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will affect other people (Rest, 1984; Rest & Narvaez, 1994). According to Rest (1986) this component is variable among people; some have great difficulty interpreting even the simplest of situations, while others can be either insensitive or highly sensitive to the needs and welfare of others. Rest's interpretation of moral sensitivity seems to be quite applicable to nursing. He claims that empathy plays a significant role in the cognitive-affective interconnection that occurs when faced with moral problems (Rest, 1986).

Component II. Moral judgment has been widely researched by Kohlberg and is what the DIT1 intended to assess (Rest & Narvaez, 1994). Moral judgment is the process of deciding what is morally right or wrong and what ought to be done in the situation (Rest, 1986; Rest & Narvaez, 1994). Moral judgment appears to be shaped by social experiences that result in the development of a distinct sense of social cooperation and fairness, which drives one's moral judgment (Rest, 1986). Rest (1986) also notes the influence of belief systems and ideologies on a person's sense of fairness in making decisions in moral rightness.

Component III. Moral motivation is characterized by the importance given to moral values over other competing values. Deficiency in this component could be represented when competing values of self-actualization or self-preservation dominate over the choice to do right. Thus, the competing values take higher priority than moral values. Rest (1986) postulates the concepts of self-concept and professional identity may impact the cognitive-affective interconnectedness in moral motivation.

Component IV. Moral character is the ability to execute and implement an action with resolve. Rest and Narvaez (1994) refer to competence, perseverance, strength of conviction, and courage as attributes of moral character. The cognitive-affective interplay in moral character is

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apparent in the ability to self-regulate in face of frustration, fatigue, and discouragement (Rest, 1986).

Rest's Four Component Model is useful in understanding how moral reasoning is a compilation of processes that result in a chosen action. The significance of each component to the nursing profession, which is founded in caring therapeutic relationships and bound by an ethical code, is profound. For the purposes of this study, a nurse's ability to possess moral sensitivity was considered to be foundational to the nurse-patient relationship. The roles and responsibilities of the nurse imply a need for awareness of the patient's vulnerable state, recognizing the ethical dilemma, and weighing the actions to take to address a given situation. Thus, Rest's model aids in understanding the cognitive-affective elements that influence a nurse's decision making.

Collectively, the moral development approaches of Kohlberg, Gilligan, and Rest provide a lens through which moral development of nursing students can be studied. These theories provide insight on moral reasoning as it relates to nursing students and how educators can cultivate moral development. Thus, the theories of Kohlberg, Gilligan, and Rest provide the framework on which this study was built.

Summary

The literature review presented in this study provided a detailed overview of nursing ethics, moral reasoning, and moral sensitivity as they related to nursing students, framed within a theoretical structure provided by Kohlberg (1981 & 1984), Gilligan (1982), and Rest (1986). Moral sensitivity is the ability to recognize the ethical implications of a given situation, weigh the consequences of action options, and resolve one's own feelings regarding the situation (Rest, 1986). As the first component of moral reasoning, moral sensitivity is a process that develops

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over time and as a result of experiences and education. There is evidence in the literature that supports the conclusion that nursing student moral sensitivity is not fully understood. There is evidence of two groups of researchers who have explored moral sensitivity of nursing students in Korea and the United States. The literature reviewed identified only one specific tool designed to measure moral sensitivity of nursing students, which was administered in the United States. However, the reliability of the instrument is marginally low and does not simultaneously measure social desirability bias. Thus, it cannot be determined if the study results are a true representation of nursing student moral sensitivity.

CHAPTER 3: METHODOLOGY

This study explored the relationship of academic preparation and social desirability on self-reported moral sensitivity of nursing students. Nursing students at undergraduate and graduate levels of education have opportunities to provide patient care that are laden with controversial and sensitive ethical issues. It is of importance that nursing graduates from all levels of education be prepared to examine ethical issues, and make appropriate judgments and decisions in the delivery of care. Thus, it is important to understand how moral sensitivity develops and how moral reasoning matures during academic preparation.

This chapter describes the methodology used in this quantitative study. The research setting, target population, sampling method, sample size, and method of recruitment are described. Next, the instrument and data collection method and analysis procedures are outlined. Finally, the limitations and ethical considerations of the proposed study are acknowledged.

Research Design Overview

This quantitative study utilized a non-experimental correlation explanatory approach. According to Polit and Beck (2012) non-experimental studies do not apply interventions or have control groups. In addition, correlation explanatory designed studies do not manipulate or control the variables but, rather, attempt to explain the relationship between them (Creswell, 2013). A non-experimental approach aided in describing the relationship between moral sensitivity, social desirability bias, and select demographic and academic variables. The purpose of this study was to explore the relationship of academic preparation and social desirability on the self-reported moral sensitivity of nursing students.

The following questions guided this research study:

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1. What are the demographic characteristics of the nursing students participating in this study?
2. What is the level of nursing student moral sensitivity in patient care situations, as measured by the total moral sensitivity score and the seven designated subscales?
3. What is the relationship between social desirability and self-reported moral sensitivity of nursing students?
4. How do demographic characteristics influence the relationship between social desirability and moral sensitivity of nursing students?

Setting

The decision to include a specific research setting was based on the type of questions and information needed to address the research questions (Polit & Beck, 2012). Since this study sought to measure the moral sensitivity of nursing students, an academic setting was most appropriate. In order to promote a larger and more diverse sample, multiple sites were used for this study. Two mid-size, public universities with baccalaureate and graduate nursing degree programs were selected; one from Connecticut and the other from Michigan. Approval to implement the study was gained from the department chair at each university (Appendices D & E). A program liaison at both universities assisted in gaining access to potential participants. Since both universities offer undergraduate, baccalaureate-completion, and graduate degree nursing programs, the researcher had prospective access to a representative target population.

Target Population and Sampling Method

The literature (Kohlberg, 1984; Rest, 1975, 1979, 1986) suggests that moral reasoning increases with education and experience, so the target population of pre-licensure, baccalaureate-completion (RN-BSN), and graduate-level nursing students provided information

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about moral sensitivity of nursing students at various levels of education. It was assumed these populations of students would provide data that could be generalized to the entire population of nursing students.

Sample designs are concerned with how to identify individuals from the targeted population to be included in the study. A correlational research design promotes generalizability to the entire population. Convenience sampling, in which available subjects agree to participate, is appropriate for the non-experimental research design of this study. Purposive select groups from the available students at the two universities were invited to participate in the study. Pre-licensure undergraduates in the first and last-year of their programs, undergraduate second-degree, baccalaureate-completion, and graduate-level nursing students who agreed to participate were included in the study. The decision to use convenience sampling versus random sampling from the entire population was based on considerations of finances and time.

Sample Size

Power analysis is used to estimate the probability of correctly rejecting the null hypothesis. Thus, power analysis helps the researcher to minimize the risk of committing a Type II error. There are two ways researchers can determine the appropriate sample size needed to accurately evaluate research questions: (1) by consulting power tables for specific types of analyses or (2) by using online programs such as G Power 3. The power tables included within Polit and Beck (2012) and Polit (2010) texts were consulted to determine the adequate sample size for evaluating the posed research questions. For research question 2, the comparisons made among the groups of nursing students require a minimum of 19 participants per group, to achieve 80% power, using an alpha level of .05 and an effect size of .15. For research questions 3 and 4, a sample size of 85 adults was determined by using power analysis for bivariate correlation to

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achieve 80% power, alpha level of .05, and an estimated population correlation coefficient of 0.3 (Polit, 2010, p 242). However, research question 4 was ideally addressed using a multiple regression analysis. In this instance, with a power = .80 and $\alpha = .05$, and using a maximum of 8 predictors to detect R^2 between .10 and .13, a sample size of 110 to 145 participants would be needed (Polit, 2010). Given these different sample size values, the researcher needed complete data from a minimum of 145 nursing students.

Recruitment

According to Polit and Beck (2012) recruitment of participants involves two tasks: identifying eligible candidates and persuading them to participate. First, nursing program administrators from each program were asked for permission to recruit students for this study and approval from each university institutional review board (IRB) was obtained (Appendices F & G). Once permission was obtained, a program liaison at each university nursing program aided in identifying eligible participants and provided e-mail addresses for the purpose of distributing the electronic survey. Gaining cooperation of eligible participants required multiple strategies. Polit and Beck (2012) advocate persistence on the part of the researcher in gaining participation of subjects, the use of incentives, and sharing of results. The program liaison from each university was asked to distribute a research study announcement (Appendix H) one week prior to the distribution of the research survey. The announcement introduced the purpose of the study, the benefits of participating in the research, assurance of data confidentiality, the data collection time frame, and offered an incentive for participating. On the electronic survey distribution date, the researcher released an e-mail with the survey electronic link to each of the eligible participants. The e-mail to the eligible participants included the purpose of the research study and disclosed how the data were to be stored, analyzed, and used in the study (Appendices

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I & J). Completion of the survey served as consent to participate in the study. At one- and two- week intervals after the initial e-mail, reminder e-mails were sent to all eligible participants, whether or not they had completed the electronic survey (Appendices K – N). During the data collection period, the researcher evaluated the total number of completed surveys and closed the survey after the desired number of completed surveys had been obtained. At this time four names were randomly drawn from the participants who entered the gift card drawing and the gift card was mailed to the address provided.

Instrumentation

Instrumentation refers to the questions used to gather the research data (Creswell, 2013). The instrument must be reliable and valid to provide accurate measures of the phenomenon. Several tools, described below, were used in this study.

Modified Moral Sensitivity Questionnaire for Nursing Students

The MMSQ-SN (Comrie, 2006) was the primary research instrument used in this study. Electronic permission was obtained from the author to use the questionnaire (Appendix O). The MMSQ-SN (Appendix P) is a self-administered Likert-type questionnaire with 30 separate statements about moral sensitivity. Each item required the student to agree or disagree with statements that represent ethical dimensions in clinical practice (Comrie, 2006). Comrie (2006) modified the original MSQ (Lutzen, Nordin, & Brolin, 1994) to facilitate quantitative measurement of moral sensitivity of nursing students.

The MMSQ-SN uses five of the six major theoretical categories of the MSQ (Comrie, 2006). The sixth category was revised for use with the nursing student population. The categories the MMSQ-SN measures are:

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1. Expressing benevolence: A moral motivation to do “good” or act in the best interest of the patient.
2. Structuring moral meaning: The process of reflection in deriving moral meaning for decisions made and actions taken, even if these may limit the patient’s self-choice.
3. Modifying autonomy: Strategies taken when the practitioner perceives the need to limit a patient’s autonomy but is also aware of the principle of self-choice. This often occurs in a situation in which there is need to protect the patient from self-harm or harming others, either psychologically or physically.
4. Interpersonal orientation: Focuses on building a trusting relationship with the patient and finding ways of responding to his or her own perceived needs.
5. Experiencing moral conflict: In order for moral sensitivity to be expressed one needs to first experience moral conflict; a potential or existing moral issue must first be identified. Experience refers to feelings and intuition as well as the cognitive perception of a moral issue and what ought to be done.
6. Personal conviction that professional knowledge is necessary when dealing with moral issues.

MMSQ-SN scoring. Twenty-eight of the items are categorized according to the six subscales of moral sensitivity. Item 29 is uncategorized and should be analyzed independently (Comrie, 2006). It refers to giving medication by force if the patient refuses medications, which explores the nursing student’s attitude toward the use of coercion to gain patient compliance (Comrie, 2006).

The scale for each item is 1 (Strongly Disagree) to 7 (Strongly Agree). Thus, a score between 1 and 7 is indicative of the extent to which the participant disagrees or agrees with the

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moral issue represented by the item. Scores for each item were totaled and rated as very important, important, neutral, or disagreement (Comrie, 2012). Items with mean scores of 5.9 – 7.0 are considered higher values and reflect general agreement with the moral issues as being very important. Those items with mean scores of 5.0 – 5.8 are considered to reflect general agreement with the moral issue as being important. Items with a mean score of 3.1 – 4.9 reflect neutrality. Items with scores below 3.1 reflect disagreement or strong disagreement with the moral issues.

Cronbach's alpha is a reliability measure of consistency with statistically significant values ranging from 0.70 to 0.95 (Polit & Beck, 2012). In the original study, the MMSQ-SN produced a Cronbach's alpha of 0.64, which is considered marginally reliable for internal consistency. While Comrie (2005) interprets this finding as low, the original Cronbach's alpha score is a reflection of the specific sample in the original research. This research study validated the internal consistency of the tool and the research findings with this sample. Polit and Beck (2012) maintain "an instrument's reliability is not a fixed entity. The reliability of an instrument is a property not of the instrument but rather of the instrument when administered to certain people under certain conditions" (p. 355).

Marlowe-Crowne Social Desirability Scale

Self-report surveys are susceptible to invalid data due to participant response bias. Social desirability is a participant response bias in which there is the need to obtain approval by responding in a manner in which one is looked upon favorably. The Marlowe-Crowne Social Desirability Scale (MSCDS) is a widely used survey that was designed to control response bias in self-reports.

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Ray's (1984) short version of the MCSDS includes eight items (6, 13, 15, 16, 19, 21, 34, 35) from the original MCSDS requiring "yes" and "no" responses (Appendix Q). In developing this version, Ray (1984) administered the tool to random clusters of individuals three different times: once using a German version of the instrument, which had a Cronbach's alpha of .65, and twice using an English version, with a Cronbach's alpha of .74 both times. In later research, Ray (1974) found his short version to produce a Cronbach's alpha of .69. Although considered low reliability when compared to preferred range of .70 to .95 (Polit & Beck, 2012), use of Ray's (1984) short version of the MCSDS is based on the analysis and recommendations of Greenwald and Satow (1970). Greenwald and Satow (1970) concluded that between one and 12 of the original MCSDS items with the best Likert scale Cronbach's alpha could predict social desirability similar to the MCSDS. It was thus recommended a researcher could combine items to generate a reliable measure of social desirability when considering time available for testing and participant fatigue and attention span (Greenwald & Satow, 1970). Ray's short version was selected for this study in consideration of the combined time required to complete the NSDS, MMSQ-SN, and the MCSDS, and because it was readily available for public use.

Nursing Student Demographic Survey

The researcher utilized a Nursing Student Demographic Survey (NSDS) instrument, developed by this researcher, to assess participant demographics (age, gender, race, and marital status), current academic level, previous academic degrees, and years of clinical nursing experience. Seago, Wong, Keane, and Grumbach (2008) document the value of understanding the impact of nursing student characteristics on educational experiences. Thus, the NSDS (Appendix R) was created from the situational construct of Seago et al. (2008) to identify variables that could explain the differences between groups of nursing students. A thorough

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description of the sample characteristics was “critical to interpreting results and understanding the population to whom the findings can be generalized” (Polit & Beck, 2012, p. 376).

Additionally, these characteristics may be linked to the study findings, which was determined needed further exploration.

Data Collection

Thorough collection of data required a systematic plan for the steps to be taken before, during, and after data collection, as well as how data will be collected (Lunenburg & Irby, 2008). Prior to collecting data, IRB approval was obtained (Appendices F & G). Once IRB approval was obtained, a faculty liaison at each academic institution informed eligible participants of the study and obtained current e-mail addresses. Polit and Beck (2012) maintain that self-report surveys can gather a great deal of good information if the questions are relevant to the data desired. The MMSQ-SN, MCSDS, and the NSDS, were combined to create one electronic self-report survey. The MMSQ-SN and MCSDS short form contained questions used by previous researchers that provided feedback from pilot participants, and were considered to possess clarity and relevancy for the study purposes. Author permission was obtained to use the MMSQ-SN (Appendix Q). The MCSDS short form was readily available for public use, so did not require author permission. The NSDS is designed to gather demographic and professional experience information. Three colleagues reviewed the questions for clarity, and minor revisions were suggested. The self-report survey for this study included the MMSQ-SN questions first, followed by the MCSDS questions, and concluded with the student data. The eligible participant e-mail addresses were loaded into the researcher’s academic institution contacts by academic groups. The self-report survey was loaded into the electronic survey development cloud, Select Survey. To protect anonymity, participants were assigned a unique identifier using letters and

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numbers. Prior to the designated date for sending the survey to participants, a pretest deployment of the survey to the dissertation committee chair occurred via e-mail for review. Technical difficulties and final revisions were addressed at this time.

On the designated release date, the survey deployed to eligible participants via the e-mail addresses provided by the program liaisons. The e-mail message contained a description of the study, along with an informed consent statement, right of voluntary participation and withdrawal, incentive offered for participation, how the data would be used and reported back to the participants, the researcher contact information, and the link to the electronic survey.

Participants who completed the survey were considered to agree to participate in the study. After participants completed the 45-item instrument the survey automatically submitted to the online cloud database. Upon completing the survey, participants were prompted to provide a mailing address to enter a drawing for a \$50.00 gift card to be awarded to four participants. After one and two weeks, eligible participants received a reminder e-mail with the same information as the initial e-mail. When the projected number of survey responses was obtained, the survey closed and the results were analyzed in collaboration with a statistician.

Data Analysis Procedures

The survey data were subjected to exploratory and descriptive analyses. The first type of exploratory analyses identified nursing students who did not complete all of the questions on either the moral sensitivity questionnaire or the social desirability scale. This was necessary to determine which items had missing responses and which type of imputation method was appropriate, or if the missing survey responses would be deleted (Polit, 2010, p. 371).

The second round of exploratory analyses determined how well the data satisfied the assumptions required of parametric analyses, primarily normality and homogeneity of variance.

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The total moral sensitivity scores were evaluated for normality by calculating a z score of skewness. The total moral sensitivity scores were also graphed with a normal curve superimposed on each graph, which provided the supporting visual documentation of whether the data were skewed or not. Whether the groups within a variable had similar amounts of variability was determined using the Levene's Test.

The final analysis computed prior to evaluating the research questions was to determine the reliability of the survey instruments. Internal consistency of the moral sensitivity and social desirability scores was computed using Cronbach's Alpha, which aided in evaluating the quality and adequacy of both the MMSQ-SN and MCSDC instruments.

Once the assumptions required by the parametric analyses were evaluated, the research questions were addressed with either appropriate parametric or corresponding non-parametric analyses. The first research question referred to the demographic characteristics of the sample. Metric variables, such as age, were summarized using means, minimum and maximum values, and standard deviations. Since the data supported the assumptions of parametric comparisons, comparisons using the Analysis of Variance (ANOVA) were made among the groups of nursing students. This was not executed for every demographic variable (like groups of nursing students) as there were insufficient cell sizes in several subgroups. The categorical and ordinal demographic data were summarized using frequencies, percent's, and modal values.

The second research question focused on the total and subscale scores of moral sensitivity. As these data are metric, the same descriptive procedures were used as outlined above for the demographic variable of age. Likewise, it was planned to perform parametric comparisons among the groups of nursing participants on the total and subscale scores of moral sensitivity. However, after determining the seven subscales lacked adequate reliability, the

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decision was made to not compute parametric analyses or comparisons on these data for several demographic variables.

The third research question focused on the relationship between the total moral sensitivity scores and the shortened form of social desirability. Exploratory analyses revealed the data were not normally distributed, so the relationship between moral sensitivity and social desirability was calculated using Pearson's rho correlation coefficient and Kendall's tau coefficient (non-parametric).

Finally, the fourth research question focused on the impact of the demographic variables and social desirability on the prediction of moral sensitivity (total scores). To evaluate the impact of both social desirability and the collected demographics, multiple regression was performed.

Limitations of Research Design

Limitations are those elements of the study that may negatively affect the results, interpretation of outcomes, or the generalizability of the study (Lunenburg & Irby, 2008). Identifying limitations or weaknesses aids the researcher in developing a tight study design that will minimize their effect on the study results.

Internal Threats

Internal validity threats typically arise from the methodology, data, or method of analysis, but can include the participant experience and compromise confidence in drawing conclusions about the relationship between variables (Creswell, 2014; Roberts, 2010). A risk to internal validity exists secondary to the self-report survey design in which participants may provide the researcher with answers they believe are wanted rather than answers that reflect subjects' actual thinking. Anonymity of participants may have reduced socially undesirable responses, but may

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have also posed a threat related to lack of accountability for answers. Previous research has not determined whether accountability is more favorable than anonymity in gaining honest and reliable survey results. The combination of Likert-type required responses and measurement of social desirability not only provided a lens through which to analyze the participant responses, but minimize the effect of response bias.

External Threats

Threats to external validity compromise confidence in generalizability of study results to other groups. Limitations related to external threats can result from sample characteristics and size, response rates, and timing of the study (Roberts, 2010). A limitation of this study related to the use of a convenience sample. A convenience sample includes whoever may be available or those who volunteer to participate, which limits representation of and thus generalizability of the results to the larger population. Sampling available students reduced the potential effect of a sampling error (Lunenburg & Irby, 2008; Roberts, 2010). Response rates and timing of the study could independently or collectively cause a threat to the validity of the study results (Creswell, 2014). Students traditionally experience many stressors related to demanding schedules and expectations. Thus, timing the release of the survey to avoid high academic workload and stress was paramount. The release of the survey occurred two weeks after the beginning of the semester. In an effort to produce the needed response rate, an e-mail reminder one and two weeks after the survey release reminded students of the research study, thus heightening awareness. Because students may be motivated to participate if there was a perceived benefit to participating, eligible participants were provided information on the study importance and offered the opportunity to enter a gift card drawing for participating.

Ethical Considerations

Ethical issues in research are evident at several points in the research process. In survey research, data collection, data analysis, and reporting of results present distinct issues that should be the researcher's priority agenda (Polit & Beck, 2012; Creswell, 2013). Three principles guide designing and conducting research: beneficence (minimizing risk to participants), respect (protecting participant autonomy and informed consent), and justice (distribution of risk and benefits) (Creswell, 2013). IRB's exist to safeguard ethical design and implementation of research. Prior to gathering of data, IRB committee members reviewed the research plans to assure protection of human rights. Application to the IRB at the two participating universities was completed by using the required forms and documents. Once IRB approval (Appendices F & G) was gained from both universities implementation of the research study ensued. A program liaison at both universities assisted in gaining access to university domain e-mail addresses of eligible participants. Participant e-mail addresses were delivered as file attachments to the researcher's university student e-mail account, which was password protected. The e-mail addresses were then transferred to the researcher's e-mail address book. The electronic document containing the participant e-mail addresses has been secured in a locked safe in the researcher's private home office, and will be stored for a period of three years. Upon completion of the research study, the findings will be shared with participants, after which the e-mail addresses will be deleted from the researchers e-mail account.

Analysis of the data reports the full range of findings, including findings that may be contrary to the study premises. In documenting the research findings, the researcher assured the report is written free of jargon and in a manner that communicates the significance of the study

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findings. Appropriate in-text and reference section credit has been given to sources, including authors, titles of works consulted, and publication dates.

Summary

This chapter describes the quantitative methods implemented to answer the research questions that explore the impact of academic preparation on moral sensitivity of undergraduate, baccalaureate-completion, and graduate-level nursing students. The multi-site research setting, target population, projected sample size, and recruitment methods were detailed. Description of the multi-tool instrument disclosed the purpose and details of the NSDS, MMSQ-SN, and CMSDS tools. The data collection method and analysis procedures are outlined. Finally, the limitations and ethical considerations of the study are acknowledged.

CHAPTER 4: DATA ANALYSIS AND RESULTS

Using a correlational research design, this study explored the impact of academic preparation and social desirability on the self-reported moral sensitivity scores of nursing students. Chapter Four is organized in five sections: data collection process, description of the sample, detailed analysis of the data and research questions, discussion of the results, and summary.

Data Collection

The self-report survey for this study included the MMSQ-SN (Comrie, 2006) questions first, followed by the MCSDS (Ray, 1984) questions, and concluded with the NSDS. For tracking purposes, two electronic survey response links were created, one for each participating university. The research study information, informed consent, and the Select Survey electronic link were released on September 15, 2015 to eligible participants via the e-mail addresses provided by program liaisons. Completed surveys were monitored by the researcher for automatic entry into an Excel file and an overall response rate. Once the desired sample of 140 was obtained, the study survey was closed on October 1, 2015.

Importation of data

After the survey closed, the Excel file was then imported into SPSS version 22. As importing data from Excel is customary in SPSS no errors in the data values were anticipated. Inspection of the SPSS data confirmed that the Excel file was successfully and accurately imported with values listed in SPSS that corresponded to those listed in the original file and with missing observations or missing variables identical to those in the original file. The imported SPSS file contained the responses of 140 nursing students.

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Description of the sample

After IRB approval (Appendices F & G), university liaisons at the two participating institutions provided e-mails addresses for the eligible participants (n = 993). The targeted sample population included: first-year traditional undergraduate nursing students (n = 101), senior-level traditional undergraduate nursing students (n = 85), accelerated second-degree undergraduate nursing students (n = 23), baccalaureate-completion nursing students (n = 630), and graduate level nursing students (n = 154). When the study survey closed, the desired sample size (n = 140) was obtained. After analysis of the data, a final sample size consisted of: first-year traditional undergraduate nursing students (n = 12), senior-level traditional undergraduate nursing students (n = 25), accelerated second-degree undergraduate nursing students (n = 2), baccalaureate-completion nursing students (n = 59), and graduate-level nursing students (n = 26).

Missing data. Several participants failed to complete one or more items on the three questionnaires: (1) MMSQ-SN (Comrie, 2006), (2) Ray's (1984) short version of the MCSDS, and (3) the researcher-developed NSDS. Immediately, the decision was made not to eliminate any participants if they failed to complete one or more items on the demographic sheet and to recognize that comparisons between various categories of demographic variables may be based on different cell sizes. This decision was prompted by the attempt to retain sufficient power in order to perform the analyses addressing the posed research questions.

Inspection of the data from both the measure of moral sensitivity and the social desirability scales revealed that missing data were relegated to the moral sensitivity measure MMSQ-SN. Frequencies of each item comprising the MMSQ-SN identified 10 nursing students (five from each location) that failed to complete *any* of the questions on the moral sensitivity measure. These participants were deleted from the data file, leaving a total of 130 respondents.

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A second examination of the frequencies associated with each item of the MMSQ-SN revealed that two nursing students failed to answer more than 25% of the moral sensitivity questions.

Using the guidelines of Polit (2010), the responses from these two participants were also deleted, leaving a final sample consisting of 128 respondents. After these deletions, there were still six missing values on the MMSQ-SN. While there are numerous methods of handling missing values, an imputation method (filling in missing values with values thought to be a good estimate) was used in this analysis. Mean substitution, replacing a missing value with the mean of that variable, calculated from all sample members with non-missing data, was used (Polit, 2010). The final sample of 128 nursing students represented 91% of the original sample. When the data were summarized in tables, demographic variables with missing values were corrected if they included a missing category and the percent values reported by SPSS.

Verifying assumptions of planned statistical analyses. Prior to describing the sample, the moral sensitivity data were subjected to exploratory analyses to confirm whether there was support for using parametric analyses to address the posed research questions. The use of parametric analyses requires that the scores (data) be normally distributed and be homoscedastic (equal amount of variability) in the groups (Polit, 2010). There are several different methods of determining whether collected data are normally distributed. A simple technique is to compute a z score of skewedness, dividing the value of skewedness by its standard error (Field, 2009, p 140). The total moral sensitivity score had a skewedness of .15 and a standard error of skewedness of .21 resulting in a z value of .71, well below the criteria of 1.96. The variability in the moral sensitivity data was examined for several demographic variables (e.g., ethics training, location) that might be used as predictors in the regression analyses. All of these comparisons

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failed to identify significant differences in variability. Thus, the exploratory analyses supported the use of parametric analyses.

Reliability. Prior to evaluating the research questions, the reliability of both the moral sensitivity and the social desirability measures was computed for this sample. Confirmation of the internal consistency was necessary in light of Polit and Beck's (2012) argument that an instrument's reliability is not a fixed characteristic of the tool or questionnaire but can change with the sample. Although there are several approaches to measure internal consistency, the most widely used method is to compute an index called Cronbach's Alpha (or coefficient alpha). The normal range of values for coefficient alpha is between .00 and 1.00, with higher values indicative of better internal consistency. Alpha is an estimate of how much of a "true score" versus "error" there is in a scale (Polit, 2010).

Moral Sensitivity. The moral sensitivity measure was evaluated first. The internal consistency of the total moral sensitivity score yielded a value that exceeded the currently recommended minimum value of .70 (Table 4.1). Thus, a minimum of 55% of the variability in the moral sensitivity scores represented true individual differences on the underlying morality construct and not more than 45% represented random, extraneous fluctuations. However, the reliability of the subscales comprising moral sensitivity presented a different picture. Some subscales were based on three items, which is inadequate and can lead to errors of measurement. Given that the reliability of most of the subscales was below the recommended minimum, the decision was made not to evaluate the subscales for any of the posed research questions.

Social Desirability. Next, the social desirability measure was evaluated. The reliability of the measure of social desirability (Table 4.1) was slightly below the minimum criteria but in the range considered "useable."

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Table 4.1

Reliability of the MMSQ-SN and the MCSD

Measure	Coefficient Alpha
MMSQ-SN	.74
Experiencing Conflict	.49
Expressing Benevolence	.48
Interpersonal Orientation	.63
Modifying Autonomy	.41
Structuring Moral Meaning	.28
Professional Knowledge	.23
MCSD	.65

Detailed Analysis of the Research Questions

The objective of the data analysis was to identify if there were statistically significant relationships between academic preparation and social desirability and the moral sensitivity of nursing students. In this section, the results of the data analysis are applied to the posed research questions.

Research Question 1: *What are the demographic characteristics of the nursing students participating in this study?*

The 128 participants in this study were overwhelmingly female, with about 8 women for every male. Caucasians heavily outnumbered the other ethnic groups, with approximately 18 Caucasians for every Hispanic, African American, or American Indian. About half of the participants indicated that they held associate degrees and about another quarter of the participants reported that they either had a bachelor's degree or no previous college degree. In terms of their current academic status, nearly 50% of the participants reported that they were enrolled in baccalaureate-completion programs, and another quarter indicated that were either

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graduate/master's nursing students or traditional undergraduate nursing students in their last-year in the program. Finally, in terms of their prior nursing ethics instruction, about one-third of the nursing students identified they had not taken a separate nursing ethics course but that ethics was integrated into the nursing program, another one-third reported they were enrolled in an ethics course outside of nursing, and one-quarter were enrolled in a separate nursing ethics course (Table 4.2).

Table 4.2

Demographic characteristics

Characteristic	Categories	f	%
Gender	Male	14	11.4
	Female	109	88.6
	Missing	5	
Race/Ethnicity	Caucasian	106	86.2
	Hispanic/Latino	6	4.9
	African American	4	3.3
	American Indian or Alaskan Native	4	3.3
	Native Hawaiian or Other Pacific Islander	1	1.6
	Other Race	2	1.6
	Missing	5	

(Table 4.2 continued)

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Table 4.2 (cont)

Characteristic	Categories	f	%
Previous College Degree			
	Associates	62	50.0
	Bachelor's	28	22.6
	Doctoral	3	2.4
	Master's	2	1.6
	No previous college	29	23.4
	Missing	4	
Current Academic Status			
	Accelerated second-degree nursing student	2	1.6
	Baccalaureate-completion (RN-BSN)	59	47.6
	Graduate/Master's Nursing	26	21.0
	Traditional undergraduate, first-year of program	12	9.7
	Traditional undergraduate, last-year of program	25	20.2
	Missing	4	
Completed College Ethics Course			
	No, nursing ethics was integrated in the nursing program	41	33.1
	Yes, separate nursing ethics course	34	27.4
	Yes, ethics course outside of nursing	42	33.9
	Don't know	7	5.6
	Missing	5	

Descriptive analysis (Table 4.3) of the participants' age revealed a wide range of ages, between 19 – 61 years of age, with an average age of 36 years. Undergraduate second-degree nursing students were the youngest participants, while graduate-level students were the oldest participants.

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Table 4.3

Age of sample by academic status

Current Academic Status	f	Minimum Age	Maximum Age	Mean Age	Standard Deviation
Graduate-Level	25	28	61	44	9.5
Baccalaureate-Completion Student	59	22	60	39	9.4
Second-Degree Prelicensure	2	22	24	23	1.4
Undergraduate Last-year	24	20	53	27	8.0
Undergraduate First-year	12	19	45	25	7.8
Sample Total	122	19	61	36	11.3

The study participants were then assigned to groups by licensure status. Descriptive analysis (Table 4.4) revealed a wide range of ages, 19 – 53 with a mean age of 26, for prelicensure nursing students. Those participants currently licensed as registered nurses ranged in age from 22 – 61, with a mean age of 40.

Table 4.4

Age of sample by licensure status

Licensure Status	f	Minimum Age	Maximum Age	Mean Age	Standard Deviation
Prelicensure	38	19	53	26	7.71
Licensed as Registered Nurse	84	22	61	40	9.65

Research Question 2: *What is the level of nursing moral sensitivity in patient care situations, as measured by the total moral sensitivity score and the seven designated subscales?*

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The total moral sensitivity score was computed for each participant by summing the points assigned to each of the questions comprising the MMSQ-SN (Table 4.5). The 128 nursing students exhibited total moral sensitivity scores that ranged from 108 to 178, with a mean of 142.34. This total score was then converted to an average response to the MMSQ-SN to determine the extent to which the participant disagreed or agreed with the moral issues represented by the questionnaire. Total average scores between 5.9 and 7.0 indicated general agreement that the moral issues were *very important*. Total average scores between 5.0 and 5.8 reflected general agreement the moral issues were *important*. Total mean scores ranging from 3.1 to 4.9 suggested that the moral issues were considered *neutral*. Total mean scores below 3.1 suggested either *disagreement* or *strong disagreement* with the moral issues (Comrie, 2012). About two-thirds of this sample of nursing students reported, on average, that the moral issues evaluated by the MMSQ-SN were *neutral*, another third of the participants indicated that these issues were *important* and only two students rated the moral issues as *very important* (Table 4.5).

Table 4.5

Total average moral sensitivity scores across the MMSQ-SN

Agreement with the moral issue	f	%	
5.9 – 7	Moral issues are <i>very important</i>	2	1.6
5.0 – 5.8	Moral issues are <i>important</i>	42	32.8
3.1 – 4.9	Moral issues are <i>neutral</i>	84	65.6
below 3.1	Moral issues are <i>not important</i> <i>or not very important</i>	0	

The mean moral sensitivity scores of each academic status group were then computed (Table 4.6). The mean moral sensitivity scores for undergraduate first- and last-year nursing students were higher than the mean moral sensitivity scores of second-degree, baccalaureate-

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completion, and graduate-level nursing students. Baccalaureate-completion and graduate-level nursing student mean moral sensitivity scores were essentially the same, but lower than undergraduate and higher than second-degree nursing students. This finding suggests that undergraduate nursing students identified the moral issues on the MMSQ-SQ with higher importance than the second-degree, baccalaureate-completion, and graduate-level nursing students. The descriptive data show that as education increases there is a shift in the mean moral sensitivity scores (Table 4.6).

Table 4.6

Mean moral sensitivity scores by academic status

Current Academic Status	f	Mean	Standard Deviation
Graduate Level	26	4.65	.43
Baccalaureate-Completion	59	4.65	.42
Second-degree Prelicensure	2	4.32	1.01
Undergraduate Last-year	12	5.09	.46
Undergraduate First-year	25	4.92	.50
Unidentified	4	4.91	.68
Sample Total	128	4.74	.48

The average moral sensitivity scores and their associated importance for the seven subscales comprising the MMSQ-SN were not presented given the lack of adequate reliability for these subscales. Researchers state that unreliable scales should not be used in further analyses or comparisons (Field, 2009; Mertler & Vannatta, 2010; Tabachnick & Fidell, 2013).

Research Question 3: *What is the relationship between social desirability and the self-reported moral sensitivity scores of nursing students?*

First, the mean social desirability scores were computed (Table 4.7). The total mean social desirability was 6.12. Next, the mean social desirability scores of each academic status

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group were computed. The graduate-level and undergraduate last-year nursing students yield nearly identical lowest mean social desirability scores of 5.58, while first-year undergraduate students yield the highest mean social desirability score (6.83).

Table 4.7

Mean social desirability scores

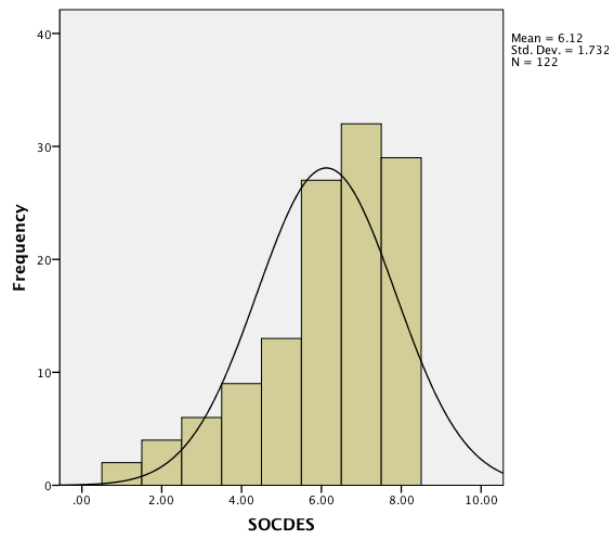
Current Academic Status	f	Mean	Standard Deviation
Graduate	26	5.58	1.79
Baccalaureate-Completion	58	6.43	1.63
Second-degree Prelicensure	2	6.50	.71
Undergraduate Last-year	12	6.83	1.47
Undergraduate First-year	24	5.58	1.86
Sample Total	122	6.12	1.73

Prior to evaluating the relationship between social desirability and moral sensitivity, the social desirability scores were inspected to determine the extent to which these scores were normally distributed or whether they bunched at one end of the distribution resulting in a skewed distribution. The social desirability scores yielded values between 1 and 8, with a mean of 6.12 suggesting that these scores may be negatively skewed and depart from normality. A histogram of the scores with the normal curve superimposed on the data, visually confirmed that the skewedness of the social desirability scores might be problematic when evaluating the relationship between social desirability and self-reported moral sensitivity scores using the Pearson correlation (Figure 4.1).

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Figure 4.1

Social Desirability Score Distribution



This observation supported the need to calculate the z score of skewedness of the social desirability scores, found by dividing the value of skewedness (-1.01) by its standard error (.22). The z score of skewedness was 4.59 and well beyond the ± 1.96 criteria. There were several ways to further address this situation, including using a nonparametric correlation or transforming the data (Warner, 2013). Researchers are not in agreement about which method to use first, but Field (2009) acknowledges that transforming data makes interpretation of the outcome difficult, so he suggests using nonparametric analyses before making linear or log transformations to force the data into a normal distribution. Accordingly, the relationship between social desirability and moral sensitivity was calculated using a Spearman rho coefficient, a non-parametric counterpart of the Pearson correlation. Social desirability was positively ($r = .11$) but non-significantly ($p = .24$) correlated with moral sensitivity. The relationship between social desirability and moral sensitivity of the nursing students was also calculated using Kendall's tau, τ , a non-parametric coefficient recommended when the data set is "small" and characterized by a substantial number of tied ranks (Field, 2009, p 181). Although

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no definition of “small data set” and “substantial” was included in Field’s description, Kendall’s statistic also identified a non-significant correlation ($\tau = .08, p = .25$) between social desirability and moral sensitivity. These correlations suggest that for this population of nursing student’s social desirability is positively correlated but not significantly with moral sensitivity.

Research Question 4: *How do the demographic characteristics impact the relationship between social desirability and moral sensitivity of nursing students?*

Prior to verifying the assumptions of multiple regression, the decision regarding the type of multiple regression needed to be made. Two types of regression analyses were identified: (1) simultaneous multiple regression or (2) hierarchical regression. Based on the exploratory nature of this project, a simultaneous multiple regression was deemed appropriate. Studenmund and Cassidy (1987) argue that the simultaneous multiple regression technique should be used over hierarchical when a new area of research is undertaken as there is a greater chance of replication if the model is retested. Referred to by some statisticians as a “shotgun” approach (Tabachnick & Fidell, 2013), the simultaneous multiple regression assessed the relationships among the variables and answered the basic question of multiple correlation. As an exploratory technique, this regression was deemed appropriate as it was assumed that the analysis would identify demographic variables that were clearly superfluous and perhaps identify demographic variables that appreciably predicted the development of moral sensitivity in nursing students in the United States. In the simultaneous model all the predictors were entered into the regression equation at once; each one was assessed as if it had entered the regression after all other predictors had entered. Each predictor was evaluated in terms of what it added to the prediction of the outcome (moral sensitivity score) that was different from the predictability afforded by all other predictors.

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Several preparatory steps were performed prior to executing the multiple regression analysis. These steps corresponded to the procedures suggested by Tabachnick and Fidell (2013) and Field (2009). First, using the criteria of 20 observations per predictor variable, it was decided to enter four predictors in the multiple regression analysis as additional participants may be excluded if they lead to violations of the assumptions of multiple regression. Second, as multiple regression requires that the predictors be metric variables (at least interval data) or dichotomous categorical variables, several categorical demographic variables with multiple categories were recoded into dichotomous categorical variables. These included (1) age 25 years or below and age over 25 years, (2) licensure as a registered nurse, and (3) whether the nursing student had taken a formal ethics course. Recoding these variables yielded the frequencies noted in Table 4.8.

Table 4.8

Recoded categorical demographic variables

Variable	Recoded Categories	f	%
Age	25 or under	29	22.7
	Over 25	93	72.7
	Missing	6	
Licensure as a Registered Nurse	No	39	30.5
	Yes	85	66.4
	Missing	4	
Completed Formal College Ethics Course	No	41	35.0
	Yes	76	65.0
	Missing	11	

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Execution of the multiple regression analysis evaluated the assumptions of the analysis while simultaneously determining the percentage of variance in the outcome (moral sensitivity) that was explained by the predictor variables (demographic variables). Some of the assumptions of multiple regression were verified by examining one of the key tables (e.g., the Coefficients table; Table 4.12) included in the regression output. Other assumptions were examined by inspecting the residuals; the difference between the student's actual moral sensitivity score and their predicted moral sensitivity score by the multiple regression equation (e.g., the P-P Plot; Figure 4.2).

Review of the *tolerance statistics* presented in the Coefficients table (Table 4.9) indicated that all the predictor variables were tolerated in the model. In other words, there was no evidence of multi-collinearity among the predictor variables. All of the tolerance statistics associated with these variables were greater than .10, the criteria for determining the presence of multi-collinearity (Tabachnick & Fidell, 2013).

Table 4.9

Tolerance values^a

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Licensure as a RN	.495	2.020
Ethics Course	.905	1.105
Social Desirability	.957	1.045
Age Group	.466	2.147

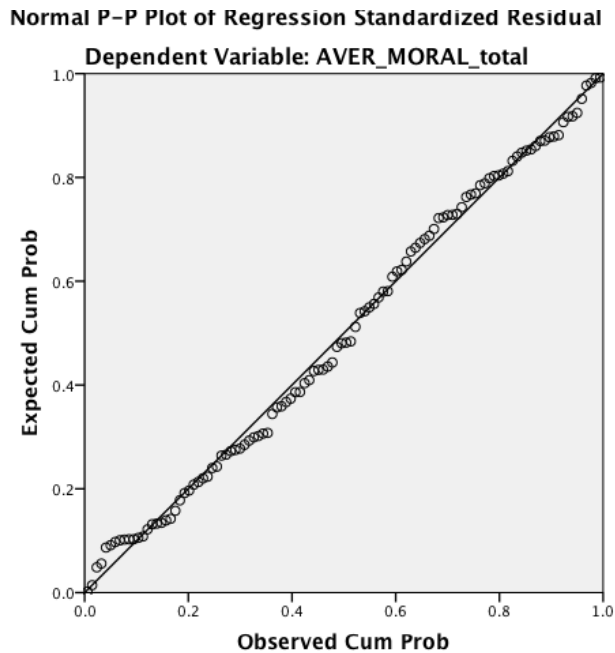
a. Dependent Variable: Average Moral Sensitivity Total

Next, inspecting the P-P plot of the residuals (Figure 4.2), the difference between the observed moral sensitivity score and the predicted moral sensitivity score, provided support for the assumption of normality as the data points closely adhered to the diagonal line.

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Figure 4.2

P-P plot of residuals



Finally, the residuals were inspected for the presence of outliers. Multiple regression provided several ways of identifying outliers. Cook's distance values were used here (Mertler & Vannatta, 2010). As Cook values were between a minimum of 0 and a maximum of .08, all smaller than the criteria of 1, it was assumed that there were no outliers. Given the support for the assumptions of the regression analysis, the Model Summary Table (Table 4.11), the ANOVA table (Table 4.12), and the Coefficients Table (Table 4.13) were further interpreted.

Multiple linear regression analysis was used to develop a model for predicting nursing students' moral sensitivity scores from their social desirability score and the demographic variables of licensure as a registered nurse, completion of a formal ethics course, and age group. Based on the data from 112 nursing students (as several demographic variables had missing data) the average moral sensitivity score was 4.74. The metric predictor of social desirability had an average of 6.06. The zero-order correlations (Table 4.10) showed that not all predictor variables

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had a significant ($p < .05$) zero-order correlation with the moral sensitivity score but only licensure as a registered nurse, social desirability, and age had significant ($p < .05$) effects in the full model. Social desirability was positively correlated with moral sensitivity score, meaning that nursing students with higher social desirability scores also self-reported higher moral sensitivity. Unlike social desirability, both licensure as a registered nurse and age had negative correlations with moral sensitivity, suggesting, for example, that nursing students with higher moral sensitivity scores were not licensed as a registered nurse and vice versa.

Table 4.10

Zero-ordered correlations among predictors and moral sensitivity (N = 112)

Variables	Moral Sensitivity	Licensure	Ethics Course	Social Desirability	Age Group
Moral Sensitivity	1.00	-.255*	-.042	.161*	-.207*
Licensure		1.00	.094	.099	.690
Ethics Course			1.00	.044	.269
Social Desirability				1.00	-.048
Age Group					1.00

* $p < .05$

To examine the overall amount of variability in moral sensitivity explained by the combination of the four predictors and to explain the unique amount of variability explained by each predictor, the remaining output of the multiple regression analysis was reviewed.

Collectively, the four predictors accounted for a significant amount of variability in the moral sensitivity scores of the nursing students, $F(4, 108) = 3.02$, $p = .021$, $R^2 = .10$ (Tables 4.11 & 4.12).

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Table 4.11

Model summary^b

Model	R	R Square	Adjusted R Square	Std Error of the Estimate	Change Statistics		
					R Square Change	F Change	Df1
1	.317 ^a	.101	.067	.44482	.101	3.019	4

- a. Predictors: (Constant), Age Group, Social Desirability, Ethics, Licensure
 b. Dependent Variable: Average Moral Sensitivity total

Table 4.12

Analysis of variance

Model	Sum of Squares	df	Mean Square	F	Significance
1 Regression	2.390	4	.597	3.019	.021 ^b
Residual	21.370	108	.198		
Total	23.759	112			

- a. Dependent Variable: Average Moral Sensitivity total
 b. Predictors: (Constant), Age Group, Social Desirability, Ethics, Licensure

Table 4.13

Coefficients table

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig	Correlations		
	B	Standard Error	Beta			Zero-order	Partial	Part
1 (Constant)	4.654	.275		16.917	.000			
Licensure	-.268	.131	-.266	-2.052	.043	-.255	-.194	-.187
Ethics Course	-.022	.092	-.023	-.244	.807	-.042	-.023	-.022
Social Desirability	.050	.025	.188	2.013	.047	.161	.190	.184
Age Group	-.009	.152	-.008	-.056	.955	-.207	-.005	-.005

- b. Dependent Variable: Average Moral Sensitivity Total

Approximately 10% of the variability in moral sensitivity was accounted for by social desirability and the demographic information of the nursing students (e.g. Model Summary, Table 4.10). Next, the Coefficients Table (Table 4.12) was reviewed again focusing this time on the significance associated with each predictor to identify the predictors that were significant in

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the regression analysis. Of the four predictors entered into the regression model, only licensure as a registered nurse and social desirability resulted in significant contributions to the regression analysis ($p < .05$). Then, the partial correlation associated with each significant predictor was reviewed to determine the unique amount of variability in moral sensitivity that was accounted for separately by the significant predictors of licensure as a registered nurse and social desirability. The partial correlation provides a measure of the relationship between an outcome (moral sensitivity) and a predictor variable, while controlling for the effects of the other predictors. As noted in the coefficients table (Table 4.13), licensure as a registered nurse accounted for the largest amount of the variability in moral sensitivity, followed by social desirability. The multiple regression analysis resulted in the following equation:

Moral sensitivity = Intercept + Licensure Effect + Social Desirability + Random Error

$$Y_{MS} = \beta_0 + \beta_1 * X_1 + \beta_2 * X_2$$

Summary of the Results

The posed research questions served to narrow the focus of this research to specific variables. With a sample that was overwhelming Caucasian females, the research questions sought to determine the influence of academic preparation and social desirability on the moral sensitivity of nursing students. The average total moral sensitivity score (4.74) of all participants suggest the participants, on average, identified the moral issues presented in MMSQ-SN (Comrie, 2006) as minimally important. In measuring the impact of social desirability on moral sensitivity, the total mean social desirability score of the sample (6.12) was positively but not significantly correlated with moral sensitivity. Finally, in evaluating which of the study variables predicted moral sensitivity of nursing students, it was determined that licensure as a registered nurse and social desirability possessed the most significant amount of variability and thus were reliable predictors of moral sensitivity in this population of nursing students.

Summary

The results of this correlation explanatory study were presented in this chapter. A total of 128 undergraduate, baccalaureate-completion, and graduate-level nursing students from two mid-size public universities were surveyed to determine the impact of academic preparation and social desirability on self-reported moral sensitivity scores. The study results presented in Chapter Four included a description of the sample, analysis of the data, and addressed the study research questions.

Chapter 5: CONCLUSIONS AND DISCUSSION

The major purpose of this research study was to explore moral sensitivity of nursing students. This study was designed to assess if nursing students at various levels of academic preparation perceive ethical issues in care delivery situations differently. This study also assessed the impact of social desirability on nursing student moral sensitivity. This chapter discusses the study findings, limitations, and implications for further research of moral sensitivity in nursing students.

Summary of the Results

This study used a non-experimental correlation explanatory approach to identify and measure the relationship of academic preparation and social desirability on the self-reported moral sensitivity of nursing students at various levels of academia. Several tools were used to gather the research data. The MMSQ-SN (Comrie, 2006) was the primary research instrument and facilitated quantitative measurement of moral sensitivity in nursing students. Ray's (1984) MSCDS short version was used to measure and control for social desirability. The third instrument was created by the researcher and assessed participant demographics, current academic level, previous academic experience, and years of clinical nursing experience. A sample of 128 nursing students from two mid-size public universities provided data across the targeted academic levels.

The study data were subject to exploratory and parametric analysis. Exploratory analysis of the data determined that the moral sensitivity scores were normally distributed and homoscedastic in the groups. The moral sensitivity and social desirability measures were then examined for reliability and internal consistency. The total moral sensitivity score was found to be a reliable measure of moral sensitivity, and in this sample, all participants identified the moral

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issues presented in the MMSQ-SN (Comrie, 2006). However, all of the MMSQ-SN (Comrie, 2006) subscales were found to have reliability coefficients below the recommended minimum. Subsequently, the subscales were not evaluated for the posed research questions.

The MCSD was determined to be a usable measure of social desirability, which is consistent with Ray's (1984) research. In this sample, the social desirability scores were negatively skewed. Without a guideline for what constitutes a low, medium, or high score (Tatman, Swogger, Love, & Cook, 2009), the higher than average score could be interpreted to represent nursing student tendency to misrepresent themselves to be viewed as more positive than negative.

Lastly, the relationship between the demographic variables, social desirability, and moral sensitivity was evaluated through parametric analysis. In this population of nursing students, current licensure as a registered nurse correlated negatively with moral sensitivity, while social desirability correlated positively. Comparison of the study findings to the moral sensitivity literature occurs in the following section.

Discussion of the Results

The following research questions provided the framework for the research. The findings and conclusions were drawn from the results of the study and apply to the study sample.

Research Question 1: *What are the demographic characteristics of the nursing students participating in this study?*

Findings. Based on exploratory analysis of the sample self-reported data the following results were found.

- Of the study participants who reported gender and race/ethnicity, 88% identified as female and 86% identified as Caucasian.

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- The nursing students in this study ranged in age from 19 to 61 years, with an average age of 36. A majority (78%) of the nursing students were over the age of 25.
- Of the study sample, an overwhelming number (75%) reported having earned a previous degree, of which 98% were currently enrolled in a baccalaureate-completion or graduate nursing program. The largest percentage (47%) of the study participants were baccalaureate-completion nursing students, followed by undergraduate and then graduate nursing students. Of the study participants who reported having earned a previous degree, 89% were already licensed as a registered nurse.
- The study sample was heavily weighted with currently licensed registered nurses. Over two-thirds (69%) of the study sample reported holding current licensure, while 30% reported pre-licensure status.
- Nearly two-thirds (65%) of participants reported having ethics content either as a separate course outside of the nursing program, as a separate nursing course, or integrated throughout academic nursing preparation.

Conclusion and comparison to the literature. The study participants identifying as male (11%) is higher than the current workforce trends of 7% (Budden, Zhong, Moulton, & Cimiotti, 2013). This result is comparable to the national trend toward an increase of males in the workforce, and slightly under the current 14% in nursing academic programs (National League for Nursing, 2015). While this study did not evaluate the impact of gender on moral sensitivity, gender could certainly be a variable. While Kohlberg (1981) focused his research on males, Gilligan (1977) believed that females have distinct moral orientations that differ from males. Lutzen, Johansson, and Nordstrom (2000) supported this belief when determining that males and females regard the use of coercion to elicit patient compliance much differently.

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Lutzen, Johansson, and Nordstrom (2000) also determined that females and males have different moral orientations. You, Maeda, and Bebau (2011) speculated that socialization in society may explain the difference between female and male responses to moral issues. The growing number of males entering the nursing profession could impact the overall moral sensitivity in the profession, and is worthy of future research.

The ethnic/racial diversity of the current nursing workforce is similar to that of the study participants. The study participants identifying as Caucasian were slightly higher than the current 83% of the current United States nursing workforce who identify as Caucasian (Budden, Zhong, Moulton, & Cimiotti, 2013). While occupying 19% of the current nursing workforce, ethnic/racial minorities in this study were less than 14%. The number of study participants in this study is too small to reach a conclusion about their representativeness of total nursing students who belong to an ethnic/racial minority. However, both statistics are not representative of the current national demographics in which minorities account for 37% of the United States population (Budden, Zhong, Moulton, & Cimiotti, 2013). Sociologists maintain that moral reasoning is influenced by personal values and experiences, and it is through social experiences that individuals are conditioned to respond in an approved manner (Kohlberg, 1984; Crowne & Marlowe, 1964). Although nurses are socialized to the profession by a process of adopting norms, customs, and ideologies usually the result of formal education, a dearth of research has explored the impact of culture, ethnicity, or race on moral sensitivity. With growing opportunities for individuals from minority groups to enter the profession of nursing, the impact of culture on moral sensitivity needs to be further explored.

The study population comprised nursing students from baccalaureate and graduate-level nursing programs. However, an overwhelming number of the participants reported having

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earned a previous degree and current enrollment in a baccalaureate-completion or a graduate nursing program. This finding is reflective of the nursing profession's standard for a professional workforce minimally educated at the baccalaureate level and a decade long increased enrollment in baccalaureate-completion and graduate nursing programs (AACN, 2015). Deductively, it stands to reason the participants in this study are over the traditional college student age range. With a mean age of 36, three-quarters of the sample were over the age of 25. On further inspection, the mean age of undergraduate nurse students who were not yet licensed was 26, while the mean age of nursing students already licensed as a registered nurse was much higher (mean = 40). These findings are reflective of the average age of baccalaureate and graduate-level nursing students in the United States. However, the mean age of licensed nursing students is 10 years less than the mean age of practicing registered nurses (mean age = 50) (Budden, Zhong, Moulton, & Cimiotti, 2013). This difference could be explained by the nursing profession goal to have a highly educated workforce (AACN, 2015). In the attempt to represent the total population of nursing students in nursing academic programs in the United States, the demographics of this sample differ from the samples in previous studies on moral sensitivity in nursing students. This study heavily represents non-traditional nursing students and the nurse who is returning to academia for continued formal education.

Finally, nearly two-thirds of the participants reported exposure to ethics content in academic preparation through 1) integration in the participant nursing program, 2) a separate nursing course, or 3) an ethics course outside of a nursing program. This finding suggests that ethics education has become an integral part of the academic preparation of nurses, which aligns with the ANA (2015) focus on ethical nursing practice and the AACN (2008) *Essentials of Baccalaureate Education* guidelines for nursing curricula. While it can be implied from these

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findings that ethics education has become an integral part of nursing curricula in the United States, there is a dearth of information regarding the current status of ethics content in nursing textbooks, the presence of dedicated nursing ethics courses in nursing curricula, how nursing ethics is integrated in nursing curricula, or if a general ethics course is required as a prerequisite to entry into a nursing program.

Research Question 2: *What is the level of nursing student moral sensitivity in patient care situations, as measured by the total moral sensitivity score and the seven designated subscales?*

Findings. Based on the parametric analyses the following results were found.

- On average, nursing students in this sample identified the moral issues associated with the MMSQ-SN questions as neutrally important.
- The designated subscales failed to demonstrate reliability, and therefore were not subject to further analyses.

Conclusion and Comparison to the Literature. Moral sensitivity is the ability “to recognize when an act, situation, or certain aspects of a situation have moral implications” (Jaeger, 2001, p. 132). Ethical issues abound in the current health care environment, and can challenge both the expert and novice nurse. The ability to identify ethical issues is a critical element in moral reasoning (Rest, 1986). The ability to identify ethical issues in nursing practice is foundational to proactively preventing their occurrence (Epstein, 2012; Prince-Paul & Daly, 2010). The MMSQ-SN (Comrie, 2006) is designed to measure nursing student sensitivity to moral issues in care delivery situations. The MMSQ-SN in Comrie’s (2005) original work demonstrated a reliability of .65, which was reflective of the sample to which the MMSQ-SN was administered. The total moral sensitivity score of the MMSQ-SN when administered to the sample in this study was .74, which more closely aligns with the reliability found in Lutzen’s

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(1995) original instrument, suggesting it is a reliable measure of moral sensitivity. However, as Comrie (2005) identified, the MMSQ-SN subscales reliability scores were below the recommended minimum, and were not subjected to further testing. This finding prevented categorizing nursing student moral sensitivity. Additionally, the structure of the MMSQ-SQ scoring table is heavily weighted to categorize total scores as neutral, which may not accurately represent the importance assigned to the questions by the participants. Comrie (2005) provides no rationale for the weighting of the categories.

The sample in this study demonstrated the ability to identify the moral issues represented in the MMSQ-SN, which is consistent with Comrie's (2005) findings. The mean moral sensitivity score of the sample in this study was 4.74, as compared to the mean score of 4.38 in Comrie's (2005) study. While not greatly different, the population of nursing students in this study identified the moral issues associated with care delivery situations as having higher importance than the sample in Comrie's (2005) study. However, clearly the sample in this study did not mirror the sample in Comrie's (2005) study, and thus the results will vary. Comrie's (2005) sample included only undergraduate and graduate-level nursing students, where this study attempted to represent the current picture of students in nursing academic programs by including baccalaureate-completion students. Comrie's (2005) sample was overwhelming under the age of 36 (83%), while this study sample was older (mean age = 36). The participants in Comrie's (2005) were subject to a compulsory ethics course as a program requirement, while the participants in this study may or may not have been required to take an ethics course in their academic programs. Age, education, and experience influence moral reasoning (Rest, 1974; Kohlberg, 1981; Crishman, 1981; Ketefian, 1981; Colby, Kohlberg, Gibbs, & Lieberman, 1983).

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Deductively, it can be inferred that the demographic variables unique to the participants in this study impacted the moral sensitivity scores.

The ability to identify the ethical issues in care delivery situations is paramount to delivery of patient-centered care. As nursing students graduate from pre-licensure programs and assume professional practice, it is vital that they understand the profession's moral responsibility to protect the patient and their rights. In formal academic programs, nursing students are socialized to the values of the profession through classroom, laboratory, and supervised patient care experiences. The mean moral sensitivity scores (4.92, 5.09) of the undergraduate nursing students in this study suggests they are capable of identifying the important ethical issues in hypothetical care delivery situations. According to Kohlberg's stages of moral development, the traditional age (19 – 25) undergraduate student thinking is evolving toward the conventional level of moral reasoning (Kohlberg, 1981). Thus, the undergraduate nursing student will focus on conformity to the rules learned in formal education. However, although movement through the moral development stages is progressive, individual progression occurs at varying rates (Kohlberg, 1981; Gilligan, 1982). Considering socialization occurs over time and the greatest gains in moral development occurs during the formal college education years, it would be expected that first-year nursing student mean scores would be lower than last-year nursing students. However, in this study first- and last-year undergraduate nursing student moral sensitivity scores did not appreciably differ. This finding differs from that of Park, Kjervik, Crandell, and Oermann (2012), who found freshmen and senior nursing student moral sensitivity differed significantly when measured by the Korean version of the MSQ. It was speculated that the difference could be attributed to the effectiveness of baccalaureate nursing education in Korea (Park, Kjervik, Crandell, & Oermann, 2012). In light of Park, Kjervik, Crandell, and

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Oermann's (2012) conclusion, the findings of this study suggest in-program ethics content may not be fully developed in undergraduate baccalaureate curricula.

The higher mean moral sensitivity score of traditional undergraduate nursing students must also be carefully considered within the context of the perceived importance (or lack of importance) of a moral issue. The ability to discern the meaning of ethical implications embedded in care delivery situations may be difficult for the novice undergraduate nursing student. Lutzen and Nordin (1993b) found nurses related the ability to discern the meaning of situations to intuition and feelings, rather than on theories or principle-based reasoning. Experience provides a model for navigating ethical dilemmas by placing emphasis on after-the-fact reflection and judgmental guidance, thereby producing an intuitive nursing-specific tacit knowledge. Undergraduate nursing students have variable amounts of formal education but limited professional experience, which can be a barrier to nurse sensitivity to patient needs and vulnerability (Hanks, 2008; Bu & Jezewski, 2007). Aligning with Benner's (1982) *Novice to Expert* model, nursing students with limited professional experience are rule-oriented and still developing tacit knowledge, thus may not be able to discern the importance of the ethical implications presented in healthcare situations.

The mean moral sensitivity scores of undergraduate nursing students must be considered from both the cognitive and affective process that occurs in moral reasoning. In a study of the cognitive and affective processes involved in moral sensitivity, Decety, Michalska, and Kinzler (2012) found younger age correlated with more brain activity in the emotion areas of the brain, while older age was associated with more brain activity in the decision-making area of the prefrontal cortex. In the population of nursing students who participated in this research study, undergraduate nursing students reported the youngest ages and the highest self-reported moral

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sensitivity scores. When compared to Decety, Michalska and Kinzler's (2012) findings, the undergraduate student groups may have demonstrated stronger emotional responses to the moral situations represented by the MMSQ-SN questions and thus assigned greater importance to the implied ethical implications of each situation.

Baccalaureate-completion and graduate-level nursing students in this study identified the ethical issues associated with the MMSQ-SN with lower importance than the undergraduate nursing students. The lower self-reported moral sensitivity scores of nursing students who are currently licensed must be considered within the context of Rest's (1986) *Four Component Model*. Rest (1986) eventually concluded there were four components of moral behavior and aligned Kohlberg's moral stages of development with moral judgment. Moral judgment, the second component of the moral reasoning process relies on the initial process of moral sensitivity: the ability to successfully recognize, understand a patient's vulnerability, and have insight into the implications of decisions made on behalf of another person (Jaeger, 2001; Lutzen, Nordstrom, & Everston, 1995). Crishman (1981) also found nurses familiar with real-life ethical dilemmas demonstrated greater ability to identify ethical dilemmas in hypothetical healthcare situations. It is through professional experience that nurses develop the ability to distinguish right from wrong and what should be done in a situation (Rest, 1986; Rest & Narvaez, 1994). The combination of formal education and professional experience enables the baccalaureate-completion and graduate-level nursing students in this study to distinguish the importance of the ethical issues represented by the MMSQ-SN questions, resulting in lower self-reported moral sensitivity scores.

However, it stands to reason the baccalaureate-completion and graduate-level nursing students are older in age and more mature as an individual and as a nurse. The

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baccalaureate-completion and graduate academic groups with older average ages may possess greater developed moral reasoning and the ability to differentiate the importance of ethical implications, thus assigning less importance to the presented situations. These findings are consistent with Kohlberg's theory of moral development (Rest et al., 1974; Rest, 1975; Colby et al., 1983), which first established the tendency of moral reasoning to coincide with physical maturation. Through both education and experience nurses develop a lens for morally reasoned action. It may be through this lens that already licensed nurses in this study assigned less importance to some ethical situations represented by the MMSQ-SN questions. When age is combined with education and experience, the tempering of values and higher-level reasoning processes aid in differentiating the importance of the ethical implications associated with situations. Benner (1982) proposed that through education and experience nurses develop ways of knowing and understanding the patient experience. Lutzen and Nordin (1995) further suggested that education, age, and experience are significant influencers in the development of wisdom. The age, previous education, and professional experience of the nursing students in this study are variables that may influence how care delivery situations are perceived and cognitively processed.

Research Question 3: *What is the relationship between social desirability and self-reported moral sensitivity of nursing students?*

Findings. Based on the parametric analyses the following results were found.

- There is no significant relationship between social desirability and nursing student moral sensitivity as measured by Ray's (1984) short version of the MCSDS and the MMSQ-SN (Comrie, 2006).

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Conclusions and Comparison to the Literature. This study used a self-report survey to collect data, which Polit and Beck (2012) recognize as being particularly vulnerable to social desirability bias. Social desirability bias is a function of several factors: the general need for approval experienced by the individual, the perceived desirability of a characteristic being studied, and the demands of a particular situation. The tendency of nursing students in this study to present an image that is congruent with professional values could impact the reliability of the study findings. Thus, measurement of social desirability using Ray's (1984) MCSDS short form allowed the researcher to control and test for its effect on the moral sensitivity data.

Initially, the social desirability data suggested that participant responses to the MCSDS questions were negatively skewed. The congregating of scores toward the higher end of the scale indicates a greater need for approval. However, further analysis determined that social desirability was positively but not significantly correlated with moral sensitivity. This finding suggests that on average nursing students at all levels of education desire to be seen favorably by others, but not to the extent of interfering with recognizing moral issues. These findings also suggest that nursing students at all levels of education can be socialized to the values inherent to nursing, which provide a moral framework by which to recognize and judge ethical issues and their broader implications. As nursing students become socialized to these values, they become better prepared to apply principled thinking in both routine and unique care delivery situations.

Further examination of the mean social desirability scores revealed a range of scores from 5.58 – 6.83. Ray's (1984) MCSDS scores responses on a range from 1 – 8, with higher scores indicating a greater need for approval. Graduate and first-year undergraduate nursing demonstrated the lowest social desirability scores, suggesting a lower need for approval as compared to the other three academic groups. The similar findings between graduate nursing

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students and first-year undergraduate students may be influenced by population characteristic variables not measured in this study. Graduate-level students in this study tended to be older (mean age = 44). Age is recognized as a major moderator of values, thus tempering the need to be seen favorably by others. The first-year undergraduate students mean social desirability score is considered above average, suggesting a moderately high need to be seen favorably. With an average age of 25, this academic group has some real life experience, but minimal care delivery experience. As novice practitioners, first-year nursing students may feel the need to be seen favorably by other nurses as a means to demonstrate adoption of professional values.

The mean social desirability score of last-year undergraduate nursing students was the highest of all the groups. Although the last-year undergraduate nursing student is expected to function at higher levels of moral reasoning than first-year nursing students (Rest, 1974; Kohlberg, 1981; Crishman, 1981; Ketefian, 1981; Colby, Kohlberg, Gibbs, & Lieberman, 1983), they do not possess greater ability to resist social pressure to conform to social expectations (Blasi, 1980). Since survey respondents are more likely to be influence by social desirability when being asked to self-report on competence (van de Mortel, 2008), the last-year undergraduate nursing students in this study may have been compelled to present an impression of a practitioner on the precipice of professional practice.

Research Question 4: *How do demographic characteristics impact the relationship between social desirability and moral sensitivity of nursing students?*

Findings. Based on the parametric analyses the following results were found.

- Licensure as a registered nurse and social desirability are significant predictors of self-reported moral sensitivity in this sample of nursing students.

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Conclusions and Comparison to the Literature. Multiple regression was conducted to examine the relationship between moral sensitivity of nursing students and the predictors of participant demographics and social desirability. Licensure as a registered nurse and social desirability accounted for the largest amount of variability in moral sensitivity. Thus, the multiple regression suggests that moral sensitivity is a function of licensure as a registered nurse and social desirability. Moral sensitivity was negatively and significantly correlated with licensure as a registered nurse, indicating that nursing students with lower scores of moral sensitivity tended to be licensed as a registered nurse. Conversely, moral sensitivity was positively and significantly correlated with social desirability, indicating that nursing students with higher moral sensitivity scores tended to have higher social desirability scores.

Meeting all three criteria established by the multiple regression analyses, undergraduate nursing students in this study demonstrated the highest social desirability scores and self-reported the highest moral sensitivity scores. As not yet-licensed participants in this study, undergraduate nursing students may be keenly aware of the principles that provide the foundation for ethical nursing practice, but lack the practice experience to contextualize the ethical implications associated with care delivery situations. While the moral sensitivity scores for both undergraduate academic status groups differ minimally, the social desirability scores differ considerably. The higher social desirability scores for undergraduate last-year nursing students represent the tendency of respondents to provide a response that was either exaggerated or congruent with professional values (social desirability) and was found to positively predict moral sensitivity. Analysis of question three found that although social desirability was positively correlated with moral sensitivity, the relationship was not significant. However, the impact of social desirability as a predictor of moral sensitivity must be contextually considered.

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The likelihood of social desirability impacting nursing student responses to MMSQ-SN questions depends on the social or professional value placed on the situations represented in the questions. A nursing student's discernment of a situation may be significantly impacted by perceived professional expectations or standards. In a review of health-related studies van de Mortel (2008) found survey respondents were more likely to be influenced by social desirability when being asked to self-report on competence and socially sensitive topics.

The ANA *Code of Ethics* (2015) is recognized to embody the nonnegotiable moral values that guide nursing practice. When and how nursing students are exposed to these ethical principles affects their development and adoption of professional values. The professional ability to identify and judge ethical issues develops with academic preparation and exposure to the values and beliefs held by educators and the profession. The effect of social desirability as a predictor of moral sensitivity may be stronger in those students who perceive a greater need to conform. For example, last-year undergraduate nursing students reported the highest level of social desirability and moral sensitivity when compared to the other academic groups. This academic status group of students is nearing graduation and transition into the profession, and may be experiencing cognitive dissonance about a perceived standard of knowledge and competence. Thus, the tendency to exaggerate responses so they are congruent with professional values may be a phenomenon unique to this academic status group of students, and consequently affected the total average social desirability.

Limitations of the Study

The main limitations of this study are related to the selection of participants and the self-report nature of the data, which may limit generalizability to the general population of nursing students in the United States. Each will be discussed briefly in this section.

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Convenience sampling from two public universities resulted in a sample that was overwhelming Caucasian female, with a mean age of 36 years, and with formal academic education. This sample may not be representative of the population of nursing students currently enrolled in formal academic programs. The higher educational levels and practice experience of the sample may have skewed the mean moral sensitivity and social desirability scores.

The survey design and self-report nature of the data may have produced data that do not reflect the true thoughts of participants. The data also may be only a snapshot of the attitudes and beliefs of the population at the time of the survey. The design and data limitations may limit generalizability of the findings to all nursing students.

The final limitation is also related to the survey research design of the study. Survey research is popular across disciplines, but is subject to low response rates. Creswell (2014) noted technological problems and filtering of mail contribute to low response rates to surveys that are delivered via e-mail. In an effort to reduce potential of the survey e-mail being directed to junk mail or flagged as Spam, the researcher obtained academic e-mail addresses of eligible participants and used the e-mail address provided by the academic institution to send the survey invitation. The study design also included a power analysis to estimate the appropriate sample size needed to accurately evaluate the research questions. However, two groups of participants did not reach the desired sample size, while the overall response rate from eligible participants was low (14%). The low response rate could have been related to timing of the study invitation. Participants may have been occupied with the demands associated with their program of study and did not take the time to complete the survey. The participants may also receive an excessive amount of e-mail, leading to in-box saturation and low likelihood of reading the e-mail invitation. The low response rate could be related to the eligible participants simply not

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checking e-mail, which could also lead to in-box saturation. The later possibility may provide the most valid reason for the low response rate from eligible participants. However, although response rate is important and efforts were taken to remind students to participate, it was more concerning to the researcher if the returned surveys were biased (Creswell, 2014). If the returned surveys had been biased, the data would have been inadequate, regardless of the response rate (Creswell, 2014). The inclusion of the MCSD permitted measurement of response bias, thereby limiting its effect. Although the small sample size in the undergraduate first-year and accelerated second-degree academic groups limits generalizability of the study findings to the larger population of nursing students, the overall findings of this study has implications for the profession and can inform future research.

Implications of the Results for Practice

The findings of this correlation explanatory study provides information about the moral sensitivity of nursing students at undergraduate, baccalaureate-completion, and graduate levels of education at two mid-size public universities in the United States. Based on the study findings, the following implications are identified.

- Pre-licensure nursing students perceive moral issues differently than licensed nurses enrolled in baccalaureate-completion and graduate-level nursing programs. Nursing curricula must be intentional in developing the moral reasoning of undergraduate nursing students. In curriculum design and review, documentation of the introduction and reinforcement of ethics content will ensure inclusion across the curriculum.
- To promote long-term moral reasoning development, a variety of teaching and learning strategies that challenge both the cognitive and affective processes must be thread throughout

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undergraduate nursing programs. Appropriately designed case studies and reflective exercises provide opportunity to engage ethical implications in care situations.

- The benefits of simulated care activities are well documented in the literature. Simulated care delivery activities that confront common moral issues in nursing practice will provide nursing students with opportunity to engage patients, families, and other health care team members in a safe environment. Post-simulation debriefing provides the opportunity to reflect on the activity, express thoughts and feelings, and receive feedback on how participants recognize and think through contextually-based patient care situations.
- Clinical experiences must be challenging both cognitively and affectively. As nursing student's progress through programs of study, greater emphasis on thinking capacity and moral reasoning, rather than technical skill performance, is essential for transition into professional practice. Observation of the ethical decision-making process undertaken by care delivery teams and ethics committees followed by reflective exercises will promote examination of ethical principles and development of principled thinking.
- Nursing students need to develop skill in navigating ethical issues as a healthcare team member. Didactic, laboratory, and clinical experiences in which students learn with, about, and from other health care discipline students will aid in understanding the ethical foundations of other disciplines and the development of communication skills needed to confront ethical issues as a health care team member.
- Nursing programs must develop faculty capacity to facilitate exploration of ethics content and ethical principles. Educational opportunities, such as workshops or formal ethics course work for both didactic and clinical faculty must explore the principles of ethical decision-making and ways to facilitate student growth and development.

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- Nursing programs must be aware of the impact of social desirability on the cognitive and affective development of nursing students. The need to represent oneself in a favorable way or to conform to social rules may be rooted in fear of being different or failing to meet a set standard. Learning environments which create a sense of community encourage nursing students to ask questions, express personally held beliefs, and disagree, yet explore alternative positions through examination of societal, religious, cultural, and professional ethical standards.
- Development of moral reasoning does not cease with licensure as a registered nurse. Continuing education opportunities that emphasize ethics and moral reasoning will promote the continued evolution toward principled thinking. Simulated interdisciplinary care delivery situations and organizational ethics committees promote guided exploration of ethical principles and decision-making.
- The changing landscape of nursing education in which more nurses are returning for higher degrees, begs the inclusion of nursing specific ethics courses at all levels of nursing curricula.
- The difference in first- and last-year nursing student's social desirability scores highlights the need to understand the impact of socialization on nursing student's perceived need to be viewed favorably or to conform to rules.

Suggestions for Further Research

The complexity of ethical issues in modern health-care delivery demands the ability to recognize and navigate the care delivery issues with principled thinking. How nursing students develop principled thinking remains poorly understood and warrants continued exploration.

- The MMSQ-SN (Comrie, 2006) subscale items need to be revised and tested. It is possible the current version is designed to test the moral sensitivity of just the undergraduate and

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graduate-level nursing student, rather than the full spectrum of nursing students represented in all nursing programs. The growth in nurses returning to academia for post-baccalaureate degrees' warrants revision of the MMSQ-SN subscales and retesting with wider representation from these academic status groups. In a mixed method design, this group of nursing students should be included in identifying care delivery situations with ethical implications. The findings would inform rewording of the test items.

- Following revision of the MMSQ-SN, this study should be replicated with a larger sample. A multi-site, national survey of undergraduate, baccalaureate-completion, and graduate level nursing students will aid in establishing reliability of the revised MMSQ-SN and extend generalizability of the findings.
- The statistical analyses found little difference in the moral sensitivity of first- and last-year undergraduate nursing students. With exposure to content and clinical experiences, one would expect nursing student moral sensitivity to improve with progression through a nursing program. A multi-site study comparing pre-nursing and graduating nurses could explore how moral sensitivity develops in the undergraduate nursing student.
- A majority of nursing students in this study reported encountering ethics content in a general education ethics course, a separate nursing ethics course, or as integrated throughout their pre-licensure program. Exploration of the impact of these varied content deliveries on the moral sensitivity of undergraduate nursing students would inform the inclusion of compulsory nursing ethics coursework in baccalaureate curricula. A comparison study of this nature would require intentional recruitment of and administration of the MMSQ-SN to senior-level nursing students who experienced ethics content in each of the delivery methods.

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- The recent move toward inclusion of simulated care experiences in nursing curricula calls for further documentation of the effectiveness of simulation in promoting the moral development of nursing students. As simulation in nursing education continues to grow, the nursing student should consider the embedded ethical implications in each scenario through faculty-guided reflection and Socratic questioning. Qualitative analysis of post-simulation reflections would provide valuable insight into how nursing students process ethical concepts and arrive at conclusions. The MMSQ-SN applied upon entry and exit of a nursing program would provide quantitative analysis of moral development over the length of a professional sequence of study.
- With the NLN's renewed emphasis on ethics, nursing textbooks should be evaluated not just for quantity but quality of ethics content. How ethics content is delivered in nursing curricula should also be evaluated through both faculty surveys and critical analysis of curricula, course syllabi, and lessons plans. A study of this nature would inform curriculum revisions.
- Little is known about the capacity of nursing faculty to deliver ethics content or courses. The need for faculty prepared to facilitate delivery of ethics in nursing curricula demands the development of post-baccalaureate nursing ethics degree opportunities. A national survey of faculty would determine this capacity and would inform the need for increased educational opportunities.

Summary

This study explored the impact of academic preparation and social desirability on the self-reported moral sensitivity scores of nursing students. The results add to what is already known about nursing student moral sensitivity and suggest that pre-licensure nursing student

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moral sensitivity differs from that of already licensed nurses. The findings also suggest that undergraduate nursing students are influenced by the need to conform or be viewed favorably by others. The study findings suggest a need for enhanced educational practices and provide direction for future research.

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MORAL SENSITIVITY

APPENDICES

MORAL SENSITIVITY

Appendix A

Kohlberg's Stages of Moral Development		
Moral Level of Thinking	Stage of Development	Description
Pre-conventional Level: Birth to 9 years	Stage 1: Punishment	Individual is good to avoid punishment. Physical consequences determine goodness or badness; Avoidance of punishment; Unquestioning deference of power
	Stage 2: Reward	Right action is what satisfies one's own needs and occasionally the needs of others
Conventional Level: Age 9 to 20	Stage 3: Social Approval	Good behavior to please or help and be approved by others; Behavior judged by intention
	Stage 4: The law	Right behavior consists of doing one's duty, showing respect, and maintaining social order
Post conventional Level: Age 20+ maybe never	Stage 5: Social contract	Right actions defined by individual rights and standards as agreed upon by a society. Personal values are relative and consensus rules.
	Stage 6: Universal principle	Self-chosen ethical principles known as universal rules of just, reciprocity and equality of human rights, and respect for human dignity

Appendix B

Gilligan's Ethics of Care		
Moral Level of Thinking	Stage of Development	Description
Level I: Orientation to Individual Survival: No age listed	Stage 1: Caring for the self	Concern for self/individual survival
	Stage 2: Judges stage 1 to be selfish	
Transition 1 – From selfishness to responsibility to others		
Level II: Goodness as Self-Sacrifice: No age listed	Stage 3: Goodness is caring for others, equated as self-sacrifice	Concern for others/self-sacrifice
	Stage 4: Illogic of the inequality between self and others. Search for equilibrium	
Transition 2 – From goodness to truth		
Level III: Morality of Nonviolence: No age listed	Stage 5: Focus on the dynamics of relationships, to eliminate the tension between self and others	Concern for all/Principle of nonviolence: Do no harm
	Stage 6: Care is extended beyond personal relationships to a general recognition of interdependence of self and other, accompanied by a universal condemnation of exploitation and hurt	

MORAL SENSITIVITY

Appendix C


Rest's Four Component Model	
Moral Sensitivity	Interpreting the situation
Moral Judgment	Judging which action is morally right/wrong
Moral Motivation	Prioritizing moral values relative to other values
Moral Character	Having courage, persisting, overcoming distractions, implementing skills

Appendix D

Western Connecticut State University Department Chair Approval

RE: Moral Sensitivity Research

Delete Reply Reply all Forward ...

 Joan Palladino <palladinoj@wcsu.edu>
Mon 4/27/2015 10:54 AM
Inbox

Mark as unread

To: Rhonda Bishop;
Cc: Ellen Abate

You replied on 4/27/2015 10:55 AM.

I would be glad to help give permission. I just need final approval from IRB.
Dr. P

Joan Palladino Ed.D, RN, CCRN
Chair, Department of Nursing
Associate Professor
[181 White St. Danbury, Ct. 06810](mailto:palladinoj@wcsu.edu)
Ph. 2038378651
Fax 2038378550
palladinoj@wcsu.edu

From: Rhonda Bishop [mailto:bishop031@connect.wcsu.edu]
Sent: Monday, April 27, 2015 10:50 AM
To: Joan Palladino
Cc: Ellen Abate
Subject: Moral Sensitivity Research

Rhonda Bishop
[1280 W. County Farm Road](mailto:bishop031@connect.wcsu.edu)
[Sheridan, MI 48884](mailto:bishop031@connect.wcsu.edu)
[Bishop031@connect.wcsu.edu](mailto:bishop031@connect.wcsu.edu)

April 27, 2015

Joan Palladino, EdD, MSN, RN
Chair, Department of Nursing
200 Ferris Drive, VFS 304-A
[Big Rapids, MI 49307](mailto:palladinoj@wcsu.edu)

Dear Dr. Palladino,

I am a doctoral student who is currently conducting research as a part of the requirements for an EdD in Nursing Education degree at Western Connecticut State University, School of Professional Studies, Department of Nursing. The purpose of this e-mail is to inform you of my research, and gain permission from the Western Connecticut State University (WCSU) nursing department to survey undergraduate, baccalaureate completion, and graduate nursing students for the purpose of measuring moral sensitivity in nursing students.

Moral sensitivity is the ability to recognize ethical implications of situations in clinical practice. Challenges of day-to-day practice increases the need for nurses to be able to identify and act upon moral issues. It is important to gain understanding about nursing student moral sensitivity so that nursing education programs can identify strategies to facilitate development of moral sensitivity in nursing students.

The survey for this research study will be delivered electronically and includes 38 items and questions to capture participant's demographic information. The survey takes approximately 25 minutes to complete. To protect anonymity, participants will be assigned a unique identifier using letters and numbers. Completion of the survey will serve as consent. Data collected from this research will be secured. Institutional Review Board approval from WCSU is pending. Thus, contact with students will not occur until IRB approval has been obtained.

I appreciate the opportunity to share my work with you and ask for your assistance in gaining access to nursing students. If you have questions about this research study, please contact me at the e-mail address above. If you have concerns about this research study you may also contact the Chair of the WCSU IRB, Dr. Jessica Eckstein at irb@wcsu.edu.

I look forward to hearing back from you.

Appendix E

Ferris State University Nursing Department Chair Approval

RE: Moral Sensitivity Research

Delete Reply Reply all Forward ...



Susan J Owens <SusanOwens@ferris.edu>
Tue 4/28/2015 3:57 PM
Inbox

Mark as unread

To: Rhonda Bishop;

You replied on 4/30/2015 9:29 AM.

We will be willing to participate!

From: Rhonda Bishop [mailto:bishop031@connect.wcsu.edu]
Sent: Monday, April 27, 2015 10:45 AM
To: Susan J Owens
Subject: Moral Sensitivity Research

Rhonda Bishop
1280 W. County Farm Road
Sheridan, MI 48884
Bishop031@connect.wcsu.edu

April 27, 2015

Susan Owens, PhD, RN, FNP-BC
Chair, School of Nursing
200 Ferris Drive, VFS 304-A
Big Rapids, MI 49307

Dear Dr. Owens,

I am a doctoral student who is currently conducting research as a part of the requirements for an EdD in Nursing Education degree at Western Connecticut State University, School of Professional Studies, Department of Nursing. The purpose of this e-mail is to inform you of my research, and gain permission from the Ferris State University (FSU) nursing department to survey undergraduate, baccalaureate completion, and graduate nursing students for the purpose of measuring moral sensitivity in nursing students.

Moral sensitivity is the ability to recognize ethical implications of situations in clinical practice. Challenges of day-to-day practice increases the need for nurses to be able to identify and act upon moral issues. It is important to gain understanding about nursing student moral sensitivity so that nursing education programs can identify strategies to facilitate development of moral sensitivity in nursing students.

The survey for this research study will be delivered electronically and includes 38 items and questions to capture participant's demographic information. The survey takes approximately 25 minutes to complete. To protect anonymity, participants will be assigned a unique identifier using letters and numbers. Completion of the survey will serve as consent. Data collected from this research will be secured. Institutional Review Board approval from Western Connecticut State University (WCSU) and FSU is pending. Thus, contact with students will not occur until IRB approval has been obtained.

I appreciate the opportunity to share my work with you and ask for your assistance in gaining access to nursing students. If you have questions about this research study, please contact me at the e-mail address above. If you have concerns about this research study you may also contact the Chair of the WCSU IRB, Dr. Jessica Eckstein at irb@wcsu.edu.

I look forward to hearing back from you.

Sincerely,

Rhonda L. Bishop, EdD(c), MSN, RN

Appendix F

**Institutional Review Board Approval
Ferris State University**

FERRIS STATE UNIVERSITY

Institutional Review Board for Human Subjects in Research

Office of Academic Research, 220 Ferris Drive, PHR 308 - Big Rapids, MI 49307

Date: September 2, 2015

To: Ellen Abate and Rhonda Bishop

From: Dr. Joshua Lotoczky, Interim IRB Chair

Re: IRB Application #150808 (*Moral Sensitivity: A Comparative Analysis of Undergraduate and Graduate Nursing Students*)

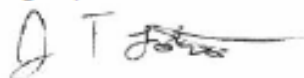
The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, "*Moral Sensitivity: A Comparative Analysis of Undergraduate and Graduate Nursing Students*" (#150808) and determined that it meets Federal Regulations Expedited-category 2G. This approval follows the expiration awarded by Western Connecticut State University. As such, you may collect data according to the procedures outlined in your application until August 18, 2016. Should additional time be needed to conduct your approved study, a request for extension must be submitted to the IRB a month prior to its expiration.

Your protocol has been assigned project number (#150808), which you should refer to in future correspondence involving this same research procedure. Approval mandates that you follow all University policy and procedures, in addition to applicable governmental regulations. Approval applies only to the activities described in the protocol submission; should revisions need to be made, all materials must be approved by the IRB prior to initiation. In addition, the IRB must be made aware of any serious and unexpected and/or unanticipated adverse events as well as complaints and non-compliance issues.

Understand that informed consent is a process beginning with a description of the study and participant rights with assurance of participant understanding, followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document and investigators maintain consent records for a minimum of three years.

As mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) the IRB requires submission of annual reviews during the life of the research project and a Final Report Form upon study completion. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let us know if the IRB can be of any future assistance.

Regards,



Ferris State University Institutional Review Board
Office of Academic Research, Academic Affairs

Appendix G

**Institutional Review Board Approval
Western Connecticut State University**

I.R.B. approval

Delete Reply Reply all Forward ...



Carol O'Connor <oconnorc@wcsu.edu>
Tue 8/18/2015 10:08 AM
Inbox

Mark as unread

To: Rhonda Bishop;
Cc: WCSU IRB <irb@wcsu.edu>; Ellen Abate;

+ Get more add-ins

Hello Rhonda Bishop,

I am pleased to inform you that your I.R.B. protocol number 1415-155 has been approved by expedited review. This email is documentation of your official approval to start your research. If you need a copy of this official approval for funding purposes, please let me know oconnorc@wcsu.edu. The WCSU I.R.B. wishes you the best with your research.

You have 1 year from the date of this email to complete your research; if you are still conducting that date, you will need to fill out a renewal application. When are you finished with your study please fill out and return via email a Termination/Completion Report (available here: <http://wcsu.edu/irb/forms.asp>) so we know your study is complete.

Finally – and most importantly! – we have recently learned that current BOR technology policies do *not* guarantee privacy of any info stored on work computers physically, remotely, or otherwise (i.e., laptop, dropbox, etc.). As such, to maintain the truth of any anonymity or confidentiality promises you make to participants (consent form, for example), you will need to store all electronic data obtained from those human subjects on a system/computer/file not connected to any CSU system. It is your responsibility as the primary researcher to make sure personal data of participants remains securely private – something not guaranteed in the currently existing CSU system. Rest assured, (because it's ridiculous to expect faculty to store work-related research on non-work-related systems and/or to conduct research where participants are not guaranteed anonymity/confidentiality), we are working to gain an exception for research purposes to this policy. But until then, it's technically and legally possible for anyone in the system office to access your participants' data at any time – *without* your consent or knowledge before doing so... which makes any guarantees made on research documents (e.g., consent forms) deceptive unless info is stored elsewhere.

Thanks,
Jessica Eckstein, Ph.D.
Chair, Institutional Review Board
Western Connecticut State University
www.wcsu.edu/irb

Carol O'Connor
Psychology/Philosophy Department Secretary
C.E.L.T
I.A.C.U.C.
I.R.B.
Warner Hall 304
Phone: 203-837-8470
Fax: 203-837-8905

Appendix H

Research Study Announcement

Dear Student,

In the next few days you will receive an e-mail invitation to participate in a research study about moral sensitivity in nursing students. This research study will provide insight about student abilities to recognize ethical implications of patient care situations. The information gained from this study will be valuable for development and revision of nursing education programs.

Your participation is important to this study. Each participant will be eligible to register for a gift card drawing upon completion of the electronic survey. Participation is voluntary and no academic credit will be awarded for completing the electronic survey.

Please watch your e-mail for further description of the study and the electronic survey link.

Sincerely,

Name and Credential of Department Chair
Western Connecticut State University or Ferris State University

Appendix I

**Invitation and Informed Consent Waiver
Ferris State University**

Project Title: Moral Sensitivity: A Comparative Analysis of Undergraduate and Graduate Nursing Students

Principal Investigator: Rhonda Bishop Email: bishop031@connect.wcsu.edu

You are invited to participate in a voluntary online survey about moral sensitivity. Moral sensitivity is the ability to recognize ethical implications of situations in clinical practice. Challenges of day-to-day practice increases the need for nurses to be able to identify and act upon moral issues. The researcher is interested in understanding the relationship between academic preparation and nursing student moral sensitivity. The researcher estimates it will take approximately 25 minutes to answer the survey questions. If you do not wish to answer a question you may exit the survey at any time and none of your responses will be recorded.

Information collected will indirectly benefit the nursing profession and directly benefit nursing academia. Nursing academia will be able to use the information to identify strategies to facilitate development of nursing students. The study will present no greater risk than what one encounters in daily life. The survey data will be collected to protect anonymity, and the topic of moral sensitivity is not sensitive. At the end of the survey you will have the opportunity to register to win one of four \$50 gift cards to be awarded at the end of the survey. Participation or nonparticipation in this study will not impact your relationship with Ferris State University in any way. The study results may be submitted for publication in a nursing journal following completion of the research study and dissertation defense.

If you have questions about this study, please contact the principal researcher listed above. If you have questions about your rights as a participant, contact the Ferris State University Institutional Review Board (IRB) for Human Participants at: 220 Ferris Drive, PHR 308, Big Rapids, MI 49307 (231) 591-2553 or IRB@ferris.edu.

**By clicking on the link below, you consent to participate in this research study.
You may print or save a copy of this page for your records.**

Appendix J

**Invitation and Informed Consent Waiver
Western Connecticut State University**

Project Title: Moral Sensitivity: A Comparative Analysis of Undergraduate and Graduate Nursing Students

Principal Investigator: Rhonda Bishop Email: bishop031@connect.wcsu.edu

You are invited to participate in a voluntary online survey about moral sensitivity. Moral sensitivity is the ability to recognize ethical implications of situations in clinical practice. Challenges of day-to-day practice increases the need for nurses to be able to identify and act upon moral issues. The researcher is interested in understanding the relationship between academic preparation and nursing student moral sensitivity. The researcher estimates it will take approximately 25 minutes to answer the survey questions. If you do not wish to answer a question you may exit the survey at any time and none of your responses will be recorded.

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If you have questions about this study, please contact the principal researcher listed above. If you have questions about your rights as a participant, contact the Western Connecticut State University Institutional Review Board (IRB) for Human Participants at: 181 White Street, Danbury, CT 06810 or irb@wcsu.edu.

**By clicking on the link below, you consent to participate in this research study.
You may print or save a copy of this page for your records.**

Appendix K

**Reminder E-mail of Research Study Announcement
Ferris State University**

From: Rhonda Bishop
Sent: Monday, September 21, 2015 10:15 PM
Subject: Reminder: Opportunity to Participate in Research

This is a reminder of an opportunity to participate in research. If you have already completed the survey please disregard this message.

Invitation and Informed Consent Waiver

Project Title: Moral Sensitivity: A Comparative Analysis of Undergraduate and Graduate Nursing Students

Principal Investigator: Rhonda Bishop Email: bishop031@connect.wcsu.edu

You are invited to participate in a voluntary online survey about moral sensitivity. Moral sensitivity is the ability to recognize ethical implications of situations in clinical practice. Challenges of day-to-day practice increases the need for nurses to be able to identify and act upon moral issues. The researcher is interested in understanding the relationship between academic preparation and nursing student moral sensitivity. The researcher estimates it will take approximately 25 minutes to answer the survey questions. If you do not wish to answer a question you may exit the survey at any time and none of your responses will be recorded.

Information collected will indirectly benefit the nursing profession and directly benefit nursing academia. Nursing academia will be able to use the information to identify strategies to facilitate development of nursing students. The study will present no greater risk than what one encounters in daily life. The survey data will be collected to protect anonymity, and the topic of moral sensitivity is not sensitive. At the end of the survey you will have the opportunity to register to win one of four \$50 gift cards to be awarded at the end of the survey. Participation or nonparticipation in this study will not impact your relationship with Western Connecticut State University. The study results may be submitted for publication in a nursing journal following completion of the research study and dissertation defense.

If you have questions about this study, please contact the principal researcher listed above. If you have questions about your rights as a participant, contact the Western Connecticut State University Institutional Review Board (IRB) for Human Participants at: 181 White Street, Danbury, CT 06810 or irb@wcsu.edu.

**By clicking on the link below, you consent to participate in this research study.
You may print or save a copy of this page for your records.**

The link to the survey is:

<http://survey.wcsu.edu/net/TakeSurvey.aspx?EID=981B46l0B865BH2mBM5oB193B2KM>

Appendix L

**Reminder E-mail of Research Study Announcement
Western Connecticut State University**

From: Rhonda Bishop
Sent: Monday, September 21, 2015 10:15 PM
Subject: Reminder: Opportunity to Participate in Research

This is a reminder of an opportunity to participate in research. If you have already completed the survey please disregard this message.

Invitation and Informed Consent Waiver

Project Title: Moral Sensitivity: A Comparative Analysis of Undergraduate and Graduate Nursing Students

Principal Investigator: Rhonda Bishop Email: bishop031@connect.wcsu.edu

You are invited to participate in a voluntary online survey about moral sensitivity. Moral sensitivity is the ability to recognize ethical implications of situations in clinical practice. Challenges of day-to-day practice increases the need for nurses to be able to identify and act upon moral issues. The researcher is interested in understanding the relationship between academic preparation and nursing student moral sensitivity. The researcher estimates it will take approximately 25 minutes to answer the survey questions. If you do not wish to answer a question you may exit the survey at any time and none of your responses will be recorded.

Information collected will indirectly benefit the nursing profession and directly benefit nursing academia. Nursing academia will be able to use the information to identify strategies to facilitate development of nursing students. The study will present no greater risk than what one encounters in daily life. The survey data will be collected to protect anonymity, and the topic of moral sensitivity is not sensitive. At the end of the survey you will have the opportunity to register to win one of four \$50 gift cards to be awarded at the end of the survey. Participation or nonparticipation in this study will not impact your relationship with Western Connecticut State University. The study results may be submitted for publication in a nursing journal following completion of the research study and dissertation defense.

If you have questions about this study, please contact the principal researcher listed above. If you have questions about your rights as a participant, contact the Western Connecticut State University Institutional Review Board (IRB) for Human Participants at: 181 White Street, Danbury, CT 06810 or irb@wcsu.edu.

**By clicking on the link below, you consent to participate in this research study.
You may print or save a copy of this page for your records.**

The link to the survey is:

<http://survey.wcsu.edu/net/TakeSurvey.aspx?EID=981B46l0B865BH2mBM5oB194B2KM>

Appendix M

**Final Reminder E-mail of Research Study Announcement
Ferris State University**

From: Rhonda Bishop

Sent: Monday, September 28, 2015 4:25 PM

Subject: Final Reminder: Opportunity to participate in research

Dear student,

This is a final reminder of your opportunity to participate in research. You may only complete the survey one time, so please disregard this message if you have already completed the survey.

Invitation and Informed Consent Waiver

Project Title: Moral Sensitivity: A Comparative Analysis of Undergraduate and Graduate Nursing Students

Principal Investigator: Rhonda Bishop Email: bishop031@connect.wcsu.edu

You are invited to participate in a voluntary online survey about moral sensitivity. Moral sensitivity is the ability to recognize ethical implications of situations in clinical practice. Challenges of day-to-day practice increases the need for nurses to be able to identify and act upon moral issues. The researcher is interested in understanding the relationship between academic preparation and nursing student moral sensitivity. The researcher estimates it will take approximately 25 minutes to answer the survey questions. If you do not wish to answer a question you may exit the survey at any time and none of your responses will be recorded.

Information collected will indirectly benefit the nursing profession and directly benefit nursing academia. Nursing academia will be able to use the information to identify strategies to facilitate development of nursing students. The study will present no greater risk than what one encounters in daily life. The survey data will be collected to protect anonymity, and the topic of moral sensitivity is not sensitive. At the end of the survey you will have the opportunity to register to win one of four \$50 gift cards to be awarded at the end of the survey. Participation or nonparticipation in this study will not impact your relationship with Western Connecticut State University. The study results may be submitted for publication in a nursing journal following completion of the research study and dissertation defense.

If you have questions about this study, please contact the principal researcher listed above. If you have questions about your rights as a participant, contact the Western Connecticut State University Institutional Review Board (IRB) for Human Participants at: 181 White Street, Danbury, CT 06810 or irb@wcsu.edu.

**By clicking on the link below, you consent to participate in this research study.
You may print or save a copy of this page for your records.**

The link to the survey is:

<http://survey.wcsu.edu/net/TakeSurvey.aspx?EID=981B4610B865BH2mBM5oB193B2KM>

Appendix N

**Final Reminder E-mail of Research Study Announcement
Western Connecticut State University**

From: Rhonda Bishop

Sent: Monday, September 28, 2015 4:25 PM

Subject: Final Reminder: Opportunity to participate in research

Dear student,

This is a final reminder of your opportunity to participate in research. You may only complete the survey one time, so please disregard this message if you have already completed the survey.

Invitation and Informed Consent Waiver

Project Title: Moral Sensitivity: A Comparative Analysis of Undergraduate and Graduate Nursing Students

Principal Investigator: Rhonda Bishop Email: bishop031@connect.wcsu.edu

You are invited to participate in a voluntary online survey about moral sensitivity. Moral sensitivity is the ability to recognize ethical implications of situations in clinical practice. Challenges of day-to-day practice increases the need for nurses to be able to identify and act upon moral issues. The researcher is interested in understanding the relationship between academic preparation and nursing student moral sensitivity. The researcher estimates it will take approximately 25 minutes to answer the survey questions. If you do not wish to answer a question you may exit the survey at any time and none of your responses will be recorded.

Information collected will indirectly benefit the nursing profession and directly benefit nursing academia. Nursing academia will be able to use the information to identify strategies to facilitate development of nursing students. The study will present no greater risk than what one encounters in daily life. The survey data will be collected to protect anonymity, and the topic of moral sensitivity is not sensitive. At the end of the survey you will have the opportunity to register to win one of four \$50 gift cards to be awarded at the end of the survey. Participation or nonparticipation in this study will not impact your relationship with Western Connecticut State University. The study results may be submitted for publication in a nursing journal following completion of the research study and dissertation defense.

If you have questions about this study, please contact the principal researcher listed above. If you have questions about your rights as a participant, contact the Western Connecticut State University Institutional Review Board (IRB) for Human Participants at: 181 White Street, Danbury, CT 06810 or irb@wcsu.edu.

**By clicking on the link below, you consent to participate in this research study.
You may print or save a copy of this page for your records.**

The link to the survey is:

<http://survey.wcsu.edu/net/TakeSurvey.aspx?EID=981B4610B865BH2mBM5oB193B2KM>

Appendix O

Researcher Approval to use Modified Moral Sensitivity Questionnaire for Nursing students



Rhonda Comrie <rcomrie@siue.edu>
Tue 12/16/2014 1:44 PM



Mark as unread

Good afternoon Rhonda

I have received up to 3 requests to use the tool. I did not receive any information back from those who worked with it. Because the reliability for my study was near .70, I suspect that others have found the need to review and revise some items.

If you determine to use and revise the tool, would you please keep my interests in mind and send me a copy?

Thank you

Rhonda



Rhonda Bishop
Wed 12/10/2014 11:33 AM
Sent Items

Mark as unread

To: rcomrie@siue.edu;

Good morning, Dr. Comrie.

I am a doctoral student in the literature research phase of the dissertation process at Western Connecticut State University. My research interest is in the ethical issues surround end-of-life and how undergraduate nursing students are prepared to deal with them. I had been focusing on Lutzen's MSQ tool until I found your dissertation and revised moral sensitivity tool for nursing students. I am very interested in any further information you can give me about your tool. Has it been revised and/or used again since your dissertation?

Sincerely,

Rhonda Bishop, EdD(c), MSN, RN
Western Connecticut State University

Appendix P

Modified Moral Sensitivity for Nursing Students

Your completion of the questionnaire acts as your consent to participate in the study.

Directions: Identify the extent to which you agree or disagree with each item. The responses range from “1-Strongly Disagree” to “7-Strongly Agree.” Note the Likert scale reads left to right; with “7- Strongly Agree” on the left and “1-Strongly Disagree” on the right. Click the corresponding option to designate the extent to which you agree or disagree with each item.

1. What is most important in my nursing practice is my relationship with my patients.
2. It is my professional responsibility as a nurse to have knowledge about the patient’s whole situation.
3. It is important that I get a positive response from the patient in everything I do.
4. My role as a nurse would feel meaningless if I never saw any improvement in my patients.
5. If I should lose my patient’s trust, I would feel that I failed my patient.
6. If a patient should ask for information about his or her treatment, it is important for me always to be honest.
7. I believe that “good” nursing care includes respecting the patient’s self-choice.
8. It is my experience as a nurse that if a patient has no insight into his or her illness, there is little I can do to help him or her.
9. I am often confronted by situations in which I experience conflict in how to approach the patient.
10. When I am in conflict, where I have difficulty in knowing what to do in response to the patient, there are always people that I can ask.
11. I often face situations in which it is difficult to know what action is ethically right for a particular patient.
12. In making difficult decisions for the patient, I rely mostly on the rules and principles that are accepted by the staff on the floor or unit.
13. It is my experience as a nurse that strict rules are important for the care of certain patients.
14. I believe that sometimes I do the ‘right’ thing for the patient more based on feelings and less on principles.
15. I am faced with difficult decisions to make almost every day.
16. In acute situations where I know very little about the patient’s background, I rely mostly on the charge nurse or unit director to help make care decisions for the patient.
17. Most of all, it is reactions of patients that show me if I have made the right decision.
18. I often think about the values and beliefs which may influence my actions.
19. My own experience is more important than theory in situations in which it is difficult to know what is ethically right.
20. When a patient refuses treatment it is important for me that there are rules to follow.
21. It is my experience that patients in some health care settings participate less in decisions that concern their care than patients in other settings.
22. If there is a conflict between my responsibility towards myself and my responsibility toward my patient, it is the patient who comes first.

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23. I am often confronted with situations where I feel that decisions are made without the patient's participation.
24. In situations where a patient is mandated to be admitted for treatment, I follow the physician's orders, even if the patient protests.
25. When there are different views concerning what goals should be set, it is first of all the patient's wishes that are important.
26. If a patient is dying from alcoholism and his or her last wish is a glass of whisky, it is my obligation to fulfill this wish.
27. If I see that a patient is becoming more and more aggressive, it is first of all the other patients' safety that is my responsibility.
28. In situations where it is my obligation to implement an action against my patient's wishes, it is important that I have support from my colleagues.
29. I can sometimes be motivated to threaten the patient with an injection by force, if he or she does not of his own free will take the medicine that is ordered.
30. In situations where it is difficult to know what is right, I consult experts, more experienced nurses, or the physician.

*Note: Six categories were used to develop the original questionnaire. Each item was assigned to one of the categories. Category codes were removed prior to distributing surveys to respondents.

EB = Expressing Benevolence
MM = Structuring Moral Meaning
IO = Interpersonal Orientation

EC = Experiencing Conflict
MA = Modifying Autonomy
PKN = Professional Knowledge

Appendix Q

**Marlowe-Crown Social Desirability Scale
Original Version Items**

Pearson <i>r</i>	Original Item No.	Item
Positively Keyed		
.62	13	No matter who I'm talking to, I'm always a good listener
.56	21	I am always courteous, even to people who are disagreeable
.53	35	I am quick to admit making a mistake
.52	16	I am always willing to admit when I make a mistake
Negatively Keyed		
.52	34	I have sometimes taken unfair advantage of another person
.51	19	I sometimes try to get even, rather than forgive and forget
.50	6	I sometimes feel resentful when I don't get my own way
.50	15	There have been occasions when I took advantage of someone

(Greenwald and Satow, 1970)

**Marlowe-Crown Social Desirability Scale
Ray's Short Version**

1. Have there been occasions when you took advantage of someone? R
2. Have you sometimes taken unfair advantage of another person? R
3. Are you always willing to admit when you make a mistake?
4. Are you quick to admit making a mistake?
5. Do you sometimes try to get even rather than forgive and forget? R
6. Do you sometimes feel resentful when you don't get your own way? R
7. Are you always courteous, even to people who are disagreeable?
8. Are you always a good listener, no matter whom you are talking to?

(Ray, 1984)

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Appendix R

Nursing Student Demographic Survey

Directions: Please select the categories which best describe you.

Gender:

1. Female
2. Male

Your age as of December 31, 2015

Open-ended response.

Ethnic Origin or Race:

1. American Indian or Alaska Native
2. Asian
3. Black or African American
4. Hispanic or Latino
5. Native Hawaiian or Other Pacific Islander
6. White
7. Some Other Race

Current Academic Status:

1. Traditional Undergraduate Nursing Student – First-year in Program
2. Traditional Undergraduate Nursing Student – Last-year in Program
3. Accelerated Second-degree Nursing Student
4. Baccalaureate-completion (RN to BSN) Nursing Student
5. Graduate or Master's Nursing Student

Have you completed a college level course in ethics?

1. Yes, I took a separate nursing ethics course
2. Yes, I took an ethics course outside the nursing program
3. No, nursing ethics was integrated in the nursing program
4. Don't know

Do you hold a previous college degree?

1. No Previous College Degree
2. Associate Degree
3. Bachelor's Degree
4. Master's Degree
5. Doctoral Degree

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If you hold a previous college degree, what was your major?

Open-ended response

If you are a practicing RN with more than 2 years of experience, please identify your area of clinical specialty.

1. Medical – Surgical Nursing
2. Critical Care Nursing
3. Pediatric Nursing
4. Obstetrics-Gynecologic Nursing
5. Home Health Care Nursing
6. Public Health or Community Nursing
7. Long – Term Care or Rehabilitation Nursing
8. Physician Office Practice
9. Academia
10. Other