THE RELATIONSHIP OF ETHICS EDUCATION TO MORAL SENSITIVITY AND MORAL REASONING OF STUDENTS IN BACCALAUREATE NURSING PROGRAMS OF SOUTH KOREA

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ABSTRACT

MIHYUN PARK: The Relationship of Ethics Education to Moral Sensitivity and Moral Reasoning of Students in Baccalaureate Nursing Programs of South Korea
(Under the direction of Diane Kjervik)

The purposes of this study were to describe the relationships 1) between academic class and moral sensitivity and moral reasoning of students in baccalaureate nursing programs in South Korea, 2) between curriculum design components for ethics education and moral sensitivity and moral reasoning, and 3) between student characteristics, and moral sensitivity and moral reasoning.

This study has a descriptive design using preexisting groups to explore the relationships between multiple variables and the student outcome variables. Data were collected by surveying freshman and senior students in eight private baccalaureate nursing programs in the Seoul metropolitan area in South Korea. The survey consisted of a demographic form, the Korean Moral Sensitivity Questionnaire to examine moral sensitivity of students, and the Korean Defining Issues Test to examine moral reasoning of students. To examine the relationships, this study used mixed models for analysis of clustered data within schools.

According to the results of this study, there were significant relationships between: 1) academic class and moral sensitivity, 2) curricular variables (i.e., hours of ethics content and hours of non-lecture teaching methods) and moral reasoning, 3) student characteristics, age,

gender, and number of siblings, and moral sensitivity, and 4) student characteristics, religion and GPA, and moral reasoning.

The findings of this study indicate that nursing education in South Korea may have an impact on developing student moral sensitivity, particularly, in caring relationship with patients (b =1.44, SE=.36, p<.001) and in expression of conflict in moral dilemma situations (b =.94, SE=.44, p<.05). However, specific ethics education provided by the programs was significantly associated with student moral reasoning rather than moral sensitivity; more hours of ethics content increased the principled thinking scores of senior students (b =.26, SE=.12, p<.05). Nursing programs in South Korea need to stress the principled reasoning of students and consider that planned ethics content in a nursing curriculum can improve moral sensitivity and moral reasoning of students based on understanding the influence of student characteristics on student moral development. Further research to test the effect of a specific curriculum intervention on the moral development of students is suggested.

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Everything is for God's glory.

I am only his instrument. I am confident that God who began a good work in me will continue to complete it. I thank God for allowing me to have this wonderful experience here. I am also grateful to many people, in particular, sisters in my religious order, Sisters of Our Lady Perpetual Help, my academic advisors and other faculty in University of North Carolina at Chapel Hill, nursing professors in South Korea who helped me to collect data from students, my loving family, friends, and others who walked as God' gifts in my life during this study! Without their prayers and supports, this work could not be completed. I believe that we are working together for his kingdom to come and for his will to be done in our lives and in our world.

During my study, I missed the last days in this world of three persons whom I loved and respected. This dissertation is dedicated to the loving memories of my big brother, my grandmother, and Cardinal Stephen Kim; they would pray for me in heaven.

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ABBREVIATIONS

CMH	*Cochran-Mantel-Haenszel* Chi-square
CSAT	College Scholastic Ability Test
CUA	Center for University Accreditation
DIT	Defining Issues Test
KABN	Korean Accreditation Board of Nursing
KDIT	Korean Defining Issues Test
K-MSQ	Korean Moral Sensitivity Questionnaire
KNA	Korean Nurses Association
MSQ	Moral Sensitivity Questionnaire
P-score	Principled Thinking Score (%)

CHAPTER 1

INTRODUCTION

Rapid changes in society and advances in health science create various and complex ethical challenges in the health care system. Professionals in health care frequently face the challenge of making ethical and legal decisions in the midst of their daily practice. Ethical decisions and ethical practice of health care professionals are of critical concern in society's pursuit of human well-being. Nurses are expected to be morally virtuous, to be responsible for their decisions and practice, and to assist patients to make their own decisions (Fry, 2004). In addition, nurses themselves identify the need for ethics education to resolve various ethical issues in nursing practice (M. Park, 2009a).

In response to growing concerns about ethics education for nurses in nursing as well as in society, nursing programs have increased ethics content in their curricula to facilitate students' knowledge and skills necessary for ethical decision making (Bennett, 1997; Hussey, 1990; J. H. Park, Kim, & Kim, 2009). However, the effectiveness of ethics education in nursing continues to be disputed among educators in terms of how to prepare nursing students to be able to practice essential knowledge and skills in order to make ethical decisions that arise during the delivery of patient care (Haywood, 1989; Kellmer, 1984; M. A. Lee, 2009; Munhall, 1980; Nolan & Markert, 2002; Numminen & Leino-Kilpi, 2007; M. Park, 2009a; Woods, 2005). Educational concerns in nursing surrounding teaching ethics are commonly shared among nursing programs in South Korea (Han & Ahn, 1995; Y. S. Kim, Park, Son, & Han, 2004; M. A. Lee, 2008, 2009).

After the Korean War (1950-1953), nursing education in South Korea was greatly influenced by advanced nursing education in the United States (S. W. Lee, 2000). Since the 1990s, nursing programs of South Korea have increased their commitment to ethics education for students following the main trend of ethics education in the United States (W. H. Lee et al., 2001; J. H. Park et al., 2009). Currently, many nursing programs in South Korea employ a required, separate course for teaching ethics (J. H. Park et al., 2009). Furthermore, the Korean Nursing Association has established learning objectives for nursing ethics (Korean Nurses Association, 2000). However, some educators have expressed skeptical views about the effectiveness of the ethics curriculum employed by nursing programs in South Korea (Han & Ahn, 1995; Y. S. Kim et al., 2004; M. A. Lee, Ahn, Kang, Seomun, & Shin, 2006). The educators indicated the following problems: the lack of recognition about the importance of teaching ethics in nursing, the lack of resources for teaching ethics, the lack of teaching hours for ethics content, the lack of a planned ethics instruction in nursing curricula, the use of limited teaching methods, and the lack of qualified faculty for teaching ethics.

Therefore, the development of curriculum to improve ethics education is a critical need among nursing programs. Current literature shows that moral sensitivity and moral reasoning have been recognized as necessary skills for ethical decision-making by ethics educators (Bebeau, 2002; Eckles, Meslin, Gaffney, & Helft, 2005; Numminen & Leino-Kilpi, 2007), and thus these skills have been frequently examined as outcomes of ethics education in professional programs. Studies about the effect of the use of ethics curricula, in addition to introducing ethics content in nursing curricula, on developing students' moral sensitivity and moral reasoning skills are important in terms of assessing the impact of nursing education on

the outcomes and identifying effective curriculum components. Furthermore, these studies will contribute to the development of a curriculum design for ethics education based on evidence.

Background

Since the beginning of modern nursing education, ethics has been a critical part of nursing curricula (M. D. Fowler, 1991; Fry, 1989b). Florence Nightingale emphasized the cultivation of virtue as moral education for nurses (Sellman, 1997); Nightingale believed that a good nurse can provide good care. Until the middle of the 1900s, ethics education in nursing schools focused on cultivating virtuous nurses (M. D. Fowler & Tschudin, 2006; Fry, 2004). For example, the Nightingale Pledge written by Lystra Gretter in 1893 reflected virtues for nurses (M. D. Fowler & Tschudin, 2006). Furthermore, at that time, there were efforts to establish curriculum for ethics education in the U.S. nursing programs. The Board of Registration of Nurses in California (1916) and the National League for Nursing Education (1917) required nursing programs to provide an ethics course along with other major courses. Modern education for nurses in Korea started in a women's hospital (Boguyoukwan) in 1903 by American missionaries (Han et al., 2008). The beginning of Korean nursing education may be more similar to the education pattern in the United States. According to a review of nursing education history in South Korean, the nursing curriculum included a course for explaining etiquette or ethical behaviors associated with the roles of the nurse expected by Korean society in the early 20th century (S. W. Lee, 2000).

During nearly two decades in the middle of the 20th century, attention to teaching ethics in nursing programs decreased. According to a review conducted by Fry (1989b), literature surrounding ethics education in nursing is not found between the 1950s and the late

1960s. However, since the beginning of the 1970s, concerns about ethics education in nursing were renewed (Aroskar, 1977; Beardslee, 1983; Bennett, 1997). The emergence of bioethics seems to have intensified concerns about teaching ethics among educators of health professional (Fry, 2004), shifting from a virtue-based ethics for nursing toward a more duty-based ethics (M. D. Fowler & Tschudin, 2006). Codes of ethics in nursing such as the International Council of Nurses' 1973 *Code of Ethics for Nurses* and the American Nurses Association's 1976 *Code for Nurses* incorporated ethical principlism, which emphasized nurses' ethical obligations as health care professionals (M. D. Fowler & Tschudin, 2006; Fry, 2004). Therefore, the application of moral duties, ethical principles, and moral reasoning to nursing practice has been critical in the ethics education of nursing programs (Clay, Povey, & Clift, 1983; Fry, 2004; Ketefian & Ormond, 1988). Furthermore, Kohlberg's moral development theory and the development of instruments to measure students' moral judgment encouraged researchers to conduct studies testing the outcomes of teaching ethics in higher education.

The trends of nursing ethics in South Korea may not have differed from those in the U.S. in the late 1900s. After the Korean War, nursing programs in South Korea had educational support from U.S. nursing programs during national reconstruction (S. W. Lee, 2000). Since that time, Korean nursing education has been greatly influenced by advanced nursing education in the United States and in other Western countries. Based on the International Council of Nurses' *Code of Ethics for Nurses*, the *Code of Ethics for Korean Nurses* was adopted in 1972; it has been refined by several revisions (Korean Nurses Association, 2006). However, until the end of the 1980s, the ethics content of nursing education in South Korea still remained focused on obligations, etiquette, or virtue that

nurses should have; ethics education in nursing curriculum was only achieved as a small part of major nursing courses (Han et al., 2008). In the 1990s, nursing programs in South Korea started to provide specified ethics education using a separate course.

Since the 1970s, nursing ethics education has mainly focused on teaching knowledge and skills to analyze and to resolve ethical dilemmas faced by nurses in their daily practice; it has been based on deontological approaches such as a Code of ethics, ethical principles, and professional obligations (Fry, 2004). However, several nursing scholars indicate that the nurse-patient relationship may be an important aspect of ethical nursing practice that a moral judgment model based ethical principles and duties may neglect; they support their arguments with the importance of caring relationships (Armstrong, 2006; Benner, Tanner, & Chesla, 1996; Fry, 1989c; Gastmans, 2002; Hodkinson, 2008). Gilligan (1995) explains the relationship by defining self and other; that is, the self as a moral agent responds to the perceived needs of others as well as of self in balance. Noddings (2003) also argues that caring is an ethically basic relationship in which a person, as one-caring, meets the other as the cared-for. Furthermore, nursing scholars address nursing as ethical practice based on the caring relationship between a nurse and a patient to promote human welfare (Gastmans, Dierckx de Casterle, & Schotsmans, 1998; Taylor, 1998).

Furthermore, ethics educators recognize and emphasize the significance of the virtue ethics approach in ethics education for health care professionals in terms of the virtue of caring (Beauchamp & Childress, 2009; Begley, 2006; Eckles et al., 2005; Fry, 1989a; Gastmans, 2002; Jaeger, 2001; Sellman, 1997). Beauchamp and Childress (2009) provide three reasons for education of virtue ethics in professional schools. First, virtue ethics clearly involves the processes of decision making leading to moral actions. Second, caring is a

critical virtue in the health care profession that should be cultivated; caring allows health care providers to have insight into the needs of clients and to promote moral commitments in caring situations. Care-based ethics has been considered by feminist ethics and rational ethical frameworks, while caring in virtue ethics can be approached as a human virtue for all health care professionals, not only for women but also for men. Third, deontological conceptions of professional responsibilities in terms of standards of practice and codes of ethics among health professionals can be broadened with virtue ethics.

Social recognition of a "good" nurse means being a morally virtuous as well as a responsible health care professional (Fry, 2004; Gastmans et al., 1998; Reed, 1989; P. A. Scott, 1996; Taylor, 1998). That is, the knowledge and skills needed for nurses' ethical decision making means more than knowing and using ethical principles (Carse, 1991). Therefore, the social expectation of the nursing profession encourages educators to teach ethics by using more comprehensive frameworks to promote the full range of critical knowledge and skills. Ethics educators insist that ethics education should promote the cultivation of moral sensitivity and of virtuous attitudes along with rationalistic ethical knowledge and skills including codes of ethics, ethical principles, and moral reasoning (Gastmans, 2002; P. A. Scott, 1996). In particular, some ethics educators suggest developing moral sensitivity and moral reasoning as appropriate and measureable goals for teaching ethics in higher education programs (Bebeau, 2002; Clarkeburn, 2002a; Han et al., 2007; J. H. Lee, Moon, Kim, Son, & Hong, 2006).

However, in terms of the effectiveness of ethics education to produce desired outcomes, there are still some questions among ethics educators: Where is ethics placed in the curriculum of nursing programs? What are effective ways for teaching ethics? The

questions are related to the selection of a curriculum design for teaching ethics to achieve the intended learning outcomes. A curriculum design refers to a curriculum pattern that provides nursing students with the learning experiences necessary to achieve the desired educational outcomes related to teaching ethics (Billings & Halstead, 2005). The curriculum designs for teaching ethics used in nursing programs are mainly divided into two categories: 1) designs that integrate ethics content throughout the nursing curriculum (i.e., an integrated approach) and 2) those that require a separate ethics course. While an integrated approach has been the most popular model for teaching ethics among the U.S. nursing programs since 1970s, the use of a separate required course for teaching ethics has also increased among the programs (Aroskar, 1977; Bennett, 1997; Milton, 2004). Most of nursing programs in South Korea provide a separate required course for teaching ethics (J. H. Park et al., 2009).

An integrated approach is commonly supported in nursing (Benner, Sutphen, Leonard-Kahn, & Day, 2008; Davis, Tschudin, & De Raeve, 2006; Hussey, 1990; Milton, 2004; M. Park, 2009b) because it can facilitate students' moral development by repeated exposure to ethics content and can make connections between ethical issues and various aspects of nursing practice. However, it also has weaknesses that include a lack of clear objectives for ethics education, a lack of planned curricular profiles, difficulties of evaluation, and a lack of faculty development programs for teaching ethics (Bennett, 1997). Nursing scholars maintain that many of the weaknesses of the integration approach can be overcome by providing a structured curricular plan for teaching ethics with support systems for faculty (Gaul, 1989; Ryden, Duckett, Crisham, Caplan, & Schmitz, 1989; Stanley, 1980). For example, the school of nursing at the University of Minnesota developed a structured integrated model for teaching ethics throughout their nursing curriculum, the Multi-Course

Sequential Learning (MCSL) model (Ryden et al., 1989). The MCSL represents an outstanding model for teaching ethics in a way that produces positive outcomes in the moral development of nursing students (Duckett et al., 1997).

Some ethics educators believe that a separate ethics course may be more effective for teaching ethics than an integrated approach (Gaul, 1987; Krawczyk, 1982). A required ethics course has key merits in that it can focus on teaching ethics by developed objectives and can easily be evaluated. However, nursing programs insist that a required ethics course can overburden students who have excessive coursework, and nursing schools do not have qualified faculty for teaching ethics. Some nursing programs use ethics courses taught by non-nursing or outside faculty; however, the choices are dubious with regard to the effectiveness of the courses for dealing with ethical issues in nursing (Bennett, 1997). In terms of the placement of ethics content in the curriculum, the Hastings Center recommends that a required semester course is a minimal standard of teaching ethics for professional students; subsequently, the students should be exposed to ethical issues in their own profession through further course opportunities (Callahan & Bok, 1980). Bennett (1997) suggested that a combined approach of both a required separate course and an integration of ethics content into curriculum may be an ideal design for maximizing the advantages and minimizing the disadvantages of each design.

Furthermore, educators suggest that there are critical components of curriculum design for effective moral education regardless of choosing an integrated approach or a separate course (Clarkeburn, 2002a; Schlaefli, Rest, & Thoma, 1985). First, the length of a moral education is critical, e.g., an intervention of 3 to 12 weeks with more than one weekly meeting is suggested. Second, the sequencing of ethics content can make moral education

more effective, e.g., moral education with students in upper class years may be more effective because their previous experiences can be reflected upon during the learning process. Third, the use of proper teaching methods, e.g., group discussions and self-reflection, may facilitate moral development. However, there are few studies to support these arguments.

In the past two decades, although nursing education in South Korea has increased its effort to teach ethics by introducing necessary ethics content and employing a separate ethics course, nursing educators still experience challenges in introducing the core content or core components for teaching ethics into nursing curriculum. To support the decision for curriculum change in ethics education, nursing educators need further studies that can provide evidence for the effectiveness of teaching strategies used in current ethics education.

Purpose of the Study

The purposes of this study were 1) to describe the relationships between academic class (i.e., freshman and senior) and the moral sensitivity and moral reasoning of students in baccalaureate nursing programs in South Korea, 2) to describe the relationships between curriculum design components for ethics education and nursing students' outcomes (i.e., moral sensitivity and moral reasoning) and 3) to describe the relationships between student characteristics and nursing students' outcomes.

Research Questions

The research questions guiding this study were:

1. What relationships exist between academic class and the moral sensitivity and moral reasoning of students in baccalaureate nursing programs?

a. What are the differences in moral sensitivity between freshman and senior nursing students?

b. What are the differences in moral reasoning between freshman and senior nursing students?

2. What relationships exist between curriculum design components (i.e., the hours of ethics content, the sequencing of ethics content, and the hours of non-lecture teaching methods) and the moral sensitivity and moral reasoning of the senior students?

3. What relationships exist between student characteristics (i.e., age, gender, College Scholastic Ability Test (CSAT) score, Grade Point Average (GPA) in previous year, religion, the number of siblings, family income, previous education level, and previous clinical experience) and moral sensitivity and moral reasoning of the nursing students?

Definition of Terms

Moral sensitivity is defined as "a personal attribute involving the ability to recognize moral conflict, to show a contextual and intuitive understanding of a persons' vulnerable situation, and to have insight into the ethical consequences of decisions made on behalf of another person (Lützén, Nordström, & Evertzon, 1995, p. 132)." Moral sensitivity was measured by the Korean Moral Sensitivity Questionnaires (K-MSQ)(Han, Kim, Kim, & Ahn, 2010). The K-MSQ has the following categories: *patient-oriented care*, *professional responsibility*, *conflict*, *meaning*, and *benevolence*.

Moral reasoning refers to the developmental reasoning skill necessary to solve moral problems in social situations (Kohlberg & Hersh, 1977). Moral reasoning was measured by the Korean Defining Issues Test (KDIT) (Moon, 1994). A higher stage of moral reasoning

means more adequate and complex ways of reasoning. If the principled thinking score (the P-score: stage 6 and stage 5) increases, the lower stage scores (Stage 2, 3 and 4) are expected to decrease (Rest, Narvaez, Bebeau, & Thoma, 1999). Therefore, the P-score is recommended for reporting the status of moral development in higher education. This study reported the stage 4 score together with the P-score based on previous Korean studies reporting an increase of a stage 4 score among nursing students.

Curriculum design components for ethics are specific strategies for ethics education employed in nursing curriculum. To compare the curriculum design components employed by programs, this study focused on the hours of ethics instruction, the sequencing of ethics content, and the hours of non-lecture teaching methods rather than lecture. Using the survey developed for this study, these data were collected from the instructors who teach ethics in each participating baccalaureate nursing school.

College Scholastic Ability Test (CSAT) refers to a standardized test to measure students' scholastic ability required for higher education (Korea Institute for Curriculum and Evaluation, 2010). The CSAT is based on the fundamental principles of the seventh national curriculum including the Korean language, English, mathematics, social studies, sciences, vocational studies, and other foreign languages (i.e., German, French, Spanish, Chinese, Japanese, Russian, or Arabic). This study used the standard scores of the CSAT in the areas considered to be four main subjects of the CSAT: Korean language, English, mathematics, and social/science. The standard score are categorized into nine grades. Lower scores indicated higher grades. Universities in Korea generally use the standard score.

Previous education refers to education for a degree in a field of study other than nursing or in nursing, prior to attending the current nursing programs.

Previous clinical experience refers to work experience in health care settings including hospitals, nursing homes, or other direct care health services; it does not include clinical experience as a student.

Assumptions

The following assumptions form the basis of the study:

1. Nursing is an ethical practice (Gastmans et al., 1998; Reed, 1989). Therefore, all nurses should be prepared to be an ethically competent professional through their professional education. That is, moral education is necessary for the nursing profession.

2. Nursing education can achieve goals in teaching ethics through various curricular approaches. Essential goals in teaching ethics are to cultivate virtuous nurses and to prepare nurses to have knowledge and skills for analyzing ethical dilemmas and making ethical decisions (e.g., moral sensitivity and moral reasoning).

3. Ethical knowledge and skills can be taught through a structured teaching ethics plan using appropriate ethics content and learning experiences (Begley, 2006; Kohlberg, 1975).

4. There are various personal, educational, and environmental variables that may influence the moral development of nursing students.

Summary

This chapter has provided background about ethics education in nursing programs to establish the significance of teaching ethics and the research related to it. The significance of ethics education in nursing programs is widely recognized. Therefore, the development of effective curricula for nursing ethics has emerged as a priority among educators. In relation to increasing concerns about ethics education among nursing programs in South Korea, this

study was conducted as an effort to identify effective teaching strategies for nursing ethics. The purpose and research questions of this study were developed to explore the relationships between academic class and the moral sensitivity and moral reasoning of students, between curriculum design components for ethics education and nursing students' moral sensitivity and moral reasoning and between student characteristics and nursing students' moral sensitivity and moral reasoning.

CHAPTER 2

LITERATURE REVIEW

In order to address the focus of this study on the relationship of ethics education to student moral sensitivity and moral reasoning in baccalaureate nursing programs in South Korea, this literature review describes, first, ethical frameworks forming the basis for ethical decision-making in nursing practice; second, national survey studies reporting the ethics curriculum of baccalaureate nursing programs; third, empirical studies examining student outcomes of ethics education; and fourth, studies describing teaching strategies in ethics education. Finally, based on the literature review, a conceptual framework developed for this study is presented.

Ethical Frameworks

The literature reveals how the primary goals of nursing ethics education have changed since the beginning of modern nursing education. In the early 1900s, teaching ethics in nursing was mainly recognized as a means of cultivating virtuous nurses (M. D. Fowler, 1991; M. D. Fowler & Tschudin, 2006; Fry, 2004; Han et al., 2008). Next, with emerging bioethics, teaching ethics in nursing was recognized as a means of preparing nurses to have ethical decision making skills based on a code of ethics, professional standards, and the principles of bioethics to resolve ethical dilemmas in nursing practice (Fry, 1989b; Gaul, 1989; Harkness & Pallikkathayil, 1989; Korean Nurses Association, 2000; Thompson & Thompson, 1989; Vito, 1983). Finally, current ethics educators emphasize that ethics education must help nursing students or nurses to be virtuous and ethically competent in their

ethical decision making and practice (American Association of Colleges of Nursing, 2008; Beauchamp & Childress, 2009; Begley, 2006; Gastmans, 2002; Jaeger, 2001; P. A. Scott, 1996; Sellman, 1997).

The literature suggests that virtue and deontological approaches are the primary ethical frameworks used in nursing ethics education. Virtue ethics and deontology as normative ethical theories attempt to identify and justify norms, which are often called principles (Beauchamp & Childress, 2009). Therefore, normative ethical theories guide people in moral thinking, as well as justify ethical decisions (Butts & Rich, 2008). Ethics education in nursing focuses on developing knowledge and skills that exert influence on ethical decisions made by nurses. Of the knowledge and skills, moral sensitivity and moral reasoning are considered to be the main components for ethical decision making (Rest & Narváez, 1994). Moral sensitivity in professional practice, as "a type of *practical wisdom* (*virtue*)," has a theoretical base in virtue ethics (Weaver, Morse, & Mitcham, 2008, p. 607). Moral reasoning, as a thinking process for formulating a moral action plan by defining values, has its theoretical base in Kohlberg's moral development and is supported by the deontological, ethical approach (Kohlberg & Hersh, 1977). Each ethical theory is discussed below.

Virtue ethics. Virtue ethics emphasizes "the excellence (virtue) of one's character and considerations of what sort of person one wants to be" rather than focusing on what is right or wrong in terms of duties (Butts & Rich, 2008, p. 18). Virtue ethics attempts to answer the question "What sort of person must I be to be an excellent person?" The ethical quality of actions is determined by the ethical quality of agents who make the actions. Actions from inclinations formed by the virtues cultivated in agents are virtuous actions

(MacIntyre, 1981). That is, the virtuous person is not the one who merely does virtuous actions but the one who also does them in the way virtuous people do them. For example, if a person acts because of a moral obligation, the action may be right and the actor unblemished, but both the person and the action are not virtuous (Beauchamp & Childress, 2009).

Aristotle's approach to virtue ethics describes two types of human *excellence*: one is *intellectual* and the other is *moral* (Butts & Rich, 2008). *Intellectual virtues* grow from teaching, and *moral virtues* come about as a result of exercising them (Urmson, 1988). The most significant *intellectual virtue* is *practical wisdom,* which is "the quality of mind concerned with things just, noble and good for man" (Joachim, 1998, p. 154). In moral experiences, *practical wisdom* is sometimes perceived as principles because people frequently depend on their emotions, capacity for sympathy, and sensitivity to decide proper moral responses (Beauchamp & Childress, 2009). *Moral virtue* is "a state of character" that chooses a moderate way without an extreme (Joachim, 1998, p. 36). For example, the virtue of courage is the mid-point between rashness and cowardice (Butts & Rich, 2008). Action guidance in virtue ethics can be found in rules using virtue and vice terms; for instance, "do what is honest" or "do not what is dishonest" (Hursthouse, 2001, p. 17). Furthermore, moral actions of a virtuous agent are led by motivational structures rooted in moral virtues (Beauchamp & Childress, 2009; Joachim, 1998). Although *excellence* is categorized as different attributes in humans, these attributes are not separable: humans cannot be good in the strict sense without intellectual virtues or be practically wise without moral virtues. "*Practical wisdom* is what ensures the taking of proper means to the proper ends desired by *moral virtues*" (Joachim, 1998, p. 154).

Moral virtues in nursing. The emphasis on virtue ethics in the education of nursing students comes from Florence Nightingale. The moral education tradition of Nightingale follows the virtue ethics of the Aristotelian: "you cannot be a good nurse without being a good woman" (Baly, 1986, p. 25). Nightingale believed that only virtuous nurses can provide good care (virtuous actions) and thus, nursing education must focus on the cultivation of virtues including truthfulness, sobriety, honesty, intelligent obedience, punctuality, and observation in relation to delivering patient care (Sellman, 1997). However, Nightingale's approach to ethics education in nursing has been criticized for its cultural relativity. There are many cultural disagreements in the understanding of the virtues. For example, understanding "obedience" as one of the virtues in the nursing profession has significantly changed over time (Sellman, 1997). As a result, teaching virtue ethics has decreased in ethics education for nurses. Yet, ethicists still emphasize nurturing moral virtues in contemporary nurses (Beauchamp & Childress, 2009; Gastmans, 2002; Sellman, 1997). For example, nurses as health care professionals need to develop the following virtues: caring, compassion, discernment, trustworthiness, integrity, conscientiousness, respectfulness, considerateness, justice, persistence, and courage (Beauchamp & Childress, 2009).

Caring as a virtue. Caring by health care professionals is referred to as a traditional and crucial virtue based on the relationship between the caregiver and the one being cared for (Beauchamp & Childress, 2009; Gastmans, 2002; Halwani, 2003). Caring, as a virtue, is "emotional commitment to deep willingness to act on behalf of persons with whom one has a significant relationship (Beauchamp & Childress, 2009, p. 36)." This statement is supported by Hume's approach to virtue ethics. According to Hume, virtues are traits of character

benevolent to others, which come from emotion as the main human motivator rather than reason (Butts & Rich, 2008). The virtue of caring means more than what one as health care professional does according to professional standards: how one performs, the underlying motives, and the impact actions make on relationships (Beauchamp & Childress, 2009; Gastmans, 2002; Halwani, 2003). That is, a caring nurse is not one who merely acts according to professional standards, but one who acts in a way that is expected of a caring nurse.

Moral sensitivity as practical wisdom. Moral sensitivity is identified as *practical wisdom* possessed by a caring person in a particular situation encountered with the one cared for (Blum, 1994; Gastmans, 2002; Lützén, Evertzon, & Nordin, 1997; Oddi, Cassidy, & Fisher, 1995; Weaver et al., 2008). Based on Laurence Blum's definition, a person having moral sensitivity can perceive, interpret, and respond to a particular situation of the other, pursuing the well-being of the other (Blum, 1994). Weaver and colleagues (2008) provide a more comprehensive definition of moral sensitivity based on current literature:

> Moral (Ethical) sensitivity is the capacity to decide with intelligence and compassion, given uncertainty in a care situation, drawing as needed on a critical understanding of codes for ethical conduct, clinical experience, academic learning and self-knowledge, with an additional ability to anticipate consequences and the courage to act. (p. 610)

They state that moral sensitivity is "*practical wisdom*" in terms of "client comfort" and "professional satisfaction with care delivery" (p. 607). Outcomes of moral sensitivity are clients' and professionals' *comfort and well-being, integrity, personal growth and self-transcendence,* which reinforce moral sensitivity. The failure of moral sensitivity in a situation causes *unrelieved suffering of clients* and *moral distress of professionals*, even

though the negative experience can prompt professional growth in moral practice. When a nurse (a moral agent) uses appropriate moral sensitivity by perceiving, interpreting, and responding to particular situations in moral life, various aspects of her or his morality can be also displayed (Blum, 1994; Gastmans, 2002; Rest, 1984).

Lützén and her colleagues (1995) defined moral sensitivity as a personal capacity for dealing with ethical conflict in particular situations in interpersonal relationships between patient and nurses. The constructs of moral sensitivity were categorized as *interpersonal orientation*, *structural moral meaning*, *expressing benevolence, modifying autonomy, experiencing moral conflict,* and *confidence in medical and nursing knowledge*. In the revision of the Moral Sensitivity Questionnaire, Lutzen et al. (2006) have made further developments in the measurement of moral sensitivity with three main constructs that define moral burden, moral strength, and moral responsibility. While some researchers focus on the cognitive capacity to be aware of ethical issues in situations based on ethical principles (Jordan, 2007), Lützén and colleagues center on 'caring' about the well-being of the other, insisting that it means more than the cognitive capacity.

Deontological ethics. Deontology is a normative ethics theory focused on duties and rules. It is categorized as nonconsequentialism: when making a decision about how to act, some feature of the action rather than the consequence of action is considered (Beauchamp & Childress, 2009). Immanuel Kant has profoundly developed the foundation of the theory. According to Kant, morality is not based on custom, perception, or attitudes but on reason; a human being, as a rational, autonomous creature, is able to know an objective principle and to freely choose moral actions (Beauchamp & Childress, 2009; Butts & Rich, 2008). Therefore, Kant claims that the moral worth of one's action is decided by whether the

objective rule leading one to the action is morally acceptable (Beauchamp & Childress, 2009). That is, moral duty is produced by an objective rule guiding one's will; the rule grants a moral reason for justification of the action. Furthermore, Kant believes that morally worthy actions come from the "sake" of obligation more than from a simple agreement on obligation (Beauchamp & Childress, 2009).

With belief in the existence of absolute and unconditional laws, Kant proposed a concept called the *categorical imperative* that is a criterion for judging whether moral rules are acceptable (objective and valid); for example, "I ought never to act except in such a way that I can also will that my maxim become a universal law" (Beauchamp & Childress, 2009, p. 345) . The *categorical imperative* tests the consistency of moral rules. For instance, "(rules) permitting cheating on tests are inconsistent with the practices of honesty on tests that they presuppose (p. 345)." Another Kantian formula is 'one must act to treat every person as an end and never as a means only.' Kant insists that each person should be treated with respect and moral dignity (Butts & Rich, 2008). According to Kant, human dignity originates from a morally autonomous being. When a person intentionally acts by the universally valid moral principles, we say that the person has autonomy; therefore, "if a person acts from passion, ambitions, self-interest, desire, fear, impulse, personal projects (no rational will)," the person acts not "autonomously" but "heteronomously" (Beauchamp & Childress, 2009, p. 346). In sum, when actions of a person come from goodwill and a sense of duty based on universalized rules (categorical imperatives) regardless of inclination or consequences, the actions are moral (right) for Kant. Furthermore, if a person has autonomy, his or her action has moral worth.

Moral development theory and moral reasoning. Kant's approach has been established in moral development research by Lawrence Kohlberg (Kohlberg & Hersh, 1977). Kohlberg was concerned primarily with the kinds of conceptions of moral rules that people use in their styles of moral reasoning. He developed criteria of cognitive structures to judge cases of moral reasoning and determined moral developmental stages. Moral reasoning means to judge which action is more morally justifiable (Rest & Narváez, 1994). Kohlberg's assumptions about the nature of morality used in the stages of moral reasoning are mainly represented by the universal *categorical imperative* (i.e., the primacy of justice; legal or political justice) (R. L. Campbell & Christopher, 1996).

Based on an analysis of reasoning styles about hypothetical moral dilemmas, Kohlberg (1977) distinguished a sequence of six stages of moral reasoning, consisting of three levels with two stages each: the preconventional level (Stages 1 and 2), the conventional level (Stages 3 and 4), and the postconventional level (Stages 5 and 6). People who are in the preconventional level do not understand moral rules or social conventions but are affected by physical consequences (e.g., punishment) or their own needs. At the conventional level, people's moral judgment depends on the norms of groups that they belong to or whether they please others. The postconventional level is defined by autonomous and principled character in moral reasoning. The first of these postconventional stages (Stage 5) is characterized by a "social-contract legalistic" orientation with an explicitly utilitarian appeal. Kohlberg categorized Stage 6 as a "universal ethical principles" orientation. These universal principles consist of justice, equal rights, and respect for human dignity. People who reason at that stage make decisions in accordance with "*self-chosen ethical principles* appealing to logical comprehensiveness, universality and consistency"

(Kohlberg & Hersh, 1977, p. 55). Kohlberg and the others who study in moral development theories emphasize the need for moral education because all persons do not naturally reach that stage over time. The cognitive-developmental approach to moral education can stimulate a sense of moral autonomy and movement to the next stage of moral reasoning, ultimate principled thinking (Kohlberg, 1975; Kohlberg & Hersh, 1977).

Principles, which Kohlberg identified in Stage 6, are also dominant ethical principles in terms of ethical decision making in health care delivery. Furthermore, the principles are clearly shown in the standards, rules, and codes of health care professionals. For example, respect for human dignity and rights, nonmaleficence, beneficence, and justice are common ethical principles shown in the codes of ethics for health care professionals (Beauchamp & Childress, 2009). Therefore, educators in professional schools have generally emphasized these ethical principles in classrooms and encouraged students' moral reasoning based on these moral principles. Furthermore, some nursing scholars suggest that nursing students should have opportunities to develop moral reasoning at the postconventional level through moral education in nursing programs (Clay et al., 1983).

Care-based ethics. In terms of feminist ethics, there are debates surrounding Kohlberg's theory. In his study, Kohlberg used the principles of justice and male subjects. Therefore, Kohlberg is criticized in relation to sex differences in moral orientation (Gilligan & Shaefer, 1982). According to Gilligan, moral orientation dominantly used by women is not justice but care. Since the debate between Kohlberg and Gilligan on moral psychology, care ethics have developed and have been defined with various moral concepts by many theorists. Therefore, it is tremendously difficult to define the ethics of care with one statement. Care-based ethics is described with the following several characteristics: (a) the moral

responsibility to respond to the needs of particular others, (b) valuable emotive components (i.e., sympathy, empathy, sensitivity, and responsiveness), and (c) partiality as a valid moral concern, and (d) feminist aspects (Halwani, 2003; Held, 2006). Several theorists distinguish care as virtue from care-based ethics (Blum, 1994; Gastmans, 2006; Halwani, 2003). However, care-based ethics and virtue theory have similarities (Held, 2006). First, for example, both examine caring as a human practice, and both value emotions. Second, both focus on particular relationships rather than on universal rules. Furthermore, both theorists believe that caring based on morality must be cultivated. Virginia Held (2006) emphasizes that care should be conceptualized with attention to the feminist aspect of caring in which women engage, and thus criticizes virtue ethics in terms of defining caring as a primary virtue for all human beings rather than as the dominant value among women. However, some ethicists believe that a conceptualization of care as a virtue can provide a more comprehensive explanation about the phenomenon of care as a human practice than care-based ethics can (Gastmans, 2006; Halwani, 2003; Hooft, 1999). This study follows a virtue approach to care; that is, caring is a primary virtue for health care professionals.

Ethics Curriculum in Nursing Programs

During the early period of the 20th century, teaching ethics was emphasized in nursing curricula, and most nursing schools provided required ethics courses at the same level as other major courses. For example, in 1931, according to Martin's study using a national survey about ethics education in professional schools in the United States, most nursing schools required ethics courses (Martin, 1931). Of the 131 nursing schools participating in the survey, 118 schools required an ethics course (90%); two schools offered an elective ethics course (1.5%); eight schools included ethics content in other courses (6%); one school

reported incidental ethics content in all courses (1%); and two nursing schools did not have any instruction for ethics (1.5%). Although Martin's study may have limitations in terms of the generalization of the results due to a low response rate (44%; 131 of 300 schools surveyed), the results showed consistency with the accreditation standards for ethics education in nursing programs at that time (M. D. Fowler & Tschudin, 2006). For example, the Board of Registration of Nurses in California had requirements for teaching ethics for all schools of nursing in 1916, including a course in ethics. Furthermore, the *1917 Standard Curriculum for School of Nursing* of the National League for Nursing Education (NLNE) included ten hours of instruction for teaching ethics. Furthermore, Martin (1931) reported that the nursing schools provided at least one thirty-hour ethics course following the recommendations of the NLNE. Most schools for nurses placed the ethics course in the first year of the program (n=107), and some had courses in both the first and third years (n=28). The literature showed that at the beginning of 1900s, ethics content in nursing focused on virtue ethics over duty-based ethics, emphasizing ethical behaviors or etiquette of a good nurse (Aikens & Lewis, 1943; S. W. Lee, 2000; Nutting & Dock, 1935; Robb, 1900). In 1903, modern education for nurses in Korea was first started by U.S. missionaries. Therefore, nursing education in Korea might have been similar with that in the U.S. However, there was no study reporting on nursing curriculum in Korea at that time. Regarding ethics education, the prevalent use of Nightingale's pledge among nursing programs in Korea may indirectly show ethical concern in nursing education. Furthermore, in a historical review of nursing education in Korea (S. W. Lee, 2000), nursing educators concluded that there were certain courses for explaining etiquette or ethical behaviors associated with the roles of the nurse expected by Korean society in the early 20th century.

During the middle of the 1900s, nursing literature related to teaching ethics and ethics courses in nursing programs noticeably decreased. Fry (1989b) reported that separate ethics courses had been widely withdrawn from the curricula of nursing programs in the United States around the 1950s; the absence of literature about teaching ethics in nursing until the late 1960s supports Fry's argument. After World War II, advances in medical technology, emerging bioethics, and the changing roles of nurses in the health care system may have led to a reintroduction of teaching ethics into nursing school curricula (Fry, 2004). After the Korean War, 1950-1953, during a national reconstruction period, nursing education in South Korea had educational support from the U.S. nursing programs (S. W. Lee, 2000). Therefore, the educational system of nursing programs in South Korea was similar to that of the U.S. nursing program. However, literature about ethics education in South Korea was not found. Therefore, a review of ethics education in the U.S. nursing programs may be meaningful when the influence of the U.S nursing education on the Korean nursing education is considered. (See Table 2.1)

Aroskar's study conducted in 1976 may reflect the trend of teaching ethics in nursing in the 1970s. Aroskar (1977) studied the curricular design for teaching ethics using a survey of 209 accredited baccalaureate nursing programs in the United States. Of the programs replying (n=86), six programs required an ethics course (7%) and 58 programs integrated ethics content into nursing courses (67%). Fifteen programs did not have any planned ethics content and provided only incidental ethics content (17%). The number of hours devoted to ethics content varied from 1 to 56 hours. In terms of integrating ethics content into courses, ethics content was mainly incorporated into clinical courses and other courses dealing with community health nursing, leadership, research and other issues during the junior and senior

years. This study reported a low response rate (41%), and thus the generalizability of the results is in doubt. However, assuming that a similar non-response bias is operating, Aroskar's results showed that there was a certain change in the curricular designs for teaching ethics employed by nursing programs between 1931(Martin's study) and 1977; their selection of the curricular designs may have moved from a required ethics course to an integrated approach. The results also indicated changes in ethics content for teaching ethics; most of the schools identified 1) professional codes of ethics, 2) ethical theories, and 3) patient rights and obligations as priority ethical issues for study in nursing curricula. Ethical frameworks for teaching ethics in nursing programs seem to have shifted from virtue ethics to duty-based ethics.

Six years later, Aroskar's survey was repeated by Beardslee(1983) who compared the changes in the teaching of ethics in nursing curricula between 1977 and 1983. She distributed 315 questionnaires to accredited baccalaureate nursing programs. Of the respondents (*n*=232), 90 programs provided a separate ethics course (39%); 160 programs integrated the ethics content into nursing courses (69%); and 51 programs employed both curricular approaches (22%). Furthermore, 190 programs required coursework in ethics (82%) and 212 programs had planned ethics content in their curricula (91%). The median number of hours devoted to teaching ethics was 11.5 hours. Beardslee achieved a high response rate (74%). Therefore, the results may relatively well reflect the trends of ethics education in nursing programs in 1983. The results have the followings implications: 1) an integrated approach was still popular among nursing programs, 2) emphasis on ethics instruction in nursing programs increased from 1977 to 1983, and 3) the ethics content of nursing schools included ethical theories such as deontology and teleology as major

philosophical systems along with ethical issues such as patient rights and professional obligations.

Table 2. 1

Changes of Ethics Curricula in the United States and in South Korea

Articles	*N* of Response (Total)	Curricular Design	Hours of ethics content	Sequencing of ethics content	Ethics contents
The United States					
Aroskar, 1977	86 (209)	Separate course (*n*=6, 7%)/ Integrated design (*n*=58, 67%)/	Range: 1 to 56 hrs.	Clinical years	Codes of ethics, Ethical theories, Patient rights, Professional obligations
Beardslee, 1983	232 (315)	Separate course (*n*=90, 39%)/ Integrated design (*n*=160, 69%)/ Both (*n*=51, 22%)	Median: 11.5 hrs.		Patient rights, Professional obligations
Bennett, 1996	396 (577)	Separate course (*n*=175, 47%)/ Integrated design (*n*=296, 79%)/ Both (*n*=127, 34%)	Mean: 54.9 hrs. (*SD*=47.7 Median=49).	Clinical years (70%) Preclinical years (30%)	Codes of ethics, Bioethics, Moral Reasoning
South Korea					
Lee et al., 2001	31(36)	Separate course (*n*=6, 21%)/ Integrated design (*n*=22, 79%)	Separate course: 29 hrs. Integrated design: 9 hrs.	Clinical years (39%) Preclinical years (61%)	Code of ethics, Bioethics, Ethical decision making, Ethical issues
Park et al., 2009	55(63)	Separate course (*n*=48, 87%)/ Integrated design (*n*=7, 13%)	1credit hrs. (16hrs, *n*=22) 2 credit hrs. (32hrs. *n*=18) More than 2 credit (*n*=1)	Clinical years (52%) Preclinical years (48%)	Code of ethics, Ethical concepts, Ethical principles, Professional ethics, Ethical issues

Based on a review of previous studies, Bennett (1997) developed a comprehensive questionnaire for defining curricular approaches to teaching ethics used by nursing programs. Over 69% of 577 accredited baccalaureate nursing programs responded to the survey (*n*=396). In her study, the curricular approaches to teaching ethics were categorized into five types: 1) only a separate course (0.1%); 2) a separate course and integrated content (34%); 3) a separate course and incidental ethics content (12%); 4) integrated content without a separate course (45%); and 5) incidental ethics content without a separate course (7.2%). Of the total respondents, 79% reported an integrated teaching approach to teaching ethics in their programs, and 46.7% provided more than one ethics course. Most of the programs offering ethics courses (*n*=198) required at least one course (*n*=154, 77.8%). About two-thirds (67.7%) of the respondents provided ethics courses to junior or senior students and less than one third to freshmen or sophomores. Furthermore, the average hours devoted to ethics content was 54.9 hours (*SD*=47.7). In terms of ethical frameworks for nursing ethics used by baccalaureate nursing programs, the study reported that deontological frameworks were the most popular, including nursing codes of ethics and standards (81.9%), bioethical framework (35.7%), and moral development framework (33.1%). The study did not include virtue ethics as an ethical framework for nursing ethics; however, the concept of caring was included as a part of a rational ethics framework. From an analysis of late respondents, who tend to represent the non-respondents (F. J. Fowler, 1988), Bennett (1997) found that the respondents to the study represented the population of baccalaureate nursing programs. The late respondents were similar to the total respondents or to those with less structured curricular approaches. Bennett's study showed that while an integrated approach was widely employed by nursing programs, many nursing schools also increased the use of separate

ethics courses. Since Bennett's study, a systematic, national survey related to ethics education in the United States was not found in nursing literature.

In 1999, Korean nursing educators conducted a study similar to the previous studies in the United State to identify ethics education among Korean nursing programs (W. H. Lee et al., 2001). Out of 36 baccalaureate nursing programs in Korea, 31 schools (86%) responded. Of these, six schools (21.4%) had a separate ethics course and 22 schools (78.6%) provided ethics content as part of other courses (i.e., introduction to nursing, nursing management, and nursing philosophy). The number of hours devoted to teaching ethics was 9.32 hours for non-separate instruction and 28.67 hours for a separate ethics course. Ethics instruction was mainly provided at a freshman or sophomore level (61%); 39% of the responding schools provided it at a junior or senior level. The methods for teaching ethics were lectures, case studies, group discussions, or clinical conferences. Teaching ethics focused on a code of ethics for nurses, professional ethics, ethical principles and theories, bioethics, and ethical decision-making (W. H. Lee et al., 2001).

Ten years later, a national survey study was conducted to review changes in nursing ethics education in baccalaureate nursing programs in Korea since 1999 (J. H. Park et al., 2009). Of 85 baccalaureate nursing programs in Korea, a survey was distributed to 63 schools (excluding 22 new programs) and 55 schools responded (87.3%). Most of the schools (n=48; 87.3%) had a separate ethics course, while just seven schools (12.7%) retained ethics content as a part of nursing courses. This is an increase from the results of the previous study, where only 21.4% (n=6) of schools taught ethics as a separate course. However, half of the respondents (n=26) devoted only one credit hour (15 hours) to teaching ethics, while the hours were smaller than the hours (22 hours) for ethics content recommended by the Korean

Nurses Association (KNA) and the Korean Society of Nursing Science and the average hours (*M*=54.9) provided by the U.S. nursing programs in 1996 (Bennett, 1997). Half of the schools offered an ethics course at the freshman or sophomore level (52.2%) and the others offered an ethics course at junior or senior level (47.8%). For methods of teaching ethics, most schools mainly employed a type of lecture and a small number of schools utilized other methods including case study (n=4), group discussion (n=2), clinical conferences (n=2), or role play (n=1) (J. H. Park et al., 2009).

According to the previous study (J. H. Park et al., 2009), the respondents reported that their ethics courses dealt with ethical concepts, ethical principles, professional ethics, research ethics, and clinical ethics. The results show that most nursing programs followed the learning objectives recommended by the Korean Nurse Association (KNA). In 2000, the KNA established learning objectives for nursing programs (Korean Nurses Association, 2000); for nursing ethics, the KNA identified nine main categories including legal position of nurses, legal obligation of nurses, professionalism, introduction of nursing ethics, ethical theories and concepts, codes of professional ethics, ethical issues related to patient care, ethical issues among health care providers, and ethical issues in nursing practice. The main categories include thirty-seven subcategories having 109 specific learning objectives. The objectives mainly describe legal obligations and ethical responsibility of a nursing professional, while a small number of the objectives regard understanding about ethical concepts related to caring.

Nursing programs in South Korea prefer to use a separate ethics course rather than integrate ethics content into the nursing curriculum. Current ethics content in nursing education in Korea focuses on duty-based ethics theories as in the U.S. The concern for

ethics in nursing education in South Korea has led to establishing learning objectives for ethics education (Korean Nurses Association, 2000) and including questions related to ethics on the Korean nurses' licensing examination. However, nursing educators argue that there are still some barriers to nursing ethics instruction: lack of time in the nursing curriculum, lack of recognition of nursing schools about the significance of ethics education for nurses, lack of utilization of various teaching methods for ethics, and lack of faculty development programs and qualified teachers (J. H. Park et al., 2009). The acknowledgement of these barriers in teaching ethics has been shared among educators across countries and health care disciplines (Eckles et al., 2005; Gorgulu & Dinc, 2007; Kanne, 1994; Kennedy, 1989; Woods, 2005).

Student Outcomes of Ethics Education

This review includes studies assessing moral sensitivity and moral reasoning as the outcomes of nursing ethics education. This review starts with studies related to moral sensitivity. Although there are studies to test the moral sensitivity of nurses, studies examining moral sensitivity of nursing students are rarely found (Han et al., 2007). Therefore, this review includes studies that tested the effect of ethics instruction on the moral sensitivity of students in a dental school (Baab & Bebeau, 1990; Bebeau & Brabeck, 1987) and in medical schools (Akabayashi, Slingsby, Kai, Nishimura, & Yamagishi, 2004; Hébert, Meslin, & Dunn, 1992; Hébert, Meslin, Dunn, Byrne, & Reid, 1990; J. H. Lee et al., 2006) to anticipate the effect of ethics education on the moral sensitivity of nursing students. Next, this review also includes studies that report the effect of ethics education on the moral reasoning skills of students (Auvinen, Suominen, Leino-Kilpi, & Helkama, 2004; Bell, 1984; Duckett et al., 1997; Frisch, 1987; Gaul, 1987; Kellmer, 1984; Krawczyk, 1982; M. A. Lee,

2008; M. A. Lee, Kim, & Hong, 2005; Munhall, 1980). Studies examining the outcomes of nursing ethics education present varying and conflicting results; some empirical studies report that nursing ethics education may make a positive impact on student's moral sensitivity and moral reasoning and others report that it may not affect student outcomes.

Effects of ethics education on moral sensitivity. Bebeau and Rest (1982) developed an instrument called the Dental Ethical Sensitivity Test (DEST) to test the ethical sensitivity of dental professionals. The authors defined ethical sensitivity as an "individual's ability to interpret factors in the care setting that related to obligations stated in professional's code of ethics (p.123)" as distinguished from moral reasoning; for example, professionals may have a good ability to interpret the ethical dimensions of a situation but may not be skilled in moral reasoning to find solutions (Bebeau, 1994). Studies using the DEST to test the effect of ethics education reported that ethical sensitivity may be facilitated by instruction (Baab & Bebeau, 1990; Bebeau & Brabeck, 1987).

The other four studies used the Problem Identification Test (PIT) developed by Hebert et al. (1990) for examining the effect of teaching ethics on the ethical sensitivity of medical students in Canada, Japan, and Korea (Akabayashi et al., 2004; Hébert et al., 1992; Hébert et al., 1990; J. H. Lee et al., 2006). The PIT tests an individual's ability to recognize ethical issues in situations showed in vignettes based on ethical principles. All studies used cross-sectional data from each medical school. The results of the studies were consistent in that the ethical sensitivity of students increased between the first-year (pre-medical grades) to the second-year (middle grades) and decreased from the third-year (middle grades) to fourth-year (upper grades). Based on the results, the researchers suggest that an ethics course and the first clinical experience may bring short-term positive effects in the ethical sensitivity of

middle-year students, and thus continuous ethical training throughout the program can help the habituation of ethical sensitivity. Furthermore, the studies also reported that there is no significant correlation between the DIT score and the PIT score and supported the fact that moral sensitivity may be an ability distinct from the moral reasoning skill and should be addressed as a separate aspect of ethics education.

Han and co-researchers (2007) conducted a study to test the moral sensitivity of nurses (n=283) in two teaching hospitals compared with that of nursing students (n=215) in two baccalaureate nursing programs in South Korea. The study used the Moral Sensitivity Questionnaire (MSQ) developed by Lützén and colleagues using a psychiatric nursing population (Lützén & Nordin, 1994; Lützén et al., 1995). In the MSQ, the authors define moral sensitivity as " a personal attribute necessary when dealing with ethical conflicts that the nurse is confronted with when making decisions for a patient who is perceived to be in a vulnerable position because of illness (Lützén et al., 1995, p. 132)." Moral sensitivity in the MSQ is conceptualized as a cognitive capacity based on intuition and feeling (Weaver, 2007), while ethical sensitivity in the DEST is conceptualized as an affect and recognition and in the PIT as mainly recognition (Jordan, 2007). Han et al. (2007) reported that there are no differences in the moral sensitivity score between junior and senior students. The authors did not test the effect of specific ethics education on the moral sensitivity of students. In the same study, the moral sensitivity score was higher among nurses having higher educational degrees, but the result was not statistically significant (F=.139, p=.71).

Effects of ethics education on moral reasoning. First, several studies concluded that the moral reasoning skills of nursing students may be facilitated by ethics education, reporting positive effects of teaching ethics on the moral development of students. Of the

studies, some studies tested the effect of an ethics course (Bell, 1984; Frisch, 1987; Gaul, 1987; Krawczyk, 1982) and some described the effect of nursing education with ethics instruction using cross-sectional or longitudinal data of students (Auvinen et al., 2004; Duckett et al., 1997).

Bell (1984) studied the effects of a separate course in biomedical ethics on the moral reasoning skill of senior nursing students in a baccalaureate program (Generic, n=55; RN to BSN, n=25), using a pretest-posttest design without a control group and using the Defining Issues Test (DIT) developed by Rest (1986b). Bell stated that the semester course used case discussion of ethical issues focusing on the process of ethical decision-making and also provided lectures about ethical theories; however, there was no explanation about the curricular approach used by the program (e.g., if ethics content was integrated into nursing courses or not). Bell found that there was a significant difference between pre-test scores and post-test scores for principled thinking (P-scores) of both student groups (i.e., Generic and RN to BSN students) (p<.01): after taking a bioethics course, students' moral judgment scores significantly increased. However, the result may also be due to a history effect, a maturation effect or uncontrolled factors that can affect moral judgment skill (e.g., observed effects from ethics content in other nursing courses).

Gaul (1987) performed a study examining the effect of an ethics course on the ethical choice and action in baccalaureate nursing students, using a static group comparison (n=37). The ethics course, a three-credit elective course, consisted of didactic experience about ethical theories and case analysis. The nursing program integrated ethics content throughout the curriculum. Therefore, one group was exposed to both approaches (i.e., an integrated approach and a separate ethics course) and the control group was exposed only to an

integrated approach. To measure ethical choice and action, the study used the Judgment About Nursing Decisions (JAND) (Ketefian, 1981). Gaul found that the group that experienced the ethics course had a significant positive correlation between ethical choice and ethical action (r= .869, p<.001), while the control group showed a non-significant negative correlation between ethical choice and ethical action (r= - 0.317, p=.340). Gaul suggested that students with the experience of a separate ethics course may achieve higher moral development than students without it. The finding may be limited in terms of the potential difference between the two groups before treatment: students enrolled in the elective ethics course may have had more concerns about ethics, and self-selection bias may be inferred.

Frisch (1987) reported the effect of integration of ethics content into clinical post conferences on the moral development of nursing student. The study compared a control group (n=24) without experience about value analysis sessions and an experimental group (n=28) that had value analysis sessions. The experimental group had three different student groups [session 01(n=10), 02 (n=8) and 03(n=10)]. The clinical post conferences consisted of biweekly, one-hour value analysis instruction (a total of six meetings for each session). The changes in principle thinking scores of the DIT of the students in session 02 were significantly different between the control group and experimental group (F=5.50, p=.05). The author reported that during session 02, the students brought up an actual ethical problem involved in their clinical practice, while students in the other sessions used hypothetical situations; therefore, the students' own experiences may have worked as a factor to facilitate impact of the ethics instruction on the moral development of students.

Krawczyk (1982) conducted a study to test the moral judgment levels of students comparing three baccalaureate nursing schools. She employed the DIT for testing students' moral judgment. She used a comparative survey study using existing groups (each school had two groups: freshmen and seniors). The groups were selected by a purposive sampling method from accredited baccalaureate nursing programs, based on curricular approaches to teaching ethics: (a) a required ethics course (program A), (b) an integrated approach (program B), and (c) the use of incidental ethics content in nursing courses (program C). Krawczyk identified that program A had a greater amount of ethics content than the other schools. A total of 180 nursing students (freshmen, n=91 and seniors, n=89) from three schools participated in the study. Students' demographic characteristics (age, father's education level, and mother's occupation) among programs were similar except for resident area and grade point average (GPA: the senior group in program C had a higher GPA than the others had). Krawczyk found that there were significant differences among all three senior groups in moral reasoning levels (p<.01). Seniors in program A showed the highest moral reasoning skill, while seniors in program C showed the lowest moral reasoning skill. Krawczyk concluded that an amount of ethics content can affect the students' moral development and that program A prepared students well for ethical decision-making. However, there was a significant difference in moral reasoning scores of students at entry level among the programs; freshmen in programs A and B had a significantly higher moral reasoning scores than those in program C. There might have been a systematic difference among subjects from each program (selection bias).

Duckett and colleagues (1997) studied changes in moral reasoning of students between entry into and exit from a baccalaureate nursing program using the DIT. The

researchers conducted a descriptive study using both cross-sectional and longitudinal data from 1989 to 1992. The nursing program had developed and established a structured integrated teaching model for ethics education called Multi-Course Sequential Learning (MCSL) (Ryden et al., 1989). Duckett et al. (1997) found that students from all four classes (1989, 1990, 1991 and 1992) significantly improved in moral reasoning scores between entry and graduation from the program (t=7.88, p<.01). Cross-sectional data and longitudinal data showed consistency in results. Therefore, the results supported the effectiveness of the baccalaureate nursing program with a constructed ethics curriculum on moral development. However, the researchers indicated that it cannot be certain that the MCSL caused students' positive outcome in moral development because of uncontrolled factors during school years.

For testing the outcomes of nursing ethics education in four polytechnic schools offering nursing education in southern Finland (Auvinen et al., 2004), the moral reasoning scores were collected from the first-year (n=52) and last-year (n=54) nursing students using the DIT. The average P-score for the last-year students was significantly higher than that for the first-year students (p<.05). Although it cannot be assumed that there are no differences between the first- and the last-year students in terms of cross-sectional data, it was consistent with the results of previous similar studies in which students at advanced academic levels had higher P-scores that those at the beginning level (Duckett et al., 1997; Krawczyk, 1997; Rest, 1979, 1986b). The summary of the studies was presented in Table 2.2.

Table 2. 2

Summary of Studies with the Significant Effect of Ethics Education on Moral Reasoning of Nursing Students

Articles	Sample	Outcomes	Curricular Design	Hours of Ethics Content	Sequencing of Ethics Content	Teaching Method
Bell, 1984	Senior students (Generic=55/RN=25)	DIT: P-score: Pre -test: 42.5/ 34.8 Post-test: 47.6/ 42.1	A separate bioethics course	3-credit semester hrs.	Senior year	Lecture, Case discussion
Gaul, 1987	Junior or Senior students (Exp.=17 /Con.=20)	JAND: correlation between ethical choice and action: Exp.(r= .87, p <.01) Con.(r= -.32, p=.34)	A separate ethics course	3-credit semester hrs.	Clinical year	Lecture, Case analysis
Frisch, 1987	Junior students (3 exp. groups =28/ Con.=24)	DIT: P-score: Pre -test: 42.2/ 41 Post-test: 51/ 43.5	Clinical conference	Six sessions in a semester: biweekly-1 hr.	Clinical year	Value analysis
Krawczyk, 1982	Freshmen (n=92) and Seniors (n=89) from 3 nursing programs : Cross-sectional data	DIT: P-score: Program A: 42/52 Program B: 42/45 Program C: 28/38	A separate course (A) Integrated design (B) No instruction (C)	3-credit semester hrs.: Program A	Clinical year	Lecture, Class or group discussion
Duckett et al., 1997	Baccalaureate nursing students (n=107): Longitudinal data	DIT: P-score: Entry: 44.5 Exit: 51.38	Multi-Course Sequential Learning: Integrated design	42 hrs. Core-22hrs/ Augmentation-20hrs.)	Sophomore, & Clinical years	Lecture, Clinical conferences etc.
Auvinen, et al., 2004	Freshmen (n=52) and Seniors (n=54): Cross-sectional data	DIT: P-score: 40.6/47.1	Nursing education with ethics instruction			Lecture, Case analysis, Discussion etc.

Note. DIT = the Defining Issues Test; P-score = the Principled thinking score; Generic = Generic students; RN = RN to BSN students; Exp. = Experimental group; Con. = Control group; JAND = the Judgment about Nursing Decisions.

On the other hand, some studies suggested that ethics education may not contribute to the moral development of nursing students (Kellmer, 1984; M. A. Lee, 2008; M. A. Lee et al., 2005; Munhall, 1980). (See Table 2.3) Munhall (1980) tested the effect of a nursing program with integrated ethics content on the moral reasoning of baccalaureate nursing students using the DIT. Munhall used a cross-sectional design using four student groups in four academic years (freshmen, *n*=76; sophomores, *n*=60; juniors, *n*=81; and seniors, *n*=88). Munhall (1980) did not provide any information about how ethics content was integrated into the nursing curriculum. The average level of reasoning for students was at the conventional level (Stages 3 or 4) that is considered a pre-requisite level for developing principled thinking (Stages 5 and 6). The study results showed that there were no significant differences in moral reasoning among four student groups; there were no differences among groups in relation to variables that may be related to the moral reasoning score.

In South Korea, two studies similar to Munhall's were conducted using a cross-sectional design with data collected from nursing students in four academic years (M. A. Lee et al., 2005) and using a longitudinal design with data collected from one student group at each year through four academic years (Y. S. Kim et al., 2004). According to the results, there were no differences in the P-scores among groups in different academic years ($F=1.15$, $p=.33$ in M. A. Lee et al., 2005) and in the P-scores of a sample group among different years ($x2=5.21$, $p=.15$ in Y. S. Kim et al., 2004). Although both studies did not mention any ethics education provided in their nursing programs, the researchers argued that the educational content of nursing courses would encourage nursing students' moral development and relevant ethics curricula in nursing programs must be developed.

In another study of the outcomes of nursing ethics education comparing two classes of nursing students, the control group consisted of first-year students without ethics education, and the experimental group consisted of third-year students with an ethics course (M. A. Lee, 2008). The students took the DIT twice: before and after an ethics course. The ethics course was offered over 8 weeks with two types of teaching methods. One was a lecture session (4 weeks) including ethical concepts, theories, code of ethics, and ethical decision-making frameworks; the other was a group discussion session (4 weeks) addressing ethical issues in clinical practice. The average pretest scores (P-score) between two groups were not significantly different despite different academic years. In terms of testing the effect of an ethics course, the author reported that the P-scores of third-year students after receiving ethics instruction were increased (t=.94, p=.35), while the scores of first-year student were slightly decreased after 8 weeks (t=-.27, p=.79). However, the changes in each group were not statistically significant. Based on the results, the study suggested that an ethics course may have an impact on the moral development of students and that studies for effective curriculum development for ethics were needed.

Furthermore, Kellmer (1984) also examined the effect of a planned teaching program for ethics on baccalaureate nursing students' moral decision-making using a pre-test, post-test design with one experimental group (n=20) and one control group (n=20). The planned teaching program was not a semester course but was composed of five two-hour classes (10 hours) over a two-month period and consisted of didactic presentations of ethical theories and case analysis using small group discussion. Curricular approaches to teaching ethics in the nursing program were not specified. To examine students' moral judgment levels, Kellmer applied the DIT and the Nursing Dilemma Test (NDT) (Crisham, 1981). Kellmer

found that there were no significant differences between the experimental and control groups. The study had certain limitations: the sample size was small, and there may have been an effect of course exposure among students in the two groups because they could share information through interactions at the same school.

There is agreement among more educators that ethics content should be integrated throughout the curriculum (Benner et al., 2008; Bok & Callahan, 1980; Duckett et al., 1997; Miles, Lane, Bickel, Walker, & Cassel, 1989; Milton, 2004). However, some researchers argue that a separate ethics course may be more effective than an integrated approach (Bell, 1984; Gaul, 1987). The literature suggests that unless there is a structured plan for ethics content in a nursing curriculum or the proper use of teaching strategies, an integrated approach or a separate ethics course may not effectively increase the moral reasoning of students (Gaul, 1987; Kellmer, 1984; M. A. Lee, 2008; Munhall, 1980). The conflicting results among the previously reviewed studies may be more clearly explained by the methodologies employed in the ethics courses.

Table 2. 3

Summary of Studies Reporting No Impact of Education on Students' Moral Reasoning

Articles	Sample	Outcomes-Moral Reasoning	Curricular Design	Hours of Ethics Content	Sequencing of Ethics Content	Teaching Methods
Munhall, 1980	Freshman (n=76), Sophomore (n=60), Junior (n=81), and Senior (n=88): Cross-sectional data	DIT: P-score: Freshman:39.4 Sophomore:42.6 Junior:43.4 Senior:45.6	Nursing education with integrated ethics content			
Kim et al., 2004	Baccalaureate nursing students (n=37): Longitudinal data	DIT: P-score: 1st year:46.1 2nd year:49 3rd year:46.5 4th year:47.5	Nursing education (No mention about ethics content)			
Lee, et al., 2005	Freshman (n=47), Sophomore (n=33), Junior (n=41), and Senior (n=33): Cross-sectional data	DIT: P-score: Freshman:45.8 Sophomore:45.7 Junior:48.3 Senior:42.3	Nursing education (No mention about ethics content)			
Lee, 2008	Freshman (Con.=35) and Junior students (Exp.=26)	DIT: P-score: Pre -test: 42.9/ 43.2 Post-test:42.4/ 45.5	A separate course	16 hrs. (8 weeks)	Clinical year	Lecture, Group discussion
Kellmer, 1984	Junior students (Con.: n=20; Exp.: n=20)	DIT: P-score: Pre –test: *M*=45.1 Post-test:49.3/ 47.6	A planned teaching program on ethics	10 hrs. (five 2-hour sessions, 2 months period)	Clinical year	Lecture, Group discussion

Note. DIT = the Defining Issues Test; P-score = the Principled thinking score; Con. = Control group; Exp. = Experimental group.

Teaching Strategies for Ethics Education

Clarkeburn (2002a) suggests four critical factors in methodologies for a successful ethics education program: the assessment of students' needs, the length of ethics education, the sequencing of ethics content, and the utilization of teaching methods for ethics education. First, the goal of an ethics program should meet the needs of students in terms of their moral development stage. For example, most nursing students have already reached the well-developed conventional stages (Clay et al., 1983); therefore, ethics education for professionals should be designed to facilitate the higher levels of moral development (i.e., principled thinking). According to Korean studies that tested the effect of ethics education on the moral reasoning skill of nursing students (Han & Ahn, 1995; J. A. Kim, Jung, & Cha, 2007; Y. S. Kim et al., 2004; M. A. Lee, 2008), after ethics education, the conventional thinking (stage 4) of nursing students tends to be strengthened, while the students' principled thinking is not significantly increased or is decreased. In terms of the results, some researchers propose that ethics education in Korean nursing programs may have focused on the legal and social duty of professionals and the theoretical aspects of ethics, thereby indicating the need for developing appropriate ethics content or teaching methods to facilitate the principled thinking of students (Han & Ahn, 1995; M. A. Lee, 2008).

Second, according to a meta-analysis of intervention studies using the DIT (Schlaefli et al., 1985), the length of ethics education may be one critical factor in the development of students' moral reasoning skill. Ethics education lasting 3 to 12 weeks (with at least weekly meetings) may be a desirable length to produce the outcome in students' moral reasoning skill; longer duration treatments (13 to 28 weeks) did not have a greater impact on students' moral reasoning than medium duration treatments (3 to 12 weeks) (Schlaefli et al., 1985). In

studies of Bell (1984) and Gaul (1987), the authors addressed 3-credit-hour ethics courses during a semester (e.g., 15 weeks, 45 hours) as a teaching intervention and reported a positive impact on the moral reasoning of nursing students. However, the length of ethics education (more than 3 weeks) may not be a successful factor for developing moral reasoning; for example, Keller (1984) tested an 2-month intervention (10 hours) and Lee (2008) tested an 8-week intervention (16 hours). The amount of exposure to ethics education may also be critical to produce an outcome.

Self, Olivarez, & Baldwin (1998) tested the effect of the amount of group discussion on the moral reasoning of medical students (n=729). Less than 20 hours of discussion was compared with more than 20 hours discussion. According to the results, while there was no significant difference in the DIT scores of students having less than 20 hours discussion (p=.85), students having more than 20 hours discussion showed a significant increase in their DIT scores (p<.01). In 2000, the Korean Nurses Association (KNA) and the Korean Society of Nursing Science established a set of objectives for nursing ethics education (Korean Nurses Association, 2000) and recommended two credit hours per semester (at least 22 hours) to achieve the objectives. However, many nursing programs in South Korea still use one credit hour per semester (J. H. Park et al., 2009). The effect of the number of hours for ethics education in South Korea has not been tested.

Third, the sequencing of ethics content in curriculum may be a critical factor in student outcomes. The order of presenting the content and learning experiences can increase student understanding and skills (Tyler, 1949). Clarkeburn (2002a) believes that the exposure of students to ethics in the first year may be the best time for impacting their moral sensitivity and moral reasoning because the students may have a strong incentive for making

decisions by themselves and may have already reached the pre-requisite levels (3 and 4 stages) that develops principled thinking (Kohlberg, 1975). Therefore, early exposure to ethics content can have a critical influence during students' university life. In particular, regarding moral sensitivity, ethics educators argued that moral sensitivity taught in the early time of professional development can allow students to habituate it by practice during their school life (P. A. Scott, 1995).

However, some ethics scholars have made different arguments (Frisch, 1987; W. H. Lee et al., 2001; Persad, Elder, Sedig, Flores, & Emanuel, 2008; Schlaefli et al., 1985). That is, ethics education with students having experiences with ethical issues in clinical practice may be more effective for developing moral reasoning skills because they can reflect on their previous experiences during instruction in ethics and thus the reflection can reinforce the students' learning. Therefore, ethics education with students during clinical training years may be recommended rather than with those in preclinical training years (W. H. Lee et al., 2001; Persad et al., 2008). According to Park et al.(2009), half of responding nursing programs (52.2%) provided ethics content during the freshman or sophomore year and others (47.8%) in the junior or senior year.

Finally, teaching methods employed in ethics education may have an impact on the moral development of students. While ethics education in a lecture format may deliver a great deal of information in a short time, it is limited to one-way communication; therefore, it has disadvantages for achieving objectives related to problem solving, decision making, or analyzing (DeYoung, 2009). In particular, many studies report that group discussions based on case analyses may be the most effective teaching format for delivering ethics content (Ales, Charlson, Williams-Russo, & Allegrante, 1992; Clarkeburn, 2002a; Schlaefli et al.,

1985; Self et al., 1998; Smith, Fryer-Edwards, Diekema, & Braddock, 2004). A study reported that group discussion is significantly effective for increasing students' moral reasoning rather than the use of written case analysis (Smith et al., 2004). Some educators conclude that small group discussions using cases may be more successful for achieving the goals of an ethics course than a theory-based approach (Ales et al., 1992). Frisch (1987) reported a positive effect of the clinical conference using value analysis; the study reported that students' self-reflection on their experiences might facilitate their moral reasoning skills during clinical conferences. In South Korea, most nursing programs use primarily lecture formats for teaching ethics (J. H. Park et al., 2009), and a few schools combine the lecture format with other teaching methods including group discussions, case studies, clinical conferences, and role plays.

A Conceptual Framework for the Study

This study suggests that both a deontological approach and a virtue approach as ethical frameworks can be explained in a comprehensive framework for teaching nursing ethics. Rest's Four Components Model supports the comprehensive framework. Furthermore, the proposed framework of teaching nursing ethics is also used as a conceptual framework that guides the conduct of this study. (See Figure 2.1)

Ethical frameworks for teaching nursing ethics. An ethical framework is an ethical thinking system that supports a moral agent's ethical decision making in situations; it is developed from ethics theories. Therefore, using a particular ethical framework is closely related to the objectives of ethics education and ethics content in the curriculum. Most nursing programs have currently employed a deontological framework for teaching ethics based on duty-based ethics dealing with the following ethics content: legal and ethical

professional obligations, codes of ethics, ethical principles and moral judgment development (Bennett, 1997; J. H. Park et al., 2009). However, ethics educators have recognized and emphasized the significance of the virtue ethics approach to ethics education for health care professionals in terms of the virtue of caring (Beauchamp & Childress, 2009; Begley, 2006; Fry, 1989a; Gastmans, 2002; Jaeger, 2001; Sellman, 1997). By using Rest's *Four Components Model* (Rest, 1984), this study explains how two normative theories work together to support ethical decision making in any given situation in our daily moral life.

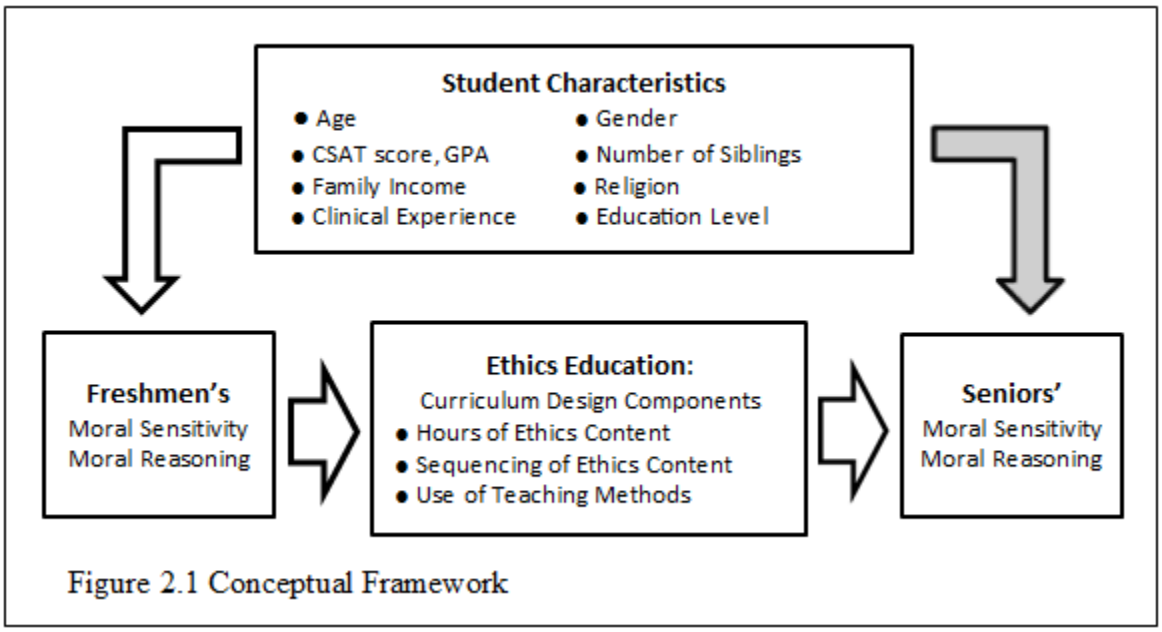

Figure 2.1 Conceptual Framework

Four components model. According to Rest (1984), moral behavior is not explained by a single theory nor is it produced by a single process. Based on multidisciplinary studies, Rest (1984) reports that the processes work together and influence each other but are simultaneously distinguished from each other by playing different roles. This means that the processes do not constitute a linear decision-making model. Therefore, if one of the processes is lacking, moral failure will result; proper functioning of the four components is regarded as necessary for moral decisions as well as for moral behavior. The four

components of morality suggested by Rest correspond to the processes: 1) moral sensitivity, 2) moral judgment, 3) moral motivation and 4) moral character.

The first component, called moral sensitivity, is the process related to interpreting a particular situation and the awareness of possible actions related to the situation. In this process, he emphasizes sensitivity and feeling (e.g., empathy) as a skill to make inferences about the needs and well-being of others. This concept may be connected to moral sensitivity as practical wisdom in virtue ethics. Moral sensitivity can activated in situations before moral judgment, can impact moral action without relating to moral judgment, and can fill gaps not covered by moral judgment (Blum, 1994). In particular, the gaps mean what is missing in moral rules used in moral judgment; that is, the gaps between ethical principles and particular situations. Currently various disciplines have developed several measurements to assess moral sensitivity, e.g., the Problem Identification Test for medical students (PIT) (Akabayashi et al., 2004; Hébert et al., 1990), the Dental Ethical Sensitivity Test (DEST) for dental students (Bebeau, Rest, & Yamoor, 1985), the Test for Ethical Sensitivity in Science (TESS)(Clarkeburn, 2002b) and the Moral Sensitivity Questionnaire (MSQ) for nurses (Lützén et al., 1995).

The second component (moral judgment) is related to determining a course of moral action based on social norms (e.g., social responsibility, equity, and reciprocity) and by stage of moral reasoning. When a person is faced with an ethical situation, he or she tries to define the moral actions in the situation and judge which action is more morally justifiable based on social norms (Rest & Narváez, 1994). Therefore, gaining knowledge of appropriate social norms is related to moral development. Kohlberg's cognitive-development research on morality is closely related to this component. People in high stages of moral reasoning can

"become aware of more complicated schemes of cooperation, involving long-term, society-wide networks and institutionalized role systems" (Rest, 1984, p. 31). Moral judgment has been widely assessed with the Defining Issue Test (DIT) as an outcome measure to test the effect of teaching ethics. The DIT is regarded as the 'gold standard' for assessing moral judgment. There are several measurements to test moral judgment in terms of ethical dilemmas in nursing including the Judgments about Nursing Decisions (JAND)(Ketefian, 1981) and the Nursing Dilemma Test (NDT)(Crisham, 1981).

The third component is related to motivation for prioritizing moral values among competing values (Rest, 1984). With various possible actions for a particular situation, a person asks, "Why I should choose the moral action?" Moral motivation may be related to human virtues (e.g., altruism, integrity, sympathy or empathy) or moral obligation (Cohon, 2004; Rest, 1984; Rest & Narváez, 1994). In particular, in terms of assessment of moral motivation of students in professional schools, some researchers used a professional identity or role concepts (i.e., understanding of professional obligations) (Bebeau, 1994). The fourth component is called moral character (virtue). Even though the person chooses the moral action, it is not clear whether the person performs moral actions without the fourth component because moral actions can be easily discouraged under pressure. Strong moral character is necessary to implement a plan of action. For example, moral character means "having courage, persisting, or overcoming distractions" (Rest & Narváez, 1994, p. 23). Virtue ethicists believe that moral virtues as a type of knowledge or skill can be cultivated with proper experience, regular practice, and good exemplars (Begley, 2006; Joachim, 1998). Although this component has been encouraged and nurtured through education, it is rarely measured.

Based on literature, this study posits that the theoretical basis of moral sensitivity and moral character are mainly supported by virtue ethics and that moral reasoning is based on duty-based ethical theories. Furthermore, a theoretical foundation for moral motivation can be provided by both ethical frameworks. Rest suggested that ethics education needs to address each moral component and to encourage and develop processes including all four components.

Teaching ethics and outcomes. Change in the moral behavior of students should be a central goal of moral education. However, the change of behavior is not suggested as a practical goal for teaching ethics due to the difficulty of measuring the change of behavior (Callahan, 1980, p. 132; Clarkeburn, 2002a). Rather, ethics educators argue that teaching ethics should focus on critical skills for ethical decision making that can lead to the change of moral behavior (Callahan, 1980; Clarkeburn, 2002a; Fry, 1989b; Ketefian, 1999). The Hastings Center (Callahan & Bok, 1980, p. 83) provides ideal goals for teaching ethics: stimulation of the moral imagination, recognition of ethical issues, development of ethical analysis skill, increasing a sense of moral obligation, and reducing ambiguity. Rest's four components (i.e., moral sensitivity, moral reasoning, moral motivation, and moral character) are broadly recognized as main factors for making ethical decisions and producing moral behaviors and are consistent with the goals suggested by the Hasting Center.

Nursing ethics educators suggest that ethics education should promote not only the development of moral reasoning based on ethical knowledge including ethical theories, principles, codes of ethics and professional obligations (rules) (Clay et al., 1983; Ketefian, 1999; Korean Nurses Association, 2000; Quinn, 1990; Stanley, 1980; Thompson & Thompson, 1989; Vito, 1983) but also the cultivation of moral virtue (i.e., caring)

incorporating moral sensitivity (Armstrong, 2006; Begley, 2006; Fry, 1989b; Gastmans, 2002; P. A. Scott, 1996). The goals for teaching ethics are directly related to the outcomes of ethics education. Furthermore, Clarkeburn (2002a) suggested that developing moral sensitivity and moral reasoning is a reasonable aim for ethics education not only because they are necessary skills for making moral decisions and for leading moral behavior, but also because they can be measured.

All ethical knowledge and skills can be taught through a planned ethics curriculum providing appropriate learning experiences (e.g., character education, values clarification, or moral discussion), repeated practices, and good role exemplars (e.g., clinical supervision and individual counseling sessions) (Begley, 2006; Callahan & Bok, 1980; Davis et al., 2006; Kohlberg, 1975; Silva & Guillett, 1996; Thompson & Thompson, 1989). Furthermore, critical components for an ethics curriculum that facilitates students' moral sensitivity and moral reasoning are also suggested by researchers: the assessment of students' needs, the length of ethics instruction, the sequencing of ethics content, and the utilization of teaching methods (Clarkeburn, 2002a; Kohlberg, 1975; W. H. Lee et al., 2001; Schlaefli et al., 1985). Therefore, based on literature, this study includes three curriculum variables for teaching ethics that may impact students' outcomes: the hours of ethics instruction, the sequencing of ethics content, and the hours of non-lecture teaching methods.

Other variables and outcomes. Furthermore, according to the literature, characteristics of moral agents may be related to their moral development. According to Rest (1986a), education is a critical variable in the theoretical base. In light of developing morality over time, chronological age may be closely related to students' morality. However, Rest argues that at post-high school age, education will be a more predictable variable than age; at

that time, the experience and education of moral agents seem to be confounded (Schlaefli et al., 1985). In particular, moral reasoning has correlations to moral agents' intellectual ability (e.g., IQ, GPA) because reasoning skills, such as understanding complex relationships or abstract thinking, are needed to resolve moral dilemmas (Kohlberg, 1969). Gilligan (1982) believes that the moral orientation of women may be different from that of men. Religious beliefs (e.g., to keep religious commandments) or political opinions may also influence moral decisions (Rest, 1986a). In addition, there are other educational or socioeconomic characteristics that may have impacts on moral development. They include regions, residential area, family income, a father's occupation, the educational level of parents, the number of siblings, or the major in college.

According to Rest(1986a), variables other than education, age, and intellectual ability (e.g., IQ) do not have consistent relationships with moral development according to research studies; therefore, the selection of variables for any study will be considered based on the purposes of the study. Bennett (1997) reported that some school characteristics (e.g., the type of funding or the size of school) may have indirect effects on students' outcomes in terms of leading different environment for ethics education.

Furthermore, in relation to moral sensitivity, there are few studies identifying personal variables that may affect individual moral sensitivity. According to Lützén's studies, personal variables including age, gender, length of experience, and previous education in mental health care may be critical factors affecting moral sensitivity (Lützén et al., 1997; Lützén, Johansson, & Nordstrom, 2000; Lützén & Nordin, 1995; Lützén et al., 1995). These variables may be supported by virtue ethics theory. The acquisition of moral sensitivity can be promoted by appropriate experience, ethics education, repeated exercise,

and good role models (Begley, 2006; Weaver et al., 2008). Furthermore, Lützén et al.(2000) interpreted that differences in moral sensitivity by gender may come from different preferences between male and female professionals in terms of being involved in interpersonal relationships, which relate to aspects of moral sensitivity.

Summary

Advances in medical technology and human research have made huge impacts on human health care. Simultaneously, they have raised various ethical issues and resulted in the emergence of bioethics. Therefore, ethics education in healthcare professional schools focuses on preparing their students to be ethically competent in ethical decision-making. Furthermore, ethics educators also insist that the creation of virtuous professionals should be included as a goal of professional education. Ethics education in nursing programs reflects the trends of teaching ethics in professional programs. This review was conducted with several purposes; first, to describe ethical frameworks in terms of producing desirable student outcomes (i.e., moral sensitivity and moral reasoning) by ethics education, to describe the current status of ethics education in nursing curricula by comparing the ethics curricula of the U.S. nursing programs to those of the nursing programs in South Korea; to describe the effects of current ethics education based on the previous published studies; and to identify the critical teaching strategies for ethics education. Finally, a conceptual framework was described to guide this study based on the literature review.

The literature showed that there are two key ethical frameworks for teaching nursing ethics: one is a virtue-based approach and the other is a duty-based approach. While virtue ethics based on Aristotle' theory has been a main framework for teaching nursing ethics since the early 1900s, deontological ethical frameworks including ethical principles, patient rights,

professional obligation, codes of ethics, and cognitive moral development were popularly used among nursing programs over virtue ethics in the late 1900s. However, currently, nursing scholars have once again become interested in virtue ethics as a framework for teaching ethics in nursing programs, believing that virtue ethics will provide a comprehensive framework for nursing ethics together with duty-based ethics (Begley, 2006; Gastmans, 2006; Jaeger, 2001; P. A. Scott, 1995).

Nursing ethics education based on those ethical frameworks can produce moral sensitivity and moral reasoning as essential knowledge or skills for ethical decision making among nursing professionals. Moral sensitivity as *practical wisdom* is developed in a virtue-based approach. Moral reasoning as the application of professional values is developed in a duty-based approach. Rest (1984) identified moral sensitivity and moral reasoning as critical moral components to produce ethical decisions and moral behaviors.

Ethics education has been a major subject of nursing curricula since the beginning of modern education. According to the latest national survey in the U. S. (Bennett, 1997), most nursing programs use an integrated approach for teaching ethics by teaching and learning ethics intertwined with nursing practice. However, with concerns about the effectiveness of the integrated approach used by nursing programs, many nursing schools have increased the use of a required, separate ethics course. In South Korea, since the mid-1900s, the Korean nursing programs have been greatly influenced by U.S. nursing education. In the past two decades, dedication to ethics education has been increased among nursing programs in South Korea with the wide use of a required, separate ethics course. However, the effect of ethics education has rarely been evaluated. Furthermore, nursing educators indicated that there are still several barriers to the facilitation of ethics education in nursing curricula.

With respect to the goal of nursing ethics education, this review included studies addressing moral sensitivity and moral reasoning as outcomes of ethics education. There is no study examining nursing students' moral sensitivity as an outcome of ethics education, even though other disciplines frequently attempt to determine the outcomes of ethics education with moral sensitivity. Several studies concluded that moral sensitivity, as a necessary skill for ethical decision making, can be taught in professional ethics education (Akabayashi et al., 2004; Baab & Bebeau, 1990; Bebeau & Brabeck, 1987; Hébert et al., 1992; Hébert et al., 1990; J. H. Lee et al., 2006). Furthermore, testing moral reasoning using the DIT is popularly used in empirical studies to address the outcome of ethics education. However, studies in this review yielded conflicting results. While some studies concluded that ethics education facilitate students' moral reasoning (Auvinen et al., 2004; Bell, 1984; Duckett et al., 1997; Frisch, 1987; Gaul, 1987; Krawczyk, 1997), other studies reported that current ethics education may not prompt students' moral development (Kellmer, 1984; M. A. Lee, 2008; M. A. Lee et al., 2005; Munhall, 1980). The literature suggests that conflicting results may due to the differences of teaching strategies used in the studies.

Ethics educators argue that there are critical curricular design components for successful ethics education: the amount (or length) of teaching hours, the sequencing of ethics contents, and the use of specific teaching methods (Clarkeburn, 2002a; Schlaefli et al., 1985). However, empirical studies testing the effects of teaching ethics using those variables are not available; therefore, the arguments are not be supported with evidence. There is still a lack of studies that provide evidence for supporting curricular decisions about teaching ethics. Based on the literature, this study identifies curriculum variables for ethics education

that may influence student outcomes: 1) the hours of ethics instruction, 2) the sequencing of ethics content, and 3) the hours of non-lecture teaching methods.

Furthermore, this study included student characteristics as significant variables that may have an impact on students' moral sensitivity and moral reasoning. With consideration given to the nursing population in South Korea, this study has collected data on the following student characteristics: age, gender, the number of siblings, religion, family income, the CSAT score, GPA, previous clinical experience, and previous education.

CHAPTER 3

METHODS

The purpose of this study was to explore the relationship of ethics education to student moral sensitivity and moral reasoning in baccalaureate nursing programs in South Korea. This chapter presents the methodology and procedures followed during investigation of the relationships between: 1) academic year and moral sensitivity and moral reasoning of freshman and senior students in baccalaureate nursing programs; 2) curriculum design components for teaching ethics and these senior students' moral sensitivity and moral reasoning; and 3) these students' characteristics and moral sensitivity and moral reasoning. This chapter is organized as follows: 1) study design, 2) subjects and settings, 3) instruments, 4) procedure, and 5) data analysis.

Study Design

This study used a descriptive design. Therefore, the present study focused on not revealing causal relationships but investigating relationships between students' moral sensitivity and moral reasoning and multiple variables including curricular variables and student characteristics using data collected from a large number of undergraduate nursing students in South Korea. Furthermore, with the practical advantage that allows for inference about changes developing over time by collecting data from existing groups at different stages (Polit & Beck, 2004), this study used a cross-sectional design to suggest the differences in effects of education on students over time.

First, this study described the relationships between academic class (i.e., freshman and senior) and the moral sensitivity and moral reasoning of the students in baccalaureate nursing programs in South Korea. All data were collected cross-sectionally from student groups in two different academic years of each nursing program. One group consisted of freshman students who had no experience with ethics education in each nursing program and another group consisted of senior students who fully experienced the ethics education provided by each program.

Second, this study was designed to describe the relationships between curriculum design components for teaching ethics and moral sensitivity and moral reasoning of senior nursing students. The study assumed that the senior student groups fully experienced ethics education under different types of curricular design components that the selected programs have employed for ethics education. This study identified three critical components of a curriculum design for teaching ethics: 1) hours of ethics instruction, 2) sequencing of ethics content, i.e., years in preclinical training of freshman or sophomores versus years in clinical training of juniors or seniors, and 3) hours of non-lecture teaching methods.

Third, this study also described the relationships between student characteristics and moral sensitivity and moral reasoning of the students in baccalaureate nursing programs in South Korea. Based on previous studies reporting relationships between those variables, this study identified the following student characteristics: age, gender, College Scholastic Ability Test (CSAT) score, grade point average (GPA) in the previous year, religion, the number of siblings, family income, previous education level, and previous clinical experience.

Hypotheses

Null hypotheses tested were:

1.

A. There are no differences in moral sensitivity scores between freshman and senior students.

B. There are no differences in moral reasoning scores between freshman and senior students.

2.

A. 1. The moral sensitivity of senior nursing students is not associated with the hours of ethics content.

A. 2. The moral sensitivity of senior nursing students is not associated with the sequencing of ethics content (i.e., preclinical years or clinical year).

A. 3. The moral sensitivity of senior nursing students is not associated with the hours of non-lecture teaching methods.

B. 1. The moral reasoning of senior nursing students is not associated with the hours of ethics content.

B. 2. The moral reasoning of senior nursing students is not associated with the sequencing of ethics content (i.e., preclinical years or clinical year).

B. 3. The moral reasoning of senior nursing students is not associated with the hours of non-lecture teaching methods.

3.

A. The moral sensitivity of nursing students is not associated with student characteristics variables.

B. The moral reasoning of nursing students is not associated with student characteristics variables.

Subjects and Setting

The sample consisted of 946 students that include 506 freshman and 440 senior students in eight private baccalaureate nursing programs in South Korea accredited by the Korea Accreditation Board of Nursing (KABN) and the Center for University Accreditation (CUA). Five programs were located in Seoul and three programs were located in cities near Seoul in South Korea. Nursing programs were purposively sampled based on various curriculum design components for teaching ethics.

There were several inclusion criteria for nursing programs. First, this study included only baccalaureate nursing programs (four-year programs) in universities accredited by the KABN and the CUA. Nursing programs accredited by those accreditation agencies are recognized as having met an acceptable level of nursing education quality and are comparable to one another. Second, this study also included only private universities in the Seoul metropolitan area. Private funding is typical of baccalaureate nursing programs in South Korea: 80% of all nursing programs are private. According to Bennett (1997), the religious affiliation of a school should be also considered as it may affect decisions about curriculum design and educational resources due to the school funding type; e.g., public schools and private non-religious schools are more likely to have less ethics content in their curricula, while private religious schools are more likely to have more ethics content in their curricula. Therefore, through a review of curriculum shown on school websites, this study excluded schools with considerable religious reflection in their ethics curricula. After the pre-reviewing process, this study included only two religiously affiliated schools because their curricula were similar to those of the non-religious schools. The two selected religiously affiliated schools employed different curriculum design components for teaching ethics. The

schools were tracked to determine whether the schools with the religious affiliation may differently impact ethics education compared to schools without religious affiliation. Third, this study was limited to universities in the Seoul metropolitan area to provide consistency. The programs in the metropolitan area were easy to access by public transportation systems from the downtown area of Seoul and being in the metropolitan area allows for a similar environment surrounding the universities. Furthermore, the selection of the geographical region was also convenient for data collection.

Finally, after the selection process, six non-religious schools and two religiously affiliated private schools were selected based on curriculum design components (i.e., hours of ethics instruction, sequencing of ethics content, and hours of non-lecture teaching methods) to include all levels of the curricular variables. According to a study by Bennett (1997), the size of the program (i.e., the number of students) has a weak positive correlation with the hours of ethics contents (r= .20, p<.01). The number of senior students in the programs selected in this study ranged from 45 to 94. Currently most of the programs have increased the number of students. Therefore, the number of freshman students enrolled in the programs participating in this study (M=79.9, SD=20) differed from those of the senior students (M=64.6, SD=19). However, in this study, the hours of ethics content varied regardless of the number of students in the programs.

Required sample size. Sample size calculation for this study using GPower 3.1 (i.e., linear multiple regression: fixed model, single regression coefficient) suggested a total of 55 students from a total of all schools, assuming medium effect size (f^2=.15), standard statistical levels of 80% power and a 5% significance level. However, there is dependence among students within a class, within a school as a cluster (multilevel data). If the formulae for

individual-based sample size is used, the required sample size may be too small or underpowered because within-school dependence will be ignored (M. K. Campbell, Thomson, Ramsay, MacLennan, & Grimshaw, 2004). Therefore, a sample size calculation is suggested by multiplying by a factor [1 + (n-1)* Intraclass Correlation Coefficient (ICC)] to correct for within-school correlation to achieve the appropriate power for the study using clustered data; the ICC is a statistical measure of the within-school dependence (Donner, Birkett, & Buck, 1981; Donner & Koval, 1982). Therefore, the required sample size for this study was 328 students. In this calculation, even though a fairly small ICC (.05) is used, the adjusted sample size was almost six times the original sample estimation (n=55). It may be an overestimate, but can be used to conservatively estimate the sample size we need.

Instruments

Moral sensitivity and moral reasoning. To test the impact of a curriculum design for ethics on student moral sensitivity and moral reasoning skill, two instruments were employed: the Korean Moral Sensitivity Questionnaire (K-MSQ) (Han et al., 2010) and the Korean Defining Issues Test (KDIT) (Moon, 1994), respectively.

Korean Moral Sensitivity Questionnaire. This study used the Korean Moral Sensitivity Questionnaire (K-MSQ) that is a Korean translation version of the Moral Sensitivity Questionnaire. (See Appendix A) The Moral Sensitivity Questionnaire (MSQ) was developed by Lützén (1993) to measure the moral sensitivity of nurses based on an analysis of interviews with psychiatric nurses about ways of dealing with moral dilemmas in nursing practice. In the MSQ, moral sensitivity is defined as the "personal attribute necessary when dealing with ethical conflicts that the nurse is confronted with when making decisions for a patient who is perceived to be in a vulnerable position because of illness (Lützén et al.,

1995, p. 132)." The MSQ had six dimensions including *interpersonal orientation*, *structural moral meaning*, e*xpressing benevolence*, *modifying autonomy*, e*xperiencing moral conflict*, c*onfidence in medical and nursing knowledge (rules)*, and *threat of coercion*. (Lützén et al., 1995, p. 132). The reliability, content validity, and construct validity of the MSQ have been established in previous studies. Reliability analysis provided a Cronbach's coefficient alpha of .78 for the whole scale (Lützén et al., 1995) (Lützén et al., 1995).

The K-MSQ was developed and applied to test the moral sensitivity of Korean nursing students and nurses; Han and colleagues have revalidated the MSQ in a Korean cultural context (Han et al., 2010). Three nursing experts and professional translators joined in the translation process of the MSQ from English to Korean. Furthermore, for general use with a nursing population, the Korean version does not contain three items specifically related to psychiatric nursing (i.e., 22, 24 and 25) and has 27 items total. According to factor analysis results, the 27 items were categorized by five factors accounting for 45.5% of the total variance: *Patient-oriented care* (items 6, 7, 13, 16 and 19), *Professional responsibility* (items 1, 4, 12, 21, 27, 29 and 30), *Conflict* (items 9, 10, 11, 14 and 23), *Meaning* (items 2, 3, 5, 8 and 18), and *Benevolence* (items 15, 17, 20, 26 and 28) (Han et al., 2010). The first two factors of the K-MSQ are different from those of the MSQ, while the other three factors of the K-MSQ (i.e., *conflict*, *meaning*, and *benevolence*) are similar to those of the MSQ. The researchers addressed the differences with cultural context among Korean nurses. For example, the first component, patient-oriented care, was mainly related to Korean nurses' recognition of nursing as patient-centered care. In terms of the second factor, Korean nurses may understand issues related to respecting patient autonomy (the fourth factor of the MSQ) and rules (the sixth factor of the MSQ) as professional responsibility.

Although this study used the K-MSQ, the student survey also included the excluded items (22, 24, and 25) to provide information about the general level of moral sensitivity of the sample in this study by comparing the scores of the previous studies testing the MSQ; the scores of K-MSQ have not been reported in the published articles and thus the mean scores of the whole items (30 items) of the sample in this study can be provide the general level of moral sensitivity. The K-MSQ is a 7-point Likert-type, self-administered questionnaire. A score of 1 to 7 for each item indicates the extent of agreement (e.g., 7 for 'I totally agree') or disagreement (e.g., 1 for 'I totally disagree') with the assumption. The higher score indicates a higher moral sensitivity. The K-MSQ can be taken in 10 to 15 minutes.

According to a validation report of the K-MSQ, its reliability was estimated using Cronbach's alpha (α=.76), an acceptable level of internal consistency. Regarding the internal consistency of the K-MSQ in this study, Table 3.1 contains the Cronbach's alpha value of each factor. A Cronbach's alpha of the K-MSQ for entire scale was .79.

Table 3.1

Reliability of the K-MSQ in this Study

Variables	N of items	Alpha for total subjects	Alpha for senior	Alpha for freshman
Reliability of the K-MSQ	27	.79	.76	.80
Patient-Oriented Care	5	.64	.62	.62
Professional Responsibility	7	.63	.61	.63
Benevolence	5	.48	.48	.49
Conflict	5	.70	.69	.69
Meaning	5	.52	.54	.50

Note. K-MSQ = the Korean Moral Sensitivity Questionnaire; N= Number; Alpha = Cronbach's Alpha

Korean Defining Issues Test. This study used the KDIT. (See Appendix B) In 1986, the Defining Issues Test was translated by Moon (1986) into Korean for application to the

Korean population (i.e., KDIT). The Defining Issue Test (DIT) is one of the most popular instruments used to evaluate moral reasoning. According to Rest and colleagues (Rest, Thoma, & Edwards, 1997), moral reasoning as a developmental progression changes over time from less advanced forms of moral thinking (e.g., influenced by self-interest factors) to more advanced forms (e.g., organizing a system of social cooperation). (See Table 3.2) The reliability, content validity, and construct validity of the DIT have been established in previous studies.

Table 3.2

Six Stages in the Concept of Cooperation

Stage	Concepts
1	The morality of obedience: Do what you're told.
2	The morality of instrumental egoism and simple exchange: Let's make a deal.
3	The morality of interpersonal concordance: Be considerate, nice, and kind: you'll make friends.
4	The morality of law and duty to the social order: Everyone in society is obligated to and protected by the law.
5	The morality of consensus-building procedures: You are obligated by the arrangements that are agreed to by due process procedures.
6	The morality of non-arbitrary social cooperation: Morality is defined by how rational and impartial people would ideally organize cooperation.

Note. Adapted from "*Moral development in the professions: Psychology and applied ethics*," by J. R. Rest, & D. Narváez, 1994, Hillsdale, N.J.: L. Erlbaum, p.5. Copyright 1994 by Lawrence Erlbaum Associates, Inc.

The KDIT is a multiple-choice test used to assess the moral reasoning; It is a paper-pencil measure, has six hypothetical stories. Each story consists of a set of 12 issues on a 5-point Likert scale (1= No importance, 2= Little importance, 3= Somewhat important, 4= Much importance, 5= Great importance). The items are related to developmental stages (i.e., 1, 2, 3, 4, 5a, 5b, 6). During the test, participants are involved in three steps for each dilemma story: first, participants read each dilemma and choose one of three listed courses of action.

Second, they rate the 12 issue statements in order of importance to their decision. Finally, based on ratings about the 12 issues, they rank the four most important issues. A shorter version of the KDIT using three stories (i.e., Husband, Prisoner, and Doctor) selected in consideration of the cultural background in Korean society has been mainly used in Korean studies. The KDIT can be taken in 15 to 20 minutes.

The P score is a main indexing of the KDIT based on a participant's ranking of principled moral stages (Stage 5 and 6). Therefore, a high P score is associated with more advanced moral judgment. As the P scores in the ranking scale increase, the lower stage scores decrease. For research purposes, Rest and colleagues (1999) recommended reporting the P score without the other lower stages, because reporting the other stages is redundant. A review study of moral reasoning in the Korean population indicated the increase of the conventional level scores (stages 3 and 4) in college student population in South Korea (Moon, Kim, Lee, & Won, 2008). Furthermore, some nursing studies reported the stage 4 score with the P score as educational effects (M. A. Lee, 2008, 2009). Therefore, this study also considered the conventional level scores with the P score.

The KDIT has methods for checking response consistency; 1) the non-differentiation of rates or ranks (whether each story has with the same rating score or the same ranking), 2) missing rates (the total number of missing rating items), 3) missing ranks (the total number of missing ranking items), and 4) the rating and ranking consistency (whether there is an inconsistency between a subject's ratings and rankings). If one of the response consistency checks is not satisfied in a questionnaire, the questionnaire is excluded from further analysis. Although the dropped questionnaires based on the internal checking process could cause limited study results, more meaningful trends in reliability can be produced by using the

internal checks (Rest, 1986a). The shorter version has been validated through previous Korean studies (Moon, 1994). The P score of the shorter version is highly correlated with the KDIT, namely, with its six stories (*r*=.93) (Oh, 2002). However, the shorter version of the KDIT has lower reliability (Moon, Kim, & Uhm, 2008: Cronbach's alpha for the P index=.61) than the short version of the original DIT using a different set of stories (i.e., Husband, Prisoner, and Newspaper) (Rest, 1986a: Cronbach's alpha for the P index =.77).

This study provided Cronbach's alpha values in three levels because the numbers of items in some stages (i.e., one item for Stage 5b and two items for Stage 2) are not enough to calculate an adequate Cronbach's alpha. (See Table 3.3) Cronbach's alpha for the principled thinking items was .62.

Table 3.3

Reliability of the KDIT of this Study

Variables	N of items	Alpha for total subjects	Alpha for senior	Alpha for freshman
Reliability of the KDIT	36	.80	.80	.80
Post-conventional level: Stage 6 & 5	10	.62	.64	.61
Conventional level: Stage 4 & 3	17	.55	.57	.54
Pre-conventional level: Stage 2& 1	9	.60	.60	.60

Note. KDIT = the Korean Defining Issues Test; N=Number; Alpha = Cronbach's Alpha

Curricular variables. The curricular variables consisted of: first, the hours of ethics content which refers to the total hours that are planned for ethics content in the curriculum; second, the sequencing of ethics content which refers to the academic years that ethics content is provided. This is divided into two periods: preclinical training years and clinical training years. Generally, in Korea, freshman and sophomore years are identified as a preclinical training period and junior and senior years as a clinical training period. Third, the hours of non-lecture teaching methods refers to the hours dedicated to specific teaching

methods for ethics e.g., case analyses, group discussions, clinical conferences, role play, and problem-based learning, other than by lecture format. The non-lecture teaching methods, e.g., group discussion and activities based on discussion, have been suggested as an effective teaching method for developing moral sensitivity or moral reasoning (Begley, 2006; DeYoung, 2009; Schlaefli et al., 1985). However, according to a current study (J. H. Park et al., 2009), the use of non-lecture teaching methods for teaching ethics was not well facilitated among nursing programs in South Korea. Therefore, inclusion of this variable is to examine the effect of non-lecture teaching methods in different levels of the nursing program on student outcomes.

The information related to curriculum design components for ethics was collected from a curriculum information survey developed by the investigator: the survey was distributed to faculty who were assigned to teach ethics in each program. (See Appendix C) The curriculum information survey was modified by combining two existing surveys: one developed by Bennett (1997) and the other used by Park and Kim (2009). First, the survey included questions related to the following curricular variables: hours of ethics instruction (question 16), sequencing of ethics content (question 15), and hours of non-lecture teaching methods (question 21). In addition, the curriculum information survey was designed for collecting detailed information about the ethics curriculum used by each school; it included 1) the purpose of ethics education (Questions 1 to 2), 2) supporting systems for ethics education (Questions 3 to 12), and 3) a systematic plan for ethics content (Questions 13 to 26). Therefore, the survey could provide more comprehensive information in terms of differences or similarities in ethics curriculum among selected schools.

Student characteristics. The student information survey developed by the investigator assessed demographic variables including age, gender, College Scholastic Ability Test (CSAT) scores, grade point average (GPA) in the previous year, religious background, education level, number of siblings, family income, previous clinical experience, and previous ethics courses in moral philosophy. (See Appendix D) All variables were in categorical formats except for age, GPA, CSAT scores and number of siblings (continuous variables). The relationships between the outcome variables and subjects' characteristics varied in previous studies. Therefore, this study included important variables that researchers have commonly mentioned in their studies. For example, the MSQ is associated with gender, education level, and clinical experience (Lützén & Nordin, 1995; Lützén et al., 1995). For subject characteristics related to scores in the DIT, based on their previous research, the *Center for the study of Ethical Development* recommended considering age, gender, GPA and education level (Bebeau & Thoma, 2003). This study also included the CSAT because it provides information about standardized intellectual ability among students across schools in Korea. Most Korean studies using the KDIT included religious backgrounds, the number of siblings and family income, and they reported significant relationships between moral judgment and the variables. The relationship between the number of siblings and moral judgment may be understood in the cultural context of Korea. The study survey in Korean was presented in Appendix E.

Procedure

This study was approved by the Institutional Review Board (IRB) at the University of North Carolina at Chapel Hill. (See Appendix F)

Recruitment and consenting. The primary investigator (PI) collected all information about nursing programs that were potential candidates for this study based on a database available on the Internet. To ascertain feasibility, faculty members in baccalaureate nursing schools that met the inclusion criteria were contacted by email. The PI explained the study and asked about their interest in participating. Faculty members in eight nursing programs agreed to help with data collection from their students by email. The second contact was completed by email and phone: a letter was sent to each previously contacted faculty member asking for information related to the IRB process in each school and for confirmation about participating in this study: verbal permissions for data collection from deans in the programs under IRB approval were obtained. The third contact by telephone and email was made to confirm further processes of the study related to specific data collection including a curricular information survey and student surveys.

Based on information from previous contacts with a faculty from each program (n=8) to get permission for data collection, the primary investigator (PI) sent an official letter to the dean requesting the permission for data collection from students through the contact faculty in each school. The approval letter of the UNC-CH IRB for this research was attached in the official letters to the deans. The dean of one school provided permission by email. The deans of other schools provided verbal permissions directly in meetings with the PI, or indirectly through the contact faculty; permission for one school was granted by the faculty member who was assigned to teaching ethics. In terms of the local IRBs, two schools required their own IRB approvals to collect data from students; the deans of those programs permitted data collection under their own IRB approvals. Therefore, the PI submitted the application forms that each school requested. See appendices G and H for these approvals.

Regarding the consent process, the surveys used in this study were anonymous questionnaires, and consent was obtained from students. Subjects returned their completed questionnaires, which indicated their consent to be participants in this study. The PI explained this study in verbal and written forms before distributing surveys.

Data collection. The assessment questionnaires for teaching ethics were administered to a faculty member who was assigned to teach ethics in each nursing program. The survey (including the moral sensitivity test, the moral reasoning test, and the student information survey) was given directly to the students by the PI or faculty member who was designated to administer the surveys at the end of classes in each school. Two schools preferred that the survey was distributed by their own personnel (i.e., teaching assistant or faculty) at the end of classes without the PI attending. Therefore, the PI provided their personnel information in relation to the distribution of the survey. The faculty contacted the PI after the completion of data collection and returned the surveys to the PI. For the other six schools, the PI distributed the surveys directly to the students at the end of classes with the cooperation of the designated faculty member. The student surveys could be completed in 20 to 30 minutes. Data collection for the freshman groups was conducted during the second semester of enrollment and for the senior groups at the end of final semester.

Data management. At first, all data were entered into EXCEL (version 2007) by the PI and three research assistants following a planned coding procedure. The planned coding procedure was developed by the PI corresponding to a coding manual of the KDIT. This study used a double data entry method to increase accuracy of data entry. With a large sample size, double data entry is suggested as the most effective data entry method for decreasing data entry error compared to single entry or single entry with visual checking (J.

R. Scott, Thompson, Wright-Thomas, Xu, & Barchard, 2008). The PI and research assistants independently entered data: the Pl entered one dataset and three research assistants entered the others. Prior to data entry, the PI provided the research assistants a one-hour training session for coding with a coding manual.

After completing double data entry, the two sets of data were checked for mismatches using Microsoft Excel (Elliott, Hynan, Reisch, & Smith, 2006); discrepancies were corrected based on the original surveys. After the double data entry process, the KDIT data were sent by email to the KDIT research assistant in the Moral Psychology Laboratory in Seoul National University for data scoring. The K-MSQ data were directly scored by the PI using SAS. Until completion of this study and anticipation of no further follow-up, the collected surveys and data files are being kept in a locked cabinet of and a password-protected computer of the primary investigator, respectively; at a later date (January 2014), the identified data will be destroyed.

In terms of missing data management, this study included several strategies. First, the PI encouraged students to fill out the questionnaires during the survey administration. After collecting the data, the PI assessed the extent and pattern of missing data: the frequency distribution of each variable and the randomness of missing values for the evaluation of comparability among groups (Polit & Beck, 2004). Finally, based on the assessment, regarding outcome variables, missing cases were deleted. Next, regarding student characteristics, there were about 15 to 19% missing data in the CSAT scores; therefore, that variable was excluded from further analysis in this study.

Data Analysis

The data in this study were analyzed in multiple steps using SAS software. First, school characteristics were described in terms of similarities and differences among schools based on the school information survey. Second, descriptive data about student characteristics were examined using means and standard deviations (i.e., age, GPA and number of siblings) or frequencies and percentages (i.e., gender, religion, family income, previous education level, and previous clinical experience). Before analyzing the data regarding research questions in this study, the differences in student characteristics among schools/ between classes were tested: for categorical variables, the Chi-square test and the *Cochran-Mantel-Haenszel* Chi-square test was used; and for continuous variables, the mixed model and the ANOVA were used. The significant differences in student characteristics between groups were controlled in the mixed model as covariates to ensure comparability between groups. Third, each research question was tested using mixed models. Mixed models can be used to test relationships between variables that are measured on hierarchical levels (i.e., the student level and the school level), accounting for dependence between students within a school (Kreft & Leeuw, 1998). Without considering the dependence among student data within the same school, standard errors may be misestimated (Kreft & Leeuw, 1998; Raudenbush & Bryk, 2002). Hierarchical linear models with random effects for each school improve the estimation of effects within student data. Statistical significance was assessed at the .05 level.

Summary

This descriptive study used a cross-sectional design, collecting data from groups: one group consisted of freshman students who had no experience with ethics education in each nursing program and another group consists of senior students who had fully experienced the

ethics education provided by each program. Relationships among several variables (i.e., academic class, curriculum design components, and student characteristics) and students' outcome variables (i.e., moral sensitivity and moral reasoning) were explored. The data were collected from eight private baccalaureate nursing programs in the Seoul metropolitan area in South Korea by surveying students (N=953, Response Rate=83.8%). The all programs were accredited by both the Korea Accreditation Board of Nursing and the Center for University Accreditation.

The student survey consisted of the Korean Moral Sensitivity Questionnaires to examine moral sensitivity of students, the Korean Defining Issues Test to examine moral reasoning of student, and demographic information questions. All surveys were anonymous questionnaires. The student survey was directly distributed at the end of class to students and was voluntarily returned from students in terms of their consent to participate in this study. Using a curriculum information survey, this study also collected information about the ethics curriculum from faculty assigned to teach ethics in each program. This study used mixed models including random effects for each school.

CHAPTER 4

RESULTS

The focus of this study was on the relationships: 1) between academic class (i.e., freshman and senior) and student moral sensitivity and moral reasoning, 2) between curriculum design components for ethics education (i.e., hours of ethics content, sequencing of ethics content, and hours of non-lecture teaching methods) and student moral sensitivity and moral reasoning; and 3) between student characteristics (i.e., age, gender, GPA, religion, the number of siblings, family income, previous education level, and previous clinical experience) and student moral sensitivity and moral reasoning. First, the response rates, information about curricular variables, demographic data about student characteristics, and information about moral sensitivity and moral reasoning are reported. Next, results related to the research questions are presented.

Response Rates

A total of 1137 questionnaires were distributed to freshmen and seniors enrolled in eight baccalaureate nursing programs in South Korea. Of the surveys, 953 (83.8%) were returned. Of the returned surveys, seven surveys were not properly completed and were excluded from further analysis (e.g. of total ten pages, if there is more than one page missing, the survey was excluded as an incomplete survey) (N=946, 83.2%). Of the completed surveys, 18 were missing items in the K-MSQ; therefore, 928 questionnaires (80.3%) were used. The DIT contains internal checks on subject reliability. According to Rest (1986a), generally, although the internal checks result in 2 to 15% dropping of the questionnaires, the

checking system will produce more meaningful trends with better reliability. After the response consistency checking of the KDIT, a total of 55 questionnaires (6%) were dropped based on the internal checks and the remaining 891 KDIT questionnaires (77.1%) were used.

Curriculum Variables

Curriculum variables included the hours of ethics content, the sequencing of ethics content, and the number of hours of non-lecture teaching methods. All programs included ethics as required content in the nursing curriculum. However, commitments to teach ethics varied among programs. Six nursing programs provided a separate ethics course and the other two schools provided ethics content as a part of other nursing courses. Ethics content was mainly taught by faculty with expertise in nursing management.

Table 4.1 contains detailed information about the curriculum of each program. The range of total hours of ethics content, both lecture and non-lecture, was from 4 to 32 hours (M=22 hours, SD=12.15). All programs used lectures for teaching ethics, and the lecture hours ranged from 4 to 25 hours (M=15.6, SD=7.8). Seven of the programs combined lectures with other methods, including group discussion, case analysis, a role play and problem-based learning. The hours of non-lecture teaching methods ranged 0 to 16 hours (M=7.9, SD=5.7). Two programs used non-lecture teaching methods for half of the total hours of ethics content; one used several teaching methods and the other used only group discussion. Four of programs linked ethics contents with clinical practice by dealing with clinical issues in class or including ethics content as objectives for clinical practice. Regarding the sequencing of ethics content, four programs placed ethics content at the clinical years, i.e., senior level, and four programs at the preclinical years, i.e., freshman or sophomore level. One program with ethics content in the freshman year placed it at the

Table 4.1

Summary of School Characteristics and Curricular Variables

Area	Program1	Program2	Program3	Program4	Program5	Program6	Program7	Program8
Religious Affiliation	No	Yes	No	No	No	No	No	Yes
Geographical Region	Out	Seoul	Seoul	Out	Out	Seoul	Seoul	Seoul
Type of Program	College	College	Dep.	Dep.	Dep.	Dep.	College	College
N of Full-time Faculty	12	17	9	8	12	9	18	20
N of Faculty for Ethics	1	2	1	1	1	1	2	2
Coordinator for Ethics Course	Yes	Yes	Yes	No[a]	No	No	No	Yes
N of Students in Ethics Class	40	75	70	50	100	45	85	80
Type of Ethics Curriculum	Course	Course	Course	Course	Integrate	Course	Course	Integrate
Sequencing for Ethics Content	Clinic	Clinic	Pre-clinic	Clinic	Pre-clinic	Pre-clinic	Pre-clinic	Clinic
Total Hours of Ethics Content	32	24	32	15	4	32	32	6
Hours of Lecture	25	20	25	14	4	15	16	6
Hours of Non-lecture	11	4	5	8	0	15	16	4
Non-Lecture Teaching Methods								
Group Discussion	Yes[b]	Yes	Yes	Yes		Yes	Yes	Yes
Case Analysis		Yes	Yes	Yes		Yes		Yes
Role Play	Yes							
Problem-based Learning						Yes		Yes
Linkage with Clinical Practice		Yes		Yes		Yes	Yes	

Note. Out = out of Seoul; N=number; College = nursing college; Dep. = nursing department in medical college; Course = a separate, required ethics course; Clinic = clinical year: junior or senior year; Pre-clinic = pre-clinical years: freshman or sophomore year.
[a] if there was no coordinator for ethics course in a program, it was listed as 'no.' [b] if a specific teaching method was used by a program, it was listed as 'yes.'

end of the second semester, and thus, its freshman students remained without ethics education at the data collection point. Although one program reported that ethics content was provided at both the freshman year and senior year, most of the ethics content was placed at the senior level. Therefore, this program was categorized into senior year.

All participating programs reported using more than one ethical framework. The most common ethical framework was a duty-based approach using codes of ethics and standards. Seven programs used a bioethical framework and a caring or related framework. Furthermore, these four ethics content areas were included in all programs: the concept of nursing ethics, nursing codes of ethics and standards, professional ethics and responsibility, and ethical decision making. Seven of the participating programs dealt with virtue ethics and ethical issues in nursing practice. Three programs included moral sensitivity and moral reasoning as ethics content. The separate ethics courses typically dealt with more ethical frameworks and ethics content areas than the integrated curriculum approaches did.

Demographic Data about Student Characteristics

Tables 4.2 and 4.3 show demographic information about this study sample. Of the student characteristics, certain categories of marital status, previous clinical experience, and previous education level had extremely small cell counts to test the associations with academic class/programs. Therefore, the frequency (*n*) and percent (%) of categories for these variables only was provided in the Table 4.2 without testing results. There were significant associations between academic class and student characteristics including age, gender, number of siblings, religion, family income, and GPA. On the other hand, there were significant differences in age, GPA, and religion among programs.

Table 4.2

Summary I of Student Characteristics by Academic Class Level

Variables	Categories	Freshman (*n*=506)		Senior (*n*=440)		p-value from CMH test[a]
		n	%	*n*	%	
Gender	Male	44	8.7	17	3.86	*p*<.01
	Female	462	91.3	423	96.14	
Marital Status	Married	0	0	7	1.59	Not tested[b]
	Single	506	100	432	98.41	
Family Income	Less than 2000/month	60	12.37	38	8.8	
	2000 to 3000/month	100	20.62	80	18.52	*p*=.04
	3001 to 4000/month	125	25.77	111	25.69	
	More than 4000/month	200	41.24	203	46.99	
Religion	Catholic	98	19.41	85	19.36	
	Other Christian	121	23.96	132	30.07	*p*=.08
	Buddhist	48	9.5	46	10.48	
	No	236	46.73	172	39.18	
	Religion[c]	269	53.27	267	60.82	*p*=.02
Clinical Experience	No experience	501	99.21	436	99.09	Not tested[b]
	Experience	4	0.79	4	0.91	
Education Level	High School	505	99.8	410	93.18	
	3-yr Nursing School	0	0	8	1.82	Not tested[b]
	Bachelor degree	1	0.2	22	5	

Note. [a]Cochran-Mantel-Haenszel Chi-square test (CMH) of association between class and student characteristics, stratified by school. [b]Cell counts too small to test. [c]Test- No religion vs. Religion

Data were collected from freshmen (*n*=506) and seniors (*n*=440) enrolled in eight nursing programs in South Korea (83.2% response rate). The average age of freshman and senior participants in this study were 19 and 23 years respectively. According to testing with a one-way ANOVA, the average age of students is significantly different among programs (F=4.11, p<.01 for freshmen; F=3.85, p<.01 for seniors). Of the total participants, 6.5% (*n*=61) were male. Significant associations were found between gender and academic class

(p<.01); the portion of male students in freshman classes is higher than that of male students in senior classes controlling for programs. Most participants reported their marital status as single; 2% of senior participants (n=7) were married. About 70% of the participants have one sibling. The number of siblings among the senior participants was slightly higher than that among the freshman participants (p=.04). Of the total participants, 46% (n=436) identified themselves as Christians including Catholic; 10% (n=94) reported themselves as Buddhists; and 43% (n=408) checked the no religion category. However, there is no evidence of association between specified religion categories and academic class. Yet, the portion of students who identified a religion in senior classes is significantly higher than that in freshman students (p=.02). In addition, there were significant differences in specified religion categories among programs (x^2=33.80, p<.05 for freshmen ; x^2=45.29, p<.01 for seniors) Family income was significantly associated with academic class: while more senior participants (n=203; 47%) reported more than $4000/month than freshman participants (n=200; 41.2%), fewer senior participants (n=38; 8.8%) reported less than $2000/month than freshman participants (n=60; 12.4%).

Table 4.3

Summary II of Student Characteristics by Academic Class

	Freshman		Senior		Mixed Model test of Linear Relationship[a]		
Variables	*n*	*M (SD)*	*n*	*M (SD)*	Estimate	*SE*	p-value
Age	504	19.12(.97)	438	22.71(.76)	3.5773	0.09	<.01
GPA	439	3.51(.46)	415	3.73(.39)	0.2233	0.03	<.01
Number of Siblings	504	2.17(.57)	439	2.25(.59)	0.0776	0.04	.04

Note. SE = standard error
[a]Mixed Model test of linear relationships between academic class and student characteristics considering the dependence among subjects within school.

The average GPA of freshman and senior participants in this study were 3.51 and 3.73 respectively. Freshman students reported GPA for a previous semester and senior students reported GPA for a previous academic year. According to testing with a one-way ANOVA, the average GPA of senior students was significantly different among programs (F=7.63, p<.01), but there was no significant difference in the average GPA of freshman students (F=1.26, p=.27). Regarding students' education level, some of programs accepted students who pursued a second degree or RN to BSN to their generic programs, so the portion of senior students with higher education experience varied among the programs (ranging from 0 to 18% of the sample in each program). Furthermore, because those students were generally enrolled in the junior year, the senior group in the programs had more students (n=22) with higher education levels than the freshman student group had (n=1).

In this study, the freshman students were chosen as a group without ethics education and the senior students with ethics education; however, three percent (n=16) of the freshman participants had already experienced ethics education and one percent (n=5) of seniors did not. Less than one percent of the participants had clinical experience before entering nursing programs; most experiences were less than one year as a registered nurse (n=1), a nurse's aid (n=4), and a radiological technician (n=1) in a hospital or oriental medicine clinics; and two subjects had three years of experience each as a registered nurse and a medical recorder. Clinical experience, marital status, and previous education level were excluded from further analyses because certain categories of these variables had extremely small cell counts. In a linear model, this can cause collinearity with the model intercept term (Hendrickx, Belzer, Grotenhuis, & Lammers, 2004).

Moral Sensitivity and Moral Reasoning

There were two outcome variables: moral sensitivity and moral reasoning. Moral sensitivity was represented by the total score of the K-MSQ and the scores of its five subscales: *patient-oriented care*, *professional responsibility*, *benevolence*, *conflict*, and *meaning*. The moral reasoning level was represented by the P-score (%) and scores for each of the six stages. This study mainly focused on the P-score and stage 4 score.

Based on the use of the K-MSQ scales (27 items), the average total scores of moral sensitivity were: for freshman participants, *M*=136.95, *SD*=12.00, and for senior participants, *M*=140.43, *SD*=10.98. (See Table 4.4) Means of participating schools ranged from 133.21 to 141.12 for freshman groups and from 137.86 to 147.22 for senior groups.

Table 4.4

Means and Standard Deviations of Moral Sensitivity by Academic Class

Variables	Freshman (*n*=492)	Senior (*n*=436)	Variables	Freshman (*n*=492)	Senior (*n*=436)
K-MSQ (27 items)[a]					
Patient-Oriented Care	28.36 (3.25)	30.09 (2.87)	Professional Responsibility	39.48 (3.85)	40.76 (3.60)
Conflict	24.25 (3.54)	26.00 (3.69)	Meaning	23.59 (3.83)	23.34 (4.03)
Benevolence	21.10 (3.55)	20.21 (3.79)	Total Score	136.95 (12.0)	140.43 (10.98)
MSQ (30 items)[b]					
Interpersonal Orientation	17.97 (2.06)	18.85 (1.83)	Rule	36.41 (4.02)	38.05 (3.76)
Conflict	24.88 (3.39)	26.13 (3.64)	Autonomy	16.15 (2.18)	16.83 (2.21)
Benevolence	23.38 (3.02)	23.22 (3.09)	Coercion	4.09 (1.36)	3.66 (1.58)
Meaning	28.65 (4.22)	28.5 (4.49)	Total Score	151.52 (13.11)	155.26 (12.16)

Note. [a] K-MSQ = Korean Moral Sensitivity Questionnaire with subcategories, *patient-oriented care* (items 6, 7, 13, 16 and 19), *Professional responsibility* (items, 1, 4, 12, 21, 27, 29 and 30), *Conflict* (items 9, 10, 11, 14 and 23), *Meaning* (items 2, 3, 5, 8 and 18), and *Benevolence* (items 15, 17, 20, 26 and 28). [b] MSQ = Moral Sensitivity Questionnaire with subcategories, *interpersonal orientation* (items 1, 6 and 29), *confidence in medical and nursing knowledge (rules)* (items 10, 12, 16, 17, 21, 24 and 27), *experiencing moral conflict* (items 9, 11, 14, 19 and 23), *modifying autonomy* (items 7, 13 and 22), *expressing benevolence* (items 4, 15, 20, 28 and 30), *coercion* (item 26), and *structural moral meaning* (items 2, 3, 5, 8, 18 and 25).

In order to compare the levels of moral sensitivity of students to those in other studies, this study also reports the mean scores from the original MSQ scale. Based on the use of the original MSQ scales (30 items), the average total scores of moral sensitivity of this study were: for freshman participants, *M*=151.52, *SD*=13.11, and for senior participants, *M*=155.26, *SD*=12.16. Means of participating schools ranged from 147.2 to 155.95 for freshman groups and from 152.29 to 162.98 for senior groups.

Regarding the moral reasoning scores, the mean of P-score (%) were: for freshman participants, *M*=45.52, *SD*=14.84, and for senior participants, *M*=45.83, *SD*=16.07. (See Table 4.5)

Table 4.5

Means and Standard Deviations of Moral Reasoning by Academic Class

Variables	Freshman (*n*=466)	Senior (*n*=425)
P- score	45.52 (14.84)	45.83 (16.07)
Stage 4	20.59 (11.15)	22.51 (12.28)

Research Question 1

Research Question 1 asked what relationships between academic class and the moral sensitivity and moral reasoning of students in baccalaureate nursing programs exist. The text box below showed the mixed model for analysis of research question 1.

Moral Sensitivity (Ms) = Intercept +Academic Class Effect (CE) + Random effect (RE):

$$Y_{Ms} = \beta_0 + \beta_1 * X_1 + RE$$

Moral Reasoning (Mr) = Intercept +Academic Class Effect (CE) + Random effect (RE):

$$Y_{Mr} = \beta_0 + \beta_1 * X_1 + RE$$

$$H_0: \beta_1 = 0 \qquad H_A: \beta_1 \neq 0$$

In the analysis of the mixed models, first, moral sensitivity scores including the total score, *patient-oriented care, professional responsibility* and *conflict* were higher in senior students than in freshman students, while the *benevolence* scores were on average .84 points lower in the seniors than the freshmen. (See Table 4.6) Considering the significant differences between academic classes in student characteristics (i.e., age, gender, GPA, number of siblings, family income, and religion), this study retested the models including the student characteristics as covariates. Table 4.6 also shows the adjusted results. After controlling for the student characteristics, there were significant changes in the relationships: while there were no significant relationships between academic class and the total score of moral sensitivity, *professional relationship* and *benevolence*, the relationships between academic class and *patient-oriented care* and *conflict* remained statistically significant. The null hypothesis that there are no differences in the moral sensitivity scores including the *patient-oriented care* and *conflict* between freshman and senior students was rejected at the 5% significance level.

Table 4.6

Relationships between Academic Class and Moral Sensitivity (N=928)

	Unadjusted Results[a]			Adjusted Results[b]		
Variables	Estimate	*SE*	p-value	Estimate	*SE*	p-value
Patient-Oriented Care	1.78	0.20	<.001	1.44	0.36	<.001
Professional Responsibility	1.36	0.24	<.001	-0.03	0.44	.95
Benevolence	-0.84	0.24	<.001	0.21	0.44	.63
Conflict	1.55	0.24	<.001	0.94	0.44	<.05
Meaning	-0.21	0.26	.41	-0.92	0.47	.05
Total Score	3.71	0.75	<.001	1.75	1.36	.20

Note. *SE* = standard error
[a]Only academic class variable entered. [b]Adjusted for age, gender, GPA, number of siblings, family income, and religion which there were significant differences between academic classes.

Second, there is no evidence of a relationship between academic class and the principled thinking score (P score). (See Table 4.7) However, there is evidence of a relationship between academic class and stage 4 reasoning. The stage 4 scores are on average 2.03 points higher in seniors than in freshmen (p<.01). After controlling for the student characteristics, this relationship was no longer statistically significant. Therefore, the null hypothesis that there are no differences in moral reasoning scores between freshman and senior students was not rejected at the 5% significance level.

Table 4.7

Relationships between Academic Class and Moral Reasoning (N=891)

	Unadjusted Results[a]			Adjusted Results[b]		
Variables	Estimate	*SE*	p-value	Estimate	*SE*	p-value
P- score	0.10	1.04	.92	1.30	1.87	.49
Stage 4	2.03	0.79	.01	0.57	1.42	.69

Note. *SE* = standard error
[a]Only academic class variable entered. [b]Adjusted for age, gender, GPA, number of siblings, family income, and religion which there were significant differences between academic classes.

Research Question 2

Research Question 2 asked what relationships exist among the curriculum design components of the hours of ethics instruction, the sequencing of ethics content, the number of hours of non-lecture teaching methods, and the student outcomes of moral sensitivity and moral reasoning by comparing senior participants who had various ethics education experiences. Furthermore, for this analysis, this study excluded transfer students because it is unknown what exposure these students had to ethics education. Without valid testing, it cannot be assumed that there was no difference in education levels of senior students among programs. Therefore, of the senior surveys, 406 samples with the K-MSQ, and 397 samples with the KDIT were used for this analysis. The text box below showed the mixed models for analysis of the research question 2.

Moral Sensitivity = Intercept +Hour Effect (HE) + Seq. Effect (SE) + Method Effect (ME) + RE

$$:Y_{Ms}= \beta_0 + \beta_1*X_1 + \beta_2*X_2 + \beta_3*X_3 + RE$$

Moral Reasoning = Intercept +Hour Effect (HE) + Seq. Effect (SE) + Method Effect (ME) + RE

$$: Y_{Mr}= \beta_0 + \beta_1*X_1 + \beta_2*X_2 + \beta_3*X_3 + RE$$

$$H_0: \beta_1=0 \; H_A: \beta_1\neq0$$

$$H_0: \beta_2=0 \; H_A: \beta_2\neq0$$

$$H_0: \beta_3=0 \; H_A: \beta_3\neq0$$

As shown in Table 4.8, there were no statistically significant relationships between the three curricular variables and moral sensitivity. The null hypotheses that the moral sensitivity of senior nursing students is not associated with the hours of ethics content, the sequencing of ethics content, and the hours of non-lecture teaching methods were not rejected at the 5% significance level.

Table 4.8

Relationships between Ethics Curriculum and Moral Sensitivity (n=406)

	Hour Effect		Sequencing Effect		Method Effect	
Variables	Estimate	*SE*	Estimate	*SE*	Estimate	*SE*
Unadjusted Results[a]						
Patient-Oriented Care	-0.06	0.04	-0.53	0.60	0.07	0.08
Professional Responsibility	-0.01	0.06	0.03	0.91	0.00	0.12
Benevolence	-0.02	0.05	1.14	0.77	0.06	0.10
Conflict	-0.03	0.05	0.38	0.71	0.02	0.09
Meaning	0.01	0.05	-0.09	0.81	-0.01	0.11
Total score	-0.11	0.17	1.03	2.65	0.15	0.35
Adjusted Results[b]						
Patient-Oriented Care	-0.05	0.04	-0.45	0.58	0.07	0.08
Professional Responsibility	0.00	0.05	0.28	0.76	0.02	0.10
Benevolence	-0.03	0.05	0.88	0.74	0.04	0.10
Conflict	-0.04	0.04	0.60	0.62	0.05	0.08
Meaning	0.01	0.05	0.04	0.80	0.01	0.11
Total score	-0.10	0.14	1.49	2.28	0.17	0.30

Note. Hour Effect = hours of ethics content; Sequencing Effect = sequencing of ethics content (pre-clinical years versus clinical years); Method effect = hours of non-lecture teaching method; *SE* = standard error
[a] Three curriculum design component variables entered simultaneously. [b] Adjusted for age, GPA and religion for which there were significant differences among programs.

However, there were several statistically significant relationships between the three curricular variables and moral reasoning. First, a significant relationship between the hours of ethics content and the stage 3 score was found; each additional hour of ethics content was associated with a .18 point decrease in the stage 3 score of moral reasoning of senior students controlling for the other curricular variables ($p<.05$). (See Table 4.9) After including the student characteristics (i.e., age, GPA, and religion) that were significant differences among programs in the mixed model, the significant relationship between the hours of ethics content and principled thinking score was found; that is, each additional hour of ethics content was

associated with a .26 point increase in the P-score of moral reasoning of senior students ($p<.05$). Therefore, the null hypothesis that the moral reasoning of senior nursing students is not associated with the hours of ethics content was rejected at the 5% significance level. That is, more hours of ethics content may increase the P-scores ($p<.05$) or stage 4 scores ($p=.58$) of senior students but more hours of ethics content may decrease the stage 3 scores ($p=.09$) of senior students.

Second, there were no statistically significant relationships between the sequencing of ethics content and moral reasoning. The null hypothesis that the moral reasoning of senior nursing students is not associated with the sequencing of ethics content was not rejected at the 5% significance level. Third, there were a couple of significant relationships between the hours of non-lecture teaching methods and the conventional level reasoning. In relation to the hours dedicated to non-lecture teaching methods, each additional hour of non-lecture ethics content was associated with a decrease of .42 points in the stage 4 moral reasoning scores of senior students controlling for the other curricular variables ($p<.05$), while each additional hour of non-lecture ethics content was associated with an increase of .49 points in the stage 3 score of moral reasoning of senior students controlling for the other curricular variables ($p<.01$). After controlling for student characteristics, those relationships were not changed. Therefore, the null hypothesis that the moral reasoning of senior nursing students is not associated with the hours of non-lecture teaching methods was rejected at the 5% significance level. That is, more hours for non-lecture teaching methods may decrease the P-scores ($p=.40$) or stage 4 scores ($p<.05$) of senior students, while more hours for non-lecture teaching methods may increase the stage 3 scores of senior students ($p<.05$).

Table 4.9

Relationships between Ethics Curriculum and Moral Reasoning (n=397)

Variables	Hour Effect		Sequencing Effect		Method Effect	
	Estimate	*SE*	Estimate	*SE*	Estimate	*SE*
Unadjusted Results[a]						
P-score	0.15	0.13	-0.36	1.99	-0.12	0.27
Stage 4	0.11	0.08	0.67	1.22	-0.42*	0.17
Stage 3	-0.18*	0.09	-0.57	1.36	0.49**	0.18
Adjusted Results[b]						
P-score	0.26*	0.12	1.12	1.83	-0.21	0.25
Stage 4	0.05	0.08	0.19	1.25	-0.33*	0.17
Stage 3	-0.16	0.09	-1.24	1.41	0.42*	0.19

Note. Hour Effect = hours of ethics content; Sequencing Effect = sequencing of ethics content (pre-clinical years versus clinical years); Method effect = hours of non-lecture teaching method; *SE* = standard error
[a] Three curriculum design component variables entered simultaneously. [b] Adjusted for age, GPA and religion which there were significant differences among programs.
*p<.05, **p<.01

Research Question 3

Research Question 3 asked what relationships between student characteristics (i.e., academic class, age, gender, GPA, religion, number of siblings, and family income) and moral sensitivity and moral reasoning skills of students exist. For testing this question, only 821 samples with the K-MSQ, and of 794 samples with the KDIT were used after excluding cases with missing data in student characteristics. The text box below shows the mixed models for analysis of the research question 3.

Moral Sensitivity = Intercept + CE+ Student Characteristics + RE

Moral Reasoning = Intercept + CE+ Student Characteristics + RE

$$Y_{Ms\ (Mr)} = \beta_0 + \beta_1 * X_1 + \beta_2 * X_2 + \beta_3 * X_3 + \beta_4 * X_4 + \ldots + \beta_n * X_n + RE$$

$$H_0: \beta_1 = 0 \quad H_A: \beta_1 \neq 0$$

$$H_0: \beta_2 = 0 \quad H_A: \beta_2 \neq 0$$

.

$$H_0: \beta_n = 0 \quad H_A: \beta_n \neq 0$$

There are several significant relationships between student characteristics and the scores in moral sensitivity and moral reasoning. Figures 4.1 to 4.8 show the relationships between student characteristics and moral sensitivity and moral reasoning with separate lines for each group (total participants, freshmen, and seniors). The standardized estimates were calculated by the estimates divided by standard errors. Therefore, the sizes show the strength of the relationships between student characteristics and moral sensitivity scores/ moral reasoning scores.

For example, regarding the relationships between gender and *patient-oriented care* in moral sensitivity, the relationships were consistent among groups (i.e., freshman, senior and total participants); the scores were higher in female students than in male students. Furthermore, the relationship was significant among senior students (*Estimate*=1.92, *SE*=.74, $p<.05$) but not in freshman or total participants (*Estimate*=.55, *SE*=.56, $p=.33$; *Estimate*=.83, *SE*=.44, $p=.06$, respectively). (See Figure 4.1) The figures showed that the scores in moral sensitivity and the P-score in moral sensitivity were generally higher in females than in males, while the stage 4 scores in moral reasoning were lower in female than in male (no statistical significance in either group). (See Figure 4.8)

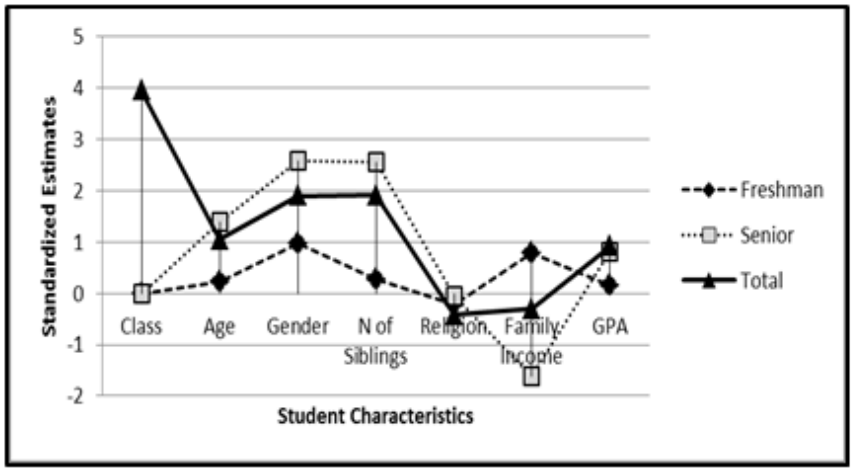

Figure 4. 1 Relationships between Student Characteristics and Moral Sensitivity (Patient-Oriented Care)

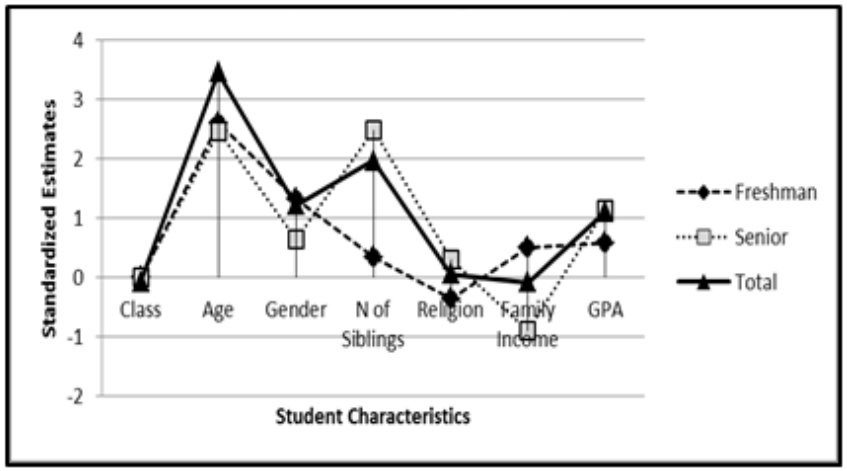

Figure 4. 2 Relationships between Student Characteristics and Moral Sensitivity (Professional Responsibility)

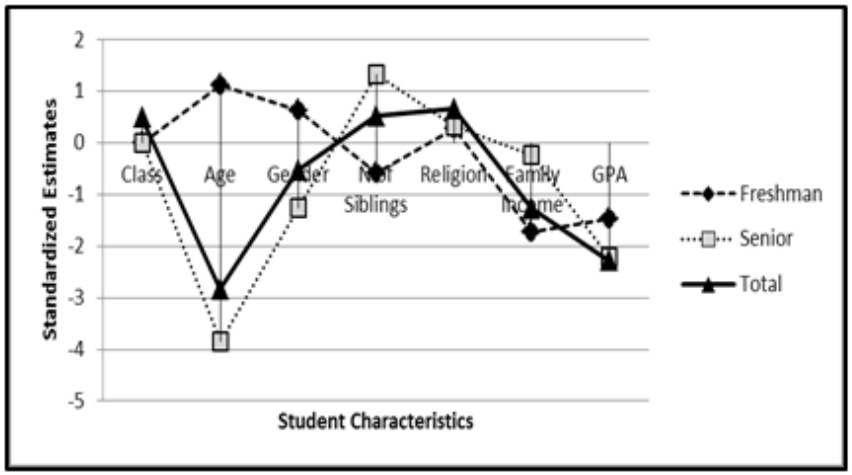

Figure 4. 3 Relationships between Student Characteristics and Moral Sensitivity (Benevolence)

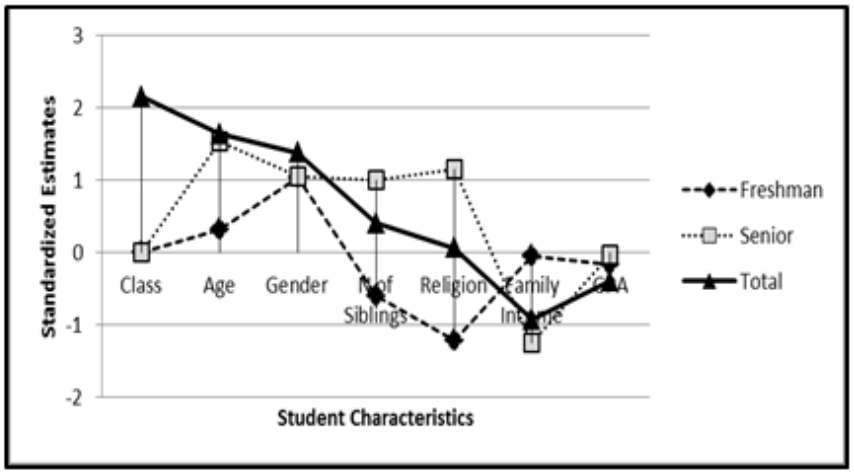

Figure 4. 4 Relationships between Student Characteristics and Moral Sensitivity (Conflict)

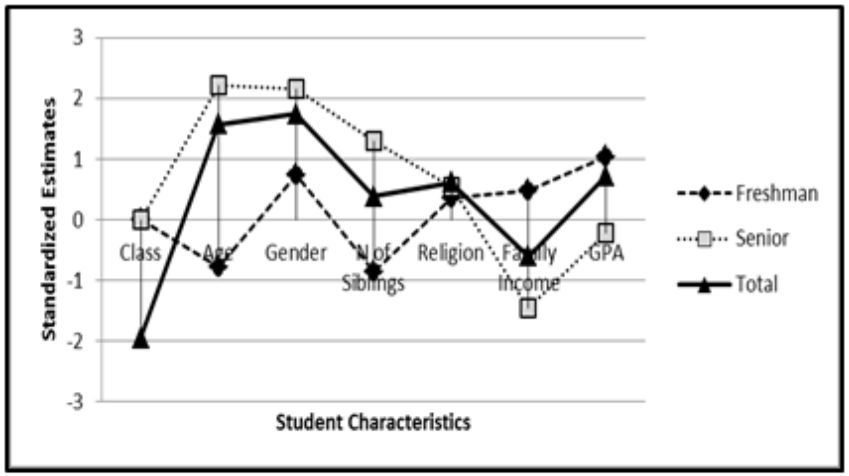

Figure 4. 5 Relationships between Student Characteristics and Moral Sensitivity (Meaning)

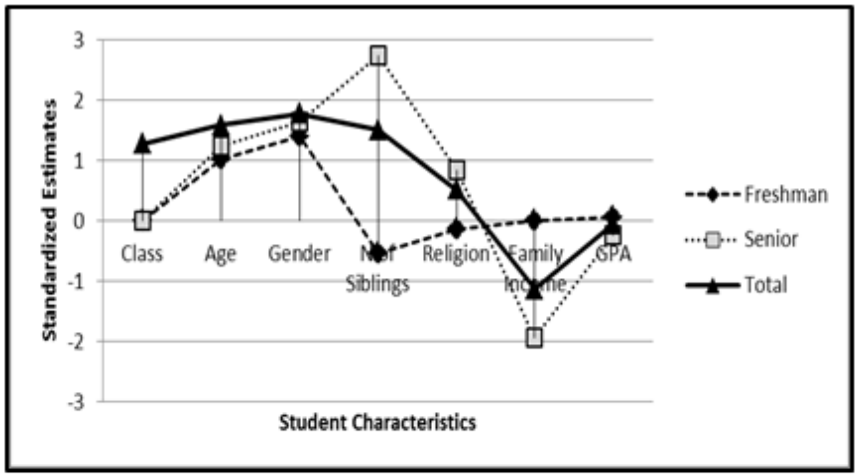

Figure 4. 6 Relationships between Student Characteristics and Moral Sensitivity (Total Score)

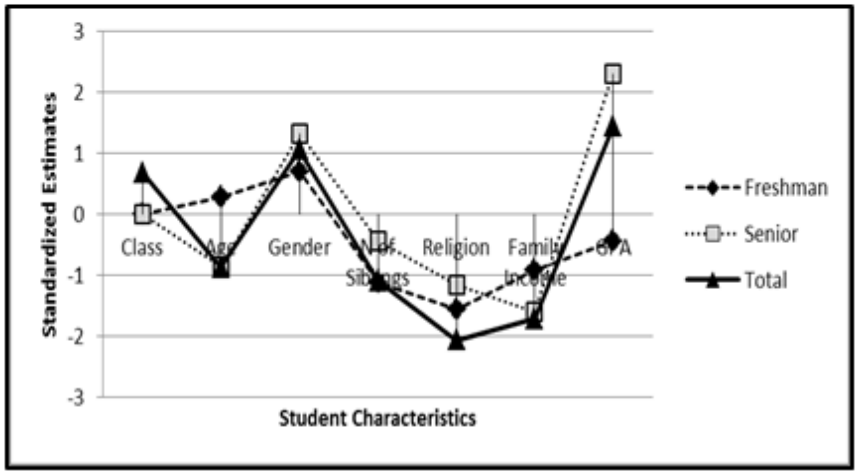

Figure 4. 7 Relationships between Student Characteristics and Moral Reasoning (P-score)

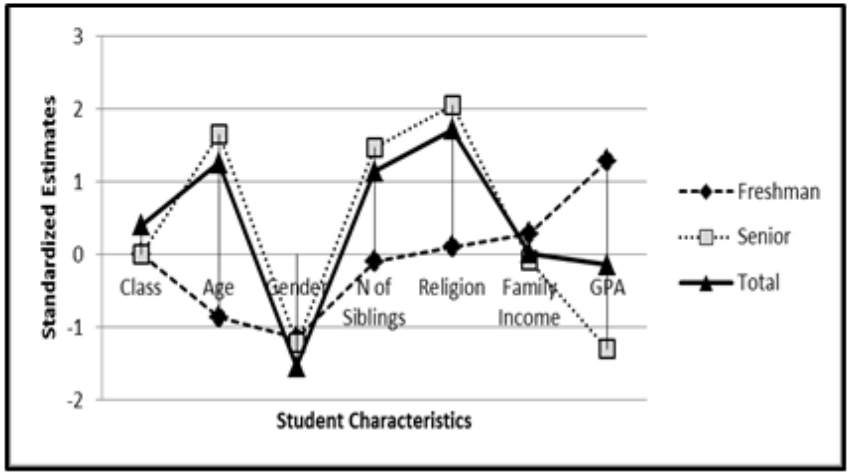

Figure 4. 8 Relationships between Student Characteristics and Moral Reasoning (Stage 4)

Table 4.10 shows mixed model fixed effects estimates of the significant relationships among variables.

Table 4.10

Relationships between Student Characteristics and Moral Sensitivity (N=821) and Moral Reasoning (N=794) (Estimates (SE) with p<.05)

Outcome Variables	Age	Gender	N of Siblings	Religion	GPA
Moral Sensitivity					
Patient-Oriented Care		1.92 (0.74) [a]	0.60 (0.23)[a]		
Professional Responsibility	0.34 (0.10)[b]		0.43 (0.22) [b]		
Benevolence	-0.28 (0.10)[c]				-0.70(0.30) [b]
Meaning	0.28 (.13) [a]	2.25 (1.04) [a]			
Total Score			2.44 (0.89) [a]		
Moral Reasoning					
P-score				-2.27 (1.10)	4.79 (2.08) [a]
Stage 4				2.52 (1.22) [a]	

Note. SE = standard error; N of Siblings = number of siblings. P-score = the principled thinking score.
[a]Estimates for senior students. [b]There was also a significant relationship in the senior group in the same relationship pattern.
[c]There were significant relationships in all three groups in the same relationship pattern.

Controlling for the other variables, there were significant positive associations between age and the *professional responsibility* score of the study participants and the *meaning* score of the senior students. However, the *benevolence* score was negatively associated with age. The *patient-oriented care* score of the senior participants was on average 1.92 points higher in the female students than in the male students. The *meaning* score of the senior participants was on average 2.25 points higher in female students than in male students. Furthermore, among senior students, there were positive relationships between the number of siblings and the *patient-oriented care*, *professional responsibility*, and total scores in moral sensitivity.

Religion may be more strongly related to the moral reasoning scores of the participants; the P-scores of the participants were on average 2.27 points lower in the students with religion than in the students without religion, while the stage 4 scores of the senior participant were on average 2.52 points higher in the students with religion than in the students without religion. The GPA was significantly associated with the *benevolence* score of moral sensitivity and with the P-score of moral reasoning; however, the associations were different. The GPA scores of the senior students were positively associated with their P-score, while the GPA scores of the senior students were negatively associated with their *benevolence* score.

Therefore, first, the null hypothesis that moral sensitivity of nursing students is not associated with student characteristics variables (i.e., age, gender, number of siblings and GPA) was rejected. Second, the null hypothesis that moral sensitivity of nursing students is not associated with student characteristics variables (i.e., religion and family income) was not rejected. Third, the null hypothesis that moral reasoning of nursing students is not associated with student characteristics variables (i.e., religion and GPA) was rejected. Finally, the null hypothesis that moral reasoning of nursing students is not associated with student characteristics variables (i.e., age, gender, number of siblings and family income) was not rejected.

Summary

Eight baccalaureate nursing programs in South Korea participated in this study. Regarding curriculum variables including the hours of ethics instruction, the sequencing of ethics content, and the number of hours of non-lecture teaching methods, the programs employed various curricular approaches for teaching ethics. The total hours of ethics content

ranged from 4 to 32 hours. Half of the programs placed ethics content in the clinical years and the other half in the preclinical years. Furthermore, for teaching ethics, seven programs combined lecture format with other teaching methods including group discussion, case analysis, role play and problem-based learning. A total of 946 nursing students participated in this study (n=506, 440, freshmen, senior, respectively). Based on the analyses of student characteristics, this study included the following variables for further analyses: age, gender, number of siblings, religion, GPA and family income. Some null hypotheses for the three research questions were rejected. Regarding research question 1, controlling for student characteristics, first, a couple of significant relationships between academic class and moral sensitivity were found: 1) the *patient-oriented care* scores of participants were higher in the senior students than in the freshman students (b=1.44, SE=.36, p<.001); and 2) the *conflict* scores of participants were higher in the senior students than in freshman students (b=.94, SE=.44, p<.05). Second, there was no significant relationship between academic class and moral reasoning.

Regarding research question 2, there was no significant relationship between curricular variables and moral sensitivity. However, there were significant relationships between curricular variables and moral reasoning. First, more hours of ethics content was associated with higher principled moral reasoning scores of senior students (b=.26, SE=.12, p<.05). Second, more hours of non-lecture ethics content was associated with lower stage 4 conventional moral reasoning scores of senior students (b=-.33, SE=.17, p<.05) and with higher stage 3 conventional moral reasoning scores of senior students (b=0.42, SE=.19, p<.05).

Regarding research question 3, there were significant relationships between student characteristics and the student outcomes ($p<.05$). First, older age was associated with higher *professional responsibility* ($b=.34$, $SE=.17$), and *meaning* scores ($b=.28$, $SE=.13$), while older age was associated with lower benevolence scores ($b=-.28$, $SE=.10$). Second, female gender was associated with *patient-oriented care* ($b=1.92$, $SE=.74$) and expressing moral *meaning* in situations ($b=2.25$, $SE=1.04$). Third, greater number of siblings was associated with higher total moral sensitivity scores ($b=2.44$, $SE=.89$), *patient-oriented care* scores ($b=.60$, $SE=.23$) and *professional responsibility* scores ($b=.43$, $SE=.22$). Fourth, having religion was associated with lower principled thinking scores ($b=-2.27$, $SE=1.10$) and higher stage 4 conventional scores ($b=2.52$ $SE=1.22$). Finally, higher GPA was associated with lower benevolence scores ($b=-.70$, $SE=.30$), while higher GPA was associated with higher principled thinking scores ($b=4.79$, $SE=2.08$).

CHAPTER 5

DISCUSSION and CONCLUSION

This study was designed to provide information about the relationships 1) between academic class and both moral sensitivity and moral reasoning of freshman and senior nursing students enrolled baccalaureate nursing programs in South Korea, 2) between curriculum design components for ethics education and both moral sensitivity and moral reasoning of the senior students, and 3) between student characteristics and both moral sensitivity and moral reasoning of the freshman and senior nursing students. This chapter discusses the findings, limitations, and implications for further studies of ethics education in nursing programs and presents a conclusion.

Discussion

Moral sensitivity and moral reasoning are necessary skills for ethical decision making in nursing practice, and those skills can be taught and learned. Formal education is recognized as a significant predictor for moral sensitivity (Lützén et al., 1995) and moral reasoning (Rest & Narváez, 1994). In particular, nursing ethics is recognized as essential educational content that can facilitate moral development in nursing students. In terms of the development of effective curricula for ethics, there are critical components that educators must consider in nursing curricula. Furthermore, to achieve successful ethics education, knowledge about nursing student moral understanding related to student characteristics is also important.

Academic class, moral sensitivity, and moral reasoning. This study first explored the relationships between academic class and nursing student moral sensitivity and moral reasoning. Senior students have fully experienced four years of nursing education and freshman students are just spending their first year in nursing education. According to the findings related to the first research question, there were significant differences in level of moral sensitivity, as measured by the Korean Moral Sensitivity Questionnaires, between freshman and senior students. However, there were no differences in level of moral reasoning, as measured by the Korean Defining Issues Test, between freshman and senior students. Although this descriptive study has limitations, which should be taken into consideration in the interpretations of findings (e.g., preexisting differences between the freshman and senior groups that cannot be controlled in this study), the difference in nursing education experience represented by academic class may account for the differences that were found in this study.

Moral sensitivity. There were some significant relationships between academic class and the scores in moral sensitivity of nursing students. The findings of this study may support the effectiveness of baccalaureate nursing education in South Korea for improving the moral sensitivity of students.

In particular, the senior nursing students agreed to a greater extent than the freshman students with the moral sensitivity concepts related to: 1) *patient-oriented care*, building the nurse-patient relationship based on respect for patient's right and autonomy, professional values, and trust; and 2) *conflict*, expressing the feeling, intuition, or cognitive perception of the situations being in moral conflict. The results of the study showed that nursing education in South Korea may be more effective for stimulating student moral sensitivity related to *patient-oriented care* and *expressing conflict* rather than *professional responsibility*,

benevolence, and *meaning*. Therefore, the concepts of *professional responsibility*, *benevolence*, and *meaning* may need to be stressed in education programs in South Korea.

In comparison to scores in previous studies, scores of moral sensitivity of senior students in this study were similar or relatively high compared to those of Korean students in Han et al.'s study (2007). Most scores of moral sensitivity of senior students in this study were similar or relatively high compared to those of nurses in Lutzen et al.'s study (1995), while the *benevolence* scores (*M*=23.22 *SD*=3.09) of senior students in this study were relatively low compared to those (*M*=27.4 for psychiatric-mental health nurses; *M*=25.7 for medical/surgical nurses) of nurses in the previous studies. The differences may be interpreted in several ways, e.g., in the differences of culture, education, age, and clinical experience between the groups (Korean senior students versus nurses in a Western country). According to Lutzen and Nordin (1993), the concept of *benevolence* means "a central motivation factor in the nurses' own accounts of situations in which decisions were made on behalf of the patient (p.1106)." *Benevolence* has three dimensions: 1) nurses' sense that a patient stands in an unequal position relative to the health care professional, 2) nurses' interpretation and response to the patient's need, and 3) nurses accepting risks based on moral motivation to do good for the patient. The concept of benevolence is closely related to nurses' advocacy roles. Despite reasons for the difference in the results between previous studies and this study, the results of this study may indicate that the concept of *benevolence* in Korean nursing education needs to be emphasized more.

Moral reasoning. There were no significant relationships between academic class and moral reasoning. This result may indicate that the development of moral reasoning skills of students needs to be stressed in the nursing education in South Korea.

The result is consistent with the results of previous studies reporting the relationship between academic class and moral reasoning in South Korea (Y. S. Kim et al., 2004; M. A. Lee et al., 2005). In previous studies using the baccalaureate nursing student population in South Korea during the last decade, the mean P-scores (%) of freshman students were found to be 42.37 (Lee, 2008), 45.82 (Lee, Kim, & Hong, 2005) and 46.13 (Kim, Park, Son, & Han, 2004); and the mean P-scores (%) of senior students were 41.54 (M. A. Lee, 2009), 43.10 (M. A. Lee et al., 2006), 42.32 (M. A. Lee et al., 2005), and 47.47 (Y. S. Kim et al., 2004). However, when compared to Duckett et al.'s study (1997), which reported the effectiveness of baccalaureate nursing education on the moral reasoning of U.S. students, while the principled thinking scores of the freshman students (M=45.5) in this study were similar with those in Duckett et al.'s study (M=44.5), the scores of senior students were different (M=45.8 in this study; M=51.4 in Duckett et al. (1997)). This fact may suggest the ineffectiveness of baccalaureate nursing education in South Korea for the development of moral reasoning in students.

However, this result may be interpreted in other ways. First, with respect to cultural differences between students in Korea and in the U.S., higher education in South Korea generally may not be effective for developing the principled thinking of students. According to a review of studies reporting the moral reasoning development of the Korean population (Moon, Kim, Lee, et al., 2008), more formal education is associated with a higher principled thinking score. Yet, the Korean researchers argued that formal education in Korea may be less effective for developing the principled thinking of students than formal education in Western society (Moon, Kim, Lee, et al., 2008). The amount of variance in the principled thinking score explained by formal education was smaller in the Korean population than in

the U.S. population. Furthermore, the study reported that the changes in the moral reasoning patterns between 1994 and 2007 in the Korean population was reflected in increased conventional reasoning (stages 3 and 4 reasoning) in college students (Moon, Kim, Lee, et al., 2008) The researchers assumed that the results may reflect social and cultural changes in Korean society. Second, in terms of weakness in the descriptive study design, uncontrolled preexisting differences in the moral reasoning score between the freshman and senior groups may impact the results of this study. For example, the principled thinking scores of this group of senior students at their entry level might have been significantly lower than those of the freshman students.

Even though formal nursing education may affect the moral sensitivity and moral reasoning of students, the specific effect of nursing curriculum on moral sensitivity and moral reasoning of students is unknown. According to the literature, ethics education is identified as a critical factor for producing an impact on the moral sensitivity (Baab & Bebeau, 1990; Bebeau & Brabeck, 1987; Clarkeburn, 2002b) and moral reasoning of students (Bell, 1984; Gaul, 1987; Krawczyk, 1997; Rest & Narváez, 1994). However, all ethics education programs in previous studies were not effective (Kellmer, 1984; M. A. Lee, 2008). In particular, regarding the effect of ethics education on moral reasoning of students, some studies reported that curriculum design components for teaching ethics, e.g., the length of ethics education programs, the sequencing of ethics content, and the teaching methods for ethics education, may make ethics education determine the effectiveness for improving moral reasoning (Clarkeburn, Downie, & Matthew, 2002; Schlaefli et al., 1985; Self et al., 1998).

Ethics curriculum design components and student outcomes. This study explored the relationships between curricular design components (i.e., the hours of ethics content, the

sequencing of ethics content, and the hours of non-lecture teaching methods) and both moral sensitivity and moral reasoning of senior nursing students.

Moral Sensitivity. According to findings of this study, there were no statistically significant relationships between curricular design components of ethics courses and the moral sensitivity of nursing students, while significant relationships between the curricular design components and the moral reasoning of students were found. These findings can be explained as consistent with the current report about U.S. nursing education by Banner and colleagues (Benner, Sutphen, Leonard, & Day, 2010). According to the interviews with educators and students in the report (Benner et al., 2010), while primary ethics education in nursing was defined as learning the principles of bioethics with ethical dilemmas, the educators and students through the entire nursing program focused on being good practitioners based on the patient-nurse relationship. Nursing education based on the caring relationship with patients throughout the academic years may encourage students to cultivate moral sensitivity. This fact is supported by the findings of the first research question in this study. According to investigations of ethics curricula used by the nursing programs that participated in this study, although virtue ethics frameworks for teaching ethics were commonly used, moral sensitivity or moral virtue was a small part of ethics content. The ethics courses of the nursing programs mainly focused on ethical decision making using codes of ethics, professional standards, and the principles of bioethics. Therefore, the ethics education may be more closely associated with moral reasoning of students than with moral sensitivity of students.

However, some ethics educators argued that moral virtue and moral sensitivity of students can be taught and cultivated by a planned ethics education (Begley, 2006; P. A.

Scott, 1995). For example, the educators argued that moral virtue and moral sensitivity of students can be nurtured by repeated exercise and adequate direct or indirect experiences. Thus, ethics education in the early period of professional development allows students to have enough opportunities for the habituation of moral virtue and moral sensitivity throughout their professional education (P. A. Scott, 1995). Furthermore, Begley (2006, 2008) suggested specific methods for teaching virtue and moral sensitivity, e.g., learning from exemplars, or class discussion by using various experiences, stories, and cases from literature, art, and films. Those specific methods are also recognized as effective teaching methods for development of moral reasoning of students; however, each moral outcome, i.e., moral sensitivity and moral reasoning, has different foci in the choice and use of the methods. The weak relationships between curriculum design components and moral sensitivity in this study may be explained by the lack of ethics content focusing on nurturing moral sensitivity of students in the ethics courses.

Moral Reasoning. The findings of this study showed significant relationships between curriculum design components and moral reasoning. First, more hours of ethics education were associated with higher principled moral reasoning of the senior students; this relationship was statistically significant. Therefore, if the hours of ethics content increases, the principled thinking of students may be improved. A study reporting the current status of nursing ethics education in South Korea indicated the lack of time for dealing with ethics content that is necessary as a critical concern in current ethics curricula provided by nursing programs (J. H. Park et al., 2009). The nursing programs that participated in this study provided the average 22 hours of ethics content. However, the principled thinking of the senior students who experienced ethics education was not different from those of the

freshman students without any ethics education: there was no statistically significant difference between freshman and senior students among the programs providing 32 hours of ethics content, even though the principled thinking scores of the senior students were slightly higher than those of the freshman students. The hours of ethics content employed in the nursing programs may not be enough to make significant differences between freshman and senior students. Previous studies reporting the effectiveness of ethics education described 42 to 48 hours (a three-credit semester course) of ethics content (Gaul, 1987; Krawczyk, 1997; Ryden et al., 1989). Therefore, the findings of this study suggest that nursing programs should provide more hours of ethics content for improving the principled thinking of students in South Korea.

Second, regarding the sequencing of ethics content, there was no significant relationship with moral reasoning. Yet, the relationship may be different from that with moral sensitivity. As mentioned in the previous section, education for moral sensitivity can produce its outcome from habituation, and thus ethics education in preclinical years may be more effective than that in clinical years. In terms of moral reasoning, some researchers argue that older age, previous experience, and reflection on that experience in an ethics education program can stimulate the principled thinking of students (Schlaefli et al., 1985). That is, experiences in college life as well as in clinical practice that nursing students have had during the previous two or three years of college life might reinforce the development of moral reasoning of students. Therefore, ethics education for moral reasoning in clinical years may be more effective than that in preclinical years.

Finally, this study reported the relationship between hours of non-lecture teaching methods and moral reasoning of students; more hours of non-lecture methods for teaching

ethics were significantly associated with lower stage 4 scores and higher stage 3 scores of senior students. The findings of this study indicate that the use of non-lecture teaching methods may stimulate reasoning based on good interpersonal relationships (the stage 3 reasoning) rather than reasoning on law and social duty (the stage 4 reasoning) or on principled thinking. That is, the use of these methods in the programs might not be effective for encouraging principled thinking in students. According to the literature, the use of a discussion session with cases is effective for improving principled thinking of students (Self, Baldwin, & Olivarez, 1993; Self et al., 1998). Yet, the effect of group discussion may depend on the hour, e.g., a one-quarter session (12 weeks) (Self et al., 1993) or more than 20 hours (Self et al., 1998); and the quality of discussion, e.g., using the self-reflection based on experience (Frisch, 1987) or the role of teachers as facilitators of discussion (Levin, 1995). The hours of specific teaching methods used by the programs in this study ranged from 0 to 16 hours. Two programs devoted half of the course hours to group discussion or other methods (15 to 16 hours). However, this study did not uncover any information about how to manage the quality of the group discussion or other methods. All programs used lectures as the primary teaching method and other teaching methods were added as extra strategies to help student learning. The average size of ethics classes in the programs was about 68 seats. Therefore, the lecture might be an easier format for managing a large class, while the quality of discussion in small groups used in a large class might be difficult to manage, e.g., lack of a facilitator or moderator to stimulate other perspectives, to lead the reflection of experiences in clinical practice, or to challenge students to use higher reasoning (DeYoung, 2009). In particular, for effective discussions, an understanding of goals, planned questions to encourage students' ideas, and roles of the teacher and students are suggested (Gaberson &

Oermann, 2007). Developing strategies for the effective use of teaching methods in a large class to improve principled thinking of students is needed.

Student characteristics and outcomes. The results of this study showed that there were significant relationships between student characteristics and both moral sensitivity and moral reasoning. Most of the significant relationships were found at the senior level. Senior students with ethics education or clinical practice experience were found to provide more confident answers to the questions of the moral sensitivity or the moral reasoning than freshman students without educational or clinical experiences.

***Age and moral sensitivity/moral reasoning*.** The older senior students were significantly associated with higher *professional responsibility* and *meaning* scores in moral sensitivity. Moral sense related to responsibility as a professional, confidence in nursing and medical knowledge, and moral awareness of consequences of own decisions and actions may be intensively aroused in older students, which may be related to their life experience (Begley, 2006). Previous studies also showed that agreement with two assumptions (4 and 21, professional responsibilities related to providing care against patients' will) in *professional responsibility* increased significantly with age (Lützén et al., 1997; Lützén et al., 1995). However, for all participants or senior students, a higher *benevolence* score was associated with younger students. This result differed from that of previous studies, which showed that *benevolence* scores were positively associated with age (Lützén et al., 1997; Lützén et al., 1995). The differences in results between this study and Lutzen's studies may be interpreted as due to cultural differences between South Korea and Western countries. If *benevolence* is defined as compassion or empathy meaning moral motivation to do good for patients (Lützén et al., 1995), younger students in South Korea may feel more comfortable expressing

benevolence than older students. As Korean nursing students grow older adding experiences in the bureaucratic, hierarchical culture of the health care system or society, they might be more responsible but less emotional in their relationship with others. The moral reasoning of students was not significantly associated with their age. The result is consistent with previous studies indicating that moral reasoning development was significantly associated with progress during engagement in formal education rather than merely chronological age (Rest & Narváez, 1994).

Gender and moral sensitivity/moral reasoning. Significant differences were found between male and female students in *patient-oriented care* and *meaning* scores; female students agreed to a greater extent with assumptions in those categories than male students. The importance of the relationship with patients and the awareness of the moral consequences of their decisions and actions in patient care may differ among genders. This result was consistent with that of a previous study indicating a significant difference in a category related to *meaning* between female and male professionals (Lützén et al., 2000). According to an ethics of care orientation (Gilligan, 1995; Held, 2006), women mainly derive their moral meaning from interpersonal relationships. Gilligan (1995) argued that women's moral orientation is based on a caring perspective, while men's moral orientation is based on a justice perspective: therefore, the DIT applying justice to the principle of the highest moral reasoning may produce differences in genders. However, the moral reasoning of students in this study was not significantly associated with their gender. This result was consistent with those in previous studies conducted in South Korea (M. A. Lee, 2008; M. A. Lee et al., 2006). However, the number of male students was relatively small. Therefore, low power to detect gender differences. Also, male nursing students may not representative of all males.

***Siblings and moral sensitivity/moral reasoning*.** Having siblings may promote students' moral development by allowing them to engage in complex social interaction. Positive relationships between having siblings (i.e., the number or birth order) and moral reasoning have been reported (Helkama & Ikonen, 1986). However, in this study, the relationship between the variable and moral reasoning was not significant, which is consistent with findings in previous studies in South Korea (Han & Ahn, 1995; M. A. Lee, 2009; M. A. Lee et al., 2006; M. A. Lee et al., 2005). On the other hand, significant relationships between the numbers of siblings and moral sensitivity were found. Total scores, *patient-oriented care* scores, and *professional responsibility* scores in the senior students were positively associated with number of siblings. There was no previous study reporting this relationship. Experience of the relationship among siblings may also impact student moral sensitivity.

***GPA and moral sensitivity/moral reasoning*.** Regarding relationships with GPA scores, this study found significant relationships with both moral sensitivity and moral reasoning. However, the relationships were different in pattern; higher GPA was associated with lower *benevolence* scores, while higher GPA was associated with higher principled moral reasoning scores. Several studies using the DIT reported the principled thinking score was associated with intellectual abilities, i.e., IQ, academic achievement tests, or critical thinking (Rest, 1986a). However, previous studies using the MSQ or the KMSQ did not report the relationship between GPA and moral sensitivity. According to a study reporting moral sensitivity of gifted children (Lovecky, 1997), the children may have average moral sensitivity skills (e.g., showing compassion, or emotional involvement) or may not show those skills in situations, while they show exceptionally intellectual reasoning skill at

resolving moral issues based on justice or fairness. Therefore, this finding may support the contention that students with higher GPAs may be more likely to show good principled thinking skill and less moral sensitivity skill based on compassion or emotional involvement.

Religion and moral sensitivity/moral reasoning. Finally, this study found no relationship between religion and moral sensitivity, yet there were significant relationships between religion and moral reasoning. Finding no relationship between religion and moral sensitivity was consistent with the result of a previous Korean study (Han et al., 2007). Regarding the relationship between religion and moral reasoning, the present study reported that the principled moral reasoning scores were negatively associated with religion. Regarding the relationships with specific religions, i.e., Catholic, Protestantism, Buddhism, and no religion, the principled thinking scores of Protestant students were significantly lower than those of the students without religion. The principled thinking scores of Buddhist students were higher than those of the other groups. Furthermore, the stage 4 score of Protestant students were significantly higher than those of students without religion. Rest (1986a) argued that the principled reasoning scores in conservative religious groups were lower than those in religious groups with liberal theology. The result of this study may be consistent with Rest's argument. The Protestant churches in South Korea are recognized as having a relatively strong conservative stance, while Buddhism in South Korea shows a relatively liberal stance on ethical issues of Korean society. However, this result was different from the result of previous Korean studies examining the relationship: the studies reported no relationship between the variables (Y. S. Kim et al., 2004; M. A. Lee et al., 2006).

Limitations of the Study

The main challenge in this study was developing a valid design that controlled for confounding variables. The cross-sectional design used in this study might limit interpretation of the findings. Researchers warn that the design can introduce substantial selection bias; preexisting differences among groups in the design can produce alternative explanations about the results (Polit & Beck, 2004; Shadish, Cook, & Campbell, 2002). A pretest-posttest design with a control group (a longitudinal design) is suggested as a better design for preventing the confounding of a threat to validity with the observed effect (Shadish et al., 2002). However, a pretest and posttest design (a longitudinal design) to test educational effects during a whole program is not practical for dissertation research with a limited timeline. Furthermore, there are many factors in an educational environment that cannot be controlled in experimentation. Therefore, although a descriptive design has weaknesses, this study used the design while paying attention to sample size, sampling method, and comparability between groups for the advantage of exploring the many relationships between variables related to education.

In order to minimize limitations, first, this study achieved a large sample size with a high response rate. Second, this study purposively selected the programs to increase comparability among programs in other educational environment variables except ethics curriculum variables using selection criteria, e.g., geographical region, accreditation of program, funding type, and program size. This study also identified confounding variables regarding student characteristics. Therefore, if the student characteristics were different among groups, this study included the variables as covariates in the testing models.

Furthermore, the nursing student population in South Korea is relatively homogeneous in terms of individual characteristics, cultural experience, or educational experience. Therefore, this homogeneity may increase the comparability among programs, and the generalizability of the findings to the nursing student population in South Korea may increase. However, a complete homogeneity of the population cannot be assumed. Data from the small number of programs may limit the generalization of study results. Therefore, to reduce sampling bias, to increase generalizability of the findings, and to include various curriculum variables, this study selected participants from eight programs (21% of baccalaureate nursing programs accredited by the KABN), including six non-religious programs and two religiously affiliated programs.

Regarding the cross-cultural generalizability of the findings in this study, the measures used in this study of psychological constructs may or may not have similar patterns of relationships with variables in different populations. Because the findings of this study reflect data obtained from a sample representing the nursing student population in South Korea, the generalization of this study may be limited to nursing students and programs in South Korea. In particular, the Korean Moral Sensitivity Questionnaires (KMSQ) is a version of the Moral Sensitivity Questionnaires (MSQ) modified by re-categorizing the moral sensitivity concepts understood by nurses in South Korea (Han et al., 2010). Even though the KMSQ used 27 items of the MSQ with the same psychological construct and the cross-cultural validity of the DIT has been established, the generalization of the findings to populations from different cultures needs to be carefully considered.

There were further considerations in the interpretation of the findings in this study. First, some items (i.e., questions 9, 14, and 23) related to *conflict* in the moral sensitivity

questionnaire were frequently omitted by freshman students. This may be due to their lack of clinical experience with conflict. Those questions were originally designed for nurses with clinical experience and were related to expressing conflict in clinical situations. Most freshman students in this study did not have any clinical experience. Therefore, the freshman students were encouraged to make hypothetical responses to the assumptions related to *conflict*. Therefore, the conflict scores of freshman students may or may not reflect the realm of their moral sensitivity. In a future study, if the instrument is considered for the use with students without clinical experience, those items may need to be revised.

Second, the student characteristic variables included in this study can explain the small amount of variance in the moral sensitivity score and the principled thinking score of students. This indicates that there are other important factors not included in this study. For example, although formal education level and previous clinical experience were recognized as critical predictors of both moral sensitivity and moral reasoning, this study could not include these variables for analysis because there were not enough data in categories to compare different education levels or clinical experiences among the nursing students.

Third, there may be undiscovered factors in curriculum variables and student characteristics that have an impact on moral sensitivity and moral reasoning of students. There may also be a limitation in the accuracy of ethics curricular information due to self-reporting by instructors in each program; the information may have a response bias. Therefore, combining several methods including interviews or document reviews (e.g., syllabus) to a self-reporting survey may reduce this potential bias for a future study.

Furthermore, the attendance by the primary investigator during data collection at six of the eight schools in this study may raise ethical concerns related to potential pressure on

students to participate in the study, even though information about voluntary participation was provided and stressed by the primary investigator. Furthermore, the special social status of the primary investigator as a Catholic sister may also have affected the students' willingness to respond to the questions.

Implications of the Findings

Recommendation for ethics education. The findings from this descriptive cross-sectional study provide information about the moral sensitivity and moral reasoning of nursing students at entry and exit levels from baccalaureate nursing programs in large universities in South Korea, ethics curriculum related to the moral development of the students, and student characteristics that may have an impact on the moral development of the students. These findings lead to the following recommendations for nursing education regarding ethics education:

1. Nursing education in South Korea tends to increase the moral sensitivity of nursing students. Yet, these nursing education programs need a curricular plan for a comprehensive, structured approach to teaching moral sensitivity. Regarding moral reasoning of nursing students, nursing education in South Korea must pay more attention to developing principled thinking in nursing students. The students have established conventional reasoning skills through their lifetime, and thus nursing education should encourage the students to develop beyond the conventional level to the principled level, essential reasoning given the complexities faced by nurses in current nursing practice.

2. Increasing hours of ethics content tends to improve moral sensitivity and moral reasoning skills of nursing students. The highest number of hours of ethics content in the study was 32 hours in a two-credit semester course. Therefore, nursing educators in South

Korea need to evaluate the current nursing curriculum with consideration given to increasing the hours of ethics content. Based on this study's finding and previous studies reporting the positive effect of an ethics course (a three-credit semester course), a three-credit semester hour course is suggested.

3. Ethics education in nursing programs should be planned for all academic years. For example, in terms of the habituation of moral sensitivity among nursing students, ethics content needs to be placed in preclinical years. For the development of the principled moral reasoning of nursing students, an ethics education program should stimulate reflection by students on their enriched experience with clinical practice in class. Therefore, ethics content is also recommended in clinical years. In relation to a structured planning for ethics content, an example of schools that provide two separate ethics courses in each preclinical (e.g., a two-credit semester course) and clinical year (e.g., a one-credit semester course) can be suggested as a curricular design example (Seoul National University College of Nursing; University of Minnesota School of Nursing).

4. Nursing educators in South Korea must consider the use of non-lecture teaching methods for teaching ethics. However, the effective use of non-lecture teaching methods might be related not to the number of hours but to the quality of the teaching methods. In particular, a large size class can be a barrier against the use of non-lecture teaching methods. Therefore, strategies for the effective use of the non-lecture teaching methods in a large size class need to be developed. Furthermore, the quality of ethics education may be related to the qualification of teachers who are assigned for teaching ethics and the availability of resources for teaching ethics. Therefore, the development of education programs for teachers and educational resources in ethics is suggested.

5. The nursing student as a moral agent is a key in ethics education and must be encouraged to participate in the class actively. Therefore, assessment of the needs of nursing students in class is a critical factor for ethics education. In particular, student characteristics such as age, gender, GPA, socio-economic status, education level, or experiences also affect the moral development of the student. The nursing student population in South Korea is changing from homogenous to heterogeneous. Therefore, nursing educators must consider the change in class make-up.

Implications for further studies. The findings of this study indicate that nursing education and ethics content in nursing programs tended to increase moral sensitivity and moral reasoning of students. A structured, comprehensive curriculum for ethics in nursing programs may help students to improve necessary skills for ethical decision making in complex situations faced by nurses in their daily practice. However, studies are needed to identify effective curriculum and teaching strategies to develop moral sensitivity and moral reasoning of students. The following recommendations are suggested to further research in this area:

1. This study could be replicated with other types of nursing programs in South Korea, e.g., 3-year nursing programs. A large number of Korean nurses graduate from 3-year nursing programs. Therefore, the impact of these education programs on nursing in South Korea is important to discern. Furthermore, this study could be repeated in other countries based on their popular curriculum designs. Repeated studies can provide information about current ethics education in nursing and suggest future directions.

2. A study could examine interventions using specific teaching strategies, e.g., different hours of ethics content, different sequencing of ethics content, and different

teaching methods using a longitudinal design. This study provided information on the relationship between curricular variables and the moral sensitivity and moral reasoning of students. Therefore, a study examining the effect of specific curriculum interventions on moral sensitivity and moral reasoning of nursing students is needed.

3. A study could be done to examine the relationships between individual student characteristics (e.g., age, gender, the number of siblings, socio-economic status, religion, GPA, clinical experience, and education level) and moral sensitivity and moral reasoning using various nursing populations. The homogeneity of the sample used in this study limited the exploration of these important relationships. Further study can provide information in order to understand the Korean nursing population by adding a greater variety of characteristics.

4. A study could be done to examine the relationship between moral sensitivity and moral reasoning of nursing students. The relationship between those variables is not a well-known subject in ethics education. Ethics educators believe that the skills may be interactive, but are developed by different processes in the moral agent. Understanding the relationship can help educators to develop more effective teaching strategies for ethics.

5. A study could be done to develop validated instruments to test the effect of ethics education on moral sensitivity and moral reasoning. The MSQ was originally developed to examine the moral sensitivity of nurses in psychiatric areas. Although the MSQ has been modified to apply to all nurses, some items of the MSQ may be inadequate for examining the moral sensitivity of nursing students without any nursing experience. Currently, the revised MSQ still needs validation (Lützén, Dahlqvist, Eriksson, & Norberg, 2006). Regarding moral reasoning, although there was a nursing-specific instrument to test

the moral reasoning (the Nursing Dilemma Test), the instrument needs further testing to establish its validity.

Conclusion

This study was conducted to determine the effect of baccalaureate nursing programs in South Korea on students' moral development by assessing the level of moral sensitivity and reasoning of nursing students at entry and exit points in the nursing programs, to explore how ethics curriculum components in nursing affect the moral sensitivity and moral reasoning of nursing students, and to investigate what kinds of influence student characteristics have over the moral sensitivity and moral reasoning of students.

The findings of this study indicate that nursing education in South Korea may have an impact on developing moral sensitivity, particularly, in the caring relationship with patients and in expression of conflict in moral dilemma situations. However, this study suggests that nursing programs in South Korea must emphasize moral sensitivity related to advocacy for patients and principled moral reasoning of students. Regarding the relationships of curriculum components to student outcomes, the findings indicate that planned ethics content in a nursing curriculum can result in a progressive improvement of moral reasoning of students. Furthermore, the findings related to the influence of student characteristics on student moral development can help educators to assess student needs in their classes in terms of ethics education. Attention to nursing as a professional occupation among students is growing in South Korean. Therefore, the variety of student characteristics in nursing classes is increasing, and thus, an interaction mechanism among students in nursing classes is changing with the increasing number of male students, various education levels, and various clinical experiences. Therefore, nursing educators' understanding about the relationships

between student characteristics and the moral sensitivity and reasoning can facilitate not only individual student learning but also student learning in the class as a group.

The findings from this descriptive study provide some substantial information about the relationships between students' moral sensitivity and moral reasoning and education in baccalaureate nursing programs in South Korea. Specifically, related to ethics education, this study provides future directions about ethics education in Korean nursing, namely, ethics curriculum designs. The programs that participated in this study have reputations as outstanding programs in the quality of teaching and learning in South Korea. Therefore, the findings of this study can provide meaningful information to these and other nursing programs in South Korea. For next steps, this study suggests further research related to ethics education, in particular, replicated studies and curriculum intervention studies. This study is the only one that has explored the relationships between ethics curriculum and moral sensitivity and moral reasoning of nursing students. Therefore, replicated studies can confirm or refine the findings of this study with public programs or 3-year nursing programs. Curriculum intervention studies based on the findings of this study can provide practical information about ethics education.

Appendix A.:

Moral Sensitivity Questionnaire (Translation of the Swedish version)

1. Completely agree ---------- 7. Completely disagree	1	2	3	4	5	6	7
1) It is my responsibility as a psychiatrist to have knowledge of the patient's total situation.*	1	2	3	4	5	6	7
2) My work would feel meaningless if I never saw any improvement in my patients.	1	2	3	4	5	6	7
3) It is important that I should obtain a positive response from the patient in everything I do.	1	2	3	4	5	6	7
4) When I need to make a decision against the will of a patient, I do so according to my opinion about what is good care.	1	2	3	4	5	6	7
5) If I should lose the patient's trust I would feel that my work would lack meaning.	1	2	3	4	5	6	7
6) When I have to make difficult decisions for the patient, it is important always to be honest with him or her.	1	2	3	4	5	6	7
7) I believe that good psychiatric care includes respecting the patient's self-choice.	1	2	3	4	5	6	7
8) If a patient does not have insight into the illness, there is little I can do for him or her.	1	2	3	4	5	6	7
9) I am often confronted by situations in which I experience conflict in how to approach the patient	1	2	3	4	5	6	7
10) I believe that it is important to have firm principles for the care of certain patients.	1	2	3	4	5	6	7
11) I often face situations in which it is difficult to know what action is ethically right for a particular patient.	1	2	3	4	5	6	7
12) If I am unacquainted with the case history of a patient, I follow the rules that are available.	1	2	3	4	5	6	7
13) What is most important in my psychiatric practice is my relationship with my patients.	1	2	3	4	5	6	7
14) I often face situations in which I have difficulty in allowing a patient to make his or her own decision.	1	2	3	4	5	6	7
15) I always base my actions on medical knowledge of what is the best treatment, even if the patient protests.	1	2	3	4	5	6	7
16) I think that good psychiatric care often includes making decisions *for* the patient.*	1	2	3	4	5	6	7
17) I rely mostly on the nurses' knowledge about a patient when I am unsure.	1	2	3	4	5	6	7
18) Most of all, it is the reactions of patients that show me if I have made the right decision.	1	2	3	4	5	6	7

1. Completely agree ---------- 7. Completely disagree	1	2	3	4	5	6	7
19) I often think about my own values and norms that may influence my actions.	1	2	3	4	5	6	7
20) My own experience is more useful than theory in situations in which it is difficult to know what is ethically right.	1	2	3	4	5	6	7
21) It is important that I should have rules to follow when a patient who is *not* being treated under the Mental Health Act refuses treatment.	1	2	3	4	5	6	7
22) I believe that good psychiatric care includes patient participation, even of those with serious mental disorders.**	1	2	3	4	5	6	7
23) I am often caught in predicaments where I have to make decisions without the patient's participation.	1	2	3	4	5	6	7
24) If a patient is being treated under the Mental Health Act, I expect nursing staff to follow my orders even if the patient is noncompliant. **	1	2	3	4	5	6	7
25) I find it difficult to give good psychiatric care against the will of the patient.**	1	2	3	4	5	6	7
26) Sometimes there are good reasons to threaten a patient with an injection if an oral medication is refused.	1	2	3	4	5	6	7
27) In situations in which it is difficult to know what is right, I consult my colleagues about what should be done.	1	2	3	4	5	6	7
28) I rely mostly on my own feelings when I have to make a difficult decision for a patient.	1	2	3	4	5	6	7
29) As a psychiatrist, I must always know how individual patients on my ward should be respectfully approached.*	1	2	3	4	5	6	7
30) I find meaning in my role even if I do not succeed in helping a patient to gain insight into his or her illness.	1	2	3	4	5	6	7

Note. * Specialized terms for a psychiatric area have been changed to general terms; e.g., from psychiatrist to nurse/ student. **This item was removed from the Korean Moral Sensitivity Questionnaire because of a specialized item for a psychiatric area. Adapted from "Moral sensitivity in psychiatric practice" by K. Lützén, M. Evertzon, & C. Nordin, 1997, *Nursing Ethics*, 4(6), p 481.

Appendix B.

The Defining Issues Test: A sample story

HEINZ AND THE DRUG

In Europe a woman was near death from a special kind of cancer. There was one drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1,000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money on it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife.

1. Should Heinz steal the drug? __Should Steal __Can't Decide __Should not steal

2. Please rate the following statements in terms of their importance.

Great Importance, ①	Much Importance, ②	Some Importance, ③	Little Importance, ④	No Importance ⑤	Questions
					1. Whether a community's laws are going to be upheld
					2. Isn't it only natural for a loving husband to care so much for his wife that he'd steal
					3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help
					4. Whether Heinz is a professional wrestler, or had considerable influence with professional wrestlers
					5. Whether Heinz is stealing for himself or doing this solely to help someone else
					6. Whether the druggist's rights to his invention have to be respected
					7. Whether the essence of living is more encompassing than the termination of dying, socially and individually
					8. What values are going to be the basis for governing how people act towards each other
					9. Whether the druggist is going to be allowed to hide behind a worthless law which only protects the rich anyhow
					10. Whether the law in the case is getting in the way of the most basic claim of any member of society
					11. Whether the druggist deserves to be robbed for being so greedy and cruel
					12. Would stealing in such a case bring about more total good for the whole society or not

3. Now please rank the top four most important statements. Put the number of the statement in the blank:

__ Most important item __ Second most important item
__ Third most important item __ Fourth most important item

Note. Adopted from "Manual for the Defining Issues Test (3rd ed.)" I. R. Rest, 1986, Minneapolis, MN: Center for the study of Ethical Development, University of Minnesota.

ESCAPED PRISONER

A man had been sentenced to prison for 10 years. After one year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For eight years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his own profits to charity. Then one day, Mrs Jones, an old neighbor, recognized him as the man who had escaped from prison eight years before, and whom the police had been looking for. Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison?

1. Should Mrs. Jones report him? __Should report __Can't Decide __Should not report

2. Please rate the following statements in terms of their importance.

Great Importance, ①	Much Importance, ②	Some Importance, ③	Little Importance, ④	No Importance ⑤	Questions
					1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
					2. Every time someone escapes punishment for a crime, doesn't that just encourage more crime?
					3. Wouldn't we be better off without prisons and the oppression of our legal system?
					4. Has Mr. Thompson really paid his debt to society?
					5. Would society be falling what Mr. Thompson should fairly expect?
					6. What benefits would prisons be apart from society, especially for a charitable man?
					7. How could anyone be so cruel and heartless as to send Mr. Thompson to prison?
					8. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?
					9. Was Mrs. Jones a good friend of Mr. Thompson?
					10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
					11. How would the will of the people and the public good best be served?
					12. Would going to prison do any good for Mr. Thompson or protect anybody?

3. Now please rank the top four most important statements. Put the number of the statement in the blank:

__ Most important item
__ Second most important item
__ Third most important item
__ Fourth most important item

DOCTOR'S DILEMMA

A lady was dying of cancer which could not be cured and she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of pain-killer like morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough morphine to kill her. She said she couldn't stand the pain and that she was going to die in a few months anyway. Should the doctor give her an overdose of morphine that would make her die?

1. Should the doctor give the lady an overdose that will make her die? __Should give __Can't Decide __Should not give

2. Please rate the following statements in terms of their importance.

Great Importance, ①	Much Importance, ②	Some Importance, ③	Little Importance, ④	No Importance ⑤	Questions
					1. Whether the woman's family is in favor of giving her the overdose or not?
					2. Is the doctor obligated by the same law as everybody else if giving an overdose would be the same as killing her?
					3. Whether people would be much better off without society regimenting their lives and even their deaths?
					4. Whether the doctor could make it appear like an accident?
					5. Does the state have the right to force continued existence on those who don't want to live?
					6. What is the value of death prior to society's perspective on person values?
					7. Whether the doctor has sympathy for the woman's suffering or cares more about what society might think?
					8. Is helping to end another's life ever a responsible act of cooperation?
					9. Whether only God should decide when a person's life should end?
					10. What values the doctor has set for himself in his own personal code of behavior?
					11. Can society afford to let everybody end their lives when they want to?
					12. Can society allow suicides or mercy killing and still protect the lives of individuals who want to live?

3. Now please rank the top four most important statements. Put the number of the statement in the blank:

__ Most important item
__ Second most important item
__ Third most important item
__ Fourth most important item

Appendix C.

Ethics Education in Baccalaureate Curriculum

I. Demographic Information for a Nursing Program

1. In what type of college or university is your program? (Circle number.)
    1) Private. Non-religious
    2) Private. Religious

2. What is the total number of faculty (FTE's) for your baccalaureate nursing program? ( )

3. What is the number of students enrolled in your program for each year?
    1) Less than 50
    2) 51 to 100
    3) More than 100

II. Specific Information for Ethic Curriculum

< *Baccalaureate Ethics Courses*>

1. Does your program provide an ethics course?
    1) Yes (go to question 2)
    2) No (go to question 25)

2. What is the purpose of the ethics course in your program?
    1) Ono based on the objectives of nursing education
    2) Nurturing Humanism
    3) Religious purpose
    4) Others ( )

< *Supporting System for Ethics Education* >

3. Does your school have a department providing ethics education for nursing students?
    1) Yes (go to question 4)
    2) No (go to question 5)

4. Since when has the department provided ethics content to nursing students?
    ( ) year

5. Does your program have a faculty fully assigned for teaching ethics?
    1) Yes (go to question 6)
    2) No (go to question 7)

---

6. For each faculty member who assigned for teaching ethics in your baccalaureate program, identify the department affiliation, full or part time, and specialty in teaching.

   ①

   ②

7. If your program does not have a full assigned faculty for teaching ethics, who teaches ethics?
   1) A faculty in other department in university
   2) An instructor
   3) Other ( )

8. How many faculty members (including guest lecturers) participate for teaching ethics in the ethics course?
   1) 1 to 2, 2) 3 to 4, 3) 5 to 6 4) 7 to 9, 5) 10 or more

9. How many seats are assigned for an ethics course? ( )

10. Do you have a coordinator for ethics education in your program?
    1) Yes 2) No

11. How are the ethics content and leaning experiences in each baccalaureate nursing course identified?
    1) Freely chosen by the instructor(s) teaching the course.
    2) Chosen by both instructors and a coordinator for ethics education
    3) Others ( )

12. Have you had a continuing education for faculty in terms of nursing ethics education in last ten years?
    1) Yes 2) No

< A Systematic Plan for an Ethics Course>

13. (A) What kinds of curriculum design does your program use to provide ethics content?
    1) Required 2) Electives

14. (B) What kinds of curriculum design does your program use to provide ethics content?
    1) A separate ethics course
    2) A integrated lecture in one of other nursing courses
    3) Others

15. Which year is an ethics course provided in your program?
    1) First year 2) Second year 3) Third year 4) Fourth year

16. How many hours are provided for an ethics course? ( ) hours

17. Is credits assigned for an ethics course?
    1) Yes (go to question 17)
    2) No (go to question 18)

18. How many credits are assigned for the ethics course? ( ) credits

19. If a certain credit is not assigned for the ethics course, how the ethics course is evaluated?
    1) Pass or Fail 2) Other ( )

20. Does your program use a defined ethical framework? (Circle all that are applied)
    1) Philosophical
    2) Nursing Codes of Ethics and Standards
    3) Bioethical
    4) Virtue Ethics
    5) Ethics of Care or Relational Ethics
    6) Moral Development
    7) No Framework
    8) Other ( )

21. Which of the following areas of ethics content or learning experiences (lecture and non-lecture) are provided in your baccalaureate curriculum? (Circle all that are applied)
    1) Ethics Theory (deontological & teleological systems, virtue ethics etc.)
    2) Moral Principles (autonomy, beneficence, etc.)
    3) Ethical issues related to health care system (patient care)
    4) Ethical issues related to research
    5) Professional ethics and responsibility
    6) Code of ethics for nurses
    7) Ethical decision making
    8) Value clarification
    9) Virtue ethics
    10) Moral Sensitivity
    11) Moral Reasoning
    12) Others ( )

22. Which of the following are used in your baccalaureate curriculum as resources in teaching ethics? (Circle all that are applied.)
    1) Teaching material developed by faculty members
    2) Medical ethics textbook
    3) Nursing ethics textbook
    4) Journal articles
    5) Other ( )

23. Approximately how many hours of lecture on ethics content are provided in your baccalaureate curriculum? ( ) hours

24. Approximately how frequently do you use non-lecture methods for teaching ethics? (if you use frequently some teaching methods, please write how many hours you have used them for teaching ethics)

    A. Group discussion (hours) : ① frequently ② sometimes ③ rarely ④ no use

    B. Case analysis (hours) : ① frequently ② sometimes ③ rarely ④ no use

    C. Clinical conferences (hours) : ① frequently ② sometimes ③ rarely ④ no use

    D. Role play (hours) : ① frequently ② sometimes ③ rarely ④ no use

    E. Other (- hours) : ① frequently ② sometimes ③ rarely ④ no use

25. In clinical nursing courses, how are links made between classroom content and clinical experiences related to ethical issues?

    1) Yes ( ) 2) No ( )

    : If you circled 'yes', please describe what kind of methods have you used for it.

26. If you wish to share any additional information or concerns related to the teaching of ethics in your baccalaureate nursing curriculum, please describe them below.

Appendix D.

Student Information Survey

---

1. Class: ( )

2. Age in year: ( )

3. Sex: 1) Female ( ), 2) Male ( )

4. The number of siblings: ( ) of ( ) (e.g., 1 of 2: First of two including subject)

5. Marital Status: 1) Single ( ), 2) Married ( )

6. Family monthly income (₩):

1) < 2,000,000 ( ) 2) 2,000.000 ≤ < 3,000,000 ( )

3) 3,000,000 ≤ <4,000,000 ( ) 4) ≤ 4,000,000 ( )

7. Religions:

1) Roman Catholic ( ) 2) Protestant ( )

3) Buddhist ( ) 4) No religion ( ) 5) Others ( )

8. College Scholastic Ability Test (CSAT) (1 to 9 Grades)

1) Language area (Korean) ( )

2) Mathematics area ( )

3) Foreign language (English) ( )

4) Social or Science areas ( )

9. GPA in last semester: ( )/4.5 or ( )/4.3

10. Previous Education

1) High school graduation ( )

2) Technical college graduation ( )

3) Associate degree (3-years) in nursing ( )

4) Baccalaureate degree in other area (not nursing) ( )

5) Master degree ( )

11. Have you taken courses in moral philosophy and ethics? 1) Yes ( ), 2) No ( )

If yes, what courses did you take and how many hours was it taken?
(e.g., bioethics course- 1credit-12 hours) ( )- ( ) credit ( ) hours

12. Have you had work experience in health care setting (other than student clinical experience)?

1) Yes ( ), 2) No ( )

If yes, what experience did you have? (e.g., RN-2 years: if it is less than one year, please write 1)
( )- ( ) years

Appendix E.

Student Survey in Korean

UNC SCHOOL OF NURSING

안녕하십니까?

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본 설문지에 성심껏, 기꺼이 응답 해 주심에 다시금 진심으로 감사드립니다.

2010년 10월

연 구 자 : 박 미현, MSN, RN
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추신 : 본 연구는 논문 윤리 위원회에 의해 심의를 통과했습니다. 만약 본 연구와 관련해서 정보를 원하시거나 하시고 싶은 이야기가 있으시다면, UNC-CH IRB에 연락을 하십시오.
전화 : 01-919-966-3113 또는 IRB_subjects@unc.edu.
IRB Study No : 10-1609

◎ 다음은 환자를 치료하고 간호 하는데 있어서 윤리적 의사결정과 연관된 내용들입니다.
각각의 질문에 대해서 귀하께서 동의하는 정도에 해당되는 번호에 동그라미로 표시해 주십시오

1. 환자의 전반적인 상황에 대한 지식/정보를 갖는 것이 간호사/학생으로서 나의 책임이다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

2. 내가 돌보는 환자들의 상태가 호전되지 않는다면, 나의 일이 의미 없는 것으로 느껴질 것이다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

3. 내가 환자에게 해주는 모든 일에 대해 환자로부터 긍정적인 반응을 얻는 것은 중요하다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

4. 내가 환자의 의지와 반대되는 결정을 내릴 필요가 있을 때, 나는 환자에게 최상의 이익이 된다고 믿는 것을 선택할 것 이다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

5. 만약 내가 환자로부터 신뢰를 잃게 된다면, 간호사/학생로서 나의 직업은 아무 의미가 없다고 느껴질 것이다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

6. 내가 어려운 결정을 할 때마다 항상 환자에게 정직해야 하는 것은 중요하다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

7. 나는 좋은 정신과적 간호에는 환자의 자기결정권을 존중하는 것이 포함되어야 한다고 믿는다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

8. 만약 환자가 자신의 질병에 대한 인식이 부족하다면, 내가 환자를 위해 할 수 있는 일은 거의 없을 것이다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

9. 나는 환자에게 어떻게 접근해야 할지에 대해 갈등을 경험하는 상황에 종종 놓이게 된다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

10. 나는 정신과적인 문제를 갖고 있는 환자를 간호할 때는 확고한 원칙을 갖는 것이 중요하다고 믿는다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

11. 나는 종종 어떤 행동이 윤리적으로 옳은지를 판단하기 어려운 상황에 직면하곤 한다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

12. 만약 내가 환자 개인의 과거병력에 친숙하지 않다면, 나는 표준 절차에 의존할 것 이다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

13. 나는 간호사-환자 관계가 정신과 간호 실무에서 가장 중요한 요소라고 믿는다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

14. 나는 종종 환자 자신이 스스로 결정을 내리게 하는데 있어서 어려운 상황에 직면하곤 한다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

15. 비록 환자가 이의를 제기한다 해도, 나는 항상 간호학적 지식에 기반을 두는 간호가 최상의 접근이라고 생각 한다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

16. 나는 의사결정시 환자를 포함시키는 것이 좋은 간호라고 생각한다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

17. 내가 무엇을 해야 할지 확신이 서지 않을 때, 나는 주로 환자에 대한 다른 간호사들의 지식에 의존한다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

18. 내가 옳은 결정을 내렸는지를 나타내 주는 것은 무엇보다도 환자의 반응이다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

19. 나는 종종 내 행동에 영향을 미칠 수 있는 나 자신의 가치와 규범에 관하여 숙고해 본다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

20. 나는 무엇이 윤리적으로 옳고 그른지를 알기 어려운 상황에 처했을 때, 이론적인 지식보다는 내 자신의 경험이 더 유용하다는 것을 발견한다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

21. 정신보건법의 적용을 받지 않는 환자가 치료를 거부할 때에는, 내가 따라야 할 규칙이 있는 것이 중요하다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

22. 좋은 정신과 간호는 비록 환자가 심각한 정신장애를 가졌다 하더라도, 환자를 참여 시키는 것이라고 믿는다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

23. 나는 종종 환자를 참여시키지 않고 의사결정을 내려야 하는 곤경에 처하곤 한다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

24. 만일 환자가 정신보건법의 적용을 받고 있다면, 환자가 의사의 지시를 이행하지 않는다 해도 나는 의사의 지시에 따르지 않으면 안 된다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

25. 나는 환자의 의지에 반대해서는 좋은 정신과 간호를 제공하기는 어렵다는 것을 안다.

1	2	3	4	5	6	7
완전히 동의함						절대로 동의안함

26. 환자가 경구 투여를 거부할 때, 주사를 놓겠다고 위협하는 것이 때로는 일리가 있다.

1	2	3	4	5	6	7
완전히 동의함						**절대로 동의안함**

27. 무엇이 옳은 것인지 알기 어려운 상황일 때, 나는 어떻게 해야 할지 동료들과 상의 한다

1	2	3	4	5	6	7
완전히 동의함						**절대로 동의안함**

28. 환자를 위해 어려운 결정을 내려야 할 때, 나는 주로 나의 감정에 의존 한다

1	2	3	4	5	6	7
완전히 동의함						**절대로 동의안함**

29. 나는 간호사/학생으로서 나의 담당 환자들이 어떠한 특별한 간호를 받고 있는지를 항상 알고 있어야만 한다.

1	2	3	4	5	6	7
완전히 동의함						**절대로 동의안함**

30. 나는 비록 환자가 자신의 질병을 인식하도록 돕는데 성공하지 못하더라도 나의 전문적 역할에 의미가 있음을 발견한다.

1	2	3	4	5	6	7
완전히 동의함						**절대로 동의안함**

◎ 일반적 특성 : 다음 사항에 대하여 해당란에 응답 및 표시(✔)를 하여 주십시오.

1. 학 년 : (현재 학년)
2. 연 령 : 만 세
3. 성 별 : 여 ( ) 남 ( )
4. 형제자매의 수 : ( ) 중 ( ) (예: 2남 1녀 중 둘째)
5. 결혼상태 : 1) 미혼 ( ) 2) 기혼 ( )
6. 가족의 한 달 수입
   1) 200만원 미만 ( )
   2) 200만원 이상-300만원 미만 ( )
   3) 300만원 이상-400만원 미만 ( )
   4) 400만원 이상 ( )
7. 종교
   1) 천주교 ( )
   2) 개신교(다른 크리스천) ( )
   3) 불 교 ( )
   4) 없 음 ( )
   5) 기타 ( )
8. 수능 등급: (1-9등급)
   1) 언어 영역 ( )등급
   2) 수리 영역 ( )등급
   3) 외국어 영역 ( )등급
   4) 사회(과학) 영역 ( )등급
9. 지난 해 학점: ( )/4.5 또는 ( )/4.3
10. 현재 다니는 대학교에 오기 전 교육
    1) 고등학교 졸업 ( )
    2) 전문대학 졸업 (간호 전문대 제외) ( )
    3) 간호대학(3년제) 졸업 ( )
    4) 다른 대학 (4년제)의 졸업 ( )
    5) 석사 학위 ( )
11. 대학에서 고등 윤리 교육을 위한 강좌를 들은 적이 있으십니까?
    1) 있다 ( ) 2) 없다 ( )

    만약, 있다면, 무슨 강좌를 얼마간 들었습니까? (예) 의학윤리-1학점, 12시간)
    강좌 이름: ( )-( )학점, 또는 ( ) 시간
12. 현재 대학에 오기 전 병원에서 근무한 경험을 가지고 있습니까?
    1) 있다 ( ) 2) 없다 ( )

    만약, 있다면, 무슨 직종에서 얼마간 일을 했습니까? (예) 간호사-2년)
    직종 ( )-( ) 년 (1년 미만은 1년으로 기록해 주세요)

◎ 다음 <보기>를 잘 읽고, 이와 같은 방법으로 여러분의 생각을 표시해 주시기 바랍니다.

<보기> 자전거 사기

철수의 아버지는 차로 30분가량 걸리는 회사에서 일하고 있다. 그러나 교통이 막히면 한 시간도 넘게 걸린다. 그래서 철수 아버지는 오래전부터 자전거를 하나 사서 회사도 다니고, 시장을 보거나 운동을 하는 데에도 사용해야겠다고 마음먹고 있었다.

그러나 막상 사려고 하니 생각해보아야 할 일이 많이 있음을 알게 되었다.

(1) (입장선택) 만약 당신이 철수 아버지의 입장에 놓인다면 어떻게 하겠는가?

① 자전거를 산다 (V) ② 잘 모르겠다 ( ) ③ 사지 않는다 ( )

(2) (중요성 정도)자전거를 사는가 안 사는가 하는 결정에 다음의 질문들은 어느 정도로 중요한가? (해당란에 V표 하시오)

매우 중요하다 ①	대체로 중요하다 ②	약간 중요하다 ③	별로 중요하지 않다 ④	전혀 중요하지 않다 ⑤	질 문
			V		1. 동네에 있는 가게에서 살 것인가, 시내의 백화점에서 살 것인가? **(이 질문은 '별로 중요하지 않게' 생각되어 ④에 V표 되었다.)**
	V				2. 장기적으로 볼 때, 새 것과 중고를 사는 것 중 어느 것이 더 이득인가? **(이 질문은 '대체로 중요하게' 생각되어 ②에 V표 되었다.)**
V					3. 가격은 비싸지만 품질이 좋은 것을 살 것인가, 품질은 좀 떨어지더라도 값이 싼 것을 살 것인가? **(이 질문은 '매우 중요하게' 생각되어 ①에 V표 되었다.)**
				V	4. 엔진의 크기가 어느 정도 되어야 하는가? **(이 질문은 자전거를 사는 것과는 전혀 상관이 없으므로 '전혀 중요하지 않게' 생각되어 ⑤에 V표 되었다.)**
		V			5. 짐 틀의 크기가 어느 정도로 커야 하는가? **(이 질문은 '약간 중요하게' 생각되어 ③에 V표 되었다.)**

(3)(중요 질문 순서선택) 위의 질문 중에서 중요하다고 생각되는 4개의 질문을 고른 후, 중요한 순서대로 그 질문의 번호를 쓰시오

가장 중요한 질문의 번호 (3)

둘째로 중요한 질문의 번호 (2)

셋째로 중요한 질문의 번호 (5)

넷째로 중요한 질문의 번호 (1)

<남편의 고민>

한 부인이 이상한 병으로 죽어가고 있었다. 그래서 남편은 아내를 데리고 병원에 갔다. 의사는 암이라고 말하면서, 집에서 가까운 약국에 그 암을 치료할 수 있는 약이 있다고 했다.

그런데 약국 주인은 그 약을 만드는 데 돈과 시간을 많이 쓰고, 고생을 했기 때문에 그 약값을 아주 비싸게 요구했다. 그래서 남편은 약값 마련을 위해 열심히 일을 했지만, 약 값의 반밖에 벌지 못했다.

그래서 남편은 그 약국에 가서 주인에게 "아내가 죽어가고 있어요. 그 약을 반값에 주세요. 나머지 반값은 다음에 드리겠습니다."라고 애원했지만, 주인은 "미안하지만 안 되겠습니다."라고 거절했다.

그래서 남편은 아내를 살리기 위해 많은 걱정을 하다가, 약을 몰래 훔치는 수밖에 다른 방법이 없다고 생각하기 시작했다.

(1) 만약 당신이 이 남편의 입장에 놓인다면, 당신은 어떻게 하겠는가?

① 훔친다 ( )　　② 잘 모르겠다 ( )　　③ 훔치지 않는다 ( )

(2) 남편의 훔칠까 말까 하는 결정에 다음의 질문들은 어느 정도로 중요한가?

매우 중요하다 ①	대체로 중요하다 ②	약간 중요하다 ③	별로 중요하지 않다 ④	전혀 중요하지 않다 ⑤	질　　문
					1. 이유가 무엇이든 법이 정한 일은 지켜야 하지 않을까?
					2. 정말로 아내를 사랑한다면, 약을 훔쳐서 아내를 살려야 하지 않을까?
					3. 그 약을 먹어도 아내가 살지 죽을지 모르는데, 감옥에 갈 일을 할 필요가 있을까?
					4. 부모님이 도둑질은 나쁜 짓이라고 하셨으니, 약을 훔치지 말아야 하지 않을까?
					5. 아내를 위해서 약을 훔칠까? 아니면 남편인 자신을 위해서 약을 훔칠까?
					6. 그 약을 만든 약국 주인의 노력과 고생도 중요하지 않을까?
					7. 약을 훔치다 잡히면 감옥에서 오랫동안 벌을 받아야 하지 않을까?
					8. 아내와 남편은 각자 서로 무엇이 더 중요하다고 생각할까?
					9. 남편이 약을 훔친 것을 초등학교 때 선생님이 알게 되면 화를 많이 내시지 않을까?
					10. 이럴 때, 법을 지키는 것은 사람의 목숨을 살리는데 오히려 방해가 되는 것이 아닐까?
					11. 약국 주인은 너무 욕심이 많고 마음씨가 나쁘니까, 도둑을 좀 맞아도 되지 않을까?
					12. 약을 훔쳐서라도 아내의 목숨을 살리려고 하는 것이, 그냥 가만히 있는 것보다 더 나은 일이 아닐까?

(3) 위의 질문 중에서 중요하다고 생각되는 4개의 질문을 고른 후, 중요한 순서대로 그 질문의 번호를 쓰시오.

가장 중요한 질문의 번호 ( )
둘째로 중요한 질문의 번호 ( )
셋째로 중요한 질문의 번호 ( )
넷째로 중요한 질문의 번호 ( )

<탈옥수>

어떤 사람이 10년을 감옥살이를 해야 하는데 1년을 살다가 감옥에서 도망을 쳤다.그리고 다른 지방으로 가서 이름을 바꾸고 8년간 열심히 일해서 큰 부자가 되었다. 부자가 된 그는 양심적으로 회사를 운영하고, 월급도 잘 주고, 가난한 사람을 많이 도와주어 훌륭한 부자로 유명해졌다.

그러던 어느 날 옆집 부인이 이 부자가 감옥에서 도망친 범인이라는 것을 우연하게 발견하게 되었다. 그리고 경찰에서는 아직도 그를 체포하려고 열심히 찾고 있다는 사실을 알게 되었다. 부인이 이 부자를 경찰에 신고하면, 경찰은 범인을 잡아서 다시 감옥에 보내게 될 것이다. 그 대신 그 부자의 회사는 망할 것이고, 더 이상 좋은 일을 못하게 될 것이다.

부인은 이 사람을 경찰에 신고해야할지 말아야할지 망설이고 있다.

(1) 만약 당신이 이 부인의 입장에 놓인다면, 당신은 어떻게 하겠는가?

① 고발해야한다 ( ) ② 잘 모르겠다 ( ) ③ 고발하면 안 된다 ( )

(2) 부인의 신고를 할까 말까 하는 결정에 다음의 질문들은 어느 정도로 중요한가?

매우 중요하다 ①	대체로 중요하다 ②	약간 중요하다 ③	별로 중요하지 않다 ④	전혀 중요하지 않다 ⑤	질 문
					1. 감옥에서 도망친 후 그가 한 8년간의 착한 일은, 그 사람이 나쁜 사람이 아니라는 것을 보여주는데 충분하지 않을까?
					2. 감옥에서 도망쳐도 잡히지 않으면, 감옥에서 도망치려고 하는 범인이 점점 많아지지 않을까?
					3. 벌을 다 받지 않고 감옥에서 도망치는 일은 나쁜 일이 아닐까?
					4. 그 범인은 착한 일을 많이 했으니까 옛날에 법을 어긴 일은 용서받을 수 있을까?
					5. 그 부자를 다시 감옥으로 보내는 일은 그 사람이 한 착한 일을 무시하는 것이고, 앞으로 계속해서 착한 일을 하지 못하게 만드는 것은 아닐까?
					6. 감옥에서 도망치다가 걸리면 더 큰 벌을 받으니까 도망치지 말아야 하지 않을까?
					7. 그 사람을 다시 감옥으로 보내는 것은 얼마나 인정이 없고 나쁜 짓인가?
					8. 신고하지 않으면, 도망치지 않고 감옥에서 착하게 벌을 받고 있는 다른 범인들에게는 억울한 일이 아닐까?
					9. 이 일을 알기 전에, 그 부인은 이 범인과 어느 정도 친하게 지냈는가?
					10. 이유야 무엇이든 간에 도망친 범인을 신고하는 것은 우리가 당연히 할 일이 아닌가?
					11. 한 사람의 생각과 다른 많은 사람의 생각이 다를 때, 사회는 이 문제를 어떻게 해결할까?
					12. 그를 다시 감옥으로 보내는 것은 그 범인을 위해서인가, 다른 사람들을 위해서인가?

(3) 위의 질문 중에서 중요하다고 생각되는 4개의 질문을 고른 후, 중요한 순서대로 그 질문의 번호를 쓰시오.

가장 중요한 질문의 번호 ( )

둘째로 중요한 질문의 번호 ( )

셋째로 중요한 질문의 번호 ( )

넷째로 중요한 질문의 번호 ( )

<환자의 애원>

어느 젊은 여자가 암에 걸려 6개월 밖에 살 수 없게 되었다. 이 암은 그 여자를 너무 아프게 했다. 너무너무 아파서 그 여자는 정신을 잃기까지 한다. 강한 진통제를 주면 덜 아프게 해줄 수는 있지만, 이것은 너무 강한 것이어서 환자를 오히려 더 빨리 죽게 할 염려가 있었다.

가끔 고통이 멈추었을 때 이 환자는 조금 많은 진통제를 주어서 아픔 없이 죽게 해달라고 애원했다. 여자는 너무 아파서 참기도 힘들고 어차피 죽을 것이니까 편안하게 죽게 도와달라고 의사에게 울면서 부탁했다.

의사는 이 환자의 애원대로 고통 없이 죽을 수 있게 해주어야할지 말아야할지 고민하고 있다.

(1) 만약 당신이 이 의사의 입장에 놓인다면, 당신은 이 환자의 애원을 어떻게 하겠는가?

① 들어 준다 ( ) ② 잘 모르겠다 ( ) ③ 들어주면 안 된다 ( )

(2) 환자의 애원을 들어줄까 말까 하는 결정에 다음의 질문들은 어느 정도로 중요한가?

매우 중요하다 ①	대체로 중요하다 ②	약간 중요하다 ③	별로 중요하지 않다 ④	전혀 중요하지 않다 ⑤	질 문
					1. 환자의 가족들은 어떤 생각을 하고 있을까?
					2. 의사가 아닌 사람이 진통제를 주어서 사람이 죽게 되면 당연히 죄가 되는 것처럼, 의사가 그렇게 해도 똑같이 사람을 죽이는 일이 아닐까?
					3. 사람을 죽이는 사람을 하느님이 용서할 수 있을까?
					4. 의사가 실수한 것처럼 일을 꾸며서 환자의 부탁을 들어 줄 수도 있지 않을까?
					5. 나라의 법은 스스로 죽고 싶어 하는 사람을 억지로 못 죽게 할 권리가 있을까?
					6. 일부러 사람을 죽이는 일은 의사가 해서는 안 되는 일이라고 배우지 않았나?
					7. 의사는 환자를 덜 아프게 해주는 일에 신경을 써야 하는가, 아니면 다른 사람이 자신을 어떻게 생각할지에 더 신경을 써야 하는가?
					8. 사람이 편안하게 죽게 도와주는 일이 어떨 때는 더 좋은 일이 아닌가?
					9. 오직 하느님만이 사람의 목숨을 살리거나 죽일 수 있는 것이 아닐까?
					10. 의사는 무엇을 가장 중요하게 생각하고 자신의 일을 해야 하는가?
					11. 어떤 사람이 스스로 죽고 싶어 할 때, 법은 그 사람이 스스로 죽게 허락할 수 있을까?
					12. 사회는 자살을 허락하면서, 또 살고 싶은 사람들의 생명을 지켜주어야 하는 반대되는 두 가지 일을 잘 할 수 있을까?

(3) 위의 질문 중에서 중요하다고 생각되는 4개의 질문을 고른 후,
중요한 순서대로 그 질문의 번호를 쓰시오.

가장 중요한 질문의 번호 ( )
둘째로 중요한 질문의 번호 ( )
셋째로 중요한 질문의 번호 ( )
넷째로 중요한 질문의 번호 ( )

Appendix F.

UNC-CH IRB Approval Letter

Subject: IRB Notice
From: IRB <irb_no_reply@mailserv.grad.unc.edu>
Date: Tue, 14 Sep 2010 13:27:46 -0400 (EDT)
To: mihyunp@email.unc.edu
CC: diane_kjervik@unc.edu

To: Mihyun Park
School of Nursing
CB: 7460

From: Public Health-Nursing IRB

Date: 9/13/2010

RE: Notice of IRB Exemption
Exemption Category: 2.Survey, interview, public observation
Study #: 10-1609
Study Title: The Effect of Curricular Design for Ethics Education on Nursing Students' Moral Sensitivity and Moral Reasoning in Baccalaureate Nursing Programs in Korea

This submission has been reviewed by the above IRB and was determined to be exempt from further review according to the regulatory category cited above under 45 CFR 46.101(b).

Study Description:

Purpose: To determine the levels of moral sensitivity and moral reasoning in freshman and senior nursing students, and to describe the relationship between curriculum design components for ethics education and nursing students' moral sensitivity and moral reasoning. Participants: Freshman and senior students in baccalaureate nursing programs in South Korea. Procedures (methods): This study has a descriptive correlation study design using pre-existing groups. The data will be collected from eight private baccalaureate nursing programs in Korea using students' survey. The student survey consists of the Korean Moral Sensitivity Questionnaires, the Korean Defining Issues Test, and demographic information questions that are anonymous questionnaires. The student survey will be directly distributed at the end of class to students and will be voluntarily returned from students. Research questions will be tested by using mixed models for hierarchical data.

Investigator's Responsibilities:

If your study protocol changes in such a way that exempt status would no longer apply, you should contact the above IRB before making the changes. The IRB will maintain records for this study for 3 years, at which time you will be contacted about the status of the study.

Researchers are reminded that additional approvals may be needed from relevant "gatekeepers" to access subjects (e.g., principals, facility directors, healthcare system).

CC:
Diane Kjervik, School Of Nursing

IRB Informational Message—please do not use email REPLY to this address

Appendix G.

Catholic University of Korea, IRB Approval Letter

[별지서식 제4호] 가톨릭대학교 성의교정 생명윤리심의위원회

생명윤리심의위원회 심의결과 통보서

문서번호	성의교정 2010-507	시행일	2010. 11. 2
수 신	신 청 자	Diane Kjervik / 박미현 수녀 School of Nursing, University of North Carolina at Chapel Hill	
	연구비지원기관	없음	
연구과제명	한국의 간호 윤리 교육 교과 과정의 효과에 대한 분석		
승인번호	CUMC10U133	심 사 일	2010. 10. 25 (신속심사)
심의결과	☑ 승인(적합) ☐ 시정승인 ☐ 보완 후 재심 ☐ 부결(부적합)		
비 고	◦ 찬성 : 2 / 반대 : 0 / 기권 : 0 ◦ 기관생명윤리위원회 운영규정 및 표준작업지침서를 토대로 검토한 결과 연구기간 변경 신청이 타당한 것으로 판단되어 승인함. ◦ 승인유효기간 : **2011. 10. 24일까지** (최종 승인일로부터 1년까지) - 지속심의 필요 시 승인유효기간 **만료 3개월 이전에 제출**하시기 바랍니다. ◦ **연구 종료 시 종료보고서를 제출**하시기 바랍니다.		

귀하께서 신청하신 심의 안건에 대하여 가톨릭대학교 성의교정 생명윤리심의위원회 심의 결과를 상기와 같이 알려 드립니다.

만약 본 위원회의 심사판정에 불복할 경우 심사결과 통보 후 2주일 이내 그 사유를 기록하여 본 위원회로 제출하여 주십시오.

가톨릭대학교 의무부총장

Appendix H.

Yonsei University, IRB Approval Letter

- 연세대학교 간호대학 연구윤리 위원회(IRB) -

연세대학교 간호대학
연구윤리심의위원회 통보서

수 신	연구의뢰자	**박 미 현** 박사생
	시험책임자	

심 사 종 류	☑초심자 ☐보완심사 ☐보류심사 ☐반려심사 ☐연구계획변경심사 ☐최종결과보고서 ☐기타보고			
접수번호(승인번호)	간대 IRB 2010-1022		과제승인일자	2010. 11. 2
과 제 명	한국의 간호 윤리 교육 교과 과정의 효과에 대한 분석			
연 구 자	연구책임자	소속	직위	성명
		노스캐롤라이나 주립대학교간호대학	박사과정생	박 미 현
연 구 종 류 (중복표시가능)	☑설문조사 ☐관찰연구 ☐행동실험연구 ☐조직 및 검체연구(혈액, 체액 등) ☐배아연구 ☐유전자연구 ☐연구 대상자연구 대상자 ☐기타( )			
연구예정기간	2010 년 9 월 13 일 ~ 2011 년 5 월 31 일			
심 의 내 용	1. 연구윤리심의 의뢰서 2. 연구계획서 3. 피험자 동의서 및 설명문 5. 연구비 소요 내역서 6. 연구도구 7. 연구책임자 이력서			
심 의 일 자	2010 년 11 월 2 일			
심 의 결 과	☑승인 ☐시정승인 ☐보완재심사 ☐보류 ☐반려			
	권고사항			

2010 년 11 월 2 일

연세대학교 간호대학 연구윤리심의위원회

위원장 김 선 아 (인)

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