

BECOMING A NURSE:
MORAL, COGNITIVE AND SKILL DEVELOPMENT IN NURSING STUDENTS

By
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ABSTRACT

TITLE: Becoming a Nurse: Moral, Cognitive and Skills Development in Nursing Students

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The purpose of this interpretive phenomenological study was to uncover and understand how nursing students learn in clinical settings. The central concerns of nursing students were examined, along with three areas of human learning and development: moral development, cognitive development, and skill acquisition. Twenty senior baccalaureate nursing students were interviewed in small groups and asked to talk about a challenging clinical experience in nursing school during which they felt stumped, worried or concerned about what to do. Themes, exemplars and paradigm cases were identified during data analysis and interpretation. Comparisons were made within and across semesters.

Three central concerns of nursing student were identified: learning by doing, maintaining positive relationships with staff, and patient well-being. Their moral, cognitive and skill development were entwined within the central concerns. Although students experienced change in the areas of moral, cognitive and skill development as they progressed through nursing school, changes were subtle, and students did not all change equally or at the same pace.

The findings of the study have implications for nursing education and can be used to inform clinical teaching strategies and curriculum planning. The implications include the importance of experiential teaching and learning, more thoughtful structuring of clinical experiences, addressing the mismatch between didactic and clinical learning, the

applicability of Benner's (1984) *Novice to Expert* model, the value of stress management and self-care for nursing students, and greater collaboration between education and practice.

Limitations of the study included the position of the researcher and the lack of diversity of the sample. The researcher is a nurse educator, and may have been perceived by participants as being a person with power, and they may have been hesitant to share their stories and opinions. The participants were mostly Caucasian, and half of the sample came from two western states in the United States. The study should be replicated with a more diverse sample.

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CHAPTER I: INTRODUCTION

The need for educational reform has been the focus of nursing education literature for the last 20 years (C. A. Tanner, 2007). Nursing practice today is significantly different than nursing practice 20 years ago. The nursing shortage, managed care, increased patient acuity, shorter hospital stays and increased focus on wellness promotion and chronic illness management have all contributed to this change. Learning needs and learning preferences of students have also changed due to shifting demographics in the student population, including greater diversity in age, life experience, educational background and ethnicity (Heller, Oros, & Durney-Crowley, 2005), as well as students' greater sophistication with technology (C. A. Tanner, 2007) and technological advances in education and practice. However, while nursing practice and student learning needs have changed, "clinical education has remained essentially unchanged for the past 40 years" (C. A. Tanner, 2006, p. 99). Generally, students attend didactic classes and labs and attend clinicals categorized by specialties and dependent upon patient diagnoses and availability. This random access opportunity "makes it difficult to ensure that students get a planned experience with a variety of placements" (Gubrud-Howe, Schoessler, & Tanner, 2008, p.3). Nursing schools that continue "business as usual" will no longer meet the needs of the rapidly changing health care system or changing educational environments.

As student demographics change, it is important for nurse educators to be aware of how adult learners apply their previous life and professional experiences to clinical situations and how their learning needs change over the curricular course. According to the National League for Nursing (Heller et al., 2005), nursing students are entering

schools “at an older age and are bringing varying college and work experiences with them. They are typically employed full-time, and many are raising families” (p. 4). Programs are being offered to students who already have academic degrees in non-nursing majors, but want to change careers and become registered nurses. Gone are the days when all nursing students are “young, inexperienced, female, and single” (Lomas, 2005, p. 24). Nurse educators are called to transform teaching styles and curricula that accommodate changing and diverse student populations.

Nursing education in the days of longer hospital stays and lower patient acuity allowed students to care for one patient for several clinical days. Today’s short hospital stays and high patient acuities limit the amount of interaction students will have with one patient. This denies students the opportunity to develop clinical ability by getting to know their patients and assessing the outcomes of their nursing care.

It is crucial to examine how well nursing education is preparing students for the “real world” of nursing practice. As many as 80 to 90% of new nurses change jobs during their first year after graduation (Orsini, 2005). Disillusionment (George, 1995) and the stress of clinical nursing practice (Butler & Hardin-Pierce, 2005) are cited as causes of the high attrition rates among new graduate nurses. These factors contribute to the nursing shortage and underscore the need for better preparation during prelicensure education.

Most nurse educators are aware of Benner’s (1984) work that identified the development of nursing abilities. Although based on practicing nurses and not students, an understanding of Benner’s work provides a framework for examining the experience and development of nursing students. Benner identified and described the following

levels of clinical ability, based on the Dreyfus Model of Skill Acquisition: novice, advanced beginner, competent, proficient, and expert. Benner's data were gathered from 109 participants including 21 pairs of newly graduated nurses and their preceptors, 51 experienced nurse clinicians, 11 newly graduated nurses, and 5 senior nursing students. Although much has been written about applying Benner's work to nursing education (Benner, Tanner, & Chesla, 1996; L. Carlson, Crawford, & Contrades, 1989; Diekelmann, 1992; Meyer & Xu, 2005; Neary, 2001; Neill et al., 1998), it must be remembered that Benner's focus was on practicing nurses and not on nursing students.

New nurses enter the field as advanced beginners (Benner, 1994; Benner, Tanner, & Chesla, 1996). Benner (1984) stated that "Nursing students enter a new clinical area as novices" (p. 21). Supportive of Benner's statement, Dillon (2002) found that new nursing students exhibited novice behavior. Prior to entering nursing school, they have had many experiences from which to draw to assist them when nurse-patient situations occur. They may come to their first clinicals as lay persons, using their taken-for-granted ways of being and relating. Then as they gain knowledge and experience in nursing school, conceivably they develop through stages that are similar to Benner's model. To better prepare graduate nurses for clinical practice, more research needs to be done to determine how students advance from lay persons to novices and then to advanced beginners and what experiences contribute to the development of clinical abilities.

Aims of the Study

The purpose of this study is to uncover and understand how nursing students learn in clinical settings. Three areas of human learning and development will be examined:

moral development, cognitive development, and skill acquisition. In Benner's (2007b) discussion of the Carnegie Foundation's examination of professional education, she cites these three areas as high-level apprenticeships:

- 1) cognitive and conceptual training to think in ways typical of and important to nursing – learning how to think like a nurse;
- 2) a skill-based apprenticeship of practice, where skilled know-how and clinical judgment are learned in particular situations; and
- 3) a moral and ethical apprenticeship to the social roles and responsibilities of the profession, through which the novice is introduced to the meaning of an integrated practice of all dimensions of the profession. (p. 3)

As a tool to simplify discussion, these three areas of learning and development are generally treated as exclusive characteristics. However, it is important to remember that our minds and bodies are not divided. In the practical world, the separation between moral, cognitive and skill development is not clear cut, but integrated into what makes up a whole person.

In order to elucidate moral, cognitive and skill development, this study will examine the central concerns of nursing students during clinical situations. Central concerns are aspects of situations that matter to students and show up as salient (Benner, 1994). Studying the central concerns of participants will shed light on experiences that influenced moral, cognitive and skill development during clinical situations.

Three classic works will inform the study. Benner's *Novice to Expert* (1984), augmented by the more recent study (Benner, Tanner & Chesla, 1996) of practicing nurses which extended Benner's original findings, will anchor the study in the

understanding of characteristics of new graduate or advanced beginner practice.

Additionally, the study will be informed by Gilligan's (1982) landmark study of women's moral development, and by Belenky, Clinchy, Goldberger and Tarule's (1997) study on women's cognition.

The specific research questions for this study are:

1. What are the central concerns of nursing students during clinical situations, and how do those concerns change over time?
2. How do nursing students describe and interpret clinical experiences that have contributed to their moral, cognitive and skills development?

Significance of the Study

Disillusionment and stress are causing a high attrition rate among graduate nurses and are fueling the nursing shortage. These factors, combined with the changing health care environment and changing student demographics, point out the need for nursing education reform. The challenge to nurse educators is to understand how students progress and change over time in the areas of clinical, cognitive, and moral development. With that understanding, students could be provided with opportunities to gain clinical abilities that more closely meet the challenges of current beginning nursing practice.

Understanding the central concerns of students during clinical situations and elucidating their understandings, perceptions, and responses to clinical situations has important implications for nursing education. The concerns and common understandings of nursing students will be revealed in the narratives they will share in this study, setting up new possibilities for learning and teaching. This study will inform the practices of clinical faculty, who will be able to select educational experiences that contribute to the

moral, cognitive and skill development of their students, thus making students better prepared for the challenges of beginning nursing practice.

CHAPTER II: LITERATURE REVIEW

In the classic 1984 work *From Novice to Expert: Excellence and Power in Clinical Nursing Practice*, Benner described the acquisition of knowledge and skill in nursing practice. In *Expertise in Nursing Practice: Caring, Clinical Judgment, and Ethics*, Benner, Tanner and Chesla (1996) expanded Benner's original work, describing how nurses develop cognitively, morally, and clinically. The *Novice to Expert* model has been used to guide nursing curricula (Benner et al., 1996), even though very little research has been done to determine if *Novice to Expert* can in fact be applied to nursing students.

New nurses enter the field as advanced beginners (Benner, 1994). Benner, Tanner and Chesla (1996) described two central aspects of an advanced beginner nurse: their clinical world and their clinical agency. The clinical world has to do with cognitive and skill development, and clinical agency concerns moral development.

Four focal points stand out in the cognitive and skill development, or clinical world, of advanced beginners (Benner et al., 1996). First, clinical situations appear as a set of tasks to be accomplished. These tasks are central, with other considerations, such as changing patients' status and patients' family concerns, relegated to the background. Second, advanced beginners see clinical situations as opportunities for learning, especially as they relate to theory. Third, clinical realities appear to be ordered, requiring "appropriate application of appropriate knowledge" (p. 48). Finally, each clinical circumstance serves as a test of personal ability.

Students' moral development can be elucidated by examining clinical agency. Benner, Tanner and Chesla (1996) defined clinical agency as "the experience and

understanding of one's impact on what happens with the patient and the growing social integration as a member and contributor of the health care team" (p. 60). They found that advanced beginners rely heavily on the expertise of others, and are guided by external factors such as standards of care, nursing and medical orders, and patient records. Although advanced beginners try to assert their own independent practice, they are continually questioning their own ability to contribute to patient outcomes and unit success.

The picture painted by Benner, Tanner and Chesla (1996) of newly graduated nurses is an important guide to assist educators to understand the outcome of nursing education. However, educators have very little knowledge of exactly what cognitive, moral and skills developmental trajectory nursing students follow as they develop into advanced beginners. It would be useful for nursing educators to understand how a student progresses to advanced beginner and then apply that knowledge to nursing education. An understanding of the progress of nursing students throughout the educational process may grant insight into points in the process that can be enhanced, thereby providing better preparation for practice.

Since nursing is relational and interactive it is difficult to describe practice development by following a step-by-step linear process. Isolating one aspect of practice, such as the cognitive steps to problem solving, would not portray the holistic nature of nursing practice or student development. Nursing students use not only what they learned in nursing school, but also their own personal sense of moral agency and responsibility, along with experientially-acquired skills. In fact, a review of 200 studies conducted by Tanner (2006) revealed that "nurses' background, the context of the situation, and the

nurses' relationships with their patients [are] central to what nurses notice and how they interpret findings, respond, and reflect on their response" (p. 204). Tanner called for "educational practices that help students engage with patients and act on a responsible vision for excellent care of those patients and with a deep concern for the patients' and families' well-being" (p. 210). It is hoped that the findings of this study will assist nurse educators to better understand the moral, cognitive, and skill development of their students, enabling educators to become expert coaches and guides.

The purpose of this literature review is to reveal what current research has to say about the moral, cognitive, and skill development of nursing students. Literature that addresses these three areas of development will be examined, followed by studies that applied *Novice to Expert* to nursing education. An interpretive framework for this study will then be offered, by describing four classic works on cognitive, moral, and skill development.

Review of the Literature

The majority of reviewed studies demonstrated that nursing students do progress, although often minimally, in the areas of moral, cognitive and skill development. However, no qualitative study was found that attempted to explain or describe exactly *how* nursing students progress. Only one author, (Dillon, 2002) in a quantitative study, actually described the progression and offered an explanatory model based on Benner's categories and nomenclature. However, Dillon's study sample included only first-year nursing students. It is clear that research needs to be done that examines how nursing students progress throughout the entire curriculum.

Interestingly, although Gilligan (1982), Benner (1984), and Belenky, Clinchy, Goldberger and Tarule (1997) published evidence that men and women develop differently, the vast majority of nursing researchers are still using frameworks and measurement tools developed from studies of males, such as Kohlberg's (1970) ethics of justice and Perry's (1970) theory of young adult cognitive development. In the area of skill development, however, most nursing researchers are using the *Novice to Expert* model. In summary, literature on the moral and cognitive development of predominantly female nursing students is based on theoretical frameworks and measurement tools that were developed by studying males. In addition, research on skill development in nursing students is most often based on research developed from the study of practicing nurses. This finding in the literature illustrates the need to examine how nursing students develop, using frameworks and tools that are most appropriate for females and for nursing students.

Search Strategy

Computerized databases (CINAHL, MedLine, ERIC, Academic Search Premier, and PsycInfo) were searched, using the following keywords: moral development, cognitive development, skills acquisition, college students, nursing, nursing students, development, Novice to Expert, Benner, Gilligan, Belenky, Kohlberg, Perry, and novice. Bibliographies of key articles were examined. Qualitative and quantitative studies about undergraduate nursing education were included. Only English language articles were reviewed due to funding restraints for interpretation. Articles about graduate students and practicing nurses were used only if participants also included undergraduate nursing students. Articles that cited works by Gilligan (1982), Belenky, Clinchy, Goldberger and

Tarule (1997), Benner (1984), and/or Benner, Tanner and Chesla (1996) as guiding frameworks were included. Non-research articles were excluded, except the ones that offered critiques of included articles. Classic works on college student development were included, but otherwise the focus for this review was on articles written after 1984, since Benner's *Novice to Expert* was published in 1984.

Overall, very few articles were found that addressed the cognitive, moral and skill development of nursing students. Recent articles focused on instructional approaches to promote knowledge and skill development, such as the use of technology (Clark & Buell, 2004; Long, 2005; Rhodes & Curran, 2005; Salyers, 2001), self-regulated learning (Kautz, Kuiper, Pesut, Knight-Brown, & Daneker, 2005), and remediation (Kubinski, 1999).

Articles that were not research-based appeared in the literature about applying Benner's model to nursing education. For example, Carlson, Crawford and Contrades (1989) described the use of Benner's *Novice to Expert* as a course textbook. Meyer and Xu (2005) used Benner's model, along with Cognitive Dissonance Theory and the Neuman Systems model as part of a theoretical foundation to make recommendations to faculty to deal with the theory-practice gap.

Definitions

Throughout the literature, study participants were variously called first-year students, novice students, second- and third-year students, and beginning students. Very few authors made clear exactly where the participants were in their nursing education related to clinicals. In some institutions, first-year students were those who were taking pre-requisites which did not include clinicals, while in other institutions, students were

identified by which clinical semester or term they were in, not by which year. Further, the term novice is diversely applied to students and practicing nurses alike. This lack of conformity of terms, probably reflective of the diversity in nursing curricula around the country, made it challenging to interpret the literature for applicability to this study. Therefore, for this literature review, the terms “new,” “first year” and “second year” in the literature were assumed to be students in their first year of nursing education that includes clinical experiences. Unless explicitly stated by study authors, “third year” and “senior” students were assumed to have more clinical experience than new students and were further along in their progression of skill and knowledge acquisition. Additionally, the term “semester” will be used in this review to denote term, quarter or semester in the curriculum.

Research about Nursing Students

Since this interpretive phenomenological study focused on the experiences that affect the moral, cognitive and skill development of nursing students, it was important to search the literature for studies about the lived experience of nursing students. In 2001 Jackson and Mannix conducted a review of literature and reported that “no study could be found which looks at the experiences and perspectives of first-year students” (p. 271). In more recent years many studies have been done that explored the lived experience of nursing students that were not grouped by level of clinical education. The studies, the majority of which were doctoral dissertations, were usually specific to a particular event or concept, such as nursing students’ lived experiences of taking care (Sadala, 1999), international clinicals (Cotton, 2000; Pross, 2000; Wilborn, 2000), male nursing students in obstetrics (Trachtenberg, 2000), managing family life for single students (Ogunsiji &

Wilkes, 2004), working with homeless families (Hunt, 2004), and the journey of Latinas (Goba, 2003), to name a few.

Few studies were found that focused on the lived experience of new students. Carlson, Kotze and van Rooyen's (2003) phenomenological study of new students' clinical experiences revealed the central theme of experiencing uncertainty due to the lack of opportunities to develop competence. Sub-themes included feelings of insecurity related to lack of availability and accessibility of staff; helplessness and frustration related to equipment shortages; confusion related to the theory/practice gap; not fitting in with staff; and lack of awareness by staff of the needs of new students. In order to increase student retention and decrease student stress, the authors called for increased supervision of new students and clear expectations for the staff. Although the authors detailed the steps they took to ensure trustworthiness of the study, the characteristics of participants were not detailed, and the number of the sample size was not provided. The study took place in South Africa, where nursing education is different than nursing education in the United States, where this study will take place. For example, nursing students in the South African study were not accompanied by clinical instructors.

Jackson and Mannix (2001) explored new students' perceptions of the role of clinical nursing staff. Forty-nine first-semester students wrote stories about clinical learning experiences. Stories were analyzed for emergent themes and ideas. Students were asked to validate the findings, which increased credibility (Koch, 1998), and all procedures were auditable. Findings indicated that many students felt intrusive, uncomfortable and unwelcome by clinical staff.

Gilchrist's (2003) descriptive qualitative study was the only one that did not focus primarily on clinical experiences but explored the "pressures of nursing school" (p. 228) by encouraging beginning baccalaureate nursing students to express their feelings through music and art. It was unclear if study participants had yet attended clinicals, and the number of participants was not mentioned. Major themes identified were: "overwhelmed, death, living vs. surviving, extremes, no one else like me, see where I have been, and qualities" (p.228).

A comparison of two articles (Beck, 1993; Chapman & Orb, 2000) highlighted the differences between new students and senior students. Both studies were informed by Colaizzi's (1978) phenomenological method of narrative data analysis. Beck (1993) analyzed 18 new students' written descriptions of their first clinical experience. Credibility was enhanced by performing member checks and by using direct quotes when reporting results. Six clusters of themes were identified: "pervading anxiety, envisioning self as incompetent, feeling abandoned, encountering reality shock, doubting choices, and uplifting consequences" (p. 492).

The purpose of Chapman and Orb's (2000) descriptive phenomenological study was to understand the lived clinical experience of nursing. Researchers conducted prolonged interviews of 14 third-year nursing students, using the question, "What is clinical practice like for you?" (p. 3). Trustworthiness was supported by repeated contacts, concurrent data collection and analysis, directly quoted transcription and member checks. The researchers kept personal reflective journals in order to leave an auditable trail of decisions. The authors concluded that the participants perceived clinical experiences as very important to their professional education. Positive relationships with

faculty and staff enhanced the clinical experience. Personal difficulties, feeling frustrated, being tired, feeling angry, and the theory-practice gap hindered their clinical experience.

It is interesting to note how different Beck's themes are from Chapman and Orb's. Beck studied new students and Chapman and Orb studied third-year students. The different findings between studies suggest that a developmental process takes place from the first to the third year of nursing school. On the other hand, the differences could be attributed to the different research questions asked, or the time elapsed (seven years) between publishing dates.

There is a glaring lack of studies about the lived experience of new nursing students, and no study was found that compared students between semesters. Although it is difficult to find a common thread within the few articles, a picture of first semester students as stressed and being concerned with their personal clinical agency reveals itself. Each study found a preponderance of negative experiences and perceptions regarding clinical experiences. New students in particular were revealed as struggling to develop clinical agency (Jackson & Mannix, 2001; Beck, 1993); anxiety and self-doubt were common experiences as they tried to fit into their new clinical world.

Studies about Cognitive Development

Few studies were found that examined the cognitive development of nursing students, and none were found after 1997. All of the studies except one (Sublett, 1997) used Perry's (1970) theory of young adult cognitive development for a framework. Perry based his theory on a series of observations and interviews with undergraduate students in the 1960's. Belenky and colleagues (1997) point out that although a few women were included in Perry's study, only the interviews with men were used to illustrate and

validate his theoretical scheme. Perry found that students progressed through four stages of thinking. First is dualism, where students view the world in polar terms such as right and wrong, good and bad, true and false, and authorities provide the “right” answers. Second is multiplism, where students accept diversity until the “right” answers are found. The third stage of thinking is relativism, where students understand that all knowledge is contextual. The fourth stage is commitment in relativism, where students commit to the opinions, values, and interests with which they will identify (Kurfiss, 1983). Within each stage of thinking, students occupy a series of “Perry positions” (N. A. Frisch, 1987) as they transition toward, and sometimes away from, the next stage of thinking.

Valiga (1983) administered a questionnaire to 123 nursing students (29 freshmen, 27 sophomores, 34 juniors, and 33 seniors) to determine their position on the Perry stages. Although students demonstrated some progression through the stages, upon graduation they were all still in Perry’s category of dualism—expecting authorities to make decisions for them. To address this problem, Valiga called for a careful examination of students who are attracted to nursing, the educational environment in nursing schools, and the role that nurse educators play in encouraging or discouraging cognitive growth.

In N.C. Frisch’s (1987) doctoral dissertation study of 42 junior nursing students, the majority of nursing students were found to operate at low levels of the Perry (1970) cognitive development scale. Most of them were in the early stage of multiplism, where they accepted diversity as a temporary view until the “right” answer was found.

Although cognitive development does occur as students progress through a nursing

program, N.A. Frisch (1987) asserted that nursing faculty may over-estimate the cognitive levels of nursing students.

McGovern's (1995) quaziexperimental study of 95 sophomore nursing students found that cognitive development is low even after two years of college, with the majority of students rating in the Perry stage of early multiplism. Planned developmental instruction had no significant effect on students' cognitive growth. Interestingly, there was a significant correlation between cognitive development and moral reasoning, which is in line with Kohlberg's (1970) moral development theory, to be discussed in the next section. McGovern called for an investigation of educational activities aimed to enhance student cognitive development. Since the study was only on sophomore nursing students, it does not shed light on the cognitive development of students in relation to clinical experience.

Using an experimental design, Holden and Klingner (1988) compared the problem-solving process in three groups of nursing students and one group of nurses. The nursing student participants consisted of 26 juniors, 29 seniors, and 15 nursing students who were also mothers. They were compared to 30 experienced pediatric nurses in their ability to solve two computer-presented problems. Using Benner's (1984) stages as a framework, they found that practical experience influenced how students solved common problems, and that "subtle but important cognitive changes occur with clinical experience" (p. 28).

Sublett (1997) used Belenky and colleagues' (1997) *Women's Ways of Knowing* to guide her research. Unlike previous studies, Sublett (1997) found that nursing students had high levels of cognitive development, and older nursing students were more likely to

have higher levels of cognitive development than younger students. This difference in findings may be attributed to the frameworks and measurement tools used by the researchers. Specifically, Sublett used tools developed for research on women. McGovern (1995), N.A. Frisch (1987), and Valiga (1983), on the other hand, used Perry's scheme, based on men's research, which could explain why women scored low.

A careful review of the literature revealed that research about the cognitive development of nursing students yields very different results, depending on which frameworks and measurement tools were used for the studies. The use of Perry's scheme, based on evidence gathered from men, revealed that nursing students make little or no cognitive developmental progress during nursing education. Conversely, the use of frameworks based on studying women, such as Benner's (1984) and Belenky and colleagues' (1997) work indicated that nursing students do develop cognitively as they gain clinical experience. It is clear that more research needs to be conducted in this area.

Studies about Moral Development

Kohlberg's (1970) and Gilligan's (1982) theories of moral development were used frequently as theoretical frameworks in the literature on moral development in nursing students. Kohlberg's ethics of justice is based on data gathered from white, male college students, and is therefore most applicable to that population. Gilligan claimed that her ethics of care reflects the moral reasoning of women, which makes her theory most applicable to female-dominated fields like nursing. Studies using either or both theories were reviewed.

Some studies used both Gilligan's ethics of care and Kohlberg's ethics of justice to measure moral development. For example, Peter and Gallop's (1994) purpose was to

examine whether caring uniquely reflected the moral orientation of nursing students. They used Kohlberg's and Gilligan's theories to structure the study design. Using a questionnaire and content analysis, third-year female nursing students were compared with third- and fourth- year male and female medical students when they recalled a personal moral dilemma. The groups were also compared in how they responded to a hypothetical clinical dilemma. Female participants, regardless of profession, used care considerations more often than male participants, supporting Gilligan's (1982) claim that women's moral development and moral reasoning differs from that of men.

Wilson (1999) used the Measure of Moral Orientation, an instrument that combines Kohlberg's decision-making through logic and justice and Gilligan's decision-making through feelings and care (Aaron, 2006). A convenience sample of 86 female nursing students participated in the non-experimental quantitative study, comprising 37 first semester associate degree students, 24 senior baccalaureate students, and 25 second career students. Although students incorporated both justice and caring in their decision-making, they used more ethics of care reasoning than ethics of justice reasoning. The senior baccalaureate students had the highest ethics of care scores, while the second career students had the lowest. The second career students also had the lowest ethics of justice scores. The author asserted that these findings suggested the possible effect of education on moral development.

Using Kohlberg's theory of moral development as a theoretical framework, Arangie-Harrell (1999) studied moral development among college nursing students. A significant increase in moral development at the end of one year of nursing program

experience was found, along with a positive correlation between moral reasoning and self esteem.

Kim, Park, Son and Han's (2004) longitudinal study examined the development of moral judgment in 37 Korean nursing students. No significant increase in Kohlberg's stages of moral development over four years of nursing education was found.

In a qualitative analysis of 75 journals of new nursing students, Lemonidou, Papathanassoglou, Giannakopoulou, Patiraki and Papadatou (2004) aimed to explore issues of ethical development during their first 13 weeks of clinical. Empathy, caring, and emotions were the major themes that emerged from the journal entries. Three stages of development were identified. In the first stage new students strongly identified and empathized with patients. In the second stage students began to identify themselves and empathize with nurses. They actively projected themselves into nurses' situations and imagined what they would do themselves in similar situations. The third stage was a time for students to take a moral stand, and become aware of their own moral orientation. Two paths diverged in this stage, most often as a result of moral conflict. Some students became disillusioned and decided to leave nursing; other students became committed to nursing and began to develop what the authors called moral professional personhood. Strong emotions, positive or negative, motivated students to reflect deeply on clinical situations, and promoted progression through the three stages. Although Kohlberg's ethics of justice was briefly reviewed in the article, the authors found their results to be in accordance with Gilligan's ethics of care.

In a quantitative cross-sectional study of 52 first-year and 54 last-year nursing students living in Finland, Auvinen, Suominen, Leino-Kilpi and Helkama (2004) found

that students who dealt with ethical dilemmas in clinicals had higher moral judgment than students who had not. Last-year nursing students were found to have higher moral judgment than first-year students, indicating that nursing clinical education promotes moral development. The study was based on Kohlberg's theory of moral reasoning stages.

Juujarvi's (2006) small study comparing moral development between Finnish college students in nursing, social work and law enforcement demonstrated that moral development does occur during post-secondary education and is measurable. The Ethics of Care Interview was used to measure care reasoning, and Colby and Kohlberg's Moral Judgment Interview was used to measure justice reasoning. Over the two-year study period, care reasoning increased in nursing and social work students and remained constant in law enforcement students. Justice reasoning increased in all three groups. Juujarvi explained this by citing research showing that classroom education promotes justice development, while care-related experiences, like those that occur in social work and nursing education, promote care reasoning.

Several themes emerged from a review of the literature on the moral development of nursing students. First, nursing students do in fact develop morally during their tenure in nursing school. Second, female students use care ethics more often than male students. Third, clinical experience promotes moral development. Fourth, moral development was demonstrated in studies using either Kohlberg's justice reasoning framework or Gilligan's ethics of care framework, or both. These findings are significant for this study, suggesting that changes in moral orientation occur during nursing school and are identifiable.

Studies about Clinical Skill Development

Very few research articles were found that explored the development of clinical skill in nursing students. Of those found, the majority referred to Benner's 1994 *Novice to Expert* model, in which she identified and described five levels of nursing proficiency: novice, advanced beginner, competent, proficient, and expert.

Neill, McCoy, Parry, Cohran, Curtis, and Ransom's (1998) qualitative study aimed to describe the experiences of 75 sophomore nursing students in their first hospital clinical setting. Data collection methods included focus groups, individual interviews and observation, following Benner's (1994) interpretive phenomenological approach. Participants were asked about clinical teaching-learning experiences, feelings, and interpersonal interactions. Five themes appeared: role confusion; learning by demonstration and observation; a heavy reliance on mentors; connecting to others; and the importance of getting feedback about performance.

The authors stated that Benner's first three stages of development did not have strong parallels in the beginning practice of nursing students in the study. However, they go on to explain how the student who feels role confusion is most like Benner's novice, focused on task performance and objective data. Those students who sought to make connections were similar to Tanner, Benner, Chesla and Gordon's (1993) critical care nurses who emphasized the value of knowing the patient. And those students who actively pursued the development of confidence were emulating Benner, Tanner and Chesla's (1996) competent nurse. These statements demonstrate the uneasy fit when *Novice to Expert* is applied to nursing students. Unfortunately, the authors spent only one paragraph in their article illustrating the developmental parallels to *Novice to Expert*. This

could be due to editorial space restraints, but their suggestions needed more clarification. If in fact the clinical developmental levels of their students did parallel Benner's novice, advanced beginner and competent stages, then the authors' recommendations to faculty are valuable when they say, "By supporting the novice, challenging the advanced beginner, and reinforcing the early signs of competence, clinical faculty facilitate the learning of students in nursing" (p.20).

In their article about mentoring novice nursing students, Pullen, Murray and McGee (2003) applied *Novice to Expert* to a group that Benner clearly did not include in her work. The authors wrote that Benner's model postulates that "a nursing student passes through five levels of proficiency" (p. 4) in skill acquisition. However, Benner did not claim that nursing *students* pass through these stages of proficiency, but that *practicing nurses* passed through the stages. Students in Benner's (1984) model most likely dwell in the first two stages, novice and advanced beginner. Pullen et al. (2003) went on to use the term "novice nursing student" to describe pre-nursing students who have not begun clinical experiences. Pullen and colleagues' study demonstrates the difficulty in adapting Benner's nomenclature to nursing education research.

Neill and colleagues' (1998) findings suggest that within one group of nursing students there may be more advanced and less advanced novices. Botti and Reeve (2003) made the same claim in their study of nursing students, aimed to identify the thinking processes used by novice nurses. They also pointed out that some nursing students were moving towards more expert practice. They recognized the lack of fit with the term "novice" by saying, "Implicit in the methods and tasks used to measure novice nurses'

decision-making has been the assumption that nursing students can be grouped under the label of 'novice,' and studied in relation to expert decision-making" (p. 48).

Dillon's (2002) findings support Neill and colleagues' (1998) proposal that nursing students do progress through developmental stages, beginning with novice, then advanced beginner, then competent. Dillon's student developmental stage model illustrates how students progress through the stages as a function of experience and time. Her quantitative study focused on the cognitive, competence and confidence levels of students at the end of the first semester of clinicals compared to students at the end of the first year of clinicals. At graduation they should be "ready to begin a new clinical practice developmental model" (p. 1). In other words, although they reached competence as students, they were not competent as nurses.

Although both Neill and colleagues (1998) and Dillon (2002) propose that nursing students progress from novice to advanced beginner to competent, it must be remembered that Benner (1984) stated that new graduates perform at the advanced beginner stage. Further, C. Tanner (personal communication, May 2006) stated that nursing students do not reach the competent level. In fact, Benner, Tanner and Chesla (1996) described competent nurses as those with more than one and one-half years of experience in the same unit. This illustrates that the use of the same terms (novice, advanced beginner, competent) that Benner used when referring to practicing nurses can add confusion when discussing skill acquisition stages in nursing students.

More research needs to be done that explores the skill development of nursing students. A review of the literature reveals an uneasy fit of Benner's model to nursing students. Although *Novice to Expert* is an appropriate framework for future studies, care

must be taken when applying Benner's (1984) work to nursing students, since the original work was aimed at practicing nurses.

Interpretive Framework

A thorough review of literature about nursing students' cognitive and moral development reveals a scarcity of studies utilizing a theoretical framework based on the study of women. This is important, considering that approximately 95% of nursing students are female (Domrose, 2003). Further, almost all of the literature on nursing students' skill development was based on skill development of practicing nurses. There is no mention in the literature about the possibility that nursing students' cognitive, moral and skill development is different than the development of practicing nurses. This significant gap in the literature calls for a study of nursing students using an interpretive framework that is based on research on women and research on nursing students.

Four classic works on cognitive, moral and skill development will inform this study. Benner's (1984) *From Novice to Expert* will be used as a springboard for examining skill development. Gilligan's (1982) *In a Different Voice* will offer a lens through which to view women's moral development. Belenky and colleagues' (1997) *Women's Ways of Knowing* will supply a description of women's cognitive development. Finally, Benner, Tanner and Chesla's (1996) *Expertise in Nursing Practice* will provide a description of the expected cognitive, moral and skill levels of a graduating nursing student entering the field. These four works will be outlined in detail.

Skill Development

In the book, *From Novice to Expert: Excellence and Power in Clinical Nursing Practice*, Benner (1984) applied the Dreyfus Model of Skill Acquisition to nursing. In

Benner's study, beginning nurses and practicing nurses recognized for their expertise were paired, observed, and then interviewed separately to identify and understand the differences in their clinical performance and their appraisal of clinical situations. In addition to the pairs, 51 experienced nurses, 11 newly graduated nurses, and 5 senior nursing students were interviewed in small groups.

In the study findings, Benner described performance characteristics for five levels of nurses: novice, advanced beginner, competent, proficient, and expert. The novice was described as:

. . . that stage in the Dreyfus model of skill acquisition where no background understanding of the situation exists, so that context-free rules and attributes are required for safe entry and performance in the situation. It is unusual for a graduate nurse to be a novice, but it is possible. For example, an expert nurse in gerontology would be a novice in a neonatal intensive care unit. Many first-year nursing students will begin at the novice stage; however, students who have had experience as nurse's assistants will not be novice in basic nursing skills. (p. 296)

Although Benner stated above that many new nursing students begin as novices, the *Novice to Expert* study is not really about new nursing students. Indeed, when the five stages were first described, Benner wrote a section called *Implications for Teaching and Learning* following each stage *except* the novice stage. This is understandable, since the research focus was on practicing nurses, and Benner stated that "the newly graduated nurse will perform at the advanced-beginner level" (p. 296), not the novice level. Benner did, however, include the novice stage in recommendations regarding nursing education, acknowledging that it is probably not necessary "for instructors of the novice to be able

to perform clinically at the advanced levels” (p.186). On the other hand, instructors of the “advanced student” should perform at advanced levels of skill acquisition. This is evidence that Benner recognized that all students are not novices, and that they progress through stages during their nursing education.

The next stage in Benner’s model is the advanced beginner, who can “demonstrate marginally acceptable performance; one who has coped with enough real situations to note, or to have pointed out by a mentor, recurring meaningful situational components” (p. 291). Benner, Tanner and Chesla (1996) further described the characteristics of advanced beginners, which will be outlined later in this chapter.

Nurses with more than one and one-half years of experience in one unit typically perform at the competent level. The competent nurse is exemplified by conscious, deliberate planning, and by increased efficiency.

The proficient nurse grasps a situation as a whole, based on a deep background understanding of the situation. The proficient nurse has experienced a qualitative change in her approach to patient care. She has learned from experience to consider fewer options and hone in on the salient characteristics of the problem.

In the final stage of the model, expertise is developed through a process of “comparing whole similar and dissimilar clinical situations with one another, so an expert has a deep background understanding of clinical situations based upon many past paradigm cases” (Benner, 1984, p. 294). Experts no longer rely on rules and guidelines to direct their actions. They have developed an intuitive grasp of each situation and consider only a very few options before being connected to the problem solution.

Critique

Several articles have been written that critique *Novice to Expert*. Most are concerned with Benner's explications of intuition and expertise. English (1993) asserts that the strength of Benner's model is the emphasis on clinical nursing care and a holistic approach that is more meaningful to practicing nurses than past task-oriented, acontextual approaches. However, coming from a cognitive psychology perspective, English disputes Benner's definition of intuition and is not convinced that it is a characteristic of experts only. English questioned why Benner did not record negative incidents where intuition failed and did not ask non-experts about intuitive experiences. English also argued that Benner did not clearly define the expert nurse, offered no guidance to nurses on how to become experts, and did not explain why all nurses cannot become experts.

In response to English's (1993) critique, Darbyshire (1994) stated that Benner's work "is among the most sustained, thoughtful, deliberative, challenging, empowering, influential, empirical... and research-based bodies of nursing scholarship that has been produced in the last twenty years" (p. 760). Darbyshire asserted that English misread Benner's work and misunderstood its philosophical base of Heideggerian phenomenology. Darbyshire stressed that judging an interpretive work using a positivist traditional-science worldview is not appropriate or accurate. Paley (1996) critiqued both English and Darbyshire, calling for nursing to not be distracted by the rhetoric of the science-phenomenology rift.

Purkis (1994) claimed that Benner "ignores crucial aspects of how language operates in the construction of a critical incident" (p. 333). In other words, when nurses recall critical incidents, the language they use illustrates what the story is really about. If

Benner had used observational cross-checks and triangulation of data, Purkis claims that the interpretation of the accounts would have been more accurate.

Cash (1995) criticized Benner's methodology and her interpretation of nursing, stating that Benner ignored issues of power, especially when describing intuition. Specifically, when nurses experience intuition, they need to have power in order to take action based on that intuition. Methodologically, Cash argues that Benner did not acknowledge and locate the data interpreters, who had power to judge participants' narratives through the lens of authority and tradition.

Padgett (2000) synthesized critiques of Benner's work, which included sample limitations, decontextualized exemplars, and the unacknowledged position of the researcher. Since the sample was limited to critical care nurses, and the data were qualitative, Padgett warned that Benner's findings should not be used to generalize to all nurses. Further, Padgett asserts that Benner's exemplars appear to say that all nurses have these experiences, yet they were gathered from specific incidents that were not well fleshed out. Finally, the voices of Benner and the data interpreters were silent, and their positions were hidden. Padgett called for renewed intellectual discourse and debate about Benner's work in order to "maintain its vitality, relevance, and challenging edge that it originally had" (p.263).

Moral Development

Gilligan (1982) points out that, beginning with Freud, research on psychological development has been conducted using men as subjects. Therefore, when moral development theory is applied to women, women are seen as deficient and deviant.

Gilligan asserts that it is not women who are deficient, but the psychological research itself, which was based on the original researchers' biased, male point of view.

In her classic work about moral development, *In a Different Voice: Psychological Theory and Women's Development*, Gilligan (1982) reported on three research studies (The College Student Study, The Abortion Decision Study and The Rights and Responsibilities Study) that examined different modes of thinking about relationships and how those modes are associated with male and female voices. By using the group that has been left out in human development theory, Gilligan aimed to provide a clearer representation of women's development, enabling "psychologists and others to follow its course and understand some of the apparent puzzles it presents, especially those that pertain to women's identity formation and their moral development in adolescence and adulthood" (p.3).

The College Student Study explored identity and moral development in 25 randomly selected college students of a moral and political choice class. They were interviewed as seniors in college and then five years after graduation. They were asked questions about view of self, morality, right vs. wrong, experiences of moral conflict, and making life choices.

The Abortion Decision Study examined the role of conflict in moral development. Twenty-one women from various backgrounds and age groups were interviewed during a time when they were considering terminating their pregnancies. Twenty-one were interviewed one year after making their choice.

Hypotheses generated by the first two studies about different modes of thinking about morality and different views of self were explored further in the third study, the

Rights and Responsibilities Study. One hundred forty-four males and females matched for age, intelligence, education, occupation, and social class were interviewed at ages 6-9, 11, 15, 19, 22, 25-27, 35, 45, and 60. Eight females and eight males were interviewed at each age category. Questions were asked about identity, morality, and moral conflict and choice.

Images of Relationship

Gilligan described two images of relationships that emerged from the three studies, based on different views of self and morality. Men found safety in separation, viewing relationships as hierarchies where rule-bound competitive achievement provided a mode of connection that established clear boundaries and limited aggression. Men saw moral choice through the lens of justice. The image of relationships for women, on the other hand, was a web of connection, where violence was prevented instead of limited, and where acts of care made their social world safe. Women's judgment was contextual, viewing the world through the lens of mercy. When faced with a moral dilemma, women in the studies were more likely than men to consider how their choice would influence their relationships, because preserving connection was of the utmost importance.

Concepts of Self and Morality

Gilligan found that women operate according to an ethic of care. Women are judged by their care and concern for others, and judge others by the same measure. This contrasts with men, who base judgment on issues of fairness and justice. Women see caring as a moral responsibility. Conflict between self and others is the central moral problem for women. They struggle with the dilemma between compassion and autonomy, care for self versus care for others, looking for solutions in which no one gets hurt. The

Abortion Study highlighted this struggle, because no matter what the participants decided, someone would be hurt. Participants sought to preserve relationships, including their own relationship with self when making moral decisions.

The Abortion Study data revealed a sequence in the development of the ethics of care. Transition was driven by crisis and experience. The first perspective began with an initial focus on caring for self in order to survive. This was followed by a transition period, from selfishness to responsibility, where caring for self was questioned and then labeled as selfish. Selfishness was then replaced by a sense of responsibility for others in the second perspective. This was followed by the second transition, from goodness to truth, where women examine the inequality of caring for others at the expense of self. The third perspective, a reflective understanding of care, was reached when women realized that self and others are interdependent, and that dynamic relationships can ease the tension between selfishness and responsibility.

Critique

Gilligan's work is significant and informed this study. However, the book, *In a Different Voice: Psychological Theory and Women's Development* (1982) is academic in tone and vocabulary, making this important subject somewhat inaccessible to the average person. It should also be remembered that Gilligan's work is interpretive, and her own biases may have come into play. For example, the "contradiction between femininity and adulthood" (p. 96) may not seem like a contradiction at all to some of her readers.

Gilligan acknowledges that her work is a beginning and calls for additional longitudinal studies on women's moral judgment in order to validate the developmental sequence she

described. It would be interesting to trace the effect that Gilligan's work has had since its initial publication, but that is beyond the scope of this paper.

Very few current articles were found that critiqued *In a Different Voice*. The most recent was a meta-analysis by Jaffee and Hyde (2000) who reviewed 180 articles to determine if Gilligan's claims were supported by empirical evidence. The authors' main conclusion was that Gilligan's claims are largely untestable, because constructs like parental identification and issues of equality and attachment are not easily measured. Jaffee and Hyde's findings showed that women use the ethics of care more than men, but men and women use a mix of justice and care reasoning. These results weakened Gilligan's findings of gender differences in moral reasoning. However, the authors were not able to determine whether women predominantly used care reasoning, and men predominantly used justice reasoning, one of Gilligan's strongest assertions.

Stookey (1995) developed a causal model to evaluate Gilligan's claims. A pattern of relationships of modest strength was found between moral orientation, moral maturity, gender, perception of self and gender-role. However, bias against women in the scoring of moral maturity as predicted by Gilligan was not found. This could be attributed to the fact that Stookey's model was developed 13 years after *In a Different Voice* was published and gender bias may have undergone change during that time.

Bias against women in Kohlberg's scheme was also not found by Walker, de Vries, and Trevethan (1987). In addition, their study of 80 families found few individuals that employed consistent use of a single moral orientation. Walker (1989) conducted a follow-up longitudinal study of 78 families, using Gilligan's and Kohlberg's models. He found few violations of Kohlberg's stage sequence over the two-year longitudinal

interview period, and sex differences in moral orientation were almost completely absent. Interrelationships between the two models were weak, indicating that the Kohlberg and Gilligan models are not synonymous. Walker suggested that the two typologies were tapping different aspects of moral reasoning.

In support of Gilligan's model, Pratt, Golding, Hunter and Sampson (1988) found that women were more likely than men to use care orientation, especially in personal reasoning. However, sex differences were influenced by age, stage level, and the type of dilemma, and were not as strong as Gilligan argued.

Nokes (1989) criticized Kohlberg's cognitive-developmental theory and asserted that Gilligan's position is most applicable to nurses. Since social, relational experience is a large part of nursing practice, Nokes supported Gilligan's argument that moral development is dependent on social experience. More studies need to be conducted that apply and verify Gilligan's model. However, since the majority of nursing students are women, Gilligan's assertions that women's voices are largely unstudied and unheard are applicable to this study. Using Gilligan as a guiding framework, the researcher was sensitized to how women most likely look at clinical experiences from an ethic of care, and how measurement tools and male points of view may bias the interpretation of data. Gilligan's work is an important contribution to the study of moral development in women.

Cognitive Development

In *Women's Ways of Knowing* Belenky and colleagues (1997) interviewed 135 women to explore the experiences and problems women had as learners and knowers and included a review of their past histories of changing self concepts and relationships with

others. Ninety of the women were enrolled in academic institutions, and 45 were clients of family agencies that assist and educate women about parenting. From the interviews the authors described “five different perspectives from which women view reality and draw conclusions about truth, knowledge, and authority” (p. 3). The first way of knowing is silence, a manifestation of denial of self and dependence on external authority. Second is received knowledge, which entails listening to the voices of others. Third is subjective knowledge, wherein women listen to their inner voice and seek to discover a sense of self. The fourth way is procedural knowledge, which includes developing a voice of reason and understanding separate and connected knowledge. The final women’s way of knowing is constructed knowledge, which is an integration of the previous ways of knowing, where women find a place for reason, intuition, and the voices of others. The ways of knowing are epistemological categories, and not stages, although they do seem to have stage-like qualities. The authors suggested that more research needs to be done to determine if women move through the categories developmentally.

Silence

The authors found only a few women in this category but felt it was important to include as an anchor for their epistemological plot. Women in silence were found in the public assistance agencies and not on college campuses.

Deaf and dumb. Women in this category felt “deaf and dumb” (p. 24); not heard because they had nothing to say. When they did speak, they felt they were punished for talking too much. Their limited dialogue with others extended to a limited dialogue with self.

Experiencing disconnection. Because of their lack of conversation with others, women in silence had trouble learning from words of others. They also lived chiefly in the present, with sparse opportunities or abilities to reflect on the past or future. They felt alone in the world.

Obeying the wordless authorities. Silent women viewed authorities as all powerful and even overpowering, by virtue of their strength and position instead of their expertise. Authorities had to be obeyed for the women to stay out of trouble. Silent women saw themselves as powerless and dependent on others to guide them.

Maintaining the woman's place. Silent women accepted extreme sex-role stereotypes, believing women were passive, incompetent and subordinate, while men were active and in power. These women were unable to speak out to protest or protect themselves from abuse. Words they spoke were often labeled as someone else's words that they were simply repeating. They also tended to see things dualistically: Everything was right or wrong, big or small, black or white.

Conceiving the self. These women had a difficult time describing themselves, because they had never been asked who they are, and never thought about it. When they finally answered the question, they described themselves in terms of what they could see in their environment, as if unable to view themselves from outside their own bodies.

Seen but never heard. The authors noted that women in silence experienced a childhood of isolation and deprivation and often abuse and neglect. They did not do well in public education, indicating that it was unlikely that nursing students in this category participated in this study about moral, cognitive and skill development. However, it is

possible that some of the participants had traveled through this dangerous and lonely way of knowing.

Received Knowing: Listening to the Voices of Others

Received knowers think they *receive* all knowledge. They see themselves as recipients and not sources of knowledge. In this category, women began to see themselves as learners, often for the first time. Many said that childbirth ushered in a revolution in their views of learning. Motherhood demanded the acquisition of new knowledge, and these women discovered that they could learn by listening. Unlike the “deaf and dumb” women in silence, these women were no longer deaf, as they realized that words are central to the process of knowing. They still had little confidence in their own voices, however, and would often sit in silence, “soaking in” conversations.

Listening as a way of knowing. Received knowers were delighted when they heard peers saying things that they themselves were thinking, which gave them courage to speak without fear of judgment or ridicule. Their close friends provided safe space for them to speak and explore the use of language. They celebrated the opportunities to share intimacies and similarities with others through discussion. This agreement and common ground set the stage for them to later disentangle their own voices from the voices of others.

Received knowers viewed truth as being passed on from person to person, and not generated through one’s own experience. Women in this category trusted professors’ words more than their fellow students’ words, and they assumed their professors learned their facts from other, more learned, professors. They still had a strong dualistic sense of

right and wrong, and expected authorities to tell them what was right and what was wrong.

Women in this category have trouble with ambiguity. They want to clearly know what is expected of them. They look to authorities not only for knowledge, but also for guidance. They are literal, and struggle when asked to “read between the lines,” reflect, interpret, or apply knowledge. If this type of thinking is not rapidly dislodged in college students, they are at risk of failure or dropping out.

Comparing men and women as knowers. In Perry’s (1970) classic study of intellectual and ethical development of men in college, dualism was the simplest way of knowing that he observed. It closely resembles women’s received knowing, with some important differences. Men tended to dichotomize the world of “‘Authority-right-we’ as against the alien world of ‘illegitimate-wrong others’” (Belenky et al., 1997, p. 43). The men aligned themselves with the authorities, whereas women did not identify with the authorities. Further, the women of Belenky’ et al.’s study focused on listening; while Perry’s dualistic men lectured rather than listened.

Entering into the moral community. The moral judgment of received knowers conforms to the conventions of their society. They follow sex role expectations, which along with their dualism, leads them to choose care of others over care of self, not considering that both could take place concurrently. Women may in fact be empowered by caring for others selflessly. As they listen to the words of encouragement and wisdom they speak to others, they begin to hear and see themselves as creators of knowledge, prepared to move beyond being only recipients of knowledge.

Conceiving the selfless self. Received knowers look to others to learn about themselves and form an identity. They see themselves only as mirrored in the eyes of others, in a sort of unchanging, “snapshot” sort of way, unable to envision their own growth and development. Although some of the women in the study recognized the need to listen to their own inner voice in order to progress, they expressed frustration because they didn’t know exactly how to trust themselves to go about the task.

Subjective Knowing: The Inner Voice

This category is characterized by women’s shift away from reliance on external authority to becoming their own authority, by listening to their internal voice. Although there is a shift away from absolute dualism, women using this way of knowing still believe that there is a right answer to everything, but the truth now resides within, challenging the answers that the outside world provides.

Of the 135 women interviewed, half were predominantly subjectivist in their thinking. The researchers cited that developmental theorists such as Blos, Erikson, Kohlberg and Piaget noted that development from silence, to reliance on external authority, and then to reliance on internal authority was a task of adolescence. Psychosocial theorists such as Maslow and Riesman, on the other hand, cited transcendence of social pressure and authority as an achievement of mature personalities. Interestingly, Belenky et al. found that subjectivism was not tied to a specific age.

Women and failed authority. Entry into this category was often associated with recent changes in the personal lives of women. The changes usually involved a sudden awareness that the male authority they had relied upon had failed them. Generally, a

return to formal or public education followed the onset of subjective knowing; it did not lead to subjective knowing.

Sexual harassment and abuse. In a sample of 75 of the participants of the study, Belenky and colleagues found that 38% of the women in school and 65% of the women contacted through social agencies had experienced sexual abuse by men in authority over them. Of those, the subjectivists were most outraged, and still working through their anger. Many attributed their new way of thinking to their dissatisfaction with how they reacted silently and powerlessly to sexual abuse in their past.

Maternal authority and the woman in transition. When women in transition from silence to subjectivism left behind their trust in male authority and listened to their inner voice, they often turned to female peers and family members for sources of nurturing and encouragement. Through dialogue with other, similar women, these women in transition realized they had experience that could be valuable to others; that they, too, could know things.

Perry's view of men and the shift out of dualism. Perry's (1970) study of advantaged men at Harvard University found a parallel to Belenky and colleagues' subjectivism, which he called multiplism. The men in his study were moving away from dualism like the women in Belenky and colleagues' study, and in the areas where they perceived that the authorities did not have the right answers, individuals were entitled to their own opinion.

Hidden multiplists: Stories of advantaged women. Women of advantage frequently felt overwhelmed by the freedom they experienced in college. As they began to turn from others and listen to their own voices, they often adopted a "wait and see"

attitude, fearful of disappointing those old sources of authority that still seemed to have a pull on them. They were the polite listeners, feeling strongly that everyone should be free to express their opinions, but not feeling obligated to verbally express their own.

'Just knowing:' the inner expert. Subjectivists see truth as emerging from within, and don't recognize a process for arriving at truth. In this period, women began to value their own truth over the truth of others, acknowledging that truth is subjective, personal and formed by life experience.

Alien expertise. As subjectivist women shifted toward intuitive knowing, many rejected logic, analysis, abstraction, and even language as belonging to the old authoritarians. They favored experiential learning and talking instead of reading. Many women in this category did not accept the idea of becoming familiar with classic texts, memorizing "facts," or winning arguments as important elements of education.

The quest for self. Subjectivist women in Belenky et al.'s study were severing connections and "walking away from the past" (p.76). If experience was the greatest teacher, then that's what they wanted. Without much forethought or planning, women acted on their intuition and on what felt right and created new lives for themselves.

Procedural Knowing: The Voice of Reason

Belenky and colleagues (1997) found women in this category to be more homogeneous than those in other categories. They tended to be white, bright, young, and in college or college graduates.

Procedural knowledge is objective and oriented away from the self and toward the object that the knower seeks to analyze or understand. Using procedural knowing, women move away from silence and received knowledge, where they hear only others' voices;

they also move away from subjectivism, where they listen to only their inner voice. They begin to consider the voices of others and weigh things out, making their world less black and white. They are willing to acknowledge the gray areas of opinion and argument.

In order to leave subjectivism and enter the practice of procedural knowledge, women needed encounters with authorities that were benign and knowledgeable. Several women in the Belenky et al. study told stories of authorities, particularly teachers, whose expectations promoted their students' powers of reasoning.

Several aspects of procedural knowledge became apparent in the research. These included speaking in measured tones, knowing how, perspective taking, and objectivity.

Speaking in measured tones. Recognizing that events are open to more than one interpretation, women at this position were careful not to jump to conclusions. They thought carefully before they spoke, afraid that their inner voice had not looked at all the possible answers. They often did not speak at all, but their inner voice was not silent; it was reasoning and weighing options.

Knowing how. Emphasis in this category was on procedures, skills, and techniques. Form was more important than content. It didn't matter so much *what* one thought, but *how* one came to the conclusion. This way of obtaining knowledge felt more stable than the subjective way of knowing, when women depended upon the answer just "springing up" intuitively. It was frightening when the answer did not come. With this procedural way of knowing, they felt safer because they had procedures for figuring things out.

Perspective taking. Unlike subjectivists, procedural knowers believe that understanding can occur, but it requires communication through talking, which is a

procedure. Therefore, they are beginning to find their own voices, and acknowledging the voices of others. To really understand something, they see the value of viewing it from many different angles.

Objectivity. Procedural knowers pay attention to objects in the external world, with the goal of “seeing things as they really are” (Belenky et al., 1997, p. 99), instead of how they want them to be. They discover that in the world of subjectivism, their inner voice sometimes lies to them, and should not be fully trusted. They acknowledge the reality of other persons as valid and worth exploring.

Procedural Knowledge: Separate and Connected Knowing

Belenky et al.(1997) identified two types of knowers within the procedural knower group. Understanding was the prominent theme for some women, and knowledge was more prominent to others.

Understanding involves intimacy and equality between the self and the object to be known, whether it is a person or subject. A relationship with the object is entered into so that the woman can come into harmony with and accept the object for what it is. This epistemological orientation toward relationship is what Gilligan (1982) called *connected knowing*. People who see themselves as connected espouse a personal morality based upon truth emerging through a procedure of care.

In contrast to understanding, knowing something entails separating from the object and gaining mastery over it. This more masculine (Perry, 1970) orientation towards impersonal rules and justification is Gilligan’s *separate knowing*. People who see themselves as separate knowers espouse a personal morality based upon truth being established by way of impersonal procedures.

Separate knowing. Most of the women who were inclined toward separate knowing were attending or graduated from elite, rigorous, liberal arts colleges. Many of them refused to play the traditional feminine role throughout their lives and embraced a more male way of being and doing. They used impersonal reasoning in education and in their personal lives. These separate knowers assumed that everyone, including themselves, may be wrong, and that there are dispassionate ways (procedures) to find the truth without getting hurt. They saw power in authority directly related to the ability of authorities to offer a reasoned argument defending their point of view. In doing this, they purposely removed their own emotions from the discussion or interpretation of a topic. Loss of voice was common in these women, who wanted to “sound like you know what you’re talking about, even if you don’t” (Belenky et al., 1997, p. 108).

Connected knowing. Connected knowers use a more feminine approach to learning. They use procedures aimed to develop understanding the experiences and views of others as a doorway to knowledge. Unlike separate knowers who seek dispassionate, impersonal truth, connected knowers care about personal truth grounded in firsthand experience. They learn through an empathic process, seeking to understand what it would be like to be the other person, as opposed to seeking the truth through logic and reason, like separate knowers. Deep relationships offer them an opportunity to really get to know another view of the world. They approach learning from an attitude of trust, refusing to judge, assuming others have something good to say. They are willing to accept criticism only from others who share a common experience.

Constructed Knowing: Integrating the Voices

Women in this category believe they are engaged in the construction of knowledge. They have come to find a place for reason *and* intuition *and* the expertise of others. They have taken previous ways of knowing (silence, received, procedural and subjective) and integrated them in order to see, interpret, and interact with their world in a new way. They speak of “weaving together the strands of rational and emotive thought and of integrating objective and subjective knowing” (Belenky et al., 1997, p. 134) and creating their own way of knowing.

Belenky et al. (1997) found that constructivist women shared a number of characteristics. They noticed and cared about others. They were acutely aware of their own thoughts, judgments, moods and desire. They concerned themselves with issues of inclusion and exclusion, separation and connection. They endeavored to find balance in their lives. Struggling to find her own voice, each woman wanted to make a difference in the world. They had a high tolerance for internal contradiction and ambiguity, and learned to live with conflict, “rather than talking or acting it away” (p. 137).

Experts and truth in context. Constructivists expected experts to exhibit an awareness of complexity and a sense of humility about their knowledge. They believed that experts should listen to others as much as speak to others. Constructivists were hesitant to label anyone an expert.

The passionate knower. Constructivists entered into an intimate union with what is to be known. This was beyond the empathy utilized by the connected procedural knower. Connected procedural knowers lacked the self-knowledge to connect what they were trying to understand to their own experience. With attentive caring, constructivists

established a communion with what they were trying to understand. They developed a language of intimacy when talking about knowledge, using phrases like, “the author spoke to me,” or “I let the knowledge come to me.”

Real talk. For constructivists, conversation included discourse, exploration, talking, listening, questioning, arguing, speculating, and sharing. Listening no longer diminished women’s ability to hear their own voices. They strived to be forthright and honest and at the same time honor, acknowledge and “feel” the voices of others. Real talk is informal and collaborative; the kind of conversation where domination is absent and the focus is on reciprocity and cooperation.

Silence and conflict. Constructivists, like women using the previous ways of knowing, still experienced the feeling of being silenced. Many in this category found themselves unwilling to talk about things they cared about unless the other person was really listening, willing to engage in real talk. They had become acutely aware of silencing, but made a conscious choice to be quiet. Women using constructed knowledge often felt lonely in relationships when their partners were not willing or able to engage in real talk or accept women as fully realized individuals, able to articulate wants and needs. Some women ended up accommodating the ground rules of men after realizing that speaking their truth came at the price of loneliness.

Moral imperatives. Posing questions is central to the constructivist way of knowing. When asked what they “should” do in a moment of moral choice, constructivists in the Belenky et al. (1997) study said that it depended on the situation. They wanted more information about the context and the people involved in the moral

choice. They exhibited Gilligan's (1982) responsibility orientation to morality. To them the moral response was the caring, humanistic response.

Commitment and action. Constructivist women are highly attentive to the moral or spiritual dimension of their lives. They have a feeling of responsibility to their larger community. They acknowledge that moral conviction and values must be nurtured and placed in environments that help them grow. When making commitments, they try to balance the needs of self with the needs of others. They often speak of the "juggling act" that women perform, working hard to keep the pins of career, family and self in the air.

Critique

There was a striking lack of articles critiquing *Women's Ways of Knowing*. In their review of several epistemological models, Hofer and Pintrich (1997) said that Belenky and colleagues' choice to interview only women opened up their work to criticism, but no citations were offered of the critiques. They presented several of their own criticisms of Belenky and colleagues' work, stating that Belenky et al.'s study "provided no means to assess the gender-related nature of the findings" (p. 96). The ordering of the interview questions also posed a concern, with questions on relationships coming first. This ordering could have "primed" the rest of the interview to elicit more relationship-centered answers. Although Belenky and colleagues used Perry's work as a comparative benchmark, Perry's work was about the *nature* of knowledge and truth, but Belenky et al.'s was about the *source* of knowledge and truth. Therefore, the comparison to Perry may not have been fitting. Finally, since the study did not include women in school, Hofer and Pintrich questioned Belenky and colleagues' recommendations for

applying their model to education. However, 90 of Belenky and colleagues' participants were in fact enrolled in academic institutions.

Women's Ways of Knowing (Belenky et al., 1997) was an important guiding framework for this study. Being aware of different perspectives from which women view reality assisted in data collection, analysis and interpretation. Knowledge of how participants regarded knowing and learning guided interviewers to frame follow-up questions appropriately. Further, accurate interpretation was enhanced by viewing the data through the lens of the cognitive perspective of the participants.

Advanced Beginner Practice

Since the goal of this study was to describe how nursing students advance from lay person to advanced beginner, it is important to identify exactly what an advanced beginner looks like. Benner, Tanner and Chesla (1996) provided a description of the moral, cognitive, and clinical attributes of graduate nurses entering the field. They used narrative interviews and observation to access the everyday practice and skill of 130 hospital nurses, mostly working in critical care, over a period of six years. The study expanded and illuminated the work first begun in *Novice to Expert* (Benner, 1984). The authors asserted that nurses enter the field as advanced beginners, so the lay and novice stages were not included in the study. New graduates, practicing for six months or less, were interviewed and observed. These advanced beginners were found to live in a very different clinical world than expert nurses. More experienced nurses were also studied, but for the purpose of this literature review, only the advanced beginner information will be included in the following summary.

Requirements for action. Advanced beginners did not see their patients as individuals but instead as a set of complex requirements that were of equal importance. Their narratives often included descriptions of intense, incapacitating anxiety and worry about their own competence. Tending to the patients' physical and technological support, and organizing, prioritizing, and completing tasks by the end of shift were the advanced beginners' main concerns.

Clinical situation as source of learning. Advanced beginners demonstrated a partial knowledge of the clinical picture and had difficulty seeing the "big picture," especially in patients with multiple problems. They saw clinical situations as an opportunity to fill in their gaps in knowledge and experience, and looked forward to the day when they could grasp situations like a more seasoned nurse. This attitude gave them a kind of freedom to use clinical situations as learning opportunities, because they did not yet feel fully responsible for patient outcomes. They could only see and deal with one day or moment at a time, with very limited knowledge and expectations about illness trajectories. They had a heavy reliance on the expertise of other staff members and needed frequent and consistent coaching to relate theory to practice.

Clinical situation as ordered and regulated. Advanced beginners relied on theory and procedures that they had learned from nursing school and other nurses. They viewed clinical situations as puzzles to solve by applying the right knowledge. Problems came up when they could not call to mind the correct procedural or theoretical knowledge for the situation at hand. In crisis situations, advanced beginners strived to prioritize and sought direction from others to guide their actions.

Clinical situation as a test of personal capabilities. Advanced beginners were filled with anxiety when faced with something new, and their narratives focused on how they got through it, instead of how their patients got through it. This self-consciousness may assist beginners to consciously reflect on the role of the nurse, helping them to learn about power relationships and how nurses can affect situations (Benner et al., 1996). Anxiety about patients was seen to evolve from fear of patients' dying to worrying more about patients' changing status. With more experience, they began to understand how small aspects of patients' conditions can foretell important problems.

Advanced beginner clinical agency. The authors define clinical agency as "the experience and understanding of one's impact on what happens with the patient and the growing social integration as a member and contributor of the health care team" (Benner et al., 1996, p. 60). Although advanced beginners are filled with anxiety and doubt their value to the health care team, they feel exceedingly responsible for patient outcomes. Four themes emerged from their narratives: procedural practice; delegating up; learning the skill of involvement; and agency within the health care team.

Advanced beginners' nursing actions were guided by task requirements such as charting, treatments, medications, and following medical orders. Patient condition and progress were peripheral to the imperative to complete tasks by the end of shift. In fact, tending to immediate patient needs produced anxiety for beginners because it ran the danger of getting them off schedule. In the event of rapidly changing patient conditions, advanced beginners missed cues and continued care in a rule-governed, routinized way.

Advanced beginners in the study relied heavily on physicians and more experienced nurses to make clinical decisions. They accepted the judgments of those

authority figures without question. Their narratives suggested that they did not feel responsible for care, as evidenced by the use of the term “they” instead of “we” when referring to the treatment team.

Although the advanced beginners felt unable to attend to the psychosocial needs of patients and families, they wanted to learn how to relate to them properly. They looked to more experienced nurses for positive and negative examples of nurse-patient relationships. They were able to identify inappropriate relationships when they witnessed them. They had the ability to identify with their patients because they shared the common experience of being new to the intensive care unit environment.

Paradoxically, advanced beginners felt strongly responsible for patient outcomes, even while doubting the value of their own contributions to patient care. They had great trust in the ability of medicine to cure and comfort. Situations where they could not cure or comfort severely challenged their sense of agency and left advanced beginners feeling defeated and aware of their own limitations.

Nursing Education

Benner, Tanner and Chesla (1996) acknowledged that students progress through skill acquisition stages and are not all novices. In other words, not only are there developmental differences in practicing nurses, but there are also developmental differences in nursing students as they gain experience in academics and clinicals.

Although the study sample did not include nursing students, the authors made the following recommendations about nursing education: 1) For absolute beginners, assign rule-based activities that help students apply theoretical knowledge; 2) Early in the program, encourage analytical clinical thinking by planning for decision making and

recognizing relevant aspects of a clinical situation; 3) As students advance in analytical thinking, emphasize learning about individualized care; 4) Guide students in clinical knowledge development; and 5) Provide opportunities for students “to develop habitual practices and skills in reflection on practice in ways that stay true to the clinical issues at hand” (p. 324).

Benner, Tanner and Chesla (1996) described advanced beginners living in a clinical world seen as a set of requirements for action, a source of learning, a series of ordered and regulated events, and a test of personal capabilities. Their study did not, however, examine exactly how graduate nurses became advanced beginners. Their study informed this study by providing a description of exactly where the students end up in their developmental journey from lay person to advanced beginner nurse.

Summary

It is clear that the moral, cognitive and skill development of nursing students has not been studied carefully. Much of the research on nursing students' skill development (Botti & Reeve, 2003; S. Carlson et al., 2003; Dillon, 2002; Neill et al., 1998; Pullen et al., 2003) is based on Benner's (1984) *Novice to Expert*. However, since Benner's original work was really not about nursing students, applying her model to nursing students may result in an uncomfortable fit (Dillon, 2002; Neill et al., 1998).

A clear picture of how new students progress, and what shows up as concerns for them is missing in the literature. The literature does, however paint a picture of new students under stress. The major themes revealed were generally negative in tone, such as discomfort (Jackson & Mannix, 2001), uncertainty (S. Carlson et al., 2003), overwhelmed (Gilchrist, 2003), anxious (Beck, 1993) and confused (Neill et al., 1998).

Simply knowing that new students are under stress is not enough information to guide education.

Dillon's (2002) quantitative study is the only one that described nursing student development in detail. The study, however, did not include moral development and the application of terms such as novice and competent was somewhat imprecise. New terms are needed to distinguish nursing students' development from practicing nurses' development.

Studies about cognitive development (N. A. Frisch, 1987; Holden & Klingner, 1988; McGovern, 1995; Valiga, 1983) uniformly used male-tested measurement tools and showed that cognitive development makes minimal progress during nursing school. On the other hand, the only study (Sublett, 1997) that used a framework based on studies of women found that nursing students had high levels of cognitive development. Clearly, more studies need to be conducted about the cognitive development of nursing students, using gender-appropriate measuring tools.

Moral development was generally found to increase in nursing school (Arangie-Harrell, 1999; Auvinen et al., 2004; Juujärvi, 2006), and nursing students were found to use care reasoning more than justice reasoning (Juujärvi, 2006; Peter & Gallop, 1994). Interestingly, except for one study (Kim, Park, Son & Ham, 2004) moral development showed increases regardless of whether the measuring tools were male-based or female-based.

A clear picture of what new nurses look like in the areas of cognitive, moral, and skills development is well described by Benner (1984) and Benner, Tanner and Chesla (1996). New nurses concern themselves with tasks and learning and depend on others for

guidance. This picture of advanced beginner nurses is an important description of the outcomes of nursing education. What is missing in the literature, however, is a description of exactly what process students follow and what experiences enhance their development. Additionally, the literature offers few descriptions of nursing students' concerns during clinical experiences. It is important to study the concerns of nursing students in order to understand how they develop from lay person to advanced beginner.

No research has been done that examines the possibility of a level that occurs before novice. It is important to examine the differences in the cognitive, moral and skills development of new students compared to students with more clinical time, in order to guide educators who teach students at different levels. If instructors and preceptors are aware that students progress developmentally, then expectations between them and their students will be more compatible, enhancing the educational process.

Based on this review of literature, it is clear that research needs to be done about the central concerns of nursing students and their moral, cognitive and skill development. This knowledge will help educators to know what educational experiences might enhance students' progress. The frameworks used to inform research about skill development should be based on nursing models (i.e., Benner, 1984; Benner et al., 1996) that describe new nurses, to be used as a point of reference. Further, frameworks related to cognitive (Belenky et al., 1997) and moral development (Gilligan, 1982) should be gender-appropriate.

CHAPTER III: METHODOLOGY

This chapter presents a discussion of interpretive phenomenology, the assumptions of the study, and the study design and rationale in relation to the research questions. It contains a comprehensive description of the research design and methods, including choice of setting, selection of participants, data collection and methods, and all procedures used in the study. Procedures for ensuring methodological rigor are described, as well as provisions for the protection of human rights.

Interpretive Phenomenology

The purpose of this study was to understand the central concerns and moral, cognitive and skill development of nursing students as they progress from lay persons to advanced beginners. Explanation and prediction was not the aim. Therefore, a qualitative, interpretive approach would best illuminate the contextual lived experience of nursing students as they develop in the domains of interest. An interpretive approach was used instead of a descriptive approach in order to reveal the participants' understanding of their lived experience situated in their own history. As Benner and Wrubel (1989) explained,

The person is a self-interpreting being, that is, a being who is embodied intelligence brought up in the world of meaning, who has concerns, all of which provide embeddedness (connection) in a situation grasped in terms of its meanings for the self. Such a being cannot be studied objectively, because such an objective, de-situated, ahistorical study will always miss the essential aspect – the self-interpretation, the lived meaning. (p. 112)

The goal of interpretive phenomenology is to offer increased understanding and articulate the “practices, meanings, concerns and practical knowledge of the world it interprets” (Benner, 1994, p.xvii). Since little has been studied about nursing student development, their practices, meanings, concerns and practical knowledge are largely unarticulated. Little is known about what they bring to clinical in terms of moral development, cognitive functioning and clinical proficiency. Educators naturally assume that new students function lower in all three areas than experienced students, and that their meanings, concerns and practical knowledge will change over time. However, the research findings to back up those assumptions are inconsistent (Arangie-Harrell, 1999; N. A. Frisch, 1987; Kim et al., 2004; McGovern, 1995; Sublett, 1997; Valiga, 1983). If educators could know the central concerns of nursing students, what they bring to clinical, and how they progress, then nursing education could be changed to meet the needs, abilities and expectations of nursing students. It is therefore important to begin in their world of situated, concernful actions during day-to-day moral, cognitive and clinical comportment.

Philosophical Assumptions of Interpretive Phenomenology

Interpretive phenomenology was developed by Martin Heidegger, a 20th century German philosopher. He challenged the Cartesian mind/body split by asserting that researchers should be concerned with ontological questions about what it is to be human, instead of Cartesian epistemological questions about how we come to know. “For Heidegger, the answer to the question of knowing arises out of the answer to the question of being” (Benner & Wrubel, 1989, p. 41), making, ‘What is it to be human?’ the primary question in research.

What it is to be Human

According to Heidegger (1962), a person is a self-interpreting being, becoming defined in the course of living. A person has “an effortless and nonreflective understanding of the self in the world. People can have this understanding because they are always situated in a meaningful context and because they grasp meaning directly” (Benner & Wrubel, 1989, p. 41). They constitute and are constituted by situations, experiences and activities. Although Heidegger acknowledged that people are capable of thinking reflectively, he proposed that deliberative, abstract thought was not the only way people made sense of or engaged their world. “Heidegger’s concern was to illuminate what kind of knowing occurs when one does not stand outside of the situation, but is involved in it. This concern was preeminent because it seemed to him that most of a person’s being was engaged in particular situations” (Benner & Wrubel, 1989, p. 41). Benner and Wrubel (1989) outlined five aspects of being human that portray the Heideggerian perspective of phenomenology: embodied knowledge, background meaning, concern, the situation, and temporality.

Embodied knowledge. The Cartesian mind/body separation identified the mind, located in the brain, as the knower. Heidegger recognized that the body has at least two types of knowing: the habitual, cultural body and the body using tools. The habitual, cultural body knows how to be in the world. For example, depending on our culture, we “just know” how far to stand from someone during a conversation. It is when we reflect on the exact distance that we begin to doubt our body’s intelligence.

The body using tools is uncertain at first, reflective and concentrating. For example, when students first learn to take blood pressure, their minds are engaged with

remembering each procedure in order. But with practice and experience, the body takes over. They begin to take blood pressure less “mindfully” and more “bodily,” with the feeling that the equipment is an extension of the body. They notice that if they really think about and analyze what they are doing, the procedure begins to break down.

Background meaning. Background meaning is a way of understanding the world unreflexively; it is what a culture gives a person when he/she is born, providing context. “It is that which determines what counts as real for that person. It is a shared, public understanding of what is . . . it allows perception of the factual world “ (Benner & Wrubel, 1989, p. 46). Although people take up background meaning in individual ways, they are limited by the range of possibilities that are culturally available. For example, the background meaning of what it means to be a nursing student may be taken up and manifested in different behaviors by different students, but generally within commonly held notions and boundaries that limit the choice of behaviors.

Concern. Another facet of being human is that because things and people matter to us, we become involved in the world (Benner & Wrubel, 1989). What people care about or are concerned about answers the question of why people do what they do or make the choices they make. According to Benner (1994), concerns “dictate what will show up as salient and therefore what will be noticed in the situation” (p. 105). In this study, narratives of nursing students were told through the lens of what they noticed and what mattered to them in particular situations.

Heidegger asserted that present activities are assigned meaning according to future purpose. For instance, nursing students interpret a clinical event in light of how it will affect their future in nursing school, or how it will assist them to be a good nurse.

They are investing in themselves, and their concerns reflect that investment. Further, nursing students are embedded in the cultural world of professional nursing education that has its own historical-cultural contexts and traditions. All of these factors influence how they tell their stories of concerned practice, and what they regard as salient. Researchers are also always interpreting their own experiences according to future purposes, investments, and concerns, making each step of research an interpretive process (Johnson, 2000).

This study aimed to uncover the concerns of nursing students in order to understand what they notice during clinical experiences that influences their patient care, their learning and their moral, cognitive and skill development. Concerns naturally came to light as their stories unfolded. Their narratives wrapped around and were shaped by their central concerns. A picture of changing concerns emerged as they reflected on clinical events from the beginning to the end of their formal nursing education. Knowing the central concerns of nursing students will inform nurse educators, providing understanding of how central concerns, and therefore patient care and student learning needs, change over time.

The situation. A person engages embodied knowing, background meanings, and concerns to interpret, relate to and interact with a situation. People grasp a situation in terms of what it means to the self (Benner & Wrubel, 1989). Change of context, or encountering an unfamiliar situation, can cause breakdown when old ways of being do not facilitate smooth functioning. Nursing students, for instance, are faced with a foreign situation in clinicals, where their taken-for-granted embodied knowledge, cultural

background meanings, and concerns do not guide them in how to interact with their new world.

Temporality. Nursing students come to clinical with their past experiences and anticipations for the future. They are not ahistorical, de-situated snapshots frozen in time, but have been and are being constituted by their experiences. Their present moment is connected to all of their past moments, because their present moments are infused with their personal understandings of their past lived experiences.

Modes of Engagement

An assertion of Heideggerian phenomenology is that people who are engaged in day-to-day life or an activity in which they are skilled, such as nursing care provided by experienced novices, do not reflect upon or notice closely what they are doing, unless something breaks down. When the activity is running smoothly, it is taken for granted. A key characteristic of expert nursing care is that it typically runs smoothly and is therefore taken for granted, resulting in the lack of articulation about what nurses really do, and about what it is like to be a nurse.

Heidegger described three modes of engagement or involvement in day-to-day life and skilled activities: ready-to-hand, unready-to hand, and present-to-hand (Benner & Wrubel, 1989; Heidegger, 1962; Leonard, 1994; Plager, 1994). In ready-to-hand engagement, the activity is running smoothly, or as expected, so the person is absorbed in the activity and does not notice it; it is taken for granted. Equipment is seen as an extension of the body because of the person's active involvement in the activity (Benner & Wrubel, 1989). For example, when a nurse is taking a blood pressure, she may not afterward be able to articulate exactly what she did, because in the ready-to-hand mode,

the blood pressure equipment feels like an extension of her body that she does not consciously notice. Because this mode of engagement is largely transparent, unacknowledged and unarticulated, hermeneutic interpretation focuses on this mode and the unready-to-hand mode (Plager, 1994).

Unready-to-hand refers to equipment or activities that are noticed because of breakdown. Breakdown may occur because the equipment itself does not work or because of something related to the person, such as loss of maximum grasp or self-consciousness (Benner & Wrubel, 1989). Nursing students are generally operating in this unready-to-hand mode, because they lack experience to fully grasp clinical situations, and are self-conscious as they learn new skills under close supervision. In this mode of engagement aspects of equipment or practical activities stand out or become more noticed, so researchers often focus on this mode of engagement (Benner, 1984).

In the present-to-hand mode of engagement, the person stands back from practical activity and equipment and observes or reflects on the situation (Benner, 1994). The person describes the equipment as an object instead of what it is like to be with or experience the situation with the object (Benner & Wrubel, 1989). This Cartesian mode of involvement is more objective and less involved, seeking to describe characteristics of the situation instead of the actual lived experience. Instead of capturing what it is like to take a blood pressure, descriptive terms capture the objective properties of the equipment and procedure, such as pressure, pulse, duration, arm position, etc. This mode of engagement is what characterizes beginner practice.

The purpose of interpretive phenomenology is to uncover that which is hidden, and to make practical knowledge visible (Benner, 1994). This unfolding of meaning and

understanding occurs during engaged conversation between the interviewers and the interviewees. It is recognized, however that this revealing is never complete and whole. Although engaged conversation brings worlds closer together, the researchers recognize that they are visitors in the participants' world. They can narrow the distance between the two worlds by adopting a stance of openness, curiosity and wonder (Gadamer, 1989; in Johnson, 2000). This phenomenological perspective on meaning and understanding, focusing on what it means to be human and taken-for-granted ways of being in the world, framed both the research questions and methods for this study.

Research Questions

- 1) What are the central concerns of nursing students during clinical situations, and how do those concerns change over time?
- 2) How do nursing students describe and interpret clinical experiences that have contributed to their moral, cognitive and skill development?

Study Design and Methods

This qualitative study design was informed by Benner (1984) and Benner, Tanner and Chesla's (1996) studies on expertise in nursing practice. Narratives were used in this study because meaning is often revealed as stories unfold. According to Benner (1994), Narrative accounts of factual situations differ from questions about opinions, ideology or even what one does in general, because the speaker is engaged in remembering what occurred in the situation. Spoken accounts allow the speaker to give more details and include concerns and considerations that shape the person's experience and perception of the event. A story of an event is remembered in terms of the participant's concerns and understanding of the situation. Therefore,

narrative accounts are meaningful accounts that point to what is perceived, worth noticing, and what concerned the storyteller. (p.110)

It is therefore important to begin in nursing students' world of situated actions during day-to-day moral, cognitive and clinical comportment. Instead of asking them to quantify or think back about how they operated or felt about a particular experience, sharing their narratives gives them a chance to uncover the clinical world they take for granted that is often unclear to students themselves. Narratives provide access to what participants deem the important parts of their lived experience. For both the researchers and participants, "the graphic revelations in stories paint a picture of how past, present, and future blend together to form a meaningful, coherent view of a position in the world" (Blecke & Flatt, 1993, p. 303).

Setting

The study took place at two colleges of nursing in a western state in the United States, and at a national nursing student convention in a western state. Both colleges offer baccalaureate degrees in nursing. Colleges that offer only associate degrees or "RN to BSN" (Registered Nurse to Bachelor's Degree) programs were not chosen because most of their senior nursing students already work as nurses, which would exclude them from the study. Interviews took place in meeting rooms on campus at convenient times for students, and during breaks at the nursing student convention.

The first college is part of a large faith-based private university with 28,000 students and 320 undergraduate nursing students. The focus of the university is undergraduate education. Groups of 48 to 64 nursing students progress through five clinical semesters. Their inpatient clinical experiences include medical-surgical,

pediatric, intensive care, operating room, psychiatric, geriatric, and obstetrical nursing. Experiences in the community are provided through a variety of locations, such as public schools, senior community centers, homeless centers, and Head Start pre-schools. Their final semester includes a “capstone” experience where they work intensively with one nurse preceptor in a specialty area for 220 hours. Although the research investigator is a faculty member at this college, and fairly well known by the senior students, she does not teach courses to seniors and has no authority or influence over their grades.

The second college is part of a large state research university with approximately 28,600 students. There are 256 undergraduate nursing students, progressing through four semesters in groups of 64. Clinical courses include nursing skills and arts, care of adults, maternity/pediatrics, community health/home care, and psychiatric nursing. There are 225 capstone clinical hours, taken during the same semester as psychiatric nursing clinicals, which give this university’s students a heavy clinical load.

The third interview location was at an annual convention of a national nursing student association. Approximately 3,500 nursing students and faculty were in attendance from every state in the United States and from a wide variety of nursing programs.

Sample

A purposive sampling method was used to recruit participants, who had to be at least 18 years of age and able to give informed consent. They had to be senior students enrolled in a traditional baccalaureate nursing program that included clinical experiences. Since this study was specifically about nursing students, those who were working as Registered Nurses, Licensed Practical Nurses, Certified Nursing Assistants or other health care workers involved with direct patient care were not invited to participate.

Students in these jobs may already have passed through learning and development stages that no longer qualify them to be called nursing students in line with the purposes of this study. Due to their professional nursing experience, their central concerns were likely to be very different than the central concerns of nursing students without professional patient care experience.

According to Patton (2002), “any common patterns that emerge from great variation are of particular interest and value in capturing the core experiences and central, shared dimensions of a setting or phenomenon” (p. 235). In keeping with this concept of maximum variation sampling, an effort was made to recruit students who represented a variety of ages, in order to mitigate the effect of aging and life experience on moral, cognitive and skill development and central concerns. Students from different family configurations (married, single, with or without children, for example) may have different life experiences and central concerns. Other variables such as gender, previous college experience, and work experience may also have an effect on moral, cognitive and skill development and central concerns and were considered for variety in representation. This maximum variation sampling aimed to prevent or mitigate patterns from occurring if all of the students were, for instance, second college degree seekers. With a variety of characteristics, the patterns that emerged were more likely attributable to the experience of the “average” senior nursing student. Additionally, the interview groups at colleges were comprised of students from different clinical groups, in order to elicit stories that they hadn’t told or heard before, and to diminish the effect that a shared clinical instructor may have on the narratives. This strategy aimed to add freshness and detail to the stories, encouraging the tellers to share it “for the first time.”

Eight male and 12 female senior nursing students participated. Their ages ranged from 23 to 53 years of age, with a mean of 31.5 years. Eighteen characterized themselves as white, one as African American and one as white and African American. Twelve were married or lived with a partner; seven were single and one was widowed. Thirteen were parents. Eleven had previous baccalaureate degrees; six of those degrees were in health-related fields. Nine were employed and 11 were not. Half were in generic baccalaureate nursing programs and half were in accelerated programs.

Procedures

The researcher visited classrooms of senior nursing students at each college to explain the study and invite participation. To facilitate maximum variation sampling, each student interested in participating in the study completed a demographic form (see Appendix A) at the time the researcher visited the classroom. The form included questions about contact information, age, gender, education, family configuration, work experience, and clinical group membership. After reviewing the demographic forms, the researcher invited, by email, a variety of volunteers to participate in small group interviews.

At the nursing student convention, the researcher sat at a table in the convention center and as nursing students walked by during breaks, asked if they were seniors in baccalaureate programs. If they answered positively they were then asked if they were interested in participating in the study. If they agreed, they filled out the demographic form and were asked to meet with a small group later in the day. Two groups of students were recruited using this method. Due to the small number of passers-by who were seniors in baccalaureate programs, all who volunteered were asked to participate in the

study. The researcher did not review the demographic forms before inviting participation. Therefore, participants at the convention represented a convenience sample instead of a maximum variation purposive sample.

The researcher conducted all of the interviews, which were audio tape recorded. The researcher and a research assistant took notes during the interviews, recording pauses, facial expressions and other body language or contextual cues that added detail and clarity to the transcripts that might have been lost during transcription. The researcher and assistant also transcribed field notes as soon as possible after each interview, recording impressions and insights that guided subsequent interviews. A reflexive journal was kept to record methodological decisions, daily schedules and a personal diary, in order to provide an audit trail to enhance trustworthiness of the data (Lincoln & Guba, 1985).

Participant burden was considered, and it was determined to offer each participant a \$25 Target store gift certificate to compensate for the time they spent participating in the study. The gift certificate was awarded after the first group interview. Participants were awarded \$10 Target gift certificates for participating in second interviews. In addition to decreasing participant burden, the gift certificates helped prevent or decrease participant attrition.

Data Collection

Small group interviews were held consisting of four to six senior nursing students. Participants were asked to tell stories about events in clinical that stood out for them because the situation was challenging, or they felt stumped, worried or concerned about what they should do; or situations that stood out for any reason. This question was

selected because stories about not knowing what to do would most likely involve emotion, and emotions enhance the ability to form vivid memories of events (Hu et al., 2007). Stories that “stood out for any reason” were also embedded with emotion, and were often recalled because they highlighted participants’ central concerns. As they described their experiences, their central concerns guided their recollections of what was important to talk about, addressing the first research question. Additionally, “not knowing what to do” required action on the part of students. How they decided what to do provided insights into their moral reasoning, cognition and skillful comportment, which are related to the aims of the study and the second research question.

According to Benner and Wrubel (1989), emotions are the “language of embodied intelligence” and “allow the person to be engaged or involved in the situation” (p. 96). Asking a question about an emotion-laden experience allowed participants to connect to important events that were connected to their central concerns, since people often remember things that went wrong more clearly than events that operated smoothly. Questions about ordinary experiences may not have uncovered the concerns and clinical events that helped to shape participants’ moral, cognitive and skillful practice development. When breakdown occurs, as in situations where students are stumped or don’t know what to do, details and aspects of the event become more conspicuous (Benner, 1994), thereby making it more available to a richer re-telling and more useful to research.

The interviewers asked participants to speak informally, as if they were talking to friends in an informal setting about what happened in clinical. They were asked to tell their stories directly to one another, the way they speak when no nursing professors are

present. The interviewer asked follow-up questions as a way to invite expansion of the narrative or to clarify parts of the story. She also encouraged other participants to respond with stories that were similar to or different from the ones being told (Benner, 1994).

According to Patton (2002), the “validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected” (p. 245) than with the sample size. Small groups were limited to four to six students. This number was chosen to enable all participants the opportunity to share their stories within the two-hour time frame of the interviews. Limiting interviews to two hours was chosen to avoid participant fatigue. Each college group was interviewed twice. Due to the tight schedule of events at the nursing student convention, each of the groups there was interviewed only once. Evaluation of interview data was ongoing; the number of interviews and their depth and breadth were sufficient to obtain richness and redundancy of themes (Lincoln & Guba, 1985). The interview guide itself was flexible, according to the iterative and continuous design suggested by Rubin and Rubin (1995), reflecting the knowledge and understanding gained by the research interviewer as each succeeding interview was conducted.

Small group interviews influence the kind of data gathered and were used for several purposes (Benner, 1994). First, they create a natural communication environment for participants to share their stories as they ordinarily talk, giving the researcher an emic, or insider’s view. Second, meanings can be elucidated by providing other participants with cues that trigger similar and dissimilar stories. Finally, small group conversations between students simulate the school environment, which feels more natural when talking about clinical situations that are part of their education.

Data Analysis and Methodological Rigor

A research assistant transcribed the interviews. The transcribed interviews were audited for accuracy by the investigator as soon as possible after transcription. Notes taken during the Interviews were added to the transcript where appropriate. Microsoft Office Word software was used to organize the data, guided by the research questions, tagging broad sections of text for clinical episodes and specific accounts related to central concerns, cognitive, moral, and skill development, and participants' interpretations of events. Common elements and patterns, as well as elements that were expected but not present were also noted and tagged. The tags were used to retrieve data excerpts during analysis and interpretation. The researcher and her dissertation committee collaborated in developing interpretive summaries and identifying themes, categories and paradigm cases from the data.

Analysis of the data occurred in several phases, adapting the method used by Tanner, Benner, Chesla and Gordon (1993). First, interpretive summaries of the interviews were written, to develop beginning descriptions of recurring themes. Second, themes derived from background frameworks (e.g. Benner's 1984 *Novice to Expert* model, Gilligan's 1982 psychological development theory and Belenky et al.'s 1997 *Women's Ways of Knowing*) were labeled and broadly defined. Then paradigm cases and exemplars that particularly stood out as examples of moral, cognitive or skill development, central concerns, or students' interpretations of meaning were set apart for in-depth analysis and interpretation. Finally, themes were compared across semesters, searching for change as students progressed through their nursing programs.

Packer and Addison (1989) asserted that Heideggerian interpretation is a matter of uncovering truth, but does not show things as they “really are.” The researcher allows an entity to show itself, without forcing the researcher’s perspective upon it. Further, the entity can only show itself in a way that it is capable of; there is no “right” way for the knower to uncover what he/she knows. It follows that there is no “right” way for researchers to evaluate an interpretive account. Many methods are based on a logical positivist perspective, which is not congruent with an interpretivist view. The challenge to the interpretive researcher is therefore to choose evaluation methods that may best suit the data. Trustworthiness criteria established by Lincoln and Guba (1985) and Packer and Addison’s (1989) evaluation approaches were utilized in this research study and reviewed briefly here.

Prolonged engagement. Lincoln and Guba (1985) suggested that prolonged engagement increases the credibility of the study findings. The research investigator needs to spend enough time with participants to become oriented to the environment and context of participants. The period of engagement should be “long enough to be able to survive without challenge while existing in that culture” (p. 302). Further, prolonged engagement allows an opportunity for the investigator to build trust and rapport with participants. In this study, the investigator is familiar with the two college nursing programs, having graduated from one program, and currently teaching at the other. Therefore, she has an insider’s view of nursing education. Nevertheless, students may see her as an outsider because of her position of authority as a nursing professor. Prolonged engagement could allow her to become familiar with these particular groups of nursing students and build rapport and trust. However, due to time and financial constraints, the

study was limited in time spent with participants, although two groups did meet twice. The researcher felt that the participants were generally comfortable with her and were not holding back.

Coherence. Also called plausibility or intelligibility (Packer & Addison, 1989), coherence is evident when the interpretation makes sense of the behavior being studied. Benner (1994) does not assume that a text will be completely coherent and rational, nor a perfect match between participants' narratives of practice and their actual practice:

Rather, we assume that the text contains inconsistencies and conundrums, and that the task of interpretation is to bring to light the most coherent and complete story possible. Inconsistencies and unanswered puzzles must be acknowledged. When presenting themes about the text, it is important to specify the paradigmatic narratives that evidence those themes as well as the multiple exemplars that demonstrate variation in those themes. (p. 364)

To achieve coherence, the researcher in this study searched out and focused on material that didn't make sense, subsequently asking clarifying questions of the participants. Furthermore, during the interviews, participants were asked to offer confirming and disconfirming narratives, in an effort to "make sense" of the whole picture of narratives. Additionally, paradigmatic narratives and exemplars were presented in the findings that demonstrated variation in the themes.

External evidence. Once the researcher interprets an account, it is important to move out of the text and seek outside evidence that the account is a match to what the participant meant (Packer & Addison, 1989). One way to do this is to go back to the participants and ask them if the researchers have understood what they meant. This

method has limitations, in that the participants themselves may not be able to interpret exactly what they meant by their actions, or what the narrative meant to them (Packer & Addison, 1989). However, the participants' recollections can be valuable to the interpretive inquiry. Thus, during the second interview, the researcher offered participants an opportunity to confirm or disconfirm the match between their intention and the researcher's interpretations. This strategy has also been called member checking and peer debriefing, which Lincoln and Guba (1985) described as "the most crucial technique for establishing credibility . . . and meaningfulness of findings" (p. 314).

Consensus. A convincing interpretation should make sense to others and enable them to interpret new material in its light. Consensus was sought through discussion with the researcher's dissertation committee, discussion with colleagues not involved in the project, and by careful consideration of peer response to professional presentations (Packer & Addison, 1989). These procedures are similar to what Lincoln and Guba (1985) call triangulation.

Practical implications. Although an interpretive account cannot predict future events, it is important that the account be useful and emancipatory in "freeing people from practical troubles" (Packer & Addison, 1989, p. 287). This study has the potential to change the way nurse educators look at their students, and therefore change their behavior toward them and toward nursing education. The researcher plans to publish findings in professional nursing and education journals. Findings will also be presented at professional conferences. The extent to which this study informs the practices of clinical faculty will be a way of evaluating its usefulness.

Protection of Human Rights

The researcher is a student at Oregon Health & Science University, and a faculty member at one of the colleges where interviews were conducted. Therefore, this study was reviewed and approved by the Institutional Review Boards of Oregon Health & Science University (See Appendix B), as well as the two colleges where the interviews took place.

Informed written consent was obtained from all participants before the first interview. The consent form (see Appendix B) described the expected risks and benefits from participating in the study, the methods and goals of the study, and the participant's right to withdraw from the study at any time. The consent form clearly stated that participants would be involved in a group interview and that this interview method could not provide them with anonymity during the interview. However, the form made explicit the methods used to protect confidentiality during the analysis of the data and reporting of findings. These procedures included using pseudonyms to identify participants, keeping audio tapes and transcripts in a locked cabinet in the researcher's office, and removing identifying information from the transcripts. Only the researcher knows the real names of the participants, for the purpose of contacting them again for follow-up interviews and member checks if needed. Furthermore, participants were guaranteed that participation in the study would not affect their grades in nursing school, and that none of their nursing instructors would have access to the transcripts or any information that could in any way compromise confidentiality.

Participants could have felt negative or embarrassing emotions related to the content of the narratives they told or heard. This risk of discomfort was clearly stated in

the consent form, with the understanding that participants could withdraw from the interview at any time without repercussion or loss of compensation.

CHAPTER IV: RESULTS AND DISCUSSION

In this chapter findings of the study are presented and discussed. The purpose of this study was to understand nursing students' central concerns and their moral, cognitive and skill development as they progress in nursing education. The specific research questions were:

- 1) What are the central concerns of nursing students during clinical situations, and how do those concerns change over time?
- 2) How do nursing students describe and interpret clinical experiences that have contributed to their moral, cognitive and skill development?

Students met in small groups of four to six participants. The interviewer asked them to tell about a challenging clinical experience during which they felt stumped, worried or concerned about what they should do. Probing questions were asked to elicit examples of their main concerns and moral, cognitive or skill development. At the end of each interview, in order to free the participants to discuss what they thought was important, and to flesh out the data, participants were asked to just tell a clinical experience that stood out to them for any reason.

To maintain participant confidentiality, each student chose a pseudonym which will be used as necessary in this presentation of findings. Quotes will not be identified by the students' pseudonyms unless the discussion warrants. For reader convenience, each quote is identified parenthetically by the semester it describes, and its line in the categorized data. For example, (S4:221) means that the quote can be located in the data from semester 4 narratives, beginning on line 221. The data itself is password-protected in the researcher's computer.

Students in this study came from across the United States and from different colleges and schools of nursing. The first group of participants was enrolled in a generic baccalaureate program that was five semesters long. The second group consisted of students that had previous bachelor's degrees, and their program was three and one-half semesters long, separated into seven blocks. The final two groups interviewed were from a variety of programs from around the country; some were in generic baccalaureate programs and some were in "bachelor's degree to RN" programs.

The difference between curricula around the country created a challenge in categorizing stories from specific semesters. To address this challenge, and for purposes of this presentation, the term "semester" will be used for all course groups, including quarters, semesters or blocks. Generally, in all the programs, first semester covered the first time period that students were in clinicals. Usually, this meant they were taking care of geriatric or low acuity medical-surgical patients and learning the fundamentals of nursing. Second semester usually included medical-surgical nursing, and third semester was labor and delivery/pediatrics. In five semester programs, fourth semester was usually acute medical-surgical nursing, and fifth semester was the capstone experience. In three and one-half semester programs, the last half-semester, which for this study was categorized as fourth semester, included acute medical-surgical nursing and capstone. To decrease this confusion for the reader and as a way to compare and track student progression, stories from the first two semesters will be considered "early" semesters and stories from fourth or fifth semesters or capstone will be considered "later" semesters. Stories from third semester will generally be identified as third semester stories, as narratives from this semester represented a transition from early to late semesters.

Readers interested in the exact semester the experience occurred can refer to the parenthetical information at the end of quotes.

Data analysis occurred in three phases. First, paradigm cases were identified that allowed the practical meanings and concerns of participants to unfold on their own terms (Benner, 1994). Paradigm cases are presented here as long, complete narratives so the reader can see the “whole story,” providing a view of the practical world and lived experience of nursing students. After paradigm cases were identified, thematic analyses were conducted, searching for meaningful patterns, perceptions or concerns. Finally, exemplars were identified. Exemplars are short quotes that illustrate themes and further augment and elucidate the paradigm cases. Exemplars that illustrated breakdown or puzzles were also used to present cases that contrast the concerns and meanings found in paradigm cases.

In the following discussion, paradigm cases will be presented that exemplify participants’ central concerns or moral, cognitive or skill development. An interpretive analysis of each paradigm case will then be discussed, supported by exemplars and examples from literature. Exemplars that contrast the paradigm cases will also be presented.

Central Concerns of Nursing Students

The first research question is: What are the central concerns of nursing students, and how do they change over time? According to Benner and Wrubel (1989),

A concern is a way of being involved in one’s own world in which people and things matter to one. It describes a phenomenological relationship in which the

world is apprehended directly in terms of its meaning for self. Concern is the reason why people act. It is necessary for life. (p. 408)

Throughout all semesters, nursing students' narratives illustrated three central concerns: learning by doing, relationships with staff, and patient well-being. Learning by doing was the prime reason students were in clinicals, and the centrality of this concern changed very little as students progressed through their nursing education programs. However, almost every story centered on students' relationships with staff nurses and other staff members, and often focused on how relationships with staff promoted or blocked learning. As they progressed through semesters, students grew less trusting of the skill and expertise of staff nurses as they gained their own level of knowledge, experience and assertiveness. Finally, nursing students' concern for patient well-being, although secondary to learning, showed up as a concern and also an opportunity for learning. Ways of acting upon their concern for patient well-being changed from early to later semesters. Early students focused on providing emotional support and comfort for patients, while later semester students focused their concern for patient well-being by participating in patient advocacy.

Concern #1: Learning

Across all semesters, and unchanging over time, the students' first concern at clinicals was the opportunity to learn. Clinical situations showed up primarily as opportunities to gain experience and knowledge. Stories had very little detail about patient status but instead focused on factors that would affect learning, such as the students' relationships with staff and patients and the amount of hands-on experience students were able to do. In fact, students viewed doing and learning synonymously. In

most cases, observation was considered an inferior way to learn. In later semesters, students were proactive learners, seeking out mentors and opportunities for learning while at clinicals.

The following paradigm case from fourth semester lacks any meaningful information about patient status, focusing on the student's strong desire to learn by doing. The participant's relationship with the staff nurse was in the foreground and hindered opportunities for learning, leading to frustration.

(Bean): So this is after fourth semester and I was in the pediatrics ICU [Intensive Care Unit], and I'd been there the day before and my nurse had basically let me do everything on that first day that I was there. We were there for two 12-hour shifts in a row. And so she had let me do pretty much everything on that baby, like change all the meds and this and this and this. And so the next day I was like, 'Sweet, it's going to be a good day, I've got the care under control.' She let me do so much the day before. And so . . . the second day I come back and, you know, the nurse is getting things going, we had to switch to a different baby, it was a heart baby, which I like heart babies. I was like, 'Sweet, this is going to be a good day.' And so I, so she's starting to get the meds, and so I just up, you know, and I grab the IV bag and stuff as she's getting other things ready and I'm like, 'Do you want me to prime this for you?' And she's like, 'No, that's Okay, I'll do it.' And I was like, 'No, no I can, I can help you, it's alright,' you know, 'Let me help you.' And, because she was just telling me, 'Oh, it's going to be such a busy day.' And I was like, 'Great, I can help her out,' you know. 'I know what I'm doing, I did this yesterday.' And then, um, and she's like, 'No, no really, I'll take it.' And she

took it from me. And I was like, 'Well, what do you want me to help you do? What can I do for you?' And she's like, 'Oh, just sit back, you can just watch and learn.' 'You can just watch and learn.' And I was like, 'Oh, K. Oh, I probably should have told you when I got here, um, you know, where I am in my program. You know, I'm to capstone and I can do most things. Just let me know and you can help me through things.' And she's like, 'Oh, I'm starting a capstone student next week.' And I'm like, 'Oh good, so she, she knows I'm almost there,' or whatever. And, I'm to this point. And then, I forget, we did a couple other things and another time came up where we needed to cover up the pacer wires for the baby and I had learned how to do that, putting them in the little lab tubes or whatever we did. And so I just automatically put gloves on and started to help and she looks at me and she's like, 'You're used to doing things, aren't you?' And I was like, 'Well, yeah.' And she was like, I'm trying to be positive and it's only like eight thirty and we've got to go till seven and . . . And, she, I just remember that she was like, 'You're used to doing things, aren't you?' And I was like, 'Yeah, I'm just trying to help and I want to help you and I want to learn and stuff.' And then she's like, 'Well I'm used to students just watching.' And I was like, 'Oh, Okay, well...' And she's like, 'This is going to be a long day, huh?' And anyway, she hardly let me do anything for the rest of the day. Yeah. It was a little frustrating because I felt like I could help, I could help change his diaper, you know. And there was a lot of things that I could have done, but, and I tried to jump in when she obviously had a lot to do, and I'd try to jump in and be like, 'Oh, I can do this.' Or, 'Would you like it if I did this for you.' Like, you know,

just something more miniscule, even like running and getting the parents some water, you know, just doing anything. And I started to branch out and talk to some other nurses around me and see what I could do to help them. And it was just kind of frustrating because she knew that I wanted to do stuff, she knew where I was, I mean, she didn't know for sure, but she knew my knowledge base was more than just of an observer. So . . . just kind of frustrating. Because you're like, 'I didn't pay tuition and wake up at 5:00 and drive all the way up here to just watch you do these things, you know, I came here to learn.' So it was just kind of frustrating and you wish that they'd remember back on their clinical experiences and remember what it's like [to be] a student nurse. (S4:622)

In the above narrative, it is clear that Bean's primary concern and focus was to have the opportunity to learn by doing. There is no mention of patient condition or changing status, or the appropriateness or necessity of doing certain tasks; only the strong desire of the student to "do stuff." There is a strong feeling in the narrative that Bean believed that doing is learning, so doing nothing is frustrating and represents a lost opportunity for learning.

Experiential learning is essential in the development of expertise. According to Benner (1984), experience results when "preconceived notions and expectations are challenged, refined, or disconfirmed by the actual situation" (p.3). Although nursing students come to clinical with preconceived notions and expectations, they have had very little experience. Their main task becomes gaining experiences that will allow them to challenge, refine or disconfirm their preconceived notions, expectations, and classroom learning. Learning results from being taught by actual clinical situations (Benner et al.,

1996), so nursing students are on the right track when they actively seek opportunities to learn by doing.

Doing is Learning

This strong desire to learn by doing and how to go about reaching that goal is the main focus of Bean's story. She began the shift thinking it was going to be a good day because she would be doing things. When her nurse asked Bean to just sit back and watch, she tried explaining to the nurse exactly what she was capable of doing. When that strategy didn't work, she tried to convince the nurse how helpful she could be to her by saying, "I can help. Let me help you." Being helpful to the nurse was important to Bean but was mainly used as a reason to get to do more things. Finally, Bean was frustrated with the nurse and tried a third strategy, "branching out" and asking other nurses to see what she could do to help them.

Like Bean, other students in the study seemed to innately recognize that doing is learning, so they were eager to have hands-on experiences. Bean said, "I know what I'm doing, I did this yesterday" (S4:642), highlighting how closely doing and learning are linked. It was important to students to do things in clinicals, which they valued far more than observation, lecture or written assignments. It was clear that the doing they spoke of was the doing of procedures. They didn't count such things as assessments, determining patient needs, setting priorities, patient education or critical thinking as doing.

A factor which may contribute to the students' strong focus on learning by doing may be their conception that nursing itself is about doing things. Therefore, the more they do, the more they will be like a nurse and feel like a nurse. This kind of thinking is not unexpected at this level because it foreshadows advanced beginner thinking. Advanced

beginners see clinical situations as a set of tasks to accomplish, or things to do. As nursing students look forward to practice, they can see the day when they will be expected to complete tasks on their own, and they want to do as much as possible before then.

Students were so eager to *do* things in clinicals that they were tempted to break protocol for the opportunity. The following story is an example of a student's difficulty in prioritizing what is important: learning a skill or patient safety. Although the student knew it was wrong to administer the unlabeled medication that someone else had prepared, she may have had trouble prioritizing, or even thinking straight when she had the opportunity to practice a skill. Her trust in the nurse or the nurse's perceived authority may also have overridden her better judgment.

We had a student the other day where a nurse came up to her and said, 'Go administer this' to a patient ... the nurse had already drawn it up and everything. And she handed it to her and said, 'Go do this.' Well the student was about to do it because she wanted to practice her injections. When they looked up what it was, it was enough to kill the patient. (S1:1348)

Observation is Not Learning

Bean said, "I didn't pay tuition and wake up at 5:00 and drive all the way up here to just watch you do these things, you know, I came here to learn." This statement points out how students often did not value observation and didn't consider observation as an acceptable way to learn, as evidenced by the following statements.

(Sally): I didn't want to go and watch the doctor . . . do an endoscopy; like I wanted to be doing what the nurse would do . . . I didn't want to be just following the doctor around. (S2:187)

(Fiona): My learning took place when I was paired with a really good nurse who was good at talking the whole time they were working, not just letting you watch while they worked in silence. (S5:845)

In contrast, learning actually did occur by observation when the students were engaged in the experience by being quizzed by the staff.

(Fiona): I did have a really good learning experience in clinical yesterday where I thought, 'This is the way that they should teach.' . . . I'm in with a patient who's in active labor and the anesthesiologist had come to put in the epidural. And I was more in the observer role. . . . And, the anesthesiologist starts to quiz me on everything. And, of course, I failed miserably on most of it, but he was quizzing, and he continued to drill me the whole entire time, which was wonderful for me to learn. And he said, 'I hope you don't mind.' And I said, 'No, this was great.' If only they sat and drilled you like that every single time, every time you're in the room. And even the patient commented that they learned a ton. And they said, 'This was a great learning experience.' (S5:371)

One student said that her mind wandered when observing a nurse do a procedure if the student can't ask questions. When asked what she was thinking about while observing, she responded,

That's the problem . . . if I'm not doing it and if I'm not in charge, I don't have a lot of the critical thinking going on in my head because I don't feel responsible

unless someone is specifically asking me questions. And a lot of times I don't know what I should be thinking about unless people are asking me. (S5:433)

Actively Seeking Learning Opportunities

Students recognized that they had to be proactive learners, especially when it came to learning psychomotor skills and getting a variety of experiences. When Bean realized her nurse wasn't going to let her do a lot, she said, "I started to branch out and talk to some other nurses around me and see what I could do to help them." Similarly, the following third semester student was proactive in learning skills that she wanted to learn, but avoided other skills.

You have to be very proactive in seeking skills. . . . One of the skills I really wanted to learn was starting an IV . . . I went to talk to other nurses on the floor and said, 'If you have a patient that needs an IV, come get me, because I want to try.' And that's the only way I got the skills. I wasn't proactive with the catheter because I didn't really want to do that if I didn't have to. (S2:675)

Changes Over Time

Even though students believed that observation was not the best way to learn, during first semester they felt hesitant to seek learning experiences because of their lack of experience and discomfort or shyness in a new environment. As they progressed, students realized that they had to actively seek learning experiences. By the time she got to her last semester, Fiona understood that she needed to be proactive and accountable for her own learning. Even though a lot depended on the nurse, it took assertiveness and confidence for Fiona to get the experience she wanted:

(Fiona): I think it also depends on what the nurse that you're with, you know, how proactive are they in trying to get you to try new skills. . . . Yesterday . . . the nurse says, 'Have you put a catheter in?' And I said, 'Well, I did it once on the manikin in the lab.' And, if she had given me the option of, 'Do you want to put this one in or do you want to watch me do this one?' I would have said, 'I want to watch you do this one 'cause I haven't seen it in a long time.' But instead, she said, 'Okay, you're putting this catheter in,' where, that forces me to learn and that is great. (S5:301)

Fiona's assertion, "That forces me to learn," highlights the close relationship between doing and learning. Her statement suggests that if she had not *done* the catheter insertion, she would not have learned.

Discussion of Concern #1

Study participants' main concern in clinical was to learn by doing. They saw clinical situations essentially as opportunities for learning, and generally did not view observation as a valuable learning experience unless they were being quizzed while observing. This overarching concern about learning by doing is similar to the stance of advanced beginners, who see clinical situations as opportunities for learning from practical realities (Benner et al., 1996). Also similar to advanced beginners, participants did not attend to the patient as a person. When patients appeared in the narratives, they were described vaguely in broad categories, such as Bean's "heart baby."

In Carlson, Kotze and van Rooyen's (2003) study, early students experienced uncertainty due to the lack of opportunities to develop competence. This is very similar to

the findings of this study, where students were frustrated when they did not have opportunities to learn by doing.

The centrality of this concern for learning changed very little over time, and actually became more pronounced as students progressed. This is evidenced by later semester students' increasing assertiveness in proactively seeking learning experiences.

Concern #2: Relationships with Staff

Across all semesters, students were very concerned with creating and maintaining good working relationships with staff, in order to reach their primary objective of learning by doing. They often silenced themselves and learned to use careful communication when interacting with staff. As an example of the centrality of maintaining good relationships with staff, in the following paradigm case Sam was challenged to find a balance between preserving his relationship with the nurse and providing pain relief for his patient.

(Sam): I'm in the ER right now and we had a trauma patient, so we were in the trauma room with him. And when you're in the room the nurse is in there the whole time basically. So we were in there the whole time with him and we had given him some narcotic, and I can't remember what it was, Dilaudid maybe, or something, I don't know. Anyhow, so he had on the board he could have another one. So we were out to lunch; when we came back the nurse that was in there gave us report. And she said that he could have another Dilaudid. And about an hour after that he started complaining of more pain; he wanted something for pain. And his family was in there, which makes things even worse, because, you know . . . I walked over, and they didn't say this super loud, but they asked me to

give him something else for pain. And I knew he had on the order another script for this narcotic, so I knew that we could give it to him. Um, and I wasn't a hundred percent sure that my nurse had heard, I thought he had heard, but I wasn't sure. And he obviously wasn't making any motion to give the patient the narcotic. And no matter what, I thought it was on purpose because he knew that he had the other narcotic on the order. And so I went on, and since the patient, we were right in front of the patient and the family, I really didn't feel comfortable in asking the nurse why he wasn't gonna, why he wasn't giving him this pain medication. And they were looking at me, expecting me to give it because they had asked me for it, and I said, 'Okay, I'll see what I can do.' I knew we . . . had it on the order, and so here I, I'm caught between my nurse, who's obviously not doing it and this family who wants him to get it; he wants to get it. And I didn't know why my nurse was doing it but it was obvious that he had made a decision. And looking back right now, I guess this isn't a great story, but I was in that position for a few minutes, you know like a half an hour or so. And not knowing what I should do. I can't really leave the room to ask him because he's in the room with the patient. And so it was a really hard decision or hard circumstance for me. I finally understood afterwards why he didn't want to give it to him, but at the time I had no idea why . . . because he wasn't having problems with respiratory or anything. So I couldn't figure out why he wouldn't want to give him this pain pill when he was obviously in so much pain. And so I didn't, I didn't make it, it was kind of quiet because the family was talking a lot. So I . . . just quietly said to the nurse, 'Oh, he asked for more Dilaudid.' And he wasn't

making a motion to get it for him and so, so here's now the family is the one who asked for it, and he asked me for it. And so, or maybe his wife did, I don't remember. So either way they're looking at me expectantly and I'm waiting for my nurse because I can't get the narcotic because I'm a student nurse. And he knows about it and doesn't want to give it and I don't know why. And so I didn't feel that I could ask him why he wasn't giving it to him because he had his reasons, and it's just like part of the politics because he's my nurse and I have to maintain a good relationship with him . . . and part of it was that I just didn't know why he was making this decision and I guess I knew that there was a reason for it, but I didn't know what the reason would be. (S4:1462)

Although Sam was concerned about his patient, what really mattered to Sam was his relationship with the nurse. In order to maintain this relationship, Sam was very careful to speak quietly and not cause any problems, even though he did not understand what was happening. In his final semester in nursing school, Sam was only too aware that keeping his nurse happy was the route to learning. This caused conflict for Sam, who was caught between the patient's needs and his own need to protect his relationship with the nurse.

Throughout all semesters, students' stories were informed by their relationships with clinical staff. As students progressed through their programs, relationships with staff became more and more important. Although their first concern was learning, they recognized that clinical staff members were the gatekeepers of their learning opportunities, which connected their concern for relationships with staff very closely to their concern for learning. In order to learn most effectively, students reported that they

needed to get along with the staff. Good days were days when they learned the most, which occurred when they got along well with the staff. Bad days occurred when they had conflict with the staff, or their nurse was not a good communicator or apparently did not want to work with a student, resulting in the perception of decreased learning. The following two statements, the first one from first semester and the second one from fourth semester, show how important the staff member's attitude is to learning, and how this concern crosses all semesters. It is also interesting to note how the first semester student's use of the words "helpful" and "fun" seem to be synonymous with learning.

(First semester student): There was one CNA [Certified Nurse Assistant] in particular who was assigned to that hallway and she just wouldn't help me at all. . . . The whole time we were there she wasn't very helpful. But the very next week, in the same hallway, I had a different CNA who was just so willing to help me out and, and teach me stuff that, it was really fun to work with her even though I only got to do it once. (S1:137)

(Fourth semester student): I hope that in my practice I remember how big of an impact that the nurse has on the student nurses' learning. And not only what they can teach them but how they take in the whole attitude, the whole experience.

(S4:1100)

It was difficult to learn when the staff nurse was disengaged. Students had a strong desire to learn by doing, and it was frustrating when the staff member was not interested in teaching. In contrast to the previous three examples, in Sally's story below, the terms "boring" and "frustrating" and not doing anything seem synonymous with not learning.

(Sally): She [the nurse] was ignoring me. I don't know if she just really didn't want a student or what, but I'd try to follow her everywhere and she just wasn't telling me, like, I was trying to ask questions and she sounded really annoyed every time I'd ask her anything. She would chart and I didn't know what she was charting, I'd just have to look over her shoulder and she was doing it really fast and I didn't pass any of the meds that day because she just did it. . . . So that day was just not the best.

(Interviewer): What was your main concern about that?

(Sally): I was concerned, like I wasn't learning anything. Like, we're supposed to be going to clinical and we're supposed to be, you know, doing all these things, you know, you go to post conference and everything and share your experiences or whatever and I didn't do anything the whole day. And it was boring, you know, and it was frustrating. I didn't understand what she was doing. (2:1110-1122)

Silencing

In Sam's story about the trauma patient, although Sam was concerned about his patient's pain, he silenced himself in front of the patient and family, in order to safeguard his relationship with the nurse. After they left the room, Sam asked the nurse about the rationale for withholding the medication, which the nurse explained to him. However, when the interviewer asked Sam about why the nurse didn't explain the rationale to the patient or family, Sam's response highlights the priority of maintaining a relationship with a nurse that he will be spending more time with during the semester. He said, "He didn't volunteer the information so I didn't press the issue." (S4:1297).

Like Sam, participants silenced themselves during interactions with staff in order to preserve good relationships. The following third semester student chose to be silent in order to maintain a good relationship with the charge nurse and ensure a positive learning environment.

I'm in the labor and delivery unit. I'm sitting there, sitting down probably for the first time in like six hours, just at the nurses' station, just kind of exhausted and not quite sure where my nurse went right at the moment, and then the charge nurse turns to me, and she's like, 'Hey can you go check that car seat in eleven?' And it's not even like, I just felt like, you know, kind of being taken advantage of. That that's not even my patient in that room, and, can't you see I'm completely exhausted, but of course I'm going to be there for the next nine weeks so I don't want to upset the charge nurse, so I'm like, 'Oay, I'll go check it.' And then, I checked and everything looked good and a little while later I'm sitting down again and she's like, 'Oh, can you go walk these people out?' You know, to their car. So, yeah, you're being involved, you're being given, like, these menial, time consuming tasks, of just, like, it felt like being taken advantage of, you know. This is a tough shift for me, I'm exhausted; I guess if I want, you know, five minutes of rest, I need to go hide in the corner somewhere. (S5:347)

The above story also illustrates how nursing students viewed some tasks as menial and time consuming when they didn't feel that they directly contributed to learning. In this instance, the student could have learned a lot by providing important patient education, but she was more concerned about being taken advantage of by the charge nurse, but at the same time feeling the need to maintain that relationship. Additionally,

she seemed to have no understanding of or interest in team work and the importance of pitching in to help, which reflects how the student positioned herself as an outsider with little responsibility for patient outcomes or the smooth operation of the nursing unit.

Careful Communication

Sam was very careful about what he said to his preceptor, especially in front of patients. When talking to staff, students' conversations were measured and aimed to avoid confrontation and maintain the power differential between staff and students. Even when students knew that their knowledge was more current than the staff's knowledge, they held back. When asked if staff members listened to students regarding the latest in evidence-based practice, the students exhibited hesitant laughter, and Neo described his indirect approach to communication:

(Neo): I think that maybe as a student nurse . . . If you say it, then, it's maybe not as valid. I think there are proper ways to approach it . . . like if you think something should be changed on the floor then I think I would find ways to like, you know, print out articles about it and set it on the desk or something so people can like see it for themselves, you know. . . . And there might be better ways, but it seems like a non-direct approach where nurses have been working--some nurses have worked for many years--and so for someone who hasn't even graduated to say that they're doing it wrong, even if you're saying it in a nice way, that's probably how they feel is that somehow you're attacking their practice and they're the one that's the nurse, not you. And so I think if there's, you know, a nice, indirect way to do it then . . . that's probably how I would handle it, at least as a student. (S3:165)

The following student's communication style with staff was slightly more direct than Neo's but very measured, with consideration for the effect that a poorly planned conversation might have on relationships:

(Bean): Sometimes I feel like if you pose it as a question, like if they're doing something and they're teaching you and you're like, 'Just help me understand and in class I learned I was supposed to do it this way, but you're doing it this way -- what do you think?' And that way you're not threatening them, you're just like, you know, 'Tell what's good about your way so I can know the best way.' . . . And then you can get an opinion for yourself. And that way you're still validating their experience . . . and you're asking for their opinion and so I think that's not as challenging as saying, 'Um, research says that's wrong.' You know [laughter from the group]? And they're like, 'What!?' I think that that would put them on their guard a little more. (S3:196)

Changes Over Time

Reflecting back on an incident where a nurse asked a student to give an injection that the nurse drew up (see page 84), later students approached this challenge differently than early students. In early semesters, students were tempted to break protocol in order to get experience, but these final semester students realized that they would soon be nurses and it was time to be assertive and speak up:

(Kelly): At this point the trust has been broken. You're no longer viewing it through the rose colored student lenses. You have the real nurse glasses on.

(Rob): No, you have nurse glasses.

(Kelly): And you're like, you drew this? No, I can't give that. I need to draw it up myself if you want me to.

(Rob): Yeah, I need to check that order. I need to verify that order.

(Kelly): Nothing personal, but you gotta see why. (S1:1398)

Discussion of Concern #2

Relationships with staff were very closely connected to learning and formed a central concern of participants. With poor relationships, learning was blocked; with good relationships, learning was enhanced. This is similar to Chapman and Orb's (2000) third semester students who reported that positive relationships with staff enhanced the clinical experience. To develop and maintain good relationships, students in this study silenced themselves and communicated very carefully, knowing that a misstep could endanger their chances to learn.

The importance of maintaining relationships with staff is evident in the literature. Carlson, Kotze and van Rooyen's (2003) first semester students were concerned about not fitting in with staff, and felt that staff lacked awareness about the needs of new students. Jackson and Mannix (2001) found that early students felt intrusive, uncomfortable and unwelcomed by staff. Although no studies were found about central concerns of later students, it is interesting to note in this study that relationships with staff continued to be a major concern, but later students began to be more assertive and less careful in communicating as they got closer to completing their nursing education.

Concern #3: Patient Well-being

In Bean's story (see page 80) about working with a nurse that wouldn't let her do anything, it is apparent that Bean's main concern was learning by doing and the staff

nurse was blocking that goal. If Bean could just convince the nurse that she could be helpful, there was still a chance to do things. Her narrative highlights the first two central concerns of nursing students--learning by doing and maintaining relationships with staff that will enhance learning. The third concern for nursing students is patient well-being. However, in Bean's story, concern for the well-being of her patients is not evident. Bean was so focused on learning that patients in her story formed a hazy background. She vaguely described one patient as "a heart baby." Additionally she asked her nurse several times if she could help the nurse, not the patient.

Like Bean's story from fourth semester, students in earlier semesters were mainly concerned about learning by doing. However, in contrast to Bean's story, early semester students were more focused on patient well-being, specifically emotional well-being. They were concerned with maintaining relationships with staff as a means to learn, but their stories were often centered on their relationships with patients. There were still, however, very few descriptive details about the patients.

Many stories in early semesters focused on the emotional state of patients, with which students often identified. Responsibility for other domains of patient care was assumed to be taken up by other members of the health care team. The following paradigm case shows how Jack, a second semester student, offered comfort and emotional support to his patient and family.

(Jack): I had a patient, it was in my second semester, and he was on the floor for like a GI [gastrointestinal] bleed. We went down, he had an endoscopy done, and it ended up making it bleed a lot worse. He aspirated all the stuff and so, he ended up going into the ICU for a little while, so I followed him to ICU . . . I was

in there with him, he had some, like, absence seizures and just some weird things going on. So I asked some questions to the doctors, and I didn't know what to do either during those times, I was a little lost as to what to do. So I, you know, helped out as best I could in there. But I think in that situation I spent more time comforting the family because that's the best that I knew to do. His sister was really upset so I just put my arm around her and tried to comfort her during that time. And let the others do their jobs. I mean, I just remember the one thing about it, though, when he was down there coming out of sedation, he was very combative. But because he was my patient that I had worked with, if I talked to him, and looked at him in the eyes, and tried to calm him down, he would calm down for me. So I was trying to, I felt like I had a little role in helping to . . . get him through that a little bit. But it was back to that comfort thing, you know, because that's what I knew to do . . . I think it's just human nature, I mean, too, it's just the kind of person I am, I guess. I think that everyone of us in nursing, I hope, has a part of their character that is caring and is concerned about people. And I think the emotional side is really important too, and sometimes I think we get carried . . . It's hard to remember all the technical things to do and, and in that position it felt right for me to give him that comfort rather than technical stuff at that time 'cause I couldn't think of what else to do. (3:723-790)

Jack's telling of the above story lacks details about patient status or clinical judgment. Jack had a strong desire to be helpful to the patient, but since he didn't know what else to do, he relied on his previously acquired interpersonal skills, offering comfort and support. Jack did not reflect on the possibility that offering comfort was an important

part of excellent patient care, evidenced by his statement about letting others do their jobs while he “just offered comfort to the family.” Although he didn’t realize it, he was in fact doing a job and also learning by doing.

According to Liaschenko (2002),

Nursing work entails emotional work that is a kind of social transaction. Patients distressed by a diagnosis and anxious about coping with treatments, patients worried about who will care for their children, spouses, or pets call for a response. Responding to this kind of distress requires time, but in an efficiency-driven system, the work that is legitimated is body work, not emotional work. Because emotional work is a social transaction and not a product, it is invisible in a product-driven society. New nurses learn very quickly what the “official” work is and what the unofficial work is. Emotional work is extra, frequently coming out of the personal time of nurses. (p.69)

In Jack’s narrative, it appears that he is already socialized to value body work over emotional work in caring for patients. This illustrates the taken for granted perception that participants brought with them to nursing school about what nurses are and what they do. A picture emerges of students’ view of nursing as a way of doing instead of a way of being. Therefore, “just being with” patients and families, offering moral support, was not viewed as “real” nursing work by students.

The above story stood out for Jack because he felt like he made a difference in patient care, giving him a feeling of clinical success. Following are two exemplars from second semester, illustrating how students felt good about making a difference.

(Bean): I went in to tell this guy that my shift was over . . . just thank him for letting me help him out that day. And he was like, 'No, thank you.' He was like, 'I really appreciate you being here today.' He was like, 'I felt like the nurse didn't care about me but I knew you did. 'I think you're going to make a great nurse.' And I was like, 'Okay thanks, thank you so much.'" I just noticed that it was a pleasure for me to be able to help him. And so it was great for that time that I was able to make a difference for him. (S2:433)

(Rob): I had a patient during hospice care . . . And I just talked to him forever and then he said thanks for talking to me, I haven't talked to anybody in a long time. And then I left the room and about 30 minutes later they came back and they said he passed away. I was like, what? Okay. I was glad that I was able to be there and help him transition to the next life. (S2:1335)

Empathy

Jack, whose patient had a GI bleed, exhibited empathy for his patient and the patient's family. Early students' focus on patient well-being often manifested as narratives about empathy, "the ability to understand and share the feelings of another" ("The Oxford American College Dictionary," 2002, p. 443). Early students told stories about viewing patients holistically and identifying with patients. Their stories conveyed the feeling that patients were real people with real problems, and students identified with them.

(Bean): I felt really bad for her and I just didn't want to get old myself. But like, I felt bad for this person who's probably really autonomous and had led a great life,

lots of kids, and sad that she had to be in this state. And I wondered how sad that is for her. (S1:102)

(Sam): I think people respond well if you just treat them like people. (S1:687)

(Neo): But he [the patient] was a crier, and that made it hard on me, because I think I do that too. I cry more than my wife. (S1:601)

(Chris): She [a dying patient] was just a year older than me. So I look at her and think, "Okay, me, her." (S3:1652)

Early students, with their concern about student/staff relationships, were disappointed to learn that the staff did not always treat patients with empathy.

(Chris): You go in and you watch the dynamics between the nurse and the patient and you see a man who's mid-sixties, was a truck driver, and . . . I believe he was diabetic . . . a lot of hard issues, just everything. So now this man is in the bed with a lot of health problems that's knocked him off from being a truck driver, and he has no other life that he knows of. And he's angry, and so you just kind of go through all of those issues with him. But yet you see this nurse not having any, seeming like, competent level of what he's going through. And it's just that he's being, everyone said he was going to be hateful, he's hateful, and 'that's how I'm going to treat you. You're going to take your medicine, I got it and you're going to take it right now.' (S1:1852)

(Annie): We've learned about bathing and doing it really nice and gentle. So this woman is terrified. She screams . . . She's crying, she doesn't want to be there, and I take the sponge and I'm washing her, and I'm really gentle and really slow

and trying to massage as I go. She calms down, I think she even said, 'That feels nice.' And the aid looks at me and says, 'You're taking too long, I have six more patients to do.' Grabs the sponge from me and like mauls the woman, who starts screaming and crying and she's having a miserable time. And she ends up, she doesn't want her compression stockings put on so she defecates and pees on the floor through the chair. Horrific. (S1:1791)

Changes Over Time

The above narratives demonstrate how early semester students empathized and identified with patients and were disappointed when staff members were insensitive to patients. These findings support the results of Lemonidou, Papathanassoglou, Giannakopoulou, Patiraki and Papadatou (2004), who found empathy, caring, and emotions as major themes in the journals of students during their first clinical experiences. In this study and the Lemonidou and colleagues' study, as students progressed through semesters, they identified more with nurses and less with patients.

In later semesters, students were concerned about patient well-being, but there were no stories about "just being with" patients to provide comfort and moral support. In contrast to early semester stories, later semester stories contained little mention of students feeling emotionally connected to their patients. Stories from later semesters were more focused on patient advocacy as a way to care.

Patient advocacy is an essential component of nursing practice (Hanks, 2008). As students developed skillful, thoughtful nursing care, they advocated for their patients more often and more successfully in later semesters. Early semester students were unclear about what patient advocacy really meant. For example, when the first semester

student below talked about being a patient advocate, she focused on compliance and changing the patient instead of changing the care.

Those kinds of situations is when I like to really truly be the advocate and try to see if I can change that patient, so by the time I leave, he's talking pleasant, he'll take his meds, he'll let me give him a bath. (S1:1888)

In contrast, in the following story from fourth semester, although Kelly is involved in patient advocacy, her story still focused heavily on her relationship with the nurse, with little evidence of empathy, emotions or identifying with the patient.

(Kelly): I was at clinical on a med surg floor step down and I had a patient who was a 66-year-old black female and I just knew she was in respiratory distress I just knew it. And the nurse that I was assigned to . . . I'd go into a room and I'm doing my assessment and she's saying, she's moaning and like thrashing in the covers and 'ooh, I can't breathe ooh,' and you know she's been doing this all day long before I got there. I came on at 3:00 and the nurse has been there with her since 7:00 and me . . . not really knowing enough about nursing I'm thinking Okay, I'm a student, how can I question the judgment of the nurse who's been here with her all day? But I just knew that something was not right with this woman. No one should be thrashing in the bed and moaning about not being able to breathe. So I went in and conducted my own assessment and I told her I said, 'I think she's in distress' and [the nurse responds], 'No no no. She's been doing that all day. She's fine.' And maybe about 30 minutes later we had to call medical response team because she was actually in respiratory distress. A PA [Physician's Assistant] happened to walk down the hallway and heard that and saw me

standing outside the room and asked what was going on and I just told him because I couldn't tell a lie about what happened. He said, [voice sounding authoritarian and aggressive] 'Well, didn't you check this?' And I did. [Then he said], 'Well, what did you do with the information?' [Then I said], 'Well, I told her. And she just said no, she's been doing this all day so she's fine.' The woman was in respiratory distress and immediately had to be BiPAP'd [Bilevel Positive Airway Pressure apparatus applied] and transferred off the floor to a specific respiratory care unit. So I didn't know what to do in that incident because I knew that her O₂ [oxygen] saturations were low and I knew she was having trouble breathing but I didn't really know what to do after that because I told someone who I thought should have known what my next action would be. And she just had no clue. After the PA intervened then . . . It was almost like, 'Oh you didn't tell me this.' She immediately played like I had not told her anything. But luckily my instructor keeps very detailed records. And my instructor and I were actually at the point where we were considering calling the MRT [Medical Response Team] over the nurse's head. So it was getting ready to be like a full-blown scene. We're going to create a scene at clinical! Um because of this woman's distress, but the nurse tried to act like I didn't tell her what was going on and my instructor had to come and back me up and say, 'No, no, no, because she did her assessment at 4:00 and this is the form that I require from them and look at what I gave your charge nurse and it's there. So there's no way that two of us just made up some story like this.' So I think the nurse got into a little bit of hot water after that.

(S4:944)

Both Kelly's and Jack's story illustrate their concern for patient well-being. In Jack's early semester, however, he simply offers comfort and emotional support and feels satisfied fulfilling that need. In Kelly's later semester, she doesn't mention her relationship with the patient at all, instead focusing on patient advocacy by attempting to convince the nurse to specifically respond to the patient's critical need. These two paradigm cases show how students' responses to their concern for patient well-being changed over time.

Kelly was not intimidated by her nurse, but doubted her right to question the nurse when she said, "I'm a student. How can I question the judgment of the nurse who's been here with her all day?" Nursing students in later semesters learned that their concern for patient well-being often conflicted with their concern for getting along with staff but indicated that concern for the patient was ultimately the right thing to focus on. As one participant stated, "I think I learned that the patient comes first, so even if you're intimidated [by the nurse] you still have to go for it if the patient's safety is in question." (S4:108)

Discussion of Concern #3

Following their central concerns of learning by doing and maintaining positive relationships with staff, participants in this study were concerned about the well-being of their patients. This concern changed over time. Early students had empathy for patients and were concerned with their emotional well-being. Establishing relationships with patients and making a difference in care were important to early students. They identified with patients and not with nurses. They often offered emotional comfort and support to patients, because they didn't know what else to do while others did "real" nursing work.

In contrast, later students did not tell narratives about comforting or “just being with” patients or families. Although they were still concerned about patients’ well-being, their stories focused on their relationships with staff, not with patients. Instead of offering comfort or emotional support, they were more concerned with advocating for their patients to receive needed treatment from staff.

Tanner (2006), in a review of research on clinical judgment in nursing, summarized findings from several studies and found that relationships with patients were central to “what nurses notice and how they interpret findings, respond, and reflect on their response” (p. 204). An interesting finding in this study is that students came to clinicals with pre-conceived notions about the lack of value assigned to establishing relationships with patients. Offering moral support and giving comfort were not considered “real” nursing work. As students progressed in their programs, this notion was supported and reinforced by staff and clinical experiences, and students’ narratives focused less on offering comfort and more on patient advocacy.

Moral, Cognitive and Skill Development of Nursing Students

Professional education can be framed in terms of three high-level apprenticeships: a moral and ethical apprenticeship to the social roles of the profession, a skill-based apprenticeship of practice, and a cognitive apprenticeship, wherein students learn to “think like a nurse” (Benner, 2007a, p. 6). In the following discussion, narratives that elucidate the moral, cognitive and skillful practice development of nursing students are presented and interpreted.

Moral Development

To examine the moral development of participants, the interviewer asked them to talk about clinical situations where they were stumped or didn't know what to do. Follow-up questions, such as, "How did you know the right thing to do?" or "What were you feeling when the situation occurred?" were asked to illuminate moral and ethical situations. Narratives emerged around three themes: skillful ethical comportment, clinical agency and relationship-based learning.

Skillful Ethical Comportment

Benner, Tanner and Chesla (1996) define skillful ethical comportment as "the embodied, skilled know-how of relating to others in ways that are respectful, responsive, and supportive of their concerns" (p. 233). Experience presents situations that are similar and dissimilar, inviting the participant to stay involved and to refine one's intuition about how to protect patients' vulnerability "while nurturing their strengths and sense of possibility" (p. 276). Students come to nursing school with already developed ways of relating to others. This way of relating is transformed by professional education. In the following narrative, Patty, a second semester student, felt more comfortable helping as a friend instead of a care provider, since that was how she related to people before nursing school.

(Patty): I had a gentleman. He wasn't my patient. He was sitting at the end of the hallway on a bench pulling an IV pole. He was obviously a patient. And uh he was sitting there and he kind of looked distressed so I walked down and I said, are you doing Okay and he says yeah, I'm doing fine, I'm just doing my walk because I gotta get . . . he was post-op . . . He was trying to get out of the hospital.

He was trying to get his bowels moving, trying to pass some gas, so I spoke with him for quite some time and he ended up telling me the story about . . . He wanted to know why I'd gone into nursing. He was in the Army. I think he was trying to recruit me for an Army nurse. I don't really know. But I think that was what he was doing. We spoke until we had to go to lunch . . . So at lunch, I told my instructor, I said . . . 'You know that gentleman I was talking to, super nice guy you know he told me this, he told me this.' And she said, 'what's he doing down there in the hallway?' I said, 'well that's why I'm a little concerned because he said he was trying to get back to his room but he was just trying to get up the strength.' So she went and helped him with me and she convinced him to let us help him back. So after lunch I told him, 'well I'm going to come back and we'll finish our conversation after lunch.' Well, when I went back into his room . . . he was actually assigned to another nursing student. . . . I walked into his room and I said 'hello Mr. X' whatever his name was, I don't recall. And he didn't respond. He was a young gentleman. He was 32 maybe. And I said, 'Oh, are you watching TV?' And he still didn't respond. So I started to get a little concerned because he's not the kind of person to ignore. So then I shook his arm and he still didn't respond and I was really alarmed so I rushed out and happened to find my instructor standing there and I said you need to come in here right away. I don't know what's wrong. So she went in there and they ended up calling a code for the gentleman and . . . It was a really moving experience for me not only because I felt almost like I had formed a friendship. Because I wasn't his nurse, I was just someone in the hallway with him. And so I think he kind of opened up to me in a

different way than you would someone that is providing care so much. And then this happened and then he ended up . . . the code team came up and he was unresponsive and unresponsive and then he finally started saying, 'Leave me alone; leave me alone. I want to go home. Nothing's wrong with me.' And we're all really confused and the other nurses kind of sloughed it off as a psychiatric disorder or something. I don't really know. I never was able to follow up because of HIPAA [Health Insurance Portability and Accountability act, a government privacy regulation] and everything else, um after we left that day. But it was a really moving experience. (S2:1278).

Patty's narrative reads like a story about helping a friend who was having a hard time, which is an ethical thing to do. She used previous experience and intuition to guide her in establishing a relationship and then to tell her what to do in a crisis. She did not learn this skillful ethical comportment in nursing school; she brought it with her to clinicals. Her challenge was to integrate her ethical comportment into her professional nursing practice, which is not evident in the narrative. Her story focused on her relationship with the patient, with little evidence of clinical understanding. This was a moving experience for Patty, but the narrative offered no details about how the event was experienced by the patient.

Clinical Agency

In the story above, relating to her patient as a friend reduced Patty's sense of responsibility for patient care. She made it very clear that Mr. X was not her patient. In fact she felt that by being his friend and not his nurse, "he kind of opened up to me in a different way than you would someone that is providing care so much." Although she

acted morally and responsibly by seeking assistance when Mr. X was unresponsive, she appeared to have very little understanding of clinical agency.

Moral development can be studied by examining clinical agency. According to Benner, Tanner and Chesla (1996), clinical agency is “the experience and understanding of one’s impact on what happens with the patient and the growing social integration as a member and contributor of the health care team” (p.60). In the following paradigm case Sam, a capstone student, reflected on his own vulnerability when he made a medication error. The story stands out for the lack of information about the patient or the outcome.

(Sam): Yesterday a nurse had just taught me how to do something, and then I gave the person medicine and I didn’t do the thing that she had told me that I was supposed to do which was monitor his or her, in this case, blood oxygen, and uh, after a few minutes I noticed that her lips were white and she was ashen. And this was just yesterday, and she had just a couple hours previous told me that when I give Dilaudid I need to watch because it causes respiratory depression, but I didn’t do it. And so, I mean, it happens all the time where I’m really scared about what kind of nurse I’m going to make if I, if I make a mistake already, right now, of something they told me that day, what are my prospects when I graduate.

There’s so many people, there’s on my unit right now, there’s the nurse educator who I, I really think I’d like to get a job there now because I like the unit and so how I, the impression that I make to her is going to make a big difference. I have my preceptor, the other nurses around, and all the time I hear the other nurses talking about the new people and the the new guys how they’re not very good, and yada yada, they just talk and talk and talk. And so, and then I have my school

to worry about, so there's a lot, a lot of things that I don't want to mess up about. And then, you know, NCLEX [National Council Licensure Examination] is coming up and I'm like, 'Dag nabbit [*sic*] I shouldn't have made this mistake because NCLEX is coming up and what if this is a question on the NCLEX? And how am I going to pass?' So it gets me stressed sometimes . . . because the lady, she de-satted for, I don't really even know how long, it could've been twenty, thirty minutes and she, she was pretty low, and I should've caught that. Well it shouldn't have even happened, in the first place. She was asleep and I'm like, 'Oh, she's asleep. She's fine, just let her sleep.' But she wasn't asleep, she was out. So it was a lot more nerve racking yesterday than it was . . . And, and my nurse, he didn't even think twice about it because I guess we were really, really busy and he didn't really realize what had happened. And I, I guess I wasn't going to volunteer that information that I had messed up. [Laughter from group] But, uh, I can remember when I made the mistake my second semester I was worried about it, but at the same time I guess back then I would have played the victim card, like, 'Oh, you know I'm second semester, I don't really know, she just handed me a jar and said go do it.' Whereas now, capstone, it seems like there's more autonomy, so the consequences are heavier. (S5:864)

Sam's main focus in the above story is what his mistake said about himself and his future professional prospects. Very little detail is offered about the patient, leaving one to wonder what happened to the patient. Interestingly, when other participants heard Sam's story, none of them asked about the patient's outcome. Sam was very concerned about his mistake affecting his chances of getting a job on the unit after graduation, about

making a good impression, and about passing the NCLEX. He even considered not telling his nurse about the incident, which clearly has moral implications. In his last sentence, he talks about heavier consequences; it is clear that he is talking about professional consequences to himself, not the health consequences for his patient. His way of being is very different from Benner, Tanner and Chesla's (1996) description of advanced beginners who felt overly responsible for outcomes of patient care. On the other hand, he was similar to advanced beginners in the way that he did not feel like a part of the treatment team.

Across all semesters, students in this study generally felt very little responsibility for patient care and did not feel like a part of the health care team. First semester students in particular thought of themselves as observers who were unqualified to participate in care:

(Fiona): First semester, my feeling is that you are more in that observer role, not expected to be in that action role of actually jumping in, you know, putting the oxygen on. Definitely haven't had adequate training at that point to do that completely normal. (S1:885)

(Patty): Our first few weeks in clinicals I felt like a visitor. I mean I didn't feel like there was anything that I was qualified to do. And even though we'd had some training, I really felt like [pause] almost being thrown to the wolves at first. (S1:1478)

First semester students didn't have a strong sense of accountability for their own actions. For example, when the two students in the following story from first semester violated universal precautions, they assigned responsibility to the clinical instructor and

staff nurses. It is interesting to note that when one of the students talked about a “disconnect,” she left herself out of the picture, describing the disconnection between the nursing staff and the clinical instructor, but not involving the student:

I think sometimes things are left out of report. There’s a disconnect between the nursing staff and the clinical instructor. And, so, like we went in there and were just doing her pulses by hand and everything, and we looked over and saw that there was a mask on the bedside table. And we both kind of looked at each other with our clinical thinking and said, ‘Why is that there?’ And then after the fact we looked and saw there was a big box on the door and everything, but we weren’t oriented, I guess, enough to recognize that . . . being any different from any of the other hospitals because it was our very first clinical where we’re just giving bed baths and things like that. (S1:1655)

Sometimes staff nurses were unclear about the clinical agency of students, which had the potential for putting patients at risk. They could give students too much responsibility, or not enough to do. Students often just did what the nurses told them to do, knowing that in the end the accountability belonged to the nurse. In the following story, the fourth semester student broke medication safety protocols, exhibiting a lack of concern for the risk to the patient.

(Sally): I had a nurse last week, she’s an LPN [Licensed Practical Nurse] and I said, ‘Do you want help passing meds?’ And she was like, ‘Oh, yeah, sure.’ And she just pretty much left. And so, I passed the meds for her. But, she had started on one, and in previous semesters they told us not to open the pills just in case the patient doesn’t want it and then you don’t really have to throw one out, and which

one is it. She just opened them, and so I didn't know what was in the cup already, and were they all in there? I was going to help you, but not, 'I'll do it for you.'

But she went and we didn't see her for a couple of hours [Laughter from group].

(Interviewer): And you went ahead and gave those meds?

(Sally): Yeah. It was okay, because I had done it the previous week, so I was okay with it. But I didn't know if I was supposed to count them on my own or what.

Because you have to sign out the narcs. But I was like, 'Okay, I'll just sign.' But I don't know. (S4:588)

Carlson, Kotze and van Rooyen's (2003) phenomenological study of new students found that they felt that staff lacked an awareness of the needs of new students, felt insecure related to inaccessibility of staff, and did not feel that they fit in with staff. These themes are evident in Sally's story. Sally felt that her nurse did not understand her needs and the nurse's inaccessibility led Sally to engage in risk-taking behavior that could have resulted in harm to the patient. This can be an especially dangerous combination, because if something negative had happened, it is unlikely that Sally would have taken full responsibility for her actions.

Changes Over time. When comparing Patty's early semester story about Mr. X (see page 106) to Sam's capstone story (see page 109) about not monitoring a patient's condition, a difference appears. Patty arrived at nursing school using past experience to guide her to "do the right thing" in her relationships with patients, and her conduct was ethical and patient-centered. In contrast, Sam seemed concerned about doing the right thing only as it pertained to his future as a nurse, with little concern or accountability for

patient outcomes. He also acknowledged that he was more responsible in capstone. When referring to earlier semesters he stated,

Back then I would have played the victim card, like, ‘Oh, you know I’m second semester, I don’t really know, she just handed me a jar and said go do it.’

Whereas now, capstone, it seems like there’s more autonomy, so the consequences are heavier. (S5:908)

This difference between early and later semesters may point out a change that occurs as students progress through nursing school. However, throughout all semesters, students generally talked about events and outcomes in terms of themselves, not in terms of the patients:

(Second semester student): [The patient’s] sister was really upset so I just put my arm around her and tried to comfort her and let the others do their jobs. (S2:650)

(Fourth semester student): Everyone else was getting ready; no one was really talking to her and because I’m a student and I didn’t really have any responsibility in that area I just went over there and I like held her hand and we just talked.

(S4:374)

Feeling in the way. Students told stories about leaving the room when they felt in the way, which demonstrated their lack of responsibility or contribution, even in later semesters.

(Kirsten): There was a little baby there [in the nursery] that was having a little bit of respiratory distress and retractions and everything, and they turned to me and said, ‘We need a monitor.’ And I just felt like, I just stood there, I didn’t know they were talking to me! And then they realized that they were asking the wrong

person, like, then they were kind of looking at my nametag, and going, 'Oh, I think we're asking the wrong person.' There's like five of them, they're all looking at me. I was just like, 'I have no idea what you want or where it is, so' . . . I felt like if I had known where the monitor was I probably would have been able to go get it and watch them hook it up and see what they do with it, but at that point I just kind of left the room because I felt like I was in the way. . . . Well I felt stupid! So I wasn't going to stay there! I'm like, they don't need me, so I'm going to get out of the way. (S4:844)

Jackson and Mannix (2001) found that many students felt intrusive, uncomfortable and unwelcome by clinical staff, which is reflected in Kirsten's story above from fourth semester. For Kirsten, feeling in the way overrode her concern for learning. If she had stayed in the room she would have learned, but feeling stupid, in the way, and unneeded caused her to miss an important learning opportunity.

Other stories focused on things that made them feel more like a part of the team, such as being given a small role or knowing where supplies were located. They wanted to be helpful, and helping the team was viewed as their contribution to patient care.

(Amanda): I had an experience in the ER that was so excellent and one of the reasons was that the nurse I was assigned with took me around and gave me a tour before we started. So that when somebody then said, 'Get me this.' I knew where it was! And that sounds so simple, but after that, when I would go to clinical, I would orient myself and ask people where things were because the difference in how that made me feel and in the level that I could participate was enormous. It,

you know, because there were times where I was just with the doctor and the doctor would say, 'I need this.' And I would say, 'Oh, Okay.' I could go find it! (Unidentified student): I remember that feeling so well. 'I need some 2x2 gauze.' 'Don't look at me!'

(Amanda): Well, he was asking for more confusing things like that. It was so cool because I knew where they were! And it was so refreshing to not feel clueless and to just be able to have a doctor say something to me and just be able to do it. (S4:777)

Relying on the expertise of others. Seeking the assistance of experts was a primary and recurrent role for the participants. When students identified changes in patient status, their first thought was to notify the nurse. Student clinical agency was limited to a focus on assessment. The rest of the nursing process was passed up to others in authority, who were then responsible for diagnostic reasoning, creating a plan, and then implementing and evaluating the plan. For students, their plan of care often consisted of just trying to convince the nurse that there was a problem with the patient. Clinical instructors were also called upon.

In the following story from fourth semester, the student made a brief assessment and recognized she was outside her knowledge and accountability boundaries and went to persuade the nurse to intervene when the patient complained of sudden severe chest pain.

I had no idea what to do or what I could do, so I went and got the nurse and the nurse didn't feel the need to get over there really soon. And I don't remember what I said, but I finally convinced him to come in the room and it turns out that

the chest tube had been kinked, and so that was causing his lung to collapse.

(S4:710)

Benner, Tanner and Chesla(1996) found that advanced beginners relied heavily on the expertise of others and frequently “delegated up” when problems arose. This is similar to the findings in this study, although nursing students relied almost exclusively on the expertise of others and had no choice but to delegate up, because they were on the bottom of the clinical authority ladder. Even when the following second semester student felt responsible for treating her patient’s pain, her lack of power and authority derailed her attempts.

(Sally): I just went and talked to a patient and he said he was in pain, and I like kind of tried to relay that back to her. Like, ‘You know, this patient said he was in pain.’ And I had his med sheet, so, you know, ‘Can we get this?’ And she was just like, ‘Oh, yeah, Okay.’ And not like, ‘Oh yeah here, let’s go get something and you can give it to him,’ or whatever. She was just like, ‘Oh, okay,’ and just kind of like, ‘Thanks.’ (S2:376)

Sally related this narrative in angry, disgusted tones. When the nurse said, “Oh, yeah, okay” to Sally, she said it dismissively, and Sally felt that the nurse did not care about the patient and had no intention of providing pain relief any time soon. Sally felt in the way and undervalued. This illustrates the frustration inherent in relying on others for guidance and action. This lack of power does little to promote the development of clinical agency.

Relationship-based Learning

Participants recognized that learning took place in the context of their relationships with the health care staff. Poor relationships equated with poor learning and good relationships facilitated learning. This relationship-based way of being and learning was demonstrated many times in students' stories. They were very concerned about maintaining a "good" relationship with the staff and with patients. The large majority of stories were about relationships, mercy versus justice and preserving or creating connection. These themes were explored by Gilligan (1982) who said that women see "a world comprised of relationships rather than of people standing alone, a world that coheres through human connection rather than through a system of rules" (p.29).

(Rob): I hope that in my practice I remember how big of an impact that the nurse has on the student nurses' learning. And . . . not only what they can teach them but how they take in the whole attitude, the whole experience, because when I was doing my ER rotation, I had a nurse who started off saying . . . she was burn-out . . . she was tired of it and she used some foul language to even describe her job so I thought right off the get-go that we were starting off on the wrong foot but we had an elderly lady who had just been discharged for a . . . some sort of abdominal bleed. And I guess that they thought that it had, I'm not sure the background, but long story short, this patient was in tremendous pain and her two daughters were at the bedside and said you know mama never complains about pain and this elderly lady is laying there crying and she's very frail. She is practically immobile as it is. And the nurse was just so frustrated that they kept calling her back in and the reason that she was still in the ER is that they were

waiting for a room. They were admitting her. And it was about 8:00 on a Friday night and . . . I kept saying, ‘Oh gosh, I just feel really bad that lady just seems so uncomfortable’ and you know her vitals were stable but were still within normal limits but were on the higher end and I just really felt like I didn’t know what else I should say to get my point across. And I didn’t really know who to approach because it was busy at the time and the nurse didn’t want to call the attending physician. Because it was Friday night, 8:00 and she said, ‘I am not going to bother Dr. So-and-So for this lady’s pain meds. He’ll be in in the morning to do rounds.’ And it was really hard to know how to handle it and luckily a PA came by and noticed this person’s discomfort and said ‘what’s going on in here?’ And something was finally done. And she was reprimanded and I was standing right there when it all took place and I never said anything, but I thought, ‘Gosh, thankfully . . .’ and if you burn out then you need to move on. . . . You can’t do it at the patient’s expense. Or at the student nurse’s expense. . . . Because it really tainted my view of the emergency room setting. That is one place I will never go because of that one experience. (S4:1137)

In the above story, a conflict occurred for Rob between the two central concerns of patient well-being versus preserving a relationship with the nurse. Rob judged the nurse harshly because of her apparent lack of compassion for her patient. He then took it one step further and judged his entire ER experience according to his view of that one nurse. Although Rob was concerned about the patient’s suffering, he wanted to preserve his relationship with the nurse by using careful communication. Fortunately, the PA showed up to resolve the struggle, which is another example of students’ reliance on the

expertise of others. One is left to wonder what Rob would have done if the PA had not appeared to solve this moral dilemma.

Making excuses for staff. Students had a strong desire to learn, and relationships with staff nurses were linked to learning. To preserve the relationship and thereby increase chances of learning, students made excuses for staff's unprofessional behavior, viewing them through a lens of mercy instead of justice. When first semester students felt intimidated by staff, they created excuses for staff behavior in order to maintain their relationship.

And this LPN kind of intimidated me; she wasn't like the most friendly lady, but I think she just had a lot to do, I think she just felt overwhelmed. (S1:254)

In later semesters, students were still making excuses for unprofessional staff behavior. The following student judges himself for judging the nurses, demonstrating how reluctant students were to jeopardize their relationships with staff.

I did hear a lot of nurses who were very vocal about the woman who gave birth to a methadone baby. And they were actually like saying stuff about her sister who had carried a baby for a gay couple and they were judging her. And so it's a good thing you work with babies cause, you know, they might be able to hear you, but, I don't know . . . but I did find myself judging the nurses for judging other people, which is probably backwards. But I was just a little upset with that.
(S3:1282)

Role models. Students judged staff according to how friendly they were or how much they cared for the patients, instead of their procedural expertise. They worked with negative and positive role models throughout all semesters.

I've seen patients get railroaded into Pitocin and epidurals that they didn't want and nurses who've stood by and let the doctors do it. And I've seen nurses who were better than the OB's with delivery; they were much better coaches. You see like the entire spectrum, but you see some of the stuff that you didn't want to see, in how the nurses actually treat them to their faces and how they treat them when they walk out the door and talk about them behind their backs. (S3:1294)

As illustrated in Rob's story about the ER nurse (see page 118), negative experiences with nurses caused students to reject that nurse's specialty, the clinical site, or even nursing in general:

You get a nurse that's just so negative and hates doing this and hates doing that and you're thinking, 'Oh my God did I choose the right field to go into?'

(S4:1152)

The following student worked with an intimidating nurse in fourth semester and had to confront him about a medication error. Notice how, like Rob in the ER, she used careful communication, but was successful in getting her point across and still maintaining the relationship with the nurse.

(Bean): I had noticed that in the charts it had said that the patient was allergic to aspirin and codeine. And so I was kind of nervous to give them. And I was like, 'Um . . . you know.' So finally I took up the courage and I was like, 'You know I noticed that . . . I was checking . . . that, you know, allergic to aspirin.' And he was like, 'What?! We've been giving this drug for days and nothing's happened.' And, but we did check and it did say they were allergic to aspirin but when we talked to the patient about it they said that they just had a side effect a couple of

years ago and it hadn't affected him since. And so it turned out to be just fine, but it was a hard experience for me just because I was so nervous to talk to him because like he had intimidated me and things like that.

When asked what she learned from the situation, Bean focused on her relationships with staff.

(Bean): I guess just that even though you don't like all the people you work with, your coworkers, I guess I'm experiencing that a little bit in capstone right now, as I'm trying to decide if that's an area that I want to work. I've been looking a lot at who my coworkers would be if I decided to work there and you just have to decide what the pros and cons of 'is this coworker going to affect me so much that I'm not going to enjoy my time here or that I'm not going to be able to give good patient care?' And, so, I don't know, in that situation I think I would have been uncomfortable to work on that unit because it wasn't just my coworker, my nurse, it was a lot of the nurses that had that same sort of attitude and things like that. But I think I learned that the patient comes first, so even if you're intimidated you still have to go for it if the patient's safety is in question. (1:116-219)

Bean's narrative highlights how very important relationships are to students.

When considering job prospects, participants reflected back on relationships to determine if they might like to be employed at specific hospitals or in certain specialties.

Bean's story contrasts with Rob's ER story. Rob wasn't sure what to do and felt that he had tried everything to convince the nurse to treat the patient for pain. In contrast, Bean's concern for patient well-being overrode her fear of the nurse. Both of these

situations occurred in fourth semester, illustrating the differences between individual students.

Students also engaged with positive role models. During second semester, this student appreciated the nurse being vulnerable and affected by the plight of her patients. He characterized the nurse as, “the only nurse I ever really want to be like.” (S2:1503)

She [the patient] pulled the nurse into the kitchen and she started to tell her that she really appreciated the nurse telling her to go to the doctor because it turned out that she wasn't pregnant and that her protrusion in her abdomen was some kind of cancer. And, um, she, the nurse lost it, like in the car. She then helped me to see, you know, hospice nurses can cry. (S2:1517)

A picture emerged from this data of a dilemma that students face in clinicals. On one hand they must rely on the expertise of others for guidance. Yet on the other hand they see the weaknesses of the experts, and wonder if they can be trusted. Couple this problem with the powerlessness of nursing students, and they are truly in an uncomfortable position that can have great ramifications for patient outcomes, and the behavior of nurses in future practice. A recent study (Maxfield, Grenny, McMillan, Patterson, & Switzler, 2005) showed that although 62% of nurses have seen colleagues take potentially dangerous shortcuts in patient care, fewer than 10% directly consulted their colleagues about their concerns. Perhaps this limitation in interpersonal communication is related to the training they received in nursing school to engage in careful conversations and avoid confrontation in order to maintain relationships.

Discussion of Moral Development

The literature (Auvinen et al., 2004; Lemonidou et al., 2004; Wilson, 1999) reveals that changes in moral development occur during nursing education and are identifiable. In this study, moral development was examined through narratives that illustrated skillful ethical comportment, clinical agency, and relationship-based learning.

Participants came to nursing school with ethical comportment previously acquired in everyday living. Dreyfus, Dreyfus and Benner (1996) asserted that nurses' ethical comportment is "modified or extended, rather than learned from the ground up" (p. 263) in response to clinical situations. This seemed to be the case for participants in this study, as evidenced by how many stories from early semesters focused on establishing "friendly" relationships with patients, such as Patty's story about Mr. X. Then as students became socialized into the profession, stories shifted from offering comfort to patients to the more distanced act of patient advocacy as they began to identify with nurses more than patients. This is in line with Lemonidou and colleagues' (2004) three stages of moral development. In the first stage, new students strongly identified with patients. In the second stage they began to identify with nurses, and in the third stage they became aware of their own moral orientation. It is in the third stage that students took a moral stand or decided to leave nursing. This was reflected in this study when participants left a specialty, so to speak, because of their negative experience.

Students across all semesters felt very little responsibility for patient care and outcomes. They had not developed clinical agency, often feeling in the way and not part of the health care team. They exclusively relied on the kindness and expertise of others to guide them. When students made errors in early semesters, they often assigned blame to

others. In later semesters they took responsibility for errors but were more concerned with how the errors would affect their future career prospects instead of how they would affect patients.

Participants were very concerned about preserving good relationships with staff, in order to increase learning. Their stories illustrated the web of relationships that Gilligan (1982) described as a way of morally relating to the world. Their stories were about offering mercy instead of justice, not only to patients but to negative nurse role models. Their focus on relationships did not change as they advanced through semesters.

The clinical world of advanced beginners was described by Benner, Tanner and Chesla (1996) as consisting of “complex agency, in which they doubt their own contributions, see themselves as secondary participants, and at the same time experience incredible responsibility for breakdowns and failures in patient care” (p. 61). Participants in this study were found to resemble advanced beginners in the areas of doubting their own contribution and seeing themselves as secondary participants but felt very little responsibility for breakdowns or failures in patient care.

Cognitive Development

The cognitive development of nursing students encompasses how they learn to “think like a nurse” when solving problems, making decisions and relying on information learned in clinicals, their personal lives and the classroom. Participants were found to rely heavily on the knowledge of others to direct their thinking and perspective-taking. Early semester students in particular viewed clinicals as arenas to test didactic learning and were disappointed when their classroom learning did not match what they saw happening

in clinical practice. In the following story from second semester, Annie is frustrated with the ambiguity of the clinical situation.

(Annie): I was at the hospital and I was performing a wound care, and I'm trying to remember what exactly the wound was from, and I can't remember what exactly the wound was. But, the patient was actually a nurse, or at least she said she was a nurse, but she said a lot of things and had a lot of questions that made us wonder, really, the extent of her nursing. So that's just kind of a little background, but, um . . . So this is going to be my first real dressing change where we were going to be packing saline-soaked gauze into the wound and doing all that type of care, and you know, we had learned about it in the lab, and we were taught it's a clean, it's as sterile as you can make it. Or technically it's a clean procedure because you can't really have it be sterile, and it was just really confusing to me whether it really should have been sterile or it should have been a clean procedure. And so, my nurse, he is a pretty experienced nurse on the floor and everyone knows him. He kinda carries himself like, 'I'm the man,' you know on the floor. And he was my nurse for the day and so before we went in I had him kind of prep me on what exactly I needed to be doing and talking me through the steps so when I go in there and I'm doing it on the patient that she feels comfortable like I know what I'm doing. And so, he did and he talked me through it and I even asked him, I said, 'Is this clean or is this sterile?' And he gave me the same response, 'It's as sterile as you can make it.' And so when I went into the room, you know, there is a pair of suture scissors right there and there was some sterile saline in a container, so it's kind of like, I didn't know really whether

I should be getting a brand new sterile suture kit, if I should be getting a brand new container of sterile gauze, if I should get a brand new big bottle of NS [Normal Saline]. You know, it was all these questions I had. Anyways, so I went in to perform the dressing change and my instructor was just passing by and saw what I was doing and so she came in. And while I'm beginning the procedure and asking questions, the patient, who has now reminded us that she is a nurse . . . I'm trying to remember exactly what happened but I started doing the procedure and my instructor asked me, 'well don't you think you should get a new NS container?' And I said, 'Well, you know, its, ah, it's okay.' I was giving answers according to what the nurse had told me. Really that's what it came down to, how he prepped me, that's what my response was. So then the patient asks, 'Well, is this a sterile procedure or is this a clean procedure?' who is a nurse, and she should know, so why is she asking me in the first place. But she asked me and I need to give her a response so, what am I supposed to say? I've been asking everyone the same question, so my response was what everyone's been telling me, 'Well, it's as sterile as you can make it.' And she's like, 'Well what does that mean?' So during the whole procedure she's questioning me and giving me grief about whether it should be sterile or clean and I don't know. I mean, I only know what the nurse has told me and what I've been taught in class, which is all kind of conflicting. So I did it to the best of my ability. So we finished and we left, and that was what I thought was it. Well, then, about an hour later, my instructor saw me and said, 'Annie I need to speak with you.' And she pulled me aside and I thought she was going to talk, well, I assumed she was going to talk about the

dressing change, which she did. And she said, 'Well, how do you think you did?' And first of all, that's always a horrible question to ask. And I said, 'Well, I think I did Okay, you know, I did everything that the nurse told me to do, and you know, I think I handled the situation Okay.' And I said, 'Well, what do you think?' And she said, she just shook her head and gave me this death look, and I was so nervous and so scared 'cause here I thought I had done a good job and had done it according to what the nurse had told me, and, her concern was, the dressing change was fine. She said, 'But how you answered the patient's questions were not.' And she said, 'I'm really concerned that this patient may come back to the hospital, you know, there may be a lawsuit. And she was that concerned that possibly a lawsuit would happen because she's a nurse and if she thinks it should've been sterile, then you should've been doing it 100 percent sterile. And, this may be a problem, and just so you know you may find out in the future that you could be involved in some sort of lawsuit'. And it was just really frustrating because as a student I was doing exactly what the nurse had taught me, and had told me to do and now suddenly I may be in a lawsuit.

(Fiona): That's a heavy burden to carry around for who knows how long.

(Annie): Yeah, and honestly to this day I still don't know how I should have done the procedure. Really, probably from now on I'll do it always sterile, I'll go get all new supplies. I don't care how expensive it is. But I'm just gonna get all brand new supplies and if someone says, you know that only has to be clean. 'I don't care, I'm doing it sterile!' You know?

(Interviewer): What stands out for you in this story, what's the one thing if you could distill it, kind of the main concern you have. What stands out?

(Annie): Probably the ambiguity of dressing changes. And really not knowing how the procedure really should have been done. It just seems like, well and after the fact, even, I asked my instructor, I said, 'Well, so should it have been sterile? Or should it have been clean?' And she actually went around to tons of the different nurses on that floor, 'cause she had worked on that floor prior to being an instructor and she asked everyone for their opinion. She even went to the nurse manager, and everyone said, 'Well it's as sterile as you can make it,' everyone gave that same line. And so, it's like no one really knows and no one really knew, and yet if this nurse patient thinks that it should have been sterile, I don't know what would ever hold up in, in court, you know? Now I would use all new packaging and if the patient asked, 'So is this clean or sterile?' I'll say, 'it's as clean as you can make it, but I'm going to make it sterile for you.' (S2:484)

Received Knowing

As Annie's story began, she was comfortable trusting the nurse to provide instruction on how to perform the dressing change procedure correctly. She was confident in the nurse's knowledge, experience and authority, commenting, "He is a pretty experienced nurse on the floor and everyone knows him." This perspective is in line with Belenky and colleague's (1997) received knowing. Received knowers rely on external authority, and view truth as being passed on from person to person. Annie made sure that she was doing the right thing by relying on not only what she learned in the lab,

but by confirming that information by asking her nurse, “Is this a clean procedure or a sterile procedure?” She expected everything to go well.

Annie relied so much on received knowledge that there is no evidence in the narrative of her critical engagement in thinking about what would be the best course to take for the patient’s benefit. Her belief that there was a “right” answer, if only it could be found, was profoundly challenged by the ambiguous phrase, “as sterile as we can make it.” She seemed to be more concerned about the ambiguity of the situation and her own experience than the patient’s experience of the situation.

Early semester students regarded the knowledge they received in the classroom as correct. They expected classroom instructors to fully prepare them for clinicals, and were often disappointed. The mismatch between what was learned in the classroom and what was experienced in clinicals came up every semester but caused the most discomfort in first semester students. These students felt dissatisfied with their classroom instructors, and trusted clinical learning more than didactic learning.

(Cara): One of the struggles I had first semester was seeing difference in practice than what I learned in class. For example, I remember my first day of clinical, I thought, ‘I kind of hate being a nurse.’ (S1:1091)

(Annie): I still don’t feel like they [didactic instructors] gave us what you wish you would have gotten. So even though they knew we didn’t have that experience, they still didn’t give us that, ‘This is what a day is like,’ you know. (S1:974)

Received knowers have a strong dualistic sense of right and wrong and expect authorities to tell them which is which. They assume there is only one right answer to a

question, making all other views automatically wrong. “Those who think they *receive* all knowledge . . . equate receiving, retaining and returning the words of authorities with learning” (Belenky et al., 1997, p. 39). In the story about the dressing change Annie said, “I was giving answers according to what the nurse had told me,” demonstrating her trust in received knowledge. However, a conflict arose between the two authorities that Annie was depending on. She stated, “I only know what the nurse has told me and what I’ve been taught in class, which is all kind of conflicting.”

Perry (1970) called this right versus wrong, black versus white perspective dualism. Although the following first semester student did not have the “right” answer, she was confident that the right answer existed. Believing that truth came from others, she silenced her own voice and looked forward to learning, trusting that she would learn the right answers from her instructors.

I just felt so terrible and you know I couldn’t just say [to the patient], ‘Oh it’s going to be okay.’ I knew that wasn’t the right answer but I didn’t know what the right answer was and I don’t think that silence was the best therapeutic approach at that point and I hadn’t had any kind of psych yet so I didn’t even really know that. (S1:1444)

In later semesters, students began to switch their trust from clinical sources to didactic sources. Students were still concerned about the mismatch between clinical and didactic knowledge, but now they had learned about evidence-based practice and were eager to apply it. Their disappointment and distrust switched to nurses in practice instead of didactic instructors. At this point, they trusted didactic learning more than clinical learning:

I can think of numerous other instances where people were doing things that we haven't really learned in nursing school. But in nursing school, I mean, with our classes, that's what we learn is like the latest practices all the time. Whereas in the field and in the hospitals it takes longer to implement things and stuff like that.

(S3:147)

Received knowers are uncomfortable with ambiguity and want to know exactly what is expected of them (Belenky et al., 1997). They want clear instructions. The "ambiguity of dressing changes" is what stood out for Annie when she recalled her clinical situation. She was surprised that her instructor asked the opinion of staff, and unhappy when she realized that "no one really knows and no one really knew" the right answer. Ambiguity was a daily occurrence in clinicals, which contributed to role confusion and discomfort throughout all semesters:

I didn't know what you were supposed to do. 'Cause I thought we're supposed to go around and assess all your patients and determine priorities and stuff and, I didn't feel like that was what I was seeing and so then I was confused about what I really should do. And as a student I didn't know what my role was. (S1:1108)

Lack of clear instructions left the following first semester student feeling clueless, stupid and overwhelmed. She was relieved that knowledgeable staff members were there to tell her what to do. She said, "Like, I had no clue. I knew he probably needed oxygen, but I didn't know at what level, I didn't know what mask to use, and luckily other people were there" (S1:708).

Subjective Knowing

Authority figures often gave students information that did not match what they were seeing in clinicals, so students felt disappointed and confused, causing a conflict about the trustworthiness of received knowledge. When the clinical instructor was involved in a procedure, the student expected the procedure to go by the book, since the instructor was seen as the authority and source of knowledge. In the following story from first semester, the failure of the clinical instructor to go by the book caused disbelief and anger in the student. Although the student did not directly challenge the authority, she went back later and repaired the damage and did what she thought was right, foreshadowing her move towards relying more on her own inner voice than the voices of others.

I was giving my first bed bath and there was a larger woman who had had an abdominal surgery. And I was getting ready to tamp on my little mitt and I was ready and my instructor came and said, 'What are you doing? We're not doing that!' She just like took the rag, put it in the water and like just squeezed it and kind of let the water just run everywhere. This is my clinical instructor! She just squeezed like she was squeezing lemon juice on a salad! .And I was just sitting there like, 'Oh my God! What is going on here?! . . . So after my instructor left I kind of went back with my mitt and tried to clean up what had been happening. I could not believe that! (S1:1489)

Due to this mismatch between didactic learning and clinical realities, students were left to wonder who was right, and which source to trust. This tension caused students to transition toward subjective knowing (Belenky et al., 1997). Although

subjective knowers still believe there is a right answer to everything, they begin to trust the truth that resides within them, and begin to become wary of external authorities. This was evident in Annie's story about the dressing change, where she was forced to make a decision on her own when the authorities let her down. She was very disappointed, even angry, because "as a student I was doing exactly what the nurse had taught me, and had told me to do and now suddenly I may be in a lawsuit." She finally decided to listen to her own voice and stated, "Now I would use all new packaging and if the patient asked, 'So is this clean or sterile?' I'll say it's as clean as you can make it, but I'm going to make it sterile for you."

The following fourth semester student was beginning to transition to subjective knowing, where she valued her own experience as a source of knowledge.

All we can tell is what the book tells us and what our instructors have told us. You can't know until you've seen it in real life, and if it's like by the book and you ask the nurse and the nurse is like 'pshhh,' well then where does that leave you?

(S4:1156)

Students in later semesters became used to the mismatch between didactic and clinical knowledge, but dealt with it more assertively, concerned with application to future practice and budding clinical agency. Additionally, they no longer exhibited blind trust in authority and began to listen to their own inner voice, illustrating evidence of the emergence of subjective knowing. They were moving "from passivity to action, from self as static to self as becoming, from silence to a protesting inner voice and infallible gut" (Belenky et al., 1997, p. 54). In these later semesters, participants realized that what they learned in clinical would have a direct application to their future practice, so they were

less trusting of received knowledge from authorities, and began listening to their inner voice:

When I was first on the floor I kept thinking that every nurse is a good nurse. But now I'm thinking, 'Okay that's a different story now, we're about to graduate, I know I need to do something because every nurse is not a good nurse and it's time for me to step up and say something.' . . . I just had this patient just doing trach care and we'd keep doing what we were taught by the books all the time. 'Sterile technique, sterile technique, sterile technique.' And that's not the way it really happens, I mean I've seen this so many times. The first time I seen [*sic*] it I kept thinking, I was like, 'Oh my God. You just broke your sterile field. Aren't you supposed to start from scratch?' and of course the nurse says, you know, 'This is not the way we do it. This is this is this is that and then you . . .' Just trying to shut me up. But nowadays I'm like, 'No.' If the nurse tells me to do this . . . because at that point [first semester] I was observing. At this point I'm doing it myself and I don't care if the nurse says she doesn't do it like that . . . And so it's a matter of you know learning our own techniques and our own skills and starting to develop what we want to do and how we're going to do it versus trying to watch someone, observe someone, because their thing is about observation. But at this point we're like well it's a limitation and I've gotta be able to do that. (S4:1076)

The following comments by Sam suggest that he's coming to terms with the mismatch between didactic learning and clinical practice.

(Sam): But it seems like just now I see my, my preceptor do things and there's differences in the way we'll do things. Like he just has a finesse that I don't have,

but he's never, he's never really corrected me unless I've asked him . . . I can't say there's one right and one wrong way to do things; there's kind of a window of ways to do things and I guess I'm on one side and he's on the other side. (S4:311)

Sam appears to be shifting away from dualism toward what Perry (1970) would describe as multiplism. Like subjective knowers, multiplists still felt that the right answers existed, but until they appeared, individuals were entitled to their own opinion.

Discussion of Cognitive Development

Participants in this study entered nursing school as dualistic received knowers. Early students placed more trust in clinical staff members than faculty. Later students, however, shifted their allegiance back to evidence-based didactic knowledge and faculty. The conflict between what they learned in the classroom and what they saw in clinicals moved them toward the development of multiplistic, subjective knowing.

The findings in this study regarding cognitive development are in line with findings from other studies. Holden and Klingner (1988) and Sublett (1997) found that cognitive changes, although small, do occur during nursing school. McGovern (1995) and N.C. Frisch (1987) both found that the majority of students in their studies were in the early stages of multiplism (subjective knowing) upon graduation. Findings were unrelated to the chronological age of participants, as was also true in this study.

Skill Development

The development of skilled practice includes the application of skilled nursing interventions and clinical judgment (Benner, 1984). This skill-based apprenticeship of practice encompasses engaged, thoughtful action, where students learn to do and think at the same time.

As discussed earlier, learning by doing was a central concern of the participants of this study; it was their main task, and essential in the development of expertise. Gaining practical experience was not only a central concern of nursing students, it was the means by which they developed skillful practice. During clinical situations, they relied first on their own previous clinical and personal experiences to guide them, followed by reliance on observational experiences and finally classroom learning. Observation was viewed as an inferior way to learn, and classroom knowledge was generally relegated to the background, to be referred to when their experience was not sufficient. In gaining practical experience, students were most often operating in the unready-to-hand mode of engagement (Benner, 1994). Students' level of confidence was an additional factor in their development of skillful practice.

Relying on Previous Clinical Experience

(Interviewer): Where do you think you learn more when [clinical situations] happen? Do you rely more on experience or more on didactic?

(Neo): I think you learn, like, a greater variety of things and maybe some degrees more important [are] the things that you learn in the classroom because those are the things that . . . are in the books, and that's the way we should be practicing. And so in a way, that stuff is more important but I feel like you fall back to, 'Okay, what's happened to me?' Like that's the first thing you think about is, 'Okay, well, what happened to me the last this happened?' or something like that. And then if you can't think of anything there you're like, 'Okay, what have I learned [in the classroom]?' Because you're looking for the most, the biggest impact that you've learned about and usually it's something that you've done or

experienced. If you can't fall back on that then you go to whatever I learned in the classroom. And I think in general the classroom is probably more accurate and is better practice because you don't always do things right in the clinic, in the hospital, and yet those are the things that you tend to fall back on because that's what you've experienced, that's what you saw other people do or even did yourself and so if you can recognize, 'Okay, when that happened I did it wrong and I need to do this differently or the nurse did it, or, you know, I could have done it a little bit better if I had done...' I think if you realize those things at the time then it benefits you in the future but if you don't ever realize those things then you're just going to make the same mistake again when it comes up, even if you were taught better in the classroom what you really should have done if you don't realize the mistakes you've made in your own experiences.

(Interviewer): Do you all agree with what he said?

(Dude): Well I think what he said is true. I also think, when you first get out, I think your first, when you don't have experience you base it off of studying in the class. And so, like, in [name of hospital], I had no experience quite yet with what to do with a mother who was going into labor without a doctor there so we resorted back to what he had learned in class and timed the contractions. But, um, when you are out and you have more experience, that's [experience] more the first thing that comes to your mind because it's had a bigger impact on you. And then, like Neo said, then you go back to, if you can't find it there then you go back to the class work. So I agree with Neo. (S3:597)

The above narrative demonstrates the preeminence of clinical experiential learning over didactic learning. Neo and Dude, and other students in the study, agreed that the first thing they thought about to guide their actions during clinical situations was past clinical experience, even though they believed that classroom knowledge was the most accurate. If they had no past clinical situation to reference, then they would rely on classroom knowledge.

Like Neo and Dude, when faced with assisting a birth without a physician, the following third semester student relied on the births that she had previously attended, instead of reviewing what she had learned in the classroom.

(Bean): I really was going through my mind the birth I had seen a week before and, 'Okay, what did they do, they had this sterile stuff and what do I do.' And stuff like that . . . as a person who's never done that, I'm not trained, and so that's where my fear came from, and I wasn't prepared.

(Interviewer): Was there anything else you were thinking about besides that previous experience that would help you deliver that baby if you had to?

(Bean): I guess I was thinking about the things we had talked about in class, but, I don't really remember, I think I was focusing most on what I had seen and what had the doctor done and what did the nurse do and what did she have me do and things like that. But, I think I was more praying that the doctor would come.

(S3:335)

Having "never done that" created fear for Bean, even though she had learned about labor and delivery in the classroom. Although she was thinking about what she learned in class, she focused most on past clinical experience to guide her actions.

Relying on Personal Experience

Students not only relied on previous clinical experiences or observations, but they also relied on previous personal experiences. For example, this student related a story that happened to her in 7th grade when a nurse explained her upcoming surgery and calmed her down. She used that experience with a patient undergoing an emergency c-section:

Just reflecting back on the experience of a nurse that has spent some time with me to say, 'Okay, this is what they're going to do, okay. I'm putting the IV in now, they're going to put the drugs in there and then they're gonna stitch you up and things like that.' And just how even that little bit of information made me more calm so I was trying to make this birthing experience more calm for this family especially because it was an emergency, it was their first, and everything, so, kind of reflecting back on my own experience for that, how scared I was. (S4:403)

When asked if she thought about what she learned in the classroom during this situation, the student said, "I think I might have reflected back on that--I was thinking more about my own experience, but, it's in your subconscious, I think, that your patient should know what they're going through and that will reduce anxiety" (S4:427).

Relying on Observation

Hands-on experience had a greater impact on student learning than observational experience. This may be related to the difficulty students had in paying attention during observational learning. In the following narrative, Fiona becomes disengaged while observing a procedure.

(Fiona): If I was just standing there and he was just putting the epidural in, I wouldn't be thinking about all of those things. I would be thinking about, what homework do I have due, what do I need to do at work tomorrow, I wonder if my kids ate dinner, did my son get his homework done? Just kind of that inner list of items that's constantly running through my head. I wouldn't be focusing on, he's giving that medication, I wonder why he's putting that one in, you know, specifically. I don't think about those questions just automatically. They don't just come to me usually.

(Interviewer): That's interesting. Can anyone think of a story that might illustrate what we're talking about right now? Things you're thinking of when something's happening and what's going on in your head?

(Fiona): I did my first overnight shift Sunday night, and towards the latter part of the early morning hours, no matter what I was doing, you know, if I'm in the room and just watching the nurse chart, I kept thinking of, 'I'm so tired, how am I going to drive home when my shift is over.' And that pretty much consumed my thoughts. I would say, when I'm not specifically involved, like, I'm watching her chart, she's going so fast on the computer that then I start to lose focus. I caught up with the minute, I was engaged thinking, 'Okay, you press this key and this key and you got to this screen and this.' And then once she lost me, at that point there was a disconnect and my mind would just wander away from what was going on at that moment. The minute I got lost or confused, or was unsure and it wasn't appropriate at that time to ask a question, then, my mind will just kind of wander. (S5:625)

With Fiona's difficulty attending to learning by observation, it is no wonder why students relied on clinical and personal experiences first, and then on observation. When Neo was asked about learning more in clinical versus didactic, he said, "you're looking for the most, the biggest impact that you've learned about and usually it's something that you've done or experienced" (S3:565). It's obvious that Fiona's observational experiences would have little impact to guide her future actions. This gives more meaning to the statement by the following final semester student: "My learning took place when I was paired with a really good nurse who was good at talking the whole time they were working, not just letting you watch while they worked in silence" (S5:691).

Relying on Classroom Learning

Although students recognized that classroom learning is important and accurate, they relied on clinical and personal experience first, followed by observation. If those failed, then they reviewed what they learned in class. For example, when confronted with a pregnant patient with a possible history of abuse, the following third semester student relied on what he had learned in class. Integrating didactic information into a clinical situation appears to be more complex than integrating previous clinical experience or observation.

In the beginning of labor and delivery rotation I was helping do the meds on a girl who was I think 22 weeks along and she just came in because she wasn't feeling well and was throwing up a lot so she was just worried about her and her baby. And her mom came in as well, and I think she worked somewhere at the hospital so she was coming in for her to be there. And as we were going through the admission procedures and like asking all the questions that you're supposed to ask

beforehand, which I had never admitted someone before, especially in labor and delivery, I wasn't sure what kind of questions you ask. But, you pretty much ask everything that I would think might be embarrassing or not sure if you should answer. And when we're asking the questions it seemed like the mom would answer a lot of the questions, which was really annoying cause like, you're asking the patient, we don't need you to answer for her, she was just kind of one of those moms, I could tell. But then my nurse got to illegal drug use and alcohol abuse and stuff like that, and my patient didn't really say anything about that. And . . . she wasn't married and, you know, you could kind of tell there were issues going on. And her mom's like, 'Oh, she doesn't have any problems any more with that.' And I was like, 'Okay.' You know? And the patient had said that she didn't live with her mom anymore, she lived with her boyfriend--or according to the mom the boyfriend doesn't actually stay there, but anyway, that was another story. But I felt like we didn't get the truth out of her regarding that and I felt like that was important not only for her own health but for the health of the child. And then she got to the next question, which made me even more nervous, was, you know, 'Is there a history of abuse within the last six months,' or something, I can't remember exactly how it's worded, but, they didn't really say anything, and my nurse just kind of continued on with the rest of the questions and I didn't know what to say. I wanted to say, 'Oh, so is there an issue?' You know? And, first I wanted the mom to leave so we could at least ask her, you know, was there an issue with abuse? Because maybe there is and she doesn't want to admit it with her mom there, and then if there is then we should probably do something about it

because it also impacts the health of the unborn child, so far. But the nurse kind of continued on with the rest of the questions and then after we left the room I was like, 'Did you notice that she didn't actually answer that question?' She's like, 'Yeah, I just made a note just to be on the lookout.' And at the time I was like, 'Well, I guess that's the best we can do,' or something. But I was really nervous because in class they had talked about how abuse is such a huge issue and that if you suspect abuse you should report it and I felt like I should say something, but I didn't know who to say it to. And I thought the nurse was the person I should say it to and she could do something about it then. And I felt like, that, maybe it should be something that should be addressed now and not maybe, you know, 24 weeks along when she's giving birth and . . . I really reflected back on what we had talked about in class, you know, how abuse is worse during the first trimester and even though she had kind of passed that part, but, I don't know. I just, it was just such a huge issue in class and we had talked about how you need to do something about it, and I didn't. And so, I don't know. I can remember that experience specifically where I was thinking, you know, 'What did we learn in class?' and like, 'What did they say about it?' And also thinking about ethics class, which we were in that same semester and what is the ethical dilemma of having her mom in there answering the questions and it may not really be true because we're not actually getting it from the patient, and so, I don't know. I had a bad headache that day. (S3:436)

The above story highlights the complexity of utilizing didactic information during a clinical ethical dilemma. Even though the student had learned in class that patients

should be interviewed alone when asked about abuse, when the actual situation arose, the background and context of the event was more convoluted than expected. Further, the student expected the nurse to follow the didactic guidelines. When she did not, the student was confused and put off balance once again by the mismatch between clinical and didactic learning. It is worth noting that the student in the above story was clearly concerned about the consequences of his actions for the patient, which is very different from the majority of narratives in the study that focused on the consequences to the nursing student.

Placing classroom learning last is somewhat surprising, in light of participants' struggle in early semesters to come to grips with the mismatch between didactic knowledge and clinical experience. It is possible that the mismatch between clinical and didactic causes earlier students to rely on clinical knowledge more than didactic. However, in later semesters, students integrated the two sources of knowledge, as they became multiplistic knowers, as discussed earlier.

Struggling with Equipment

Although students valued experiential learning, it was at times frustrating, especially when it came to learning how to use different devices at each new clinical site. Each hospital had different procedures and machines, so students were thrust back into the unready-to-hand mode of engagement (Benner & Wrubel, 1989) when each new semester began:

(Mark): There's always something. It seems like no matter how prepared we are or how much we study or talk with each other, there is always something, for me, that is left out. And to me, it's the mechanical parts. Working with the pumps,

working with the alarms, it is and was as a junior and as a senior, even last semester, and, as a matter of fact, Tuesday. I mean, you go in there and you think, ‘Oh, man, I’m really, I’m confident, I’m going into this room, I’m carrying two patients today. I’m good, I’m good to go.’ And you go in there and your alarm starts going off and you start pushing buttons and it just doesn’t work the way you think, ‘Okay, silence, silence, reset.’ And I’m finding out more that a lot of the mechanical parts that we’re going to deal with are coming when we get orientation on that floor. So it’s just like, ‘Well why didn’t you tell me that as a junior and I could have not stressed about it.’ It just seems like it’s those little things, working with the mechanical parts that is left out of our basic nursing. I mean, they want you to hang meds or hang IVs and program the pumps, and yet there’s no teaching on how to program the pumps. It’s kind of like an off-set, like they expect you to be able to do that. You know, ‘you did it as a junior,’ and I’m like, ‘Yeah, but I worked all summer.’ I don’t know, it just seemed like there was a misconnect on some of the small, what I think, small things. But to the people who’ve done it for twenty years, it’s really simple. But when you push the button and it doesn’t go the way it went last week . . . I worked on a critical care unit, and none of the pumps, in every way I went in, none of the pumps worked the same way. And they were all the same pumps! And I’m pushing the same button. . . . It’s just frustrating. (S4:1300)

The unready-to-hand mode of engagement refers to equipment or activities that are noticed because of breakdown. As in Mark’s case, breakdown may occur because the equipment itself does not work or because of something related to the person, such as loss

of maximum grasp or self-consciousness (Benner & Wrubel, 1989). Nursing students are generally operating in this unready-to-hand mode, because they lack experience to fully grasp clinical situations, and are self-conscious as they learn new skills under close supervision. In this mode of engagement aspects of equipment or practical activities stand out or become more noticed (Benner, 1994). The following third semester student put it this way: “Well, I was at a brand new hospital, again, I mean, this is always the critical issue. You go to a different hospital and it’s different stuff, different everything and everyone assumes you know what’s going on” (S3:1416).

In the above narratives about the frustrations of learning new equipment every semester, students did not demonstrate problem-solving skills or demonstrate an understanding of how similar machines worked. Once again, students resorted to experience with the same machine to understand how to operate it instead of resorting to didactic principles about the commonalities of machines and how those principles could be applied to all similar machines.

Confidence

As students developed skillful nursing practice, they valued the importance of confidence in pushing them forward. Self-confidence assisted them to learn new skills. In relation to specific procedures, successful clinical experiences built confidence and unsuccessful experiences decreased confidence. Additionally, even when students did not feel confident, it was important for them to appear confident in front of patients.

Repeating the same procedure several times increased confidence. Repetition was the key to learning and feeling confident:

A patient pushed his button to go the bathroom a lot and I would come in and he was already getting out of his bed and . . . it really helped build my confidence in that and be able to take him to the bathroom many times . . .it was great. (S2:312)

Even if they felt unsure or nervous, portraying confidence helped students get through new procedures:

I don't know if you want to call it lying to your patient, but I try to maybe allude to confidence with them, even if inside I'm like panicking, my heart is racing, I'm hoping they don't see the sweat beading on my forehead or my chest heaving as I'm doing it. I try to portray an image of, 'I know what I'm doing,' even though inside I don't know what I'm doing. . . . And that helps me. (S1:1219)

Their portrayal of confidence seemed to work well, because patients often had more confidence in students than students had in themselves. Students were acutely aware of their own limitations, but patients sometimes related better to the students than to the licensed care providers. Patients seemed to think that students were just like nurses. For example, when the physician did not show up at an impending birth, a third semester student said, "One of the uncles grabbed me on the shoulders and brought me right in front of her and said, 'The student will get the baby, push away!' And I'm like, 'Oh, please no!'" (S3:268). In the following story from third semester, the patients were more comfortable asking the student for information than asking the doctor.

So as soon as the doctor left, they stopped me and they asked what was going on. And they had no idea what it meant to be jaundiced, what the bili lights were for, anything. And so I just stayed back for a few minutes and talked to them about

what all of this meant that I thought, and the doctor thought they understood.

(S3:631)

Confidence increased with time. A later semester student said, “Confidence – I’ve progressed in it a lot throughout the nursing program” (S4:478). This is congruent with Dillon’s (2002) findings that confidence increased as nursing students progressed from their first clinical to the end of their first academic year. Reflecting back on nursing school, the following final semester student could see that her confidence had increased over the course of the program.

I just learned a lot about, I don’t know, myself, not even to do with nursing school, but just my own confidence level and, um, grown emotionally through the whole experience. It’s been a struggle . . . What doesn’t kill you makes you stronger. And I’m not dead yet! And I definitely am stronger. (S5:567)

Discussion of Skill Development

Participants in this study developed skills and skillful practice mainly through repeated experiential learning in clinicals. When they were stumped or didn’t know what to do in clinical situations, they relied on what they had learned in previous clinical experiences first, followed by personal experience, observation, and finally on what they had learned in the classroom. Their practice did not resemble the rule-governed, task-oriented practice of advanced beginners, who relied on theoretical and procedural knowledge to guide their performance (Benner et al., 1996).

Participants’ frustration with learning about new equipment every semester indicated that they were novices. Benner (1984) stated that even nurses with in-depth experience in a specific specialty or unit would be at the novice stage of skilled

performance if transferred to another unit. Changing units and specialties as each semester changed may hold students perpetually in the novice level of skill acquisition.

Working with unfamiliar equipment or procedures challenged participants' self-confidence. Confidence seemed to play a large role in what they learned and how they performed the procedural skills of nursing. Neill, McCoy, Parry, Cohran, Curtis, and Ransom (1998) found that students actively pursued the development of confidence by seeking learning opportunities. Citing Tanner (1984), Botti and Reeve (2003) pointed out the positive relationship between confidence in decision-making and level of experience, which is in line with Dillon's (2002) findings that confidence increases with experience. Repeated experiential learning in clinicals promotes confidence, which promotes skill development, which in turn promotes more confidence.

Additional Findings

Three themes could not be categorized according to the research questions, but were nonetheless interesting and important. First, clinical instructors were absent from many of the narratives. Second, previous job experience did not play an important role in students' clinical world. Finally, clinical experiences invoked emotions of fear and anxiety.

The Role of Clinical Instructors

Students recognized that when things went wrong, they needed to notify their clinical instructors. Across semesters, clinical instructors were often absent in the narratives. When they did appear, they were depicted as either providers of moral support, or someone to be feared. Although seen as the ultimate authority, many of the stories conveyed a feeling that students mistrusted the knowledge and expertise of their

clinical instructors. Clinical instructors were rarely the main characters in the stories, but were consulted afterwards. Interestingly, a frequently recurring theme was that clinical instructors “just happened to be in the neighborhood” at random times:

(Annie): I went in to perform the dressing change and my instructor was just passing by and saw what I was doing and so she came in (S2:518).

(Patty): I rushed out and happened to find my instructor standing there (S2:1279).

(Kirsten): My clinical instructor just happens to be there on the floor . . . and knew exactly what to do (S4:741).

(Bean): I went to talk to my clinical advisor in the meantime because she was just passing (S1:266).

(Rob): Then thankfully, her clinical instructor saw her walking down the hall with a needle full and said, ‘What are you doing?’ (S1:1386).

Although clinical instructors did not play central roles in participants’ narratives, they often provided moral support and a listening ear, which students appreciated. When asked how she got over a difficult incident with an unsupportive nurse, Sally answered, That day I remember I went to post conference early and I just sat there for a minute and my clinical instructor came in and we just kind of talked. And I felt better after that just because I told her what had happened and she kind of talked to me about other things that were going on in my life and, I don’t know, she just made me feel better all around. (S2:198)

When the clinical instructors did appear as main characters in the narratives, they were most often antagonists. In the following story from second semester, Han had worked hard to gain rapport with a “difficult” patient, only to have his clinical instructor offend the patient and unravel the relationship, affecting patient care and student learning.

(Han): It’s one thing when a nurse does something wrong and you’re just like . . . because you’ve got someone to go to you can be like, well, I just saw this happen, what can we do about this. But the real question is, when you’re in there with your clinical instructor and then all of a sudden you know they’re the ones who are doing something. I think it was my second semester in nursing school and I had a patient who’s an older African American gentleman and he had had a spinal injury years ago that left him paralyzed from the waist down. And because of his situation, he ended up getting a stage three decubitus that I had to do a wet-to-dry dressing on. And I guess just his life situation, just things that just made him kind of bitter and he was one of those patients who you know, he wanted you to come in the room, do your job and get out. Like I could have minimal rapport with him; he’d answer short, yes or no questions. The man practically refused his morning assessment. Like his morning head to toe. And I managed to talk to him and convince him to let us do a few things, but there were just some things that he just was like, ‘you don’t need to do this, I’m fine.’ And so you know, you have to respect him. You know I’ve done the wet-to-dry dressing skill before. She [clinical instructor] insists on coming in there. And I tell the man what I’m going to do. And she’s like, ‘well that’s not a thorough enough explanation’. I said ‘the man’s had this procedure and it’s been done to him for several days, and I’ve explained it

to him before.’ And she goes around and she starts talking to the man telling him this and he’s just looking away from her I mean doing anything but making eye contact. And she keeps on harping on him, and finally he just looks up at her and says, ‘Why do you have to annoy me?’ (S2:1073) . . . in a simple wet-to-dry dressing that should have taken 5-10 minutes to do at most ended up taking us 30 minutes to 45 minutes to sit there and pack this man’s wet-to-dry decubitus. At least during the day I had managed to get him to talk to me a little bit. But after this incident, the man had nothing else to say to me the rest of the day. I would go back in his room and this one incident just completely turned him off. (S2:1099)

For Han, his clinical instructor’s presence was an interference instead of a support.

The instructor not only sabotaged Han’s relationship with the patient, but also the relationship between the instructor and Han. Learning and patient-centered care were blocked. Further, Han felt powerless, as evidenced by his statement about not having someone to go to about this incident. His trust in his clinical instructor was damaged, which could have future ramifications for patient safety, if Han did not feel comfortable going to that clinical instructor with questions or for help in the future. It is clear that clinical instructors risk a lot by taking over for a student in this manner.

Students often reported fear of asking for help from clinical instructors. Adding to this fear was the power that the clinical instructor had over the students’ grades. When asked who she would go to first when she had a question, Annie answered:

Depending on the rapport that I have with my instructor, that’s usually my first choice. I’ve had instructors that I don’t want to talk to, so I would rather ask the nurse. With a really supportive instructor, I don’t mind asking even the dumbest

of questions. But, with a clinical instructor that I don't have a lot of trust in, I'd rather go to the floor nurse that I'm working with, ask her help, and look like an idiot, and that's fine, as opposed to having a clinical instructor who affects my grade and my progression and everything that happens. So that would be my first choice, but I've had instructors that I don't want to talk to, so I go past them to the nurse who's on the floor. (S1:1763)

A kind staff nurse helped the following third semester student avoid going to the clinical instructor when she made an error.

(Chris): So I'm doing a push on morphine. . . . I put my air in and just blew the end out. . . . And my first thought is, 'Where's my instructor!?' It's like, 'Oh God! Please don't let her see me! Let me scoop this mess up! Oh God! Oh God!' You know that kind of thing. And then another nursing student was in there with me and we were both just terrified of this instructor. And she's like, 'It's Okay, it's Okay.' That's all she could say was, 'It's okay, it's okay.' And I was like, 'Oh my gosh!' And one of the nurses on the floor, the charge nurse was in there, and I didn't know she was charge nurse at the time. She just turned around and goes, 'Honey, you do it one time, you never forget, you don't put air in it again and we've all done it.' She said, 'I've shot mine clear across the room and hit somebody with it the first time.' You know, so it was like, 'Clean it up, I'll draw you another one out.' (S3:1478)

(Mark): In your situation, do you think you're more scared of the instructors because their attitude or their perceived attitude, or because they really have it together and they want to make it hard on you?

(Chris): Um, this particular instructor is, oh, God, how can you put her? She's in a category all her own as far as my mind goes. She wants you to know, she is very concerned that you would know it, she wants you to know it. But she, she operates on a higher level. Her nursing expertise is way up there, and so she always has the assumption that you should know this, you should know this, why don't you know this. And so then, so then she comes at you with the attitude 'why don't you know this, you should know this.' And so you, and, and you're thinking, 'I don't know anything, so don't, I don't know anything! And what I do know you make me forget! You know, out of terror.' So, um, when you have another instructor, I'm thinking of this other one, that she walks beside you and she wants you to know, she's probably one of the hardest graders on some of our care plans and everything, but, and she, and she wants you to know it, but she walks beside you. Like, she walks you through it (S3:1587)

A picture emerges from the above exemplars of clinical instructors portrayed as people on the margins of clinical experiences, yet wielding great power. Benner (1984) said that is probably not necessary for instructors of novice students to be clinical experts. This is supported by Chris' statement, "She operates on a higher level. Her nursing expertise is way up there," and "What I do know, you make me forget!" Although they expected instructors to have a certain level of clinical skill, students in this study valued kindness, understanding and approachability more than clinical expertise.

The Role of Previous Professional Experience

When this study was undertaken, we expected to see how previous professional and personal experience influenced participants' learning, central concerns or progress.

Surprisingly, no differences were noted between generic baccalaureate students' responses and responses from students who had previous degrees and longer work histories. In fact, when asked the follow-up question, "Did this experience remind you of something that happened to you before nursing school?" participants were hard pressed to answer. Further probing yielded no stories about how students applied previous professional experience to their clinical situations. However, a few stories were shared about how personal experiences influenced the type of nurse they wanted to be. These were usually stories about their own experiences as patients in the hospital when they were young. Even so, these instances were too few to develop into a theme.

Emotions

Emotions played a central role in the narratives of participants. Across all semesters, stories were infused with terms such as terrified, frightening, nervous, anxiety, uncomfortable, awkward, stressed and frustrating. Lemonidou and colleagues (2004) found emotions to be a major theme in their study. They found that strong emotions, positive or negative, motivated nursing students to reflect deeply on clinical situations. Jackson and Mannix (2001) also found new students experiencing clinicals as stressful, often feeling that they were disliked and barely tolerated by clinical staff. This study supports previous findings because the clinical situations that stood out for participants, and those they had given considerable thought to, were laced with usually negative emotions. First semester students often told stories about being fearful and intimidated in clinicals, often related to their lack of confidence and experience. Narratives from later semesters were more often about being angry and frustrated in relation to patient care and advocacy.

Comparing Nursing Students to Advanced Beginners

Since the goal of this study was to describe how nursing students advance from lay persons to advanced beginners, it is important to identify exactly what advanced beginners look like, and then compare them to nursing students. Nursing students' attributes will be compared to Benner, Tanner and Chesla's (1996) description of the moral, cognitive, and clinical attributes of graduate nurses entering the field.

Requirements for Action

In Benner, Tanner and Chesla's (1996) study, advanced beginners did not see their patients as individuals but instead as a set of complex requirements that were of equal importance. Their narratives often included descriptions of intense, incapacitating anxiety and worry about their own competence. Tending to the patients' physical and technological support, and organizing, prioritizing, and completing tasks by the end of shift were the advanced beginners' main concerns.

In contrast, nursing students, especially in the early semesters, did see their patients as individuals, identifying with them and often feeling empathy toward patients. Anxiety for students was not so much about their own competence but related to their relationships with staff. Although they worried about looking stupid and feeling lost, their own competence was not questioned because they knew they were not expected to be competent as students. They recognized that tending to the patients' physical and technological support was beyond their educational preparation, so they concentrated instead on their own learning, getting along with the staff and providing patients with emotional comfort and moral support. Organizing, prioritizing and completing tasks by

the end of shift did not seem to concern students and were not highlighted in their stories about clinical situations.

Clinical Situation as Source of Learning

Advanced beginners demonstrated a partial knowledge of the clinical picture and had difficulty seeing the “big picture,” especially in patients with multiple problems. They saw clinical situations as an opportunity to fill in their gaps in knowledge and experience, and looked forward to the day when they could grasp situations like a more seasoned nurse. This attitude gave them a kind of freedom to use clinical situations as learning opportunities, because they did not yet feel fully responsible for patient outcomes. They could only see and deal with one day or moment at a time, with very limited knowledge and expectations about illness trajectories. They had a heavy reliance on the expertise of other staff members, and needed frequent and consistent coaching to relate theory to practice (Benner et al., 1996).

Nursing students in this study were very much like advanced beginners in that they saw every clinical situation primarily and essentially as a source of learning. Nursing students had very little sense of responsibility for patient outcomes, relying exclusively on the expertise of others to make all clinical decisions. They could not see the big picture and lived moment to moment in their clinical world.

Clinical Situation as Ordered and Regulated

Advanced beginners relied on theory and procedures that they had learned from nursing school and other nurses. They viewed clinical situations as puzzles to solve by applying the right knowledge. Problems came up when they could not call to mind the correct procedural or theoretical knowledge for the situation at hand. In crisis situations,

advanced beginners strived to prioritize and sought direction from others to guide their actions, reflecting their position as procedural knowers (Belenky et al., 1997).

Unlike advanced beginners, nursing students in this study seemed unable to see patterns in clinical situations, and did not seek to order or regulate them. They relied first on previous clinical experience and observation and then on theoretical knowledge. They entered nursing school as received knowers and advanced to subjective knowers, but generally did not approach the procedural knowing of advanced beginners.

Clinical Situation as a Test of Personal Capabilities

Advanced beginners were filled with anxiety when faced with something new, and their narratives focused on how they got through it, instead of how their patients got through it. This self-consciousness may assist beginners to consciously reflect on the role of the nurse, helping them to learn about power relationships and how nurses can affect situations (Benner et al., 1996). Anxiety about patients was seen to evolve from fear of patients' dying to worrying more about patients' changing status. With more experience, they began to understand how small aspects of patients' conditions could foretell important problems.

Nursing students also focused their narratives on their own internal experience, but instead of focusing on how they got through it, they were more concerned with what they learned from it. Practically every experience was a new experience, and students were eager to learn by doing. Although students were concerned about patient well-being, good and bad patient outcomes were seen equally as opportunities for learning. Each clinical situation was carefully tucked away to be drawn upon the next time a similar situation occurred.

Advanced Beginner Clinical Agency

Benner, Tanner and Chesla (1996) defined clinical agency as, “the experience and understanding of one’s impact on what happens with the patient and the growing social integration as a member and contributor of the health care team” (p. 60). Although advanced beginners are filled with anxiety and doubt their value to the health care team, they feel exceedingly responsible for patient outcomes. Four themes emerged from their narratives: procedural practice, delegating up, learning the skill of involvement, and agency within the health care team.

Procedural Practice

Advanced beginners’ nursing actions were guided by task requirements such as charting, treatments, medications, and following medical orders. Patient condition and progress were peripheral to the imperative to complete tasks by the end of shift. In fact, tending to immediate patient needs produced anxiety for beginners because it ran the danger of getting them off schedule. In the event of rapidly changing patient conditions, advanced beginners missed cues and continued care in a rule-governed, routinized way.

Conversely, narratives of nursing students did not focus on task requirements, and they seemed unconcerned about their schedules. Tending to the immediate needs of patients was important to them, especially their emotional well-being in early semesters, and patient advocacy in later semesters. Students were eager to make a difference, and felt especially useful when they were able to alleviate patient suffering.

Delegating Up

Advanced beginners in the Benner, Tanner and Chesla (1996) study relied heavily on physicians and more experienced nurses to make clinical decisions. They

accepted the judgments of those authority figures without question. Their narratives suggested that they did not feel fully integrated into the health care team, as evidenced by the use of the term “they” instead of “we” when referring to the treatment team.

Nursing students relied exclusively on the expertise of others, and did not feel responsible for care. This was evidenced by several narratives wherein the nursing student held the patient’s hand while “the others did their job,” and the feeling of being in the way and not part of the health care team.

Learning the Skill of Involvement

Although the advanced beginners felt unable to attend to the psychosocial needs of patients and families, they wanted to learn how to relate to them properly. They looked to more experienced nurses for positive and negative examples of nurse-patient relationships. They were able to identify inappropriate relationships when they witnessed them. They had the ability to identify with their patients, because they shared the common experience of being new to the intensive care unit environment.

Nursing students had very similar experiences about identifying with patients. However, students in early semesters seemed very adept at relating to patients, especially in providing comfort and moral support. They were disappointed when they witnessed nurses treating patients inappropriately, or ignoring their emotional needs. Interestingly, in later semesters students no longer told stories that focused on their relationships with patients as they began to focus more on technological and physical aspects of care. This shift away from providing comfort and moral support toward providing physical and technological care foreshadowed their focus as advanced beginners. Advanced beginners

seemed to look back and value the comfort and moral support they were able to provide as students, and desired to re-incorporate that into their practice.

Agency within the Healthcare Team

Paradoxically, advanced beginners felt strongly responsible for patient outcomes, even while doubting the value of their own contributions to patient care. They had great trust in the ability of medicine to cure and comfort, and situations where they could not cure or comfort severely challenged their sense of agency and left them feeling defeated and very aware of their own limitations.

Nursing students, on the other hand, felt very little responsibility for patient outcomes and were acutely aware of their own limitations. They accepted their limitations as a normal part of being a student and therefore had low expectations about their own contribution to patient care.

In summary, there are many differences between the practices of advanced beginners and nursing students. The difference that has the most implications for patient care is their level of responsibility for patient care and outcomes. This difference in clinical agency can most likely be attributed to the expectations that come with their roles. Advanced beginners are expected to assume responsibility for their patients. In contrast, nursing students are not expected to assume responsibility, because staff nurses are ultimately accountable for patient care. This difference in liability forms what each individual is concerned about, forcing the advanced beginner to focus on completing tasks and allowing the nursing student to focus on learning.

Summary

The purpose of this chapter was to present and discuss the findings of the study, which included the central concerns of nursing students and their moral, cognitive and skill development while in nursing school. Their central concerns were learning, relationships with staff, and patient well-being. Their moral, cognitive and skill development were entwined within the central concerns. For example, when faced with ethical situations, although they were concerned about doing the right thing to maintain patient well-being, they were also concerned about learning and relationships, which could cloud their moral judgment.

Nursing students in this study were eager to learn and at the same time maintain positive relationships with staff as a means for learning. Paradoxically, they were acutely interested in the well-being of patients, but felt little responsibility for patient outcomes. Additionally, as they progressed in the areas of moral, cognitive and skill development, their central concerns remained the same but were acted upon differently. For example, early students showed their concern for patient well-being by just “being with” patients, and later students act upon this concern by advocating for patients, which often conflicted with their concern for maintaining positive relationships with staff to protect learning opportunities.

Finally, and somewhat surprisingly, participants had little in common with the advanced beginners that they would soon become. Although both groups viewed clinical experiences as opportunities for learning, the way they acted upon, felt about and thought about their clinical world differed.

CHAPTER V: SUMMARY, IMPLICATIONS, AND CONCLUSIONS

This chapter summarizes the study and discusses implications for education and practice, recommendations for future research, and conclusions.

Summary of the Study

The purpose of this interpretive phenomenological study was to identify nursing students' central concerns and their moral, cognitive and skill development as they progressed in nursing education. The specific research questions were: 1) what are the central concerns of nursing students during clinical situations, and how do those concerns change over time? and 2) how do nursing students describe and interpret clinical experiences that have contributed to their moral, cognitive and skills development?

Participants underwent subtle changes in the areas of central concerns and moral, cognitive and skill development as they progressed through nursing school. They did not all change equally or at the same pace. Importantly, nursing students in this study were generally not like the advanced beginners described by Benner, Tanner and Chesla (1996), although both groups similarly saw clinical experiences mainly as opportunities for learning. Nursing students exhibited novice behavior (Benner, 1984) throughout all semesters.

Central Concerns of Nursing Students

Three central concerns of nursing students during clinical situations were revealed. Students' first concern was about learning, and particularly learning by doing. Their second concern was for their relationship with clinical nursing staff, especially as it affected opportunities for learning. Their third concern was for patient well-being. The

centrality and the ranking of these three concerns remained essentially unchanged as students progressed through their nursing programs.

Moral, Cognitive and Skill Development in Nursing Students

Moral development was examined through the lens of clinical agency, defined as the students' understanding of their impact on patient outcomes, and their sense of responsibility for patient care. There was a surprising lack of clinical agency in participants across all semesters in this study. Their central concerns for learning and maintaining relationships with staff overrode their moral reasoning as it related to patient outcomes, placing their concern for patient well-being as a lower priority.

Participants showed change in cognitive development. They entered nursing school as dualistic received knowers (Belenky et al., 1997; Perry, 1970) and began to develop into multiplistic, subjective knowers (Belenky et al., 1997; Perry, 1970) as they approached the end of their nursing education.

Students in this study developed skillful practice mainly through repeated experiential learning in clinicals. When they were stumped or didn't know what to do in clinical situations, they relied on what they had learned in previous clinical experiences first, followed by personal experience, observation, and finally on what they had learned in the classroom. This manner of skill development remained unchanged as they progressed through nursing school.

Limitations of the Study

Limitations of this study included the assumptions and position of the researcher, the lack of ethnic diversity in the sample, and the nature of the interview questions. The researcher is an associate professor at one of the universities where the interviews took

place. She has been a nurse educator for nine years and was a past instructor of the participants in one of the groups. Those students in particular, and all of the participants in general, may have perceived the researcher as a person with power, which may have influenced some of their responses. Precautions were taken to mitigate the power differential, such as asking participants to tell stories to each other, the way they speak when no professor is in the room. The consent form also clearly stated that their standing in their universities and their grades would not be affected by their participation in the study.

Due to her experience as a nurse educator, the researcher came to the study with pre-conceived notions about nursing students and clinical experience. To mitigate this limitation, she kept careful field notes about her reactions to participants' narratives and enlisted the assistance of her doctoral committee members in data analysis and interpretation. She also asked the research assistant, who was herself a nursing student, about the researcher's perceptions directly following each interview. Additionally, participants themselves were requested to verify impressions the researcher got in previous interviews, asking questions such as, "In the previous interview, other students said . . . What do you think about that?"

The sample lacked ethnic diversity. Of the 20 participants, 18 characterized themselves as white, one as African American, and one as white and African American. There is a possibility that the experiences of this mostly-Caucasian sample are different than the experiences of a culturally diverse sample. However, the sample's percentage of Caucasian students (90%) is similar to the percentage of Caucasian nursing students (85%) in the United States (Spector, 2000). Since the first two groups interviewed were

from the same western state, and all participants were Caucasian, an effort was made to broaden the sample by recruiting the last two groups at the annual convention of the National Student Nurses Association.

According to Dreyfus (1991, in Benner, 1994), “the interpretive researcher’s questions, like those of all researchers, inadvertently shape and foretell the possible answers to the question” (p. xix). The primary interview question was, “Tell me about a challenging clinical situation where you felt stumped, worried, or concerned about what you should do.” Although this question elicited many rich and detailed narratives, most of the stories were negative. This could be related to the negative connotation that being stumped or not knowing what to do may carry. It also eliminated the possibility of labeling “not knowing what to do” as a theme. Many follow-up or probing questions were in a more positive or neutral tenor, such as, “Tell me about a clinical situation that stands out for any reason.” The wording of the question may also account for the preponderance of emotionality in the narratives, since being stumped or not knowing what to do can elicit strong emotions.

Implications of the Study

The goal of qualitative research is not to generalize findings to similar populations, but to provide a springboard for thought, reflection and change. Although implications for nursing education, practice and research are offered here, it is ultimately up to the reader to decide if the recommendations are applicable and the findings transferrable to his or her field of action (Lincoln & Guba, 1985).

Implications for Nursing Education

The findings of the study have implications for nursing education and can be used to inform clinical teaching strategies and curriculum planning. The implications include the importance of experiential teaching and learning, the structuring of clinical experiences, the applicability of the *Novice to Expert* model, and the value of stress management for nursing students.

Experiential Teaching and Learning

Participants in this study had a strong desire to learn in clinicals and viewed learning by doing as the preferred method. Not only did they initially learn best by doing, but when similar situations occurred, they relied on what they had previously learned by doing to inform their actions. Nurse educators can take advantage of this strong preference for hands-on experience by providing as many experiential learning activities as is reasonable. With more to “do” in clinicals and less down time students may perceive increased learning and satisfaction with clinical experiences.

If observational experience is the only option, students engage more fully by being quizzed or otherwise connected to the experience. Another way to engage students during observational experiences is to provide them with guidelines on what they should be looking for or what they can expect to see during the observation, including systematic questions and nursing practice implications.

A caution is added to the recommendation to increase hands-on experiences for nursing students. Students in this study were often tempted to break protocol in order to take advantage of an opportunity to learn by doing. Students may be willing to take risks in order to learn. Since students don't generally feel responsible for patient outcomes, this

behavior may jeopardize patient safety. Clinical staff is ultimately responsible for patient outcomes, putting them in the delicate position of balancing patient safety with student learning. This situation highlights the need for open, nonthreatening communication between staff, instructor and student. If students are asked to do something that causes them discomfort, they need to feel safe communicating it to their preceptors and instructors, therefore decreasing the likelihood that they will take risks with patient safety.

When students were confronted with difficult situations involving questionable practice, they delegated up to the clinical instructor. They expected the clinical instructor to engage in a critical conversation with the offending party. This delayed students from developing vital interpersonal communication skills. As students practice professional communication they will learn that speaking up is not only permissible but encouraged. Engaging in crucial conversations when students witness risky behaviors by other care providers is an important clinical skill that students will need to safeguard future patients (Maxfield et al., 2005).

Structured Clinical Experiences

According to Gubrud-Howe, Schoessler and Tanner (2008), “the current model of clinical education is increasingly driven by availability of clinical placements, not by experience that correlates with course outcomes or competency development” (p. 3). This type of “random access” clinical education places students in clinical situations that are convenient but not necessarily the best environments for learning. For example, if a student needs to learn how to insert a urinary catheter, he or she may rely on luck to locate a patient in need of catheterization. If the patient is found and only one

catheterization procedure is performed in nursing school, the student will not be sufficiently prepared to perform the procedure in practice. It is clear from the findings of this study that students learn by doing and comparing past similar experiences. More than one catheterization needs to be performed in order for the student to truly learn how to insert a catheter by comparing and contrasting the procedure in different contexts and settings.

The findings of this study point to the development of a structured clinical curriculum that offers students not just a wide variety of experiences but opportunities to experience similar situations many times. It may be better for students to remain in the same clinical site for longer periods of time, working with patients who have the same or similar diagnoses. This will increase their ability to identify salient aspects of changing patient status by comparing previous patients to current similar patients, which takes advantage of how they learn by relying on previous clinical experience. If clinical education continues as it is now, students may graduate from nursing school seeing only one example of particular diagnoses and conditions, leaving them with insufficient points of reference when they enter practice.

Didactic / Clinical Mismatch

Students found the mismatch between what they learned in the classroom and what they experienced in clinicals to be disconcerting, confusing, and hindering their professional development and progression. Classroom teaching did not seem to prepare students well for clinical experiences. A recent study of nursing education by the Carnegie Institute uncovered a preponderance of classroom teaching that focused on abstract concepts that were not linked to patient care (C. Tanner, personal

communication, Oct. 24, 2008). Didactic teaching that more directly relates to patient care and preparation for clinicals may increase student learning and satisfaction. Further, since participants believed they learned most effectively in clinicals, when planning curricula it would be appropriate to consider increasing clinical time and creating innovative methods to link didactic and clinical.

Applicability of Novice to Expert

Although nursing students progressed in the three apprenticeships of moral, cognitive and skills development, applying Benner's (1984) *Novice to Expert* model beyond the novice level does not fit. According to Benner,

Nursing students enter a new clinical area as novices; they have little understanding of the contextual meaning of the recently learned textbook terms. But students are not the only novices; any nurse entering a clinical setting where she or he has no experience with the patient population may be limited to the novice level of performance if the goals and tools of patient care are unfamiliar. (p. 21)

Benner's statement reminds us that the Dreyfus (1980) model of skill acquisition, upon which *Novice to Expert* is based, is a situational model rather than a trait or talent model. As highlighted clearly in the findings, nursing students were introduced to new situations and settings at the beginning of each new semester, an occurrence that definitively placed them back into the novice level of behavior. In the novice level, they relied on rules and guidelines acquired from previous experience and classroom learning to govern their behavior. Throughout all semesters, nursing students stood outside clinical situations, behaving more like detached observers rather than involved

performers (Benner, 1984). They progressed in moral, cognitive and skills development, which could be categorized as traits or talents, but the unfamiliar, ever-changing situations they encountered held them in the novice position, preventing them from functioning as advanced beginner, competent or proficient practitioners. Therefore, clinical experiences that are structured to meet the learning needs and characteristics of novices will be most effective.

Stress Management and Self-care

Nursing school was revealed as an emotional experience for students in this study. Fear, intimidation, silencing and feeling stupid were pervasive in students' narratives about clinical situations. They sometimes experienced feelings of elation and excitement, but the presence of negative emotions far surpassed the occurrence of positive emotions.

The presence of stressful emotions, positive or negative, is known to suppress learning and cognition. People under stress have difficulty concentrating, making decisions and accessing memories (Bremner, 2002). Stress also affects the immune system (Seaward, 2004). Since stressful situations cannot always be prevented in clinicals, students need to learn to deal with stress in healthful ways that can be adapted to student lifestyles. Managing stress may also have the added benefit of decreasing the risk of earlier students abandoning nursing school (Jackson & Mannix, 2001) when faced with difficult situations.

The American Association of Colleges of Nursing (2008) includes nurse stress management, self-care and strategies for self renewal as essential components of nursing education. In order to sustain students through the stressful, emotion-laden process of nursing education, it is important that students learn strategies for managing their own

stress on a regular basis to protect their ability to learn efficiently and maintain their spiritual, emotional and physical health. The stress management strategies that they learn in nursing school can be carried with them into the future as they deal with the stresses of practice and assist clients and associates to manage stress effectively.

Many of the students in this study shared stories about negative experiences with their clinical instructors. For example, when clinical instructors chose to step in and “take over” a procedure from students, it left students feeling resentful, angry and confused. To decrease the negative stress associated with such events, clinical instructors can explain their behavior so the students can learn from the situations instead of holding onto negative feelings about them. Additionally, clinical instructors who were approachable and established positive relationships with their students were sources of decreased student stress and therefore increased learning. Creating an environment where students can question the actions of clinical instructors, or come to them for advice without fear of negative consequences is imperative to support learning.

Implications for Nursing Practice

Students in this study learned best while involved in positive relationships. Staff who used fear and intimidation as motivators, or ignored students, blocked learning. If preceptors and clinical staff were trained in sound pedagogical principles, based on the needs and abilities of novices, stress would be reduced and learning would increase. Students learned best when preceptors and clinical staff let them do as much as possible, and engaged them in conversations about what they are doing and why they are doing it, avoiding silent observational experiences. Staff who were positive, open and nonthreatening created an optimal learning environment and high student satisfaction.

Nurses who are overloaded from teaching may lose their enthusiasm and effectiveness with students, creating a negative experience for students. According to the findings of this study, students who have a negative experience in clinicals are disinclined to seek employment at that facility or specialty after graduation. Ensuring positive learning experiences in clinicals will benefit the nursing unit by providing a rich source of future employees. As part of the hiring process, applicants should be made aware that teaching nursing students is an expectation to maintain employment, and that training nurses to teach students most effectively will be provided. To instill the importance of high quality clinical teaching, staff performance related to teaching nursing students could be part of employee merit evaluations.

These implications call for greater collaboration between education and practice about the need for improved staff training in regard to nursing student clinical education. Strategies for improvement could include on-site in-services provided by nurse educators to clinical staff, highlighting the importance of relationship-based learning; open conversations about the needs and expectations of staff; recognition of exemplary staff preceptors and nursing units; and ongoing evaluation of staff teaching methods.

During the first year of practice, novices and advanced beginner nurses are still learning by doing (Benner et al., 1996). Experience is necessary for development in the three apprenticeships of moral, cognitive and skills development. They learned context-free rules in nursing school and need experience to put those rules into effect. Preceptorships and internships that pair new nurses with experienced nurses who know how to teach in a nonthreatening, open way will be most effective. New nurses need to

repeat procedures and compare results in many similar patients and situations before they can progress to more independent practice.

Recommendations for Future Research

With the recent growth in technology and knowledge, changes in student demographics, and the constantly evolving health care system, research needs to keep up with the evolution in patient care and nursing education. More studies need to be done that examine clinical teaching and learning in order to develop best practices for nursing education.

The interpretive phenomenological methodology is an appropriate approach for eliciting the concerns and meanings that clinical experiences present to nursing students. The opportunity for their voices to be heard was welcomed enthusiastically by participants. This qualitative method enabled the researcher to “illuminate the world of the participants, articulating taken-for-granted meanings, practices, habits, skills and concerns” (Benner, 1994, p. xviii). During earlier interviews, it was challenging to keep the students sharing stories. They often wanted to discuss what the stories meant to them, and said that they appreciated the opportunity to “vent.” These discussions helped the researcher interpret the data. However, since analyzing narratives was crucial to the interpretive phenomenological approach, when students began focusing on discussions instead of stories, they were re-directed and asked to “unpack” the stories. They were asked to start with a synopsis, then go back and tell the story from the beginning. It was suggested that they “run a movie in your head” of the event and tell how things unfolded, and ask themselves what was at the center of the story. This approach enabled the

researcher to get at the unarticulated, taken-for-granted lived experience of nursing students during clinical situations.

Half of the students in this study were from one western state in the United States. A future study that takes place on the east or middle of the country is warranted, to eliminate the possible effect of Western American culture on central concerns and moral, cognitive and skill development.

There are significant gaps in the discourse on clinical teaching and learning. This study addresses the gaps, but more studies need to be done that examine the lived experience of nursing students in clinicals, in order to inform current and future educational practices. Future researchers should interview nursing staff and clinical instructors about their perceptions of nursing students and their relationships with nursing students, to get “the other side of the story.” The Carnegie Foundation for the Advancement of Teaching is conducting a multi-site study that seeks “to understand the demands of learning to be a nurse and the most effective strategies for teaching nursing” (Carnegie, 2008). Preliminary findings suggest that excellent clinical teachers seamlessly integrate the three apprenticeships related to ethical comportment, knowledge and skill. In collaboration with Carnegie, The National League for Nursing is sending a survey to nursing faculty across the United States, asking such questions as, “What classroom and clinical teaching challenges do nurse faculty face?” (Klestzick, 2008, p. 1). Using different methods and perspectives in a wide variety of studies will help to illuminate the characteristics and needs of nursing students and educators alike, filling the gap of knowledge about nursing education.

Conclusion

This study illuminated the central concerns and the moral, cognitive and skill development of nursing students. It is hoped that the findings of this study will inform nurse educators and practicing nurses to be sensitive to the lived experience of nursing students in clinicals. With this knowledge, nurse educators and clinical staff members may be more reflective of their relationships with nursing students and create effective, safe learning environments that are appropriate to the needs, abilities and expectations of nursing students.

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Appendix A

Invitation to Participate in the Study:

Recruitment Script

Recruitment Script (in-class announcement)

Hello. My name is Glenda Christiaens and I am doing research about nursing education. I am interested in talking to some of you about your clinical experiences in nursing school. If you would like to participate in this research, please see me right after class today and fill out a very brief form about your personal background and experience. If you cannot do this right after class today, then we can make other arrangements. Just let me know.

After you fill out the form, I will select four to six of you to join a small group discussion about your clinical experiences in nursing school. The goal of my selection will be to create a group that is as varied as possible in such characteristics as education, ethnicity, gender, and work experience. If you are selected I will call or email you and arrange a time for the small group to meet. The group will meet twice on campus for two hours each time. So it should take a total of about 4 hours of your time.

You will receive a \$25 Target gift certificate for joining the first discussion, and a \$10 Target gift certificate for joining the second discussion.

Do you have any questions?

Appendix B

Consent Form for Human Research



IRB#: 00003241

Protocol Approval Date: June 27, 2007

OREGON HEALTH & SCIENCE UNIVERSITY
Consent & Authorization Form

TITLE: Becoming a Nurse: Moral, Cognitive and Skills Development of Nursing Students

PRINCIPAL INVESTIGATOR: Christine A. Tanner, RN, PhD (503) 494-3742

CO-INVESTIGATOR: Glenda Christiaens, MS, RN (801) 422-7305

This form contains important information about the study in which you are being invited to participate. Please read the form carefully, ask questions of the investigators or others who are obtaining your consent to participate in the study, and take time to think about your participation. You may want to discuss the study with your family or friends before agreeing to be in the study.

What is the purpose of this study?

The purpose of this study is to find out what it is like to be a nursing student in clinicals, and how nursing students' learning changes as they go through nursing school.

What is required to participate in this study?

To qualify for this study, you must meet the following criteria:

1. Be a senior student enrolled in a bachelor's degree nursing program
2. Never worked as a professional nurse or health care worker
3. Speak and understand English
4. Be at least 18 years old

What can I expect as a study participant?

You will be interviewed twice in a small group of 4-6 senior nursing students who are in the same nursing program. You will be asked to tell stories about your clinical experiences, and listen to the stories of the other students in the small group. Your voice will be tape recorded. The interview will take from one to two hours. Some time after the interviews, you may be contacted again for a follow-up interview. The follow-up interview may or may not be in a small group.

Before the small group interview, you will be asked to fill out a form that asks questions about your contact information, age, education, and background. It will take about 10 minutes to fill out.

If you have any questions regarding this study now or in the future, contact Dr. Christine Tanner (503) 494-3742 or other members of the study team at (801) 422-7305.

What effect will this study have on my grade?

Being in this study will not affect your grade in any college course.

How will my privacy be protected?

We will protect your privacy in the following ways:

1. Your name or other protected information will not be used. Instead, we will identify you by a false name that you can choose.
2. Only members of the study team will be able to access your information.
3. Tape recordings of your voice will be kept in a locked cabinet in the BYU College of Nursing Research Center where only study team members will have access.

The specific health information we will collect from you will be limited to your responses to questions in a questionnaire and/or interview with the investigator. The purposes of our use and disclosure of this health information are described in the **Purpose** section of this Consent & Authorization Form.

The persons who are authorized to use and/or disclose your health information are all of the investigators who are listed on page one of this Research Consent Form and the OHSU Institutional Review Board.

The persons who are authorized to receive this information are at the Office for Human Research Protections at Oregon Health & Science University, Brigham Young University and the college that you attend as required for their research oversight and public health reporting in connection with this research study.

This authorization will expire and we will no longer keep protected health information that we collect from you in this study when the study is completed.

What are the possible risks of participating in this study?

Although we have made every effort to protect your identity, there is a minimal risk of loss of confidentiality.

There may be times during the group interviews that you might feel sad, angry or embarrassed when you or another student shares a clinical story.

What are the possible benefits of participating in the study?

You may or may not personally benefit from being in this study. However, by serving as a participant, you may help us learn how to benefit students, faculty and patients in the future.

Will it cost anything to participate?

It will not cost you anything to participate in the study, except a few hours of your time. At the beginning of the first small group interview, you will receive a \$25 Target store gift certificate. You may keep it, even if you leave the interview early or withdraw from the

study. A \$10 gift certificate will be given for your second interview and any interviews after that.

What if I am harmed or injured in this study?

1. If you believe you have been injured or harmed while participating in this research and require immediate treatment, contact Dr. Christine Tanner (503) 494-3742 or Glenda Christiaens (801) 422-7305.
2. The Oregon Health & Science University is subject to the Oregon Tort Claims Act (ORS 30.260 through 30.300). If you suffer any injury and damage from this research project through the fault of the University, its officers or employees, you have the right to bring legal action against the University to recover the damage done to you subject to the limitations and conditions of the Oregon Tort Claims Act. You have not waived your legal rights by signing this form. For clarification on this subject, or if you have further questions, please call the OHSU Research Integrity Office at (503) 494-7887.

What are my rights as a participant?

1. If you have any questions regarding your rights as a research subject, you may contact the OHSU Research Integrity Office at (503) 494-7887.
2. You do not have to join this or any research study. If you do join, and later change your mind, you may quit at any time. If you refuse to join or withdraw early from the study, there will be no penalty or loss of any benefits to which you are otherwise entitled.
3. You have the right to revoke this authorization and can withdraw your permission for us to use your information for this research by sending a written request to the Principal Investigator listed on page one of this form. If you do send a letter to the Principal Investigator, the use and disclosure of your protected health information will stop as of the date he/she receives your request. However, the Principal Investigator is allowed to use information collected before the date of the letter or collected in good faith before your letter arrives. Revoking this authorization will not affect your health care or your relationship with OHSU.
4. The information about you that is used or disclosed in this study may be re-disclosed and no longer protected under federal law. However, federal or state law may restrict re-disclosure of HIV/AIDS information, mental health information, genetic information and drug/alcohol diagnosis, treatment, or referral information. OHSU tries to protect against re-disclosure without your permission by being very careful in releasing your information.
5. If the researchers publish the results of this research, they will do so in a way that does not identify you unless you allow this in writing.
6. You may be removed from the study if:
The investigator stops the study;

The sponsor stops the study;
 You do not follow instructions.

7. If you choose to withdraw from this study before it is over, you will receive the \$25 Target store gift certificate as long as you began the first small group interview.
8. The participation of nursing students is completely voluntary and you are free to choose not to serve as a research subject in this protocol for any reason. If you do elect to participate in this study, you may withdraw from the study at any time without affecting your relationship with your nursing program, the investigator, the investigator's department, or your grade in any course.
9. To participate in this study, you must read and sign this consent and authorization form. If you withdraw your authorization for us to use and disclose your information as described above, you will be withdrawn from the study.
10. We will give you a copy of this form.

SIGNATURES:

1. Your signature below indicates that you have read this entire form and that you agree to be in this study.

Signature: _____

Date: _____

Print Name: _____

Signature of person obtaining
 consent: _____

Print
 Name: _____

Appendix C

Interview Guide

Interview Guide

Moral, Cognitive and Skills Development in Nursing Students

Glenda Christiaens

1. Tell me about a challenging clinical experience during which you felt stumped, worried or concerned about what you should do.

Follow-up Questions

1. What were you concerned about in this situation? (S)
2. How did you know what to do? (C)
3. How did you decide what would be the right thing to do? (M)
4. When in your nursing program did this experience occur? Do you see it differently now?
5. Did this experience remind you of something that happened to you before nursing school? If so, how was the way you handled it similar to or different from the previous experience?
6. What resources (personal or professional) did you rely on to get you through this situation?
7. What were you thinking about while the experience was taking place? (C)
8. What were you feeling when the experience was happening? (M)
9. Why does this experience stand out for you?
10. What meaning did this experience have to you? How has that meaning changed over time?
11. What was the most demanding, difficult or challenging thing about the experience? Would that still be true for you now?
12. What did you learn from this experience?

(S = Skills question; C=Cognitive question; M=Moral development question)