

THE LIVED EXPERIENCE OF LEARNING PSYCHOMOTOR NURSING SKILLS

by

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Abstract

What does it mean to a nurse to perform a psychomotor skill? Psychomotor skills are an integral component of the knowledge, attitude, and skills of nursing education. Using van Manen's approach to phenomenology (1997; 2006), this project explored third year nursing students' "lived experiences" of learning psychomotor skills. The aim of the study was to reveal how "learning to care" might be embedded in the process of learning psychomotor skills, based on the assumption that "caring" is a present but elusive concept in the experience. Data from interviews and participant observation provided some fresh understandings of nursing pedagogy. The students' stories of memorable learning experiences revealed a learning anxiety arising from the knowledge that a person will be the recipient of their care. This anxiety is present in different ways in the skills lab and clinical setting. In addition, the students' stories of memorable learning experiences revealed caring under the themes of empathy, relationships, advocacy, integrating, affecting patient outcomes, and professional behaviors. These themes resonate with the caring attributes described by Roach (2002), who theorized caring as a human mode of being. The relationship between the thematic findings and Roach's attributes of caring are described in relation to students' experiences of learning in skills lab and clinical settings and during interactions with educators.

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Dedication

To my family, my husband Michael and my sons, Luke and Jesse, for whom I *care* most.

Chapter One: Introduction

Nurses require competency in a complex set of cognitive, affective, and psychomotor skills when implementing the nursing process (Billings & Hallstead, 2005). When nursing education moved from schools of nursing to universities, the accompanying shift in knowledge emphasis differentiated nursing work into professional and technological areas, which resulted in nursing becoming less focused on tasks and more focused on ways of being. Some suggest this has consequently resulted in decreasing the value of psychomotor skills in nursing education (Bjork & Kirkevold, 1999; DeYoung, 2003; Knight, 2004; Miracle, 1999). Recent research has demonstrated that new graduates are not well prepared for their duties in the field, and this discovery has resulted in re-engagement with the importance of psychomotor skills and has confirmed the knowledge that “nursing skills are more than [just] a motor activity” (DeYoung, 2003, p. 202). What is it like to learn a psychomotor skill? What is the lived experience of learning psychomotor skills for nursing practice? Do students study psychomotor skills with an anticipation of learning how to care for an individual?

This study sets out to explore, as its purpose, the phenomena of learning psychomotor skills as lived by student nurses, using van Manen’s Hermeneutic phenomenological human science studies (van Manen, 1997). Psychomotor skills are purposeful neuromuscular movements combined with critical thought reasoning and problem solving that can result in caring behaviors toward another (Gaberson & Oermann, 2010, p. 25). Learning psychomotor skills in patient care is multidimensional and comprised of affective, cognitive, and psychomotor components (Baldwin, Hill, & Hanson, 1991; Billings & Halstead, 2005; Gaberson & Oermann; McCausland, Curran, & Cataldi, 2004; Nehring & Lashley, 2004), and includes the ability to use clinical

judgement, (Gaberson & Oermann, p. 25).

The objectives of this study were to describe the students experiences and explicate “learning to care” through studying the lived experience of skills acquisition. The concept of caring in nursing requires enhanced understanding, often being examined to providing evidence and understanding to the question, “What is nursing?” (Finfgeld-Connett, 2008, p.196). My understanding of caring is based in the definition from Martha Rodgers (1992): “Caring is a way of using knowledge” (p. 33) to provide comfort, alleviate suffering, and improve health. I hold strongly to the belief that meticulous, purposeful, and quality physical actions articulate the concept of caring. My beliefs, informed by Rodgers’ definition, are in keeping with Smith’s (1999) description of an expression of caring as “manifested intentions” wherein nurses give attention, respect dignity, and are authentically available to the patient (p.14). The learning experienced described by the students who participated in this study mirrored these definitions but most closely aligned with the attributes of caring as described by Sister Simone Roach (2002) in her theory of *Caring: the Human Mode of Being*, which will be discussed later. Also the learning experiences described by the students answered the curiosities that I had experienced as an educator, and pressed me to explore this topic.

Authors Call

How baccalaureate programs teach psychomotor skills is a question scarcely answered, and evidence-based teaching practices are rudimentary (Billings & Hallstead, 2005). As I became more familiar with the research regarding the best educational methodologies for teaching psychomotor skills, I had a haunting feeling of a certain “taken-for-grantedness,” meaning a piece of the puzzle has not yet been explained (van Manen, 1997). Prescribed teaching strategies for psychomotor skills in nursing often

adapt other disciplines' theories of skill performance, such as sports and kinesiology (DeYoung, 2003, p. 202). I contend that these theories fail to describe the experience of learning that exists within a nursing skills laboratory. The very thought that the learning takes place in a "skills laboratory" connotes a science perspective and does not completely describe the experience. I have taught students in both biology and in nursing labs and noticed that a fundamental difference exists between learning a skill for biology (i.e., staining a slide) and learning a skill for nursing (i.e., giving an injection): In nursing, there is a recipient of a skill that is learned. The learned skill needs to convey the message of assistance and caring, the *raison d'être* of nursing. Most current theories of nursing psychomotor skill performance fail to describe fully the experience of learning caring that involves a particular knowledge, which requires illumination, description, and documentation.

Significance of the Study

Nursing practice and nursing education face many challenges in this new millennium, causing both enthusiasm and apprehension. Shortages of resources exist in the area of faculty, clinical educators, and clinical placements. Nursing employers are raising voices of increasing demand for competent performance, requesting schools of nursing to turn out graduates that can hit the road running (DeYoung, 2003; Love, McAdams, Patton, Rankin, & Roberts, 1989; Reilly & Oermann, 1999).

Research, by advancing the ability to have evidence-informed educational strategies, is changing how nursing education considers and facilitates learning in academia. Curriculum reforms have attempted to change nursing education across Canada to a more student-centered paradigm (Young & Patterson, 2007). The implementation of simulation as a learning strategy has also influenced nursing education,

but there is no research regarding simulation-based education on patient satisfaction.

Amid all of the rapid change in nursing education and knowledge, the concept of caring has remained a central tenant to the knowledge and ability a nurse possesses. In an attempt to understand how students learn caring in psychomotor skill performance, I hoped to unfold new and current knowledge which will assist nurse educators in understanding how students learn to care.

The framework of the study.

Caring in the performance of psychomotor skills. I began this study by identifying with other nurses who agree that “caring” is a challenging concept for nursing. I agree that “no one seriously disputes the idea that excellent nursing involves something which can be called ‘care’, and that the ultimate aims of the caring movement are to foster that quality within nursing” (Thorne, Canam, Dahinten, Hall, Henderson & Reimer-Kirkham, 1998, p. 1265). Nurses can definitely recognize the presence or absence of caring in practice (Grypma, 2001; Swanson, 1999). Written within the procedural instructions of skill performance are statements of rationale, defining skill actions as: improving patient comfort, decreasing anxiety, or reducing risk (DuGas, Esson, & Ronaldson, 1999): These points of rationale express care and concern for an individual. Thus, the most rudimentary aspects of psychomotor skill performance hold the action and the opportunity to purvey the concept of care. I asked, “Are students in psychomotor skills labs or simulation labs thinking this way?” Care is also associated with the concept of competency, again suggesting the multidimensional aspect of nursing skill performance:

The main purpose of a surgical wound dressing is to promote healing of the wound. If the patient is at risk of wound contamination due to the nurse’s incorrect handling of the equipment, the action cannot be considered well performed even if the nurse

gives accurate information, secures privacy, and shows concern for the patient's well-being. If the movement steps, instruction, and information are correct, but privacy is violated and the nurse is distant and does not heed the patient's expression of pain and apprehension, then too, the skill is not well executed. (Bjork & Kirkevold, 2000, p 623)

Being competent in nursing skills is central to this expression of caring and a core aspect of feeling 'cared for.' Bjork (1997) challenged theoretical discourse of psychomotor skill acquisition to address the nurse's attention to the patient's perception of good nursing care. Bjork investigated how skill performance translates into comfort and treatment. Summarizing current research, she stated that patients believe, "good nursing care reveals itself *first of all* through practical, technical or manual aspects of physical care" (p.8, emphasis mine). If we want nurses to achieve competence that reflects care, how do we know if students are finding this meaning in the educational experiences of learning nursing psychomotor skills?

The above literature framed my assumptions that care is an important aspect in the performance of psychomotor skills. This research sought to describe the lived experience of students learning psychomotor skills while simultaneously asking the question, "How might this be caring?" The purpose of this study is to describe rather than to define the phenomena of learning psychomotor skills. I attempted to interrogate the concept from the center of its being, in the learning and performance of psychomotor skills. My assumptions about caring are: (a) that attention to detail, critical thinking and application of knowledge create a performance that demonstrates care; (b) that students entering nursing think of enacting caring through the performance of skills; and (c) that as a Christian I strongly associate caring with the action of "doing unto others," as a manner in which to

demonstrate my compassion, spirituality, and calling. In undertaking this research, I attempted to suspend these presuppositions to enter into the lived experience of pedagogy, to allow the students' descriptions of the experience of learning psychomotor skills to emerge.

Chapter Two: Literature Review

Background Literature Review

Research regarding the acquisition of psychomotor skills for nursing students is scarce. A search using Cumulative Index to Nursing and Allied Health Literature (CINAHL) of the terms “nursing” and “psychomotor skills” returned only 100 citations, many of which were either related to simulation lab learning or were minimally relevant. Experts in nursing education have described how the consequences of nursing education overlooking this area of learning has resulted in voices of dissatisfaction being raised among employers, patients, and graduate nurses themselves about the deficiencies in skill abilities. This dissatisfaction has resulted in many nursing programs returning to the skill learning laboratories, which began in the 1980’s (DeYoung, 2003; Neary, 2000; MacCallum, 2007). Reilly and Oermann, (1999) strongly stated that

Lack of competency in...skills on the part of new graduates is the subject of much criticism of nursing education, which often is of such vehemence that it takes on a pervasive quality as an indictment of all nursing education. (p. 247)

Most recently, even graduate nurses’ competency in performing adequate cardiopulmonary resuscitation has been scrutinized and a call to provide more opportunity for practice has been put forward to nursing education programs (Krahn, 2011; Madden, 2006). Exploring the experience of learning psychomotor skills offers the possibility of creating teaching strategies and methodologies to answer these needs.

One answer, and the most recent strategy, to deal with the increased demand for skilled performance has been the use of technology for learning nursing skills. Methodologies such as simulation mannequins, personal digital devices, and other forms of computer-based learning are rapidly creating a new environment for skill learning in

baccalaureate nursing education.

Offering a safe and positive learning experience for students (Bearson & Wiker, 2005, p.421), simulation labs are becoming the new psychomotor pedagogy. Research related to the learning outcomes with the use of simulation is being generated (Feingold, Calaluce, & Kallen, 2004; Yoo & Yoo, 2003), but obscured among the learning outcomes identified in these quantitative studies is *how* and *to what extent* students learn to care through skill performance alone. To date little phenomenological study has explored the experience of nursing students acquiring the psychomotor skills of the profession – it remains taken for granted. At the turn of the millennium there existed only two published systematic reviews of psychomotor skill acquisition in nursing, both of which are limited in their evidence. As recently as 2012, in a third literature review, McNett has examined the few studies on psychomotor skill acquisition in an attempt to extract information on the effectiveness of teaching methodologies for psychomotor skills.

The first systematic review on psychomotor skill acquisition, by Knight (1998), examined only *six* articles: This extremely low number of available articles on the topic provides evidence to the scarcity in research on psychomotor skill acquisition. Knight called the lack of evidence a sad reflection of a core area of nursing practice. The second literature review, conducted by Miracle (1999), analyzed a mere 25 research reports, identifying five common themes related to psychomotor skills education. The themes identified were what skills are essential, what competency is needed, what teaching strategies work well, what educational settings support learning, and what other learning variables need to be considered (Miracle, 1999): All these issues remain in question today. In the studies reviewed, Miracle stated that small samples size was a limitation. This affects the ability to generalize any findings to a larger population (Burns & Grove, 2005).

p. 582). Miracle also noted there was often reference to the circumstance that employers and educators had significantly different expectations of competence in the preparation of nurse graduates. The authors of both literature reviews concluded that all areas of psychomotor skill acquisition (presumably including affective areas) require more research, because learning a skill is more complex than observation and apprenticeship (Knight1998; Miracle, 1999). Knight (1998) raised the issue that research on skills acquisition has mainly taken a conventional positivist approach and called for more constructivist paradigms in evaluating this core area of pedagogy.

In both literature reviews the concept of care is missing, although many would argue that it is essential. How then do nurse educators frame the acquisition of psychomotor skills? McNett (2012) examined the knowledge regarding effective teaching methods for psychomotor skills. The literature suggested that methods combining lecture, demonstration, and computer interactive teaching are the most preferred among students (McNett, 2012); however, the review provided little information regarding retention of learning or integration of attributes of caring. In my opinion, caring is most often associated with the affective domain of learning when examined in nursing research or discussed in nursing education. Miller (2010) reviewed literature relating to improving the performance of student nurses in the affective domain, suggesting that students' presentation, preparedness, and interaction demonstrate affective learning. Arguing that there is no organizational scheme and little guidance for the evaluation of the affective domain in clinical learning, Miller suggested that "research on teaching, mentoring and assessing the affective domain is needed to improve the knowledge and understanding of "...interaction by students, and to determine the effect on their professional practice" (p.15). Hence, caring is a concept, a part of the affective domain of

learning, and an attribute of psychomotor skill acquisition that requires greater understanding.

Borrowed psychomotor skill models. The acquisitions of nursing skills exist in the psychomotor domain, and describe the movements and actions requiring neuromuscular coordination to perform a task. Nursing has borrowed psychomotor acquisition models from other fields (Reilly & Oermann, 1999). Nurse educator authors Alavi, Loh, & Reilly (1991) used Dave's taxonomy of neuromuscular coordination – imitation, manipulation, precision, articulation, and naturalization. These traits describe the experience of physical learning but do little to describe how the task relates to caring for another. Nurses need to learn to diversify a skill in changing environments, because no two clients are alike. Also, the need to attend to several different stimuli at one time in providing competent care is challenging: For example, the novice who does well with the catheterization, but fails to speak to the patient, fails to provide competent care (DeYoung, 2003, p 203).

A leading nursing theory used by faculties of nursing to guide clinical teaching, Benner's (2004) "novice to expert" theory evolved from the Dreyfus model of skill acquisition based in experiential learning theory. The Dreyfus model posits that in the acquisition and development of a skill, a student passes through five levels: novice, advanced beginner, competent, proficient, and expert. Moving from reliance on abstract principles to the use of past concrete experience changes the perception of skill learning from a compilation of equally relevant parts to a more integrated whole. Benner suggested that the performer/learner of the skill moves from detached observation to involved performer, and that involvement is in relationship with the patient. It is my opinion that Dreyfus' psychomotor model, as used by Benner, is the only psychomotor

skill model used by nursing which addresses the fact that nurses are involved relationally with a recipient of care. However, the model implies that competency is achieved halfway through the learning process, which is difficult to expect at the level of a new graduate. Personal experience begs the questions of whether beginning practitioners can meet such expectations, and whether the model truly describes the pedagogical process of psychomotor skill acquisition.

The Mackie model as described by Snyder, Fitzloff, Fiedler, and Lambke (2000) uses observational processing, developing a mental image, feedback, and practice, resulting in a performance that matches the proposed image. Reflections and questions on contextual appropriateness support student learning. This model's use of guided practice and reflection addresses many learning styles (Snyder et al, 2000, p. 229), but fails to clarify whether there is any focus on the recipients of care.

A new nursing model. While the above models describe the learning of the psychomotor activity of the skill, little information is described about how learners acquire the affective knowledge of caring that accompanies performance – how do students learn to translate caring into performance? The Dave, Dreyfus, and Mackie models all fail to describe the competency of caring needed in nursing. Bjork and Kirkevold (1995) described psychomotor skill acquisition as a “neglected conflict in the discipline of nursing” (p.6). Bjork and Kirkevold (1999) acknowledged that research challenges associated with skill development results from difficulty in defining competency. They contested the assumptions that: (a) nurses improve their clinical skills with experience; (b) improvement is related to, and is evaluated by, development in manual and technical elements; and (c) there exists a hierarchical difference in how one learn basic skills over complex skills. In a one year longitudinal study, four new graduate nurses were

videotaped at three intervals on two practical skills, (a) post-op ambulation following abdominal surgery (considered basic) and (b) dressing a wound and drain (considered complex). This was to test the assumption that the more experience a nurse had, the better the skill development would be. What resulted was a scathing description of skill performance, full of omissions and faults, and seldom did the performance improve or correct after many months of practice experiences. This is a stark contrast to Benner's (2004) description of moving from novice to expert.

Bjork and Kirkevold (2000) conceptualized practical skill performance in a model that embraced actions relating to the patients' basic physiological needs, diagnostics, and medical treatments. They viewed skilled performance as a "complex activity of logically sequenced and integrated verbal and motor content, adjusted to constantly varying patient and contextual factors" (p.621). The constructs of their conceptualization are contained within a concentric circular model where at the center and moving outward: (a) skills are composed of substance (information) and sequence (steps), i.e. logical ordering of movement, instruction, and information; (b) skills require accuracy, i.e. exactness and precision; (c) skills require fluency, i.e. an impression of ease and smoothness; (d) skills use integration of contextual information relating to the patient and the environment, i.e. the harmonization of the action and attention to the patient's needs and specifics of the situation; and finally, (5) skills require nurses create an atmosphere of respect, encouragement, and acceptance (Bjork & Kirkevold, 2000, p.623). They saw newly graduated nurses who failed to consider the patients' slippers for ambulation continue with the same pattern of behavior months later (Bjork & Kirkevold, 2000), thus not demonstrating improvement over time. Although this is in relation to psychomotor skill performance, it still leaves one to question whether experience alone facilitates expertise in

practice, as suggested by Benner's conceptualizations of learning. DeYoung (2003, p.202) critiqued Bjork and Kirkevold's model of skill acquisition because it leaves the "integration" aspects of skill performance to clinical learning. I disagree with DeYoung, believing instead that the model provides a strong foundation for development of psychomotor skill acquisition within a caring context.

Understanding the lived experience of learning psychomotor skills would contribute to improving pedagogy and developing nursing centered models or theories of skill acquisition. Educational practices that only address the motor aspect of skill learning *assume* the integration of relevant patient knowledge and caring (Reilly & Oermann, 1999). O'Connor (2006) suggested that students are unable to integrate relevant patient information or caring until they have the basics of skill performance. It is critical for nurse educators to understand how the meaning of caring gets infused into the education of nursing. Using a phenomenological approach, this study examined the meaning in learning psychomotor skills, as psychomotor skills are the "things" we do to and for our patients. How can the layer of interaction unique to the nurse- patient relationship be replicated in a skills lab with a mannequin?

Phenomenological Research on Caring in Nursing Education

Nursing education researchers have used phenomenological methods to study how students learn. A random search without limitations of the CINAHL database of the terms "nursing" "caring," and "phenomenology" returns a list of 315 citations. If you add the terms "student" and "education," the search returns 35 citations. Among these citations, there are few relevant articles studying the concept of caring in learning from a western culture baccalaureate student perspective. Concerned about the considerable changes facing nursing education in the last two decades, Solvoll and Heggan (2009) investigated

how contemporary students learn care. After observing and interviewing six participants — nursing students of various gender, age, and experience in caring practice — they concluded that there is an apparent potential for care in students, discovered through the students' empathy and sensitivity to patients' feelings and stories. The study further revealed that nurse educators may not always ask about the students' experiences of care, and few assignments link theory to care: Instead, educators focus on practical problem solving procedures — a focus that, the authors say, contributes to privatization of the students' experience of care.

Another study of student nurses' experience of caring for infectious patients in an isolation ward revealed that students recognized that caring took place in context — the isolation patients were last to be cared for in terms of each day's schedule. In addition, the students recognized the barriers of isolation and empathized with the patient. The students noticed the lack of congruence between theory and what they saw in practice, and reported feelings of being “only a student” when trying to make certain that isolation technique was maintained among the other members of the interdisciplinary team (Cassidy. 2006).

In another phenomenological study, Wright (2010) examined how students understood care in cultural competence. When asked to define “care,” students identified helping in a physical way and interacting in a respectable, considerate, and courteous manner. The researcher noted that “care” was most commonly occurring through presence, nurturing, and empathy in the students' practice, and was identified more often as an emotion than a function. Interestingly, Wright's work identified that students learned to care through their life experience, a finding which resonates with the stories of the six students from this study who expressed a sense of bringing their own experiences to

the learning of caring in psychomotor skill acquisition. In 2001, Grypma studied cross cultural nursing, revealing caring as connection, competence and fostering relationships with God. Wright also identified that baccalaureate nursing students described caring in multifaceted ways with twenty-eight different responses from a group of forty-five students to the question, “what is caring?” Educating nursing students on the ability to convey care through skill performance may in fact provide a new understanding for them. It may be that caring is a “taken for granted” aspect of skill performance that educators assume students will absorb. Wright concluded that providing cultural care was more about (a) clinical documentation of cultural differences and preferences, and (b) understanding and being sensitive to cultural differences—that is, mostly illuminating caring as a sentiment, part of the affective domain. However, the *action* of obtaining an interpreter was described as a caring behavior in one student’s opinion. The tendency to be empathetic versus active seems to be more prevalent in the students’ repertoire of caring.

There are few studies examining caring as action. Can caring be measured by action? Is it possible to increase caring behavior in a psychomotor skill performance? In a study using a quantitative approach, researchers tried to capture students’ learning to care through acquiring the skill of blood pressure monitoring, a very common nursing psychomotor skill: A non-experimental quantitative study examined whether students’ caring behaviors increased during blood pressure monitoring after a learning intervention composed of required readings and analysis of a videotaped role playing demonstration (Minnesota Baccalaureate Psychomotor Skills Faculty Group (MBPSFG), 2008). Caring behaviors were taught based on Wolf’s (1994) conceptualization of Watson’s theory of caring, which outlined the five domains of caring: respectful deference to others, assurance

of human presence, positive connectedness, professional knowledge and skill, and attentiveness to the other's experience. Caring behaviors were either objective, observable, action-oriented behaviors, or caring behaviors were conveyed and measured by the subjective evaluation of genuine respect, warmth and caring, and competence. Although overall the students' behaviors in caring improved, students performed behaviors from the action-oriented dimension more proficiently than they performed behaviors from the dimension of respect, warmth, and attention to others' experience (MBPSFG, 2008, p. 325). In my opinion, the experience of the MBPSFG is consistent with that of Bjork and Kirkevold (1999, 2000), and with Benner's (2004) summary of skill acquisition, that skill acquisition is a complex process. Although the lack of a control group and small sample size limit the ability to apply the results to other nursing education facilities, one might be able to make the assumption that the concept of caring is not magically, nor easily, taken up by students learning psychomotor skills. The concept of caring may not be associated with the performance of a skill, but can instead be seen as separate actions such as time and attention spent with the patient.

These studies have demonstrated that students' stories of learning to be caring and perform caring acts in nursing education can be made explicit from the taken-for-grantedness that currently exists in education practices. In explicating the lived experience of learning psychomotor skills, this research also uncovered evidence to support pedagogical strategies and methods. The paucity of research, the lack of models that reflect caring in psychomotor skill acquisition, the continual call to better prepare nurses for an age that is knowledge laden and technologically complex, and the need for pedagogically sound teaching and learning strategies are reasons enough to pursue the question, "How do nursing students learn psychomotor skills?"

Chapter Three: Design and Methods

Phenomenology, as a research approach, allows nurses to explore and describe phenomena important to the discipline of nursing (Struebert-Speziale & Carpenter, 2007). Hermeneutic human science phenomenology studies the human world as it is found with all its variety, finding its point of departure in the situation (van Manen, 1997, p. 7) and providing a rich description of meaning. The use of this approach was well suited to this study, because it was in the situational learning of psychomotor skills that I sought to find meaning. Also, human science has a pedagogical underpinning, offering a research approach that is interested in uncovering the experience of the learner: “Phenomenology asks the simple question, what is it like to have a certain experience, for example an educational experience?” (van Manen, 1997, p.45). In this research I asked, “What is it like to learn psychomotor skills and how might this be learning caring?” As educators, we often select and plan learning experiences, but seldom really understand what it is like when a student has a learning experience.

Methodological Strategies for Data Collection and Analysis

The world of lived experiences provides both the source and object under study in Human Science action pedagogy, resulting in a rich description of the “taken for granted” aspects of everyday living and learning. Experiences told or related to a researcher are recollections, reflections, and descriptions, which can join with others’ accounts to describe an experience as “ours” instead of “mine” and convey meaning through written descriptions (van Manen, 2006, p. 57). Van Manen outlined methodological themes with associated activities, which provide contextualization to the way the research should unfold. While they definitely do not provide a linear framework, it is through these themes that I approached the research question.

Turning to the nature of the lived experience. Van Manen (2006) likens the experience of turning to a phenomenon of interest, to a description of reflecting on what it is like to be interviewed on television: “all of the eyes are on me, rob [bing] me of my taken for grantedness...forc[ing] me to be aware of my experience as I am experiencing it” (p.35). Researching the experience of learning psychomotor skills, I used personal experience as a starting point describing the “mine” aspect of the phenomena. This thesis has outlined my experience as an educator of psychomotor skills, but I was also keenly aware that I was also a student of nursing, and thus have my own personal experiences of learning caring and psychomotor skills. It was for me, to ease my incessant curiosity, that I asked the questions, “What is it like to learn psychomotor skills in nursing?” and “How might this be caring?”

Investigating the experience. Van Manen’s description of the lived experience of teaching captivated me, and the fact that nothing should be taken for granted in pedagogy fuelled my desire to know more. My quest in investigating the experience was merely the “finding.” To do this, I the researcher, “need(ed) to search everywhere in the life-world for lived experience material that, upon reflective examination, might yield something of its fundamental nature” (p. 53). The approach to generating data was achieved through (a) using personal experience as a starting point, (b) tracing etymological sources of concepts, (c) searching idiomatic phrases, (d) obtaining experiential descriptions from others in the form of interviews, and (e) observing participants in active learning situations.

To investigate the concept of caring in psychomotor skill acquisition, I had to face the fact that the word “caring” is overused and indeterminate in the work of nursing, and in many other professions. For this reason, I traced some of the etymological origins of the

word and looked specifically to one conceptual use in nursing. It was of importance to mention how idiomatic phrases were used to describe actions in nursing. Van Manen (2006) suggests that if we attend to some of the most common expressions associated with the phenomena we wish to pursue, that we can discover the didactic nature of the language used. Therefore, close attention was given to the language used by participants in the study.

The main strategy for gathering data was through open ended interviews with students. I asked students to describe an experience of learning a psychomotor skill that stood out for them. The question posed was, "Tell me a story from your educational experience about where you were learning a psychomotor skill." I used successive questions to follow up on the students' answers. Some questions used to elicit deeper exploration of the experience included: "What was it like to learn a psychomotor skill?" "Did you think that performing nursing skills was part of nursing?" "Can you describe that further?" and "What does 'doing things' mean in nursing practice?" In using van Manen's phenomenological approach I did not want to directly elicit answers about caring, instead I wanted to listen to the students' stories of learning and ask instead "How might this be caring?" The students' rich descriptions allowed me to discover, compare, and contrast their meanings of caring. As described earlier, the literature had suggested that caring could reveal itself as meticulous, purposeful, and high-quality physical actions or the use of knowledge to provide comfort and alleviate suffering through physical actions, or it may simply be articulated or manifested intentions of the participants. All of these concepts of caring were described by the students' memorable experiences, and then, different and even deeper meanings emerged as I listened and watched of learning to care through the acquisition of psychomotor skills.

Besides interviews, I undertook a participant observation approach by attending a psychomotor skills learning lab. I engaged in what van Manen referred to as close observation where I assumed a relation that was as close as possible, and at the same time maintained a hermeneutic (interpretive) alertness which allowed me to step back and reflect on the situation. I collected written anecdotes, remembering that “an anecdote is a certain kind of narrative with a point, and it is this point that needs honing” (van Manen, 1997, p.69).

Throughout the data collection process of this research, I kept a brief research log and journal. The purpose of journaling was to be reflective both in and upon the experience. I sought out interesting art, poetry, and phenomenological literature to provide examples of lived experiences or insights about the experience outside the scope of the everyday. As an example, I offer a Technology, Education, and Design (TED) talk. In a talk about compassion, Dr. James A Forbes posed the question, “How do you ‘tangibilitate’ compassion?” (Forbes, 2010). A new verb, such as *tangibilitate*, may be useful for nursing psychomotor care. For Dr. Forbes, *tangibilitation* meant allowing a concept to become evident or visible. My personal notion of tangibilitating care means the performance of a psychomotor skill, executed competently with accuracy, fluency, integration of relevant information, and thoughts of care. Defined by the Merriam Webster online dictionary (2013), the root word *tangible* means “capable of being perceived especially by the sense of touch, or capable of being precisely identified or realized by the mind, or even, capable of being appraised at an actual or approximate moment.”

Reflecting on the phenomena. A difference exists between the pre-reflective lived understanding of a phenomena and the reflective grasp of a phenomena under study;

thus grasping the meaning of something is the purpose of phenomenological reflection. This reflection required appropriating, clarifying and making explicit the meaning of the lived experience for the purpose of creating text that communicates meaning in human sciences (van Manen, 1997). To complete this task, I conducted thematic analysis examining the methodological character of a topic, where phenomenological themes were the “structures of the experience” (p.79) Van Manen described themes as the experience of focus, a simplification, or a capturing; at the same time, however, themes are not a thing: They are intransitive (cannot take an object). I listened, read, and reread texts (interview transcripts) looking for thematic aspects and opportunities to isolate thematic statements.

As mentioned above, I sought out artistic sources of data and other literary sources regarding psychomotor skill learning to enrich meaning and aid in thematic descriptions. When thematic analysis was completed, I looked again for “essential themes” or meanings that are unique to describing the essence of learning and performing psychomotor skills. I attempted to isolate how this experience is similar to or different from learning caring in other settings, or learning something other than caring in this setting. Essential themes included “aspects or qualities that make a phenomenon what it is without which the phenomena could not be what it is” (van Manen, 1997, p.107). Essential themes provide direction in the writing of the phenomenological text.

Writing on the phenomenon. In human science pedagogical research, creating a phenomenological text is the object of the process: creating text stands as the purpose of the commitment to the research question (van Manen, 1997, p.111). As a novice researcher, I was committed to describing this phenomenon in ways that are sensitive to the “undertones of language, to the way that language speaks when it allows the things themselves to speak” (van Manen, p.111). In some circumstances, limits in my own

language, or that of others, have left things unsaid. Anecdotes or narrative stories better demonstrate the phenomena through creating a concrete counterweight to the abstract theoretical. Anecdotes might be a concrete demonstration of insight, wisdom, or truth about a topic or provide an exemplary as no other means of expression could. An anecdotes' purpose is to "create a tension between the pre reflective and reflective pulls of language" (van Manen. p.121)

Although anecdotes provide a variety of examples, they should be viewed more for their iconic qualities. Each anecdote should elucidate structural features of a phenomenon that help make it visible. Allowing for variety in the examples used to describe a phenomena awakens the "nihilistic forgetfulness of the essence" (p.123) of that phenomena. Varying the examples helped me describe what it meant to learn psychomotor skills, and furthermore, to learn to care for another through the process of "doing" care.

The acts of reading and writing (literacy) require a certain form of consciousness which fixes the thought on paper, making the internal become external, and allows our objectified thinking to stare back at us, thus creating a reflective cognitive stance. This stance, characteristic of the social science attitude, is what jettisons the researcher into a linguistic project or the work of writing in which the writer produces text and self, combined and recombined. Through rewriting, the researcher allows the text to confront, distancing and drawing the author to more closely to the lifeworld (van Manen, 1997). Rewriting was undertaken to do justice to the "fullness and ambiguity of the experience" (van Manen, p. 131) and is described here as re-thinking, re-reflecting, and re-cognizing the phenomena.

Maintaining a strong and orientated relation. This research was about

pedagogy. The vocation of a human science pedagogical researcher is to orientate us to pedagogy in our relations with students. However, the research may not guarantee that as educators we are competent in performing or providing the very experiences we study. Things are always more complex (van Manen, 1997, p.156). Van Manen cautioned that pedagogy itself is elusive in meaning, but pointed out that does not make it any less desirable as a phenomena; “learning to understand the essence of pedagogy as it manifests itself in a particular life circumstance contributes to a more hermeneutic type of competence: a pedagogical thoughtfulness and tact” (p.143). This research aimed to understand the essence of learning psychomotor skills for nursing students. To remain orientated to the research, I could not separate theory from life. I aimed for strong pedagogical interpretations of the phenomena, and I tried to create rich and thick textual descriptions from the students’ stories. I attempted to explore meaning structures with a depth that is beyond the immediately apparent (van Manen, 1997). I was fortunate to have six wonderful student participants whose stories of learning experiences gave the voice of the learner in pedagogy—a voice which needs to be heard. In addition, I used a wonderful opportunity to participate in nursing psychomotor skills labs to ensure I had concrete experiences with the phenomena, rather than just theorizing about it.

Research Method

Sample setting and sources of data. Van Manen’s human science pedagogical phenomenology, as a method of inquiry, instructs the researcher to look to the lifeworld (the naturally occurring pre-reflective, pre-theoretical everyday life) as both the source and object of phenomenological research, and as such, it creates an unstructured open stance used in the phenomenological experience (van Manen, 1997). This leads to a situation where the researcher must be both flexible and tentative to deal with ongoing decision

making throughout interactions with the research participants, with the aim of allowing the phenomena to present itself to the researcher (Finlay, 2008). The aim of this study was to explicate the pre-reflective experience of the phenomena of learning psychomotor skills of nursing students. The first objective of the study was to illuminate the meaning of the experience for nursing students when learning psychomotor skills in hopes that a clearer understanding of psychomotor skill acquisition will contribute to a richer understanding of the concept of caring in the “doing” of nursing. A second objective was to generate knowledge that will inform nursing educators’ practice as they continue to seek clarity in students’ acquisition of psychomotor skills.

Data for this study came from face to face interviews with six nursing students in their third year of study at a Canadian institution of higher education. The students were all female, Caucasian and had no previous nursing education or experience. I sought participants through an email (Appendix A) of introduction. Three students agreed to participate immediately and another three students were recruited with a follow up email and a poster (Appendix B). I kept confidential any identifying information of the students from this selected group who agreed to participate.

The inclusion criteria for participating in the interview consisted of: (a) students who have been in the nursing program for a period of two or more consecutive years, and are over the age of 18; (b) students who have had experience practicing skills in a clinical agency; (c) students willing to share their stories and experiences; and (d) students interested and able to articulate rich stories with deep descriptive exploration of the experience. Van Manen suggests that it is important, when recruiting participants in human science pedagogy, that they have a strong interest in sharing deep stories of their experiences, to provide rich data (1997, p.122), and to this end an interview script was

developed (Appendix C). It is not necessary in phenomenology to attend to a varied background of participant; rather homogeneity is preferred to elicit similarities in experience. Once each participant was selected, I obtained informed signed consent (Appendix D). The rationale for seeking participation of third year nursing students was that they had more experience in psychomotor skill learning, leading to richer descriptions. It was considered that a second interview could be conducted; however, this was not necessary as the students were able to articulate strongly and clearly their experiences. I made no follow-up clarifications via email.

The second source of data came from my participation in a skills lab learning session. I participated with students during a psychomotor skills learning lab during the Fall semester of their nursing program. Access to the experience of observing the students learning psychomotor skills allowed me to become aware of the how the experience is for them. I took anecdotal notes about the nature of what was happening, entering what van Manen (1997) refers to as the 'lifeworld' of the student. For van Manen, anecdotal notes are a narrative with a point that requires searching for meaning through writing and rewriting to bring clarity to the experience (van Manen, 1997, p. 69). Here, I "maintain[ed] a certain orientation of reflexivity ... while guarding against the more manipulative and artificial attitude ..." (p. 71). I obtained consent to observe from the Dean of the School of Nursing, the course professor, lab instructors, and students who are participating (Appendix E).

The third and final source of data, as human science phenomenological research indicated, was my personal experiences as a learner and teacher of nursing psychomotor skills. I considered these last, as van Manen (1997) suggested that the phenomenologist "does not want to trouble the reader with private facticities" (p.54), but rather suggested

that these descriptions of experiences are data from which to extract phenomenological meaning.

Interviewing and observing methods. I contacted the third year baccalaureate nursing students via an email with permission of the Dean of the School of Nursing, the course instructor, and the Research Ethics Board (REB) approval. I met students who were interested in participating for an interview at a time convenient for them in a separate private meeting room in a campus library to keep student participation confidential from educators by avoiding the occasion of the educator seeing the student in my company. I reviewed the aim, methodology, and principles of consent, and obtained written consent from each participant. If the student was willing to proceed, I continued with the interview. I also provided a copy of the signed consent to the participant.

The purpose of the interview was to gather rich thick narratives of the students learning to perform psychomotor skills. I used open-ended questions and semi-structured interviews to allow the participants to explain the phenomena of interest (Speziale & Carpenter, 2003). Approximately one hour in length, the interviews were to be digitally recorded, and each participant was assigned a pseudonym in order to remove any types of personal identification. I transferred and stored the recordings in a personal password-protected laptop. A professional transcriptionist external to the School of Nursing, who signed a confidentiality agreement (Appendix F), transcribed three of the six interviews. I verified transcribed records for accuracy, confidentiality, and correction before data analysis was undertaken.

I negotiated the opportunity for participant observation with the third year lab instructors after the completion of the interviews. All students who participated in the participant observation session signed consent (Appendix E) immediately prior to the

nursing psychomotor skills learning lab. I recorded anecdotal notes and stored them on a personal laptop which was password protected.

Ethical considerations. Ethical principles guide the researcher in addressing the initial and ongoing issues arising from the study design in order to meet the goals of the research and to ensure and maintain the rights of the research participants (Orb, Eisenhauer, & Wynaden, 2000, p. 93). For this reason, permission for the study was sought from the University's Research Ethics Board. As well, my thesis supervisor was an adjunct to discuss arising concerns due to my novice stature as a researcher.

Nursing students are essential to nursing education research and it is important for researchers to be mindful to protect their dignity and privacy. Despite the movement to a more co-learning philosophy in nursing education, students and educators have potential for power imbalances and consequentially there is potential for a conflict of interest in participating in research (Ferguson, Myrick, & Yonge, 2006, p.706). For this reason, I paid strict attention to ensuring the students were aware that their stories shared would be void of any identifying information. In-depth review of experiences of a highly personal nature may expose previous feelings and discomfort for the participant (Burns & Grove, 2005, p.190); therefore I was prepared to offer direction to student counselling services if these circumstances arose, but this did not occur to my knowledge. There were no anticipated physical or psychological risks to the study. I informed the students that there were two potential benefits from this study: first, of learning more about psychomotor skill acquisition and second, that knowledge gained from the research might increase educators' understanding of what it means to teach psychomotor skills. The informed consents outlined both the risks and benefits to the participant.

Having over 15 years teaching experience, I have great respect for student

confidentiality, power relations, and reverence for their vulnerability in learning. It was from this respect for persons that I was committed to: (a) gaining and continuing ongoing consent for the study, i.e. providing a robust description of the method and intent of the study, obtaining written consent, and reminding students of their rights to ask questions or withdraw at any time without repercussions; (b) ensuring confidentiality through the use of pseudonyms on recordings, transcripts, and written data; (c) ensuring confidentiality through removing any other identifying data, such as the name and location of the research; (d) ensuring confidentiality through pseudonyms in discussion of my experiences with my thesis supervisor (a professor at the university); (e) keeping demographic data in a separate locked filing cabinet away from the transcripts; (f) not using identifying data in research writings, reports or presentations; and (g) destroying all data five years from the completion date of the study.

Data analysis. The process of data analysis is the sifting, organizing, and cataloguing information into themes (Holliday, 2005) through the processes of intuition, introspection, and reasoning (Burns & Grove, 2005). It is important in human science pedagogical phenomenology to note that not all meanings that we may encounter when reflecting on the phenomena are unique to the phenomena (van Manen, 1997). Most notably, I reflected to consider how the students' descriptions reflected caring. I looked for descriptions of meticulous attention, the use of knowledge, or articulated or manifested intentions. I wondered if caring had been "tangibilized" through their discourse? As stated earlier, what is essential to this type of phenomenology is to discover the essential theme that describes "...aspects or qualities that make a phenomenon what it is and without which the phenomenon could not be what it is" (p. 107), as opposed to incidental themes. Van Manen suggests three approaches to the data: "the holistic or sententious approach; the

selective or highlighting approach; and the detailed or line-by-line approach” (p. 92-93); in this study, I utilized the first two. I wrote a thematic, holistic overview of each student’s description, and then I utilized a selective or highlighting approach to discover parallel experiences among the stories of the students. The final phase of the research was to capture the essential relationships among the participants’ statements and prepare an exhaustive description of the phenomena (Speziale & Carpenter, 2003). Dissemination of findings may occur through conference presentations or publications at a later time.

Provision of trustworthiness. Measures to establish trustworthiness in qualitative research are contentious, but most often considered are the concepts of credibility, dependability, and transferability (Graneheim & Lundman, 2004, p.109). Credibility refers to how well the data and process of analysis addresses the intended focus of the study. With my research supervisor, an expert in the phenomenological approach, I sought guidance in ruminating with the data to answer the intended focus of the study. Another form of research credibility is that of the faith placed in the researcher’s capabilities. Although I am a novice, I have been both an interviewer and interviewee in other qualitative studies. My strong commitment to interpersonal communication skills and student- educator interactions has assisted me in developing good listening skills. Van Manen (1997) states, “patience and silence... may be a more tactful way of prompting the other to gather recollections and proceed with a story” (p. 68), and I align my thinking with him. Trustworthiness in interpretation is achieved through creating a strong case for the most probable interpretations of data (Graneheim & Lundman, 2004, p.110).

Dependability involves taking into account the factors of instability or openness in a phenomenological study (Graneheim & Lundman, 2004, p110). Data changes over time and the researcher may alter the decision making process. Dependability accounts for the

evolving nature of the process of phenomenological inquiry, and can be addressed through discussion with the research team (Graneheim & Lundman, 2004); in this case my thesis supervisor. In the instance of this thesis, I participated in ongoing dialogue with my thesis supervisor about the interpretation of the data. Indeed, there came a point where I abandoned some themes that seemed to be emerging through the first interviews but were not found in other students' stories. It was these discussions and an openness to the evolving nature of the process that has helped to ensure dependability. My journaling captured some of the decision making processes throughout the data analysis.

Another component that proves trustworthiness is the ability to extend research findings to other groups or setting. Phenomenological studies meet trustworthiness criteria by providing clear, distinct descriptions of context, characteristics of participants, data collection, and processes of analysis (Graneheim & Lundman, 2004, p.110). This closely related criteria of transferability, however, is not common in phenomenology and more specifically, Van Manen does not entertain the criteria of transferability to give strength to the value of the research. In fact, he does not even talk about it in his description of human science pedagogy – even though it is a form of phenomenology. To van Manen, what makes phenomenological research successful is when the reader is provoked to a deep understanding of the phenomena by identifying with the data and the descriptions themselves (1997). It is the pursuit of such deep and rich stories of psychomotor skill acquisition that has driven me forward in this research. I have heard rich stories before, and the stories the students shared in this study revealed that they are indeed thinking about caring when learning psychomotor skills and that educators have distinct abilities and opportunities to facilitate learning to care in psychomotor skill acquisition.

Summary

The acquisition of psychomotor skills in nursing is an area that remains poorly understood. Increasing demands on nursing education leave educators seeking to find pedagogically effective strategies to prepare nurses for increasingly expanding and complex practice situations. While many new teaching methods and strategies are evolving and evaluated for their contribution to learning, how nursing students come to learn to care in their physical “doing” remains uncharted. Learning to care in the acquisition of psychomotor skills is a ‘taken for granted’ phenomenon in the pedagogy of nursing. In this thesis, I uncovered the meaning of learning during psychomotor skill acquisition for six third-year undergraduate baccalaureate nursing students, to bring nursing as a profession closer to the understanding of how we make care tangible in practice and to give nurse educators insight into ways to facilitate the learning to care in psychomotor skills labs and in clinical teaching.

Chapter Four: Learning in the Skills Lab

Education is not the piling on of learning, information, data, facts, skills, or abilities – that's training or instruction – but is rather making visible what is hidden as a seed.

Thomas Moore

Student nurses have many occasions of psychomotor skill learning during their four years of baccalaureate education. While psychomotor skill acquisition is only one aspect of nursing education, students recognize that a part of their role as a novice nurse will be to perform skills in the provision of care. This thesis presents stories of students' experiences of learning psychomotor skills, specifically asking the question, "How might this be 'learning to care'?"

Six third-year baccalaureate nursing students recounted stories about skill learning that were different from the skill descriptions depicted in nursing fundamentals textbooks and video demonstrations. Their memorable learning experiences are full of explicit descriptions of their own anxieties and their own learning strategies. Nursing education literature describing psychomotor skill acquisition focuses strongly on learning strategies and methodologies, while research which describes the experience of the learner is limited. In this study, the students' descriptions bring clarity to psychomotor learning. The experiences of the students who participated in this research reveal that there is a greater depth of learning than rote sequenced performance of steps of a procedure. First and foremost, these students experienced an anxiety for the 'real' person on whom they will perform the skill. In addition, they described other experiences which had shaped their understanding of what it is to care for someone. In this thesis, I divided the findings into two chapters. This chapter, Chapter Four, focuses on learning in the skills lab while Chapter Five focuses on learning in clinical settings. Chapter Six takes these findings and

returns to the question underlying this thesis, “How might *this* be caring?” comparing the students’ experiences with patients and nursing educators to Roach’s (2002) six attributes of caring from the model of Caring: the Human Mode of Being.

Memorable Learning in Psychomotor Skill Acquisition

When asked to describe “memorable” experiences of learning psychomotor skills, two of the students interviewed, referred to as Eliza and Megan, described most of their memorable experiences of learning occurring in the skills lab, while the other four students, referred to as Anna, Beth, Clare, and Debbie, focused on “real situations” with “real patients” in the clinical setting (hereafter referred to as “clinical”). However, every student had something to important to recount about her experiences in the skills lab, be they good or bad, or described the skills lab as not the place she learned the most! In most schools and universities in North America, psychomotor skills learning in nursing education usually begins in the skills lab to provide a secure learning environment. The clinical setting is less predictable, yet highly valued as the final step of reaching competency for some of the students who participated in this study. The two areas presented two distinct processes of learning to care as reflected in the students’ stories.

The six participants’ stories helped to develop several themes of learning psychomotor skills in a lab, most notably: (a) nursing skills labs are different from other science labs (biology being described the most); (b) learning skills in the nursing lab can be more relaxed than learning in clinical; (c) instructors can facilitate or hinder learning in various ways; and (d) peers can support learning and build camaraderie. Because many of the students’ reflections on learning in the skills lab support some of my experiences, I discuss my perspectives briefly, reflecting on learning and (a) the physical environment of the skills lab; (b) the effect of previous knowledge, belief, and abilities for learning a skill;

and (c) the power of imitation. In the final section of the chapter, I write about my participant observation experience with the third year students who were learning from their newly met clinical instructors.

The students' experiences.

The difference between nursing skills labs and other science labs. The students interviewed were adept at recognizing and describing the differences between learning in other types of science labs, such as biology, versus learning in a nursing skills lab. My reason for undertaking this research came from the discrepancy I observed in student engagement between these two types of labs. I believed nursing skills labs held a greater stress for the student. It was my belief that students harboured anxiety, knowing that real life performances followed skill lab learning. It was interesting to hear how the participants' stories resonated with my experiences, and to hear stories where students felt that learning in a skills lab was disconnected from caring. Megan's comments summarized how the students saw the difference between biology and nursing labs:

Biology and the nursing labs were different. The lecture in biology was imparting knowledge to us about anatomy and physiology. Microbiology taught us that, this is the cell, this is what it looks like, and this is what happens: just like a very traditional university lecture. Whereas, in nursing labs, there was a lecture about, this is how you provide the nursing care for this specific skill, such as bed making or injections. But, then, when we actually got in to the lab part of it! After the lecture in biology, it was looking at stuff under a microscope, or dissecting an animal or whatever. In nursing, it was that we were actually going to perform skills on real people, and so although we were doing stuff and using our hands in both things, it was a different kind of atmosphere and a different, I think, like genre,

or style of things that we were doing.

Furthermore, Megan described her experience in science lab as exacting and nursing lab as more supportive. Other students described points that also denoted this difference in atmosphere. While Anna pointed out how just the physical presence of the beds in the skills lab changed the learning environment, Beth described how the content of the curriculum contributed to the difference between the two labs:

When you are in chemistry or biology lab, you learn about things in little units.

Which you do in nursing, too, in a certain way, but, with biology or chemistry, you learn about this one organism, or this one thing, and it's separate from all of these other things that you are learning in certain ways. In nursing labs, everything is almost a segue into another thing that you are going to learn. Everything is much more inter-related than in biology. You don't really learn about how the heart interacts with the brain ... in nursing you kind of learn about everything as a set of systems.

As a nursing student in a biology lab, Clare felt isolated and insecure: she assigned these feeling to the fact that biology students had more knowledge and experience in handling the various implements and procedures involved with their field. Her comments reflected a disconnection from her biology peers. Later in this chapter, I elaborate on the theme of the value of peer learning and camaraderie as Clare and several of the other participants described it.

Interestingly, Debbie also referred to the atmosphere in the biology lab as stricter and full of little steps, which is what I believed students might feel about nursing skills lab. Debbie described that in biology labs there were rules to be followed in a more thorough way in order for the dissection to go well, such as following step one, two, and three...etc.

This experience resonated with my knowledge of the step- based procedures of skill performance found in most skills textbooks. However, Debbie described her instructors in skills lab as easy going and stated that they did not take a step-based approach to teaching skills; instead, she said, they taught about skills in more general ways. She recalls the steps only for more complex skills such as catheters and dressings. This contrasts with Megan’s experience of being “overwhelmed” with bed making because of the number of steps:

Basic skills like bed changing, when the patient is in the bed, and you have to change it around them, was kind of overwhelming, because there's like 50 steps to making a bed! You know the textbook and the sheets they give us; they each have little steps, and there's like 50 steps to making a bed. It's quite overwhelming.

Different student responses about whether the number of steps of an individual procedure might indicate that not all learners receive stepwise learning in the same way. It may well be that the teaching strategies or methodologies the instructors employ might have a greater impact on lab experience than a sequence outlined in a text book. The students recognized that they learned differently but still suggested several factors that contribute to creating a difference in learning between the biology and nursing labs. The descriptions were general in nature, but what I found most significant is that the students noted a palpable difference in the two learning environments despite identifying individual reasons for feeling those differences. Whether attributed to the presence of equipment, the manner in which the instructor taught the content, or the relational nature of the curriculum, all students described a difference in atmosphere. Clare’s description resonates with my own; she posits that it is having a person on the receiving end of the skill performance which creates the most marked difference:

I think going into nursing lab ... I need to know what I am talking about and what I am doing because I am actually going to be doing this! I am not going to be doing a gram stain when I am in the hospital, but I am going to be giving someone an injection and a catheter...right?

That awareness may be responsible for evoking the first feeling of caring within these learners and at the same time creating the first feelings of anxiety and stress known to affect students' performance (Hodson-Carlton & Worrell-Carlisle, 2005). Most of the students who participated in this study discussed how the freedom to be relaxed in skills lab affected their learning, both in positive and negative ways, as will be discussed next.

Learning skills in the nursing lab can be more relaxed. Safety for patients and decreasing student anxiety are the rationale for use of a nursing skills lab (DeYoung, 2003), and the students who participated in this research echoed those sentiments. However, the students' accounts sometimes assessed the skills lab setting as a positive learning environment where they felt free to learn by trial and error; other times such freedom contributed to viewing the learning environment in a very negative way. Tarnow and Butcher (2006) wrote about teaching the art of *professional* nursing in learning laboratories: Their writing describes the use of caring frameworks, the inclusion of aesthetics, the use of narratives to deepen student understanding, and the use of guided reflection to provide an excellent learning environment for students. Anna recalled a professional lab experience while learning subcutaneous injections, a skill she was extremely nervous to learn. She appreciated the safety of the lab:

In lab, you're not accidentally going to hurt anything...we had practiced giving each other saline shots and I think that was good. And even in Mr. Chase [conventional name for the style of mannequin frequently used in nursing

education] , he is a doll (*laughter*), I felt more confident. First, we practiced on oranges, and then, we did Mr. Chase, and then we did each other. So it was nerve wracking doing it on each other because we had never done in on someone else, but since it was another nursing student, like a friend, we kind of understood that it might hurt a little bit more.

Thus, having the safety of the lab helped Anna get past her fear. She was grateful for the opportunity to give and receive a saline injection to one of her peers because she felt this enabled her to understand the pain level associated with the experience. I thought it was interesting that she articulated awareness that the injection had the possibility of hurting a little bit more because the ones giving injections were novices. Could this be the beginnings of reflecting on the patient experience? Learning more than procedures can occur in the skills lab especially when incorporating the strategies suggested above by Tarnow and Butcher (2006, p. 376). The process of reflection can help to prepare students for clinical realities. Beth related how scenario-based learning prepared her for the realities of clinical, but at the same time, being in the lab allowed her the freedom to walk away and reflect:

...scenario based learning we've done that in lab too.... in certain ways it is very effective ... it's almost like you turn up the gauge a little bit, ...trying to get that real life pressure that you would actually experience out in the field. In lab, you can walk away from the patient for five minutes, or ask the instructor a question. Whereas, you cannot do that in clinical, you've got the patient right there!

Beth enjoyed the safety of the lab for other reasons as well, one of which seemed to be the time to reflect on solving some simple problems:

I think the lab is definitely the safest place. (*Laughter*) And I think a lot of these things um, even just for the first year of going in and making a bed in a patient's room for the first time, it was overwhelming, like even just knowing where to find the blankets, how to even get this patient out of bed. Where's this patient going to be when I am making the bed?

For other students like Clare, the freedom of learning in skills lab is the lack of fear:

I can practice speed and figure out what it should feel like without having to be fearful that I am going to be hurting someone...sort of figuring out the skill, with the hands on part of it, but, without the fear attached to it. No matter what happens, we're in a situation where it is safe. I am not actually giving a medication which could be giving a wrong dose or any of those things. Therefore, that was not a concern for me then, but what happens for some reason if I miss or something? Like, I can look at it, play with it, figure out what kind of thing it is, what I should be doing. It is so helpful, even though I don't feel like it is the place where I learned the most ... if I wouldn't have had that I don't think I would have been able to get up to the level of thinking of the patient.

Whether it is reflecting, or working on manual dexterity, students appreciate the skills lab. Nursing skills are not only multifaceted to learn, but the acquisition of a skill requires attending to and integrating many factors in the performance (Bjork & Kirkevold, 2000, p.621). Many of the students spoke about the benefits of having an opportunity to practice prior to clinical and without evaluation. Debbie described how having an understanding instructor helped facilitate her learning and added a feeling of safety:

There was no set structure to that lab because they knew that was our first day and they didn't know how long it was going to take everybody to learn that technique.

We also had to rotate through different stations in order, by doing the grapefruit and then the mannequin and then each other. Even with experience of injecting into the multi-dose vials was sort of nerve wracking, but at the same time it just felt really calm. There was the lab assistant, who was very helpful, our instructor was right there with us, and she was helping everybody with the land-marking and everything.

Debbie's description resonates with a supportive atmosphere for learning. It brings back memories of skills labs I have attended where the focus on learning was so intense one could hear a pin drop.

Sometimes the students and their peers sensed a detachment from reality and consequence, which led them to engage in "goofing around," an attitude which might not resonate well with learning a sense of caring. When Anna was describing learning to use the Hoyer lift in the clinical situation, I felt I heard a bit of haunting regret in her voice for not paying closer attention to the significance of learning in the lab. She recounted:

We never used it with anyone, but with each other, which meant that, we were normally goofing around when we used it. When you are just applying it on each other, you are not taking it as seriously.

While it is important to maintain a relaxed atmosphere for learning, hoping to embed "affective" learning just through a simple hands-on experience does not always produce the anticipated result. It can be difficult for educators to relate to the students the importance of learning a skill correctly while trying to provide the freedom of trial and error, and an opportunity to laugh at one's mistakes. Megan recalled her "goofing around" experience as resulting from a peer testing scenario in adult diapering:

There was this skills testing lab, where we had to put the adult pads on each other –

you know the big Depends diapers, and we always laughed about those.

Sometimes you'd almost forget you had it on, at the end of lab and you'd like go to the cafeteria and I came close a couple of times [to] leaving and going to the cafeteria for lunch wearing my Depends outside of my pants (*laughing*). What other things? I forget what it was that was so funny, but we were just very relaxed and had fun with it.

This is the one criticism of nursing skills lab: While relaxed and safe, reality is disconnected—so much so that finding meaning in a “goofing around” setting becomes problematic for some types of learners. This disconnect was mentioned by a couple of the students who participated in the research. Most notably poignant were Eliza’s thoughts:

I kind of felt in lab there wasn't much context to it, which made it harder. It was kind of, as if we'd joke around and goof off in lab and it was just kind of like, okay, we're bathing each other, this is silly. There was no really context, as if we will be doing this in the clinical setting. You know, it was kind of hard to think, like, to take it seriously to actually learn the skill to apply it in the clinical setting. We were having fun in lab and kind of joking around. It wasn't really like thinking this will translate. Because you're nervous about it, it could be part of it, to deal with the anxiety. It would have helped to set up scenarios: here's your patient, this is his diagnosis, and you're going to give him a bed bath, working through it together with a partner and actually doing it – more realistic.

It is notable here that Eliza asked for situational context for the performance of the skill.

Students do recognize that learning labs and clinical settings are not going to be the same.

Beth felt that the reason “things [she] learned in skills lab didn’t really stick with [her] was

maybe because it was a little disconnected from the patients... a doll isn't quite the same [as a real patient]." From another viewpoint, Clare expressed concern about application of the learning from skills lab to the "real" world by asking, "Once I am there, in clinical, am I going to be able to do this? What is going to be different?" The students leave skills lab knowing that more learning will occur in the clinical setting, but they may be anxious about how this learning translates to reality. In the following chapter I will describe how the students' stories of learning to care while performing skills in the clinical setting reveal the anxiety for the patient, followed by a sense of relief and confidence after having the experience with a real patient. The students successfully defined the positive and negative aspects of having a relaxed atmosphere in the skills lab. In the above accounts, their behaviors and attitudes contributed to the created atmosphere in skills lab. Next, I will outline the students' description of ways in which the lab instructors played a pivotal role in creating safe and relaxed learning atmospheres or a negative learning atmosphere, and behaviors they described as either facilitating or hindering learning.

Learning skills in the nursing lab facilitated or hindered by instructors. There are several approaches to teaching in the skills lab (DeYoung, 2003, p. 209). The balance between instruction which facilitated learning and instruction which hindered learning permeated several of the student interviews. Students described what constituted good instruction, even when that type of instruction challenged their feelings of comfort. An instructor's philosophical orientation toward pedagogy, comfort with and use of learning strategies, and ability to provide feedback have great impact on the student experience in the skills lab. Although the research question never directly asked about experiences with instructors, every student described *at least one story* about an instructor, which suggests that instructors' performance does contribute to the learning

experience.

Facilitating learning. Debbie's most memorable experience in learning psychomotor skills focused solely on her appreciation for the instructor's demeanor when teaching:

In one nursing course, we had a lab instructor who made it really memorable. She was really calm and we practiced our first injections. ...it wasn't too loud, like everybody was sort of busy and there were people laughing too. Maybe they were a bit embarrassed, scared, or frightened so they were laughing and the instructor sort of had, like, a calm environment. She was pretty chilled and relaxed. With a calm instructor, you see everything. You're able to think a bit slower. When I compare obviously, like now, this year, I'm a lot calmer because now I'm better at these skills. First year, specifically in that room itself, it was really calm.

Debbie attributed the instructor's calmness to creating an atmosphere that supported her learning in the moment and which she implied was an important attribute for the remainder of her skill learning throughout her education. I asked her to describe the calm:

We would just do it and she would sort of correct us a bit. I didn't really need that much correcting but maybe other people did. I saw her help other people. She was very calm and patient. You'd watch her teach them... where she would demo it.

Students have also recounted how they appreciate instructors who will take the time to demonstrate a skill more than once. Most of the students explained how demonstrations contributed to their learning. They expressed the need to have instructors who were aware of different learning styles. Debbie commented on how demonstration in and out of the lab helped to facilitate her learning:

It's helpful... if the instructor is aware of how people are learning and can review the skills with the student, because sometimes when you do the skill for the first time it's obviously not going to be right. It's nice when the instructor actually performs the skill and does a little demo. I've had it in real life, and not real life, so it doesn't really matter, but say, we were in looking at the pump, and if you were to have a patient there, it's probably more beneficial because it's more real.

However, for the instructor to demonstrate it a second time really helps because then it's more concrete in your mind.

Beth described how she appreciated when the instructors allowed for more trial and error while learning in the lab:

Instructors, even though it is a horrible way to learn, should not overlook learning by trial and error. I've learned to be much more careful with my skills after making a few mistakes, nothing major, but that definitely makes you remember what sequence to do things in (*laughter*). All of the students learn in different ways, I personally do not learn well in high stress environments in the lab; sometimes it's a little bit more fast-paced and having your instructor kind of watching over you, but then again that is all about interpretation of the situation as well.

Of all the students who spoke about the facilitation of learning in skills lab, Beth offered the most positive story of how her instructor created an atmosphere and guided her and a group of students through a very challenging pediatric code blue scenario. Beth was impressed at how this situation was low stress, yet high learning value, which she attributed entirely to the calm and supportive performance of her skills lab instructor:

We did a code blue, for pediatrics. I was lucky because I was in a small group of

people, and we did like a big group exercise of it. It was a role play kind of thing...the professor was really good... they [tried] to set it up as a real life situation that you would get into, but [tried] to keep it fairly low stress...often enough fast paced, like, it was actually happening. We would just go in and she would guide us through all these assessments, but then, she would do a little knowledge testing and skill testing as we were doing it. I thought that was very good and I actually remember now what to do now in a code blue.

After hearing Beth's story, I related it to how Clare (in her description of trying to learn a psychomotor skill) talked about getting the skill to 'stick'. Perhaps good facilitation is like a form of 'glue'— making learning experience stick to students. So many of the interviewees spoke about the role of the instructors in their skill learning that by third year students can define excellent facilitation skills. Facilitation of learning was important for Eliza and she had a great deal of input on how she felt instructors helped her to learn. She was very aware of her needs as a learner and she described the value of instructors who utilized teaching strategies such as demonstrations, debriefing, and positive feedback and expected high standards of student performance. She was eager to explain how these educational strategies affected her learning:

[Regarding demonstrations] ...they did it and I observed. And they kind of talked through it like, this is the main bag and I'm hanging the mini bag above it and I'm hooking it up, kind of talked me through it.

[Regarding debriefing] ... debriefing allowed me to take something good from it. Now, I have this knowledge, I know what to do even though it was a scary circumstance.

[Regarding positive feedback] ... It's a huge thing for me, when they give me

positive feedback...that just really helps me, and it affirms me. I think it increases my confidence.

[Regarding high expectations]... she just expected a lot out of us for being in first year. I felt because she expected so much that I performed better later on and I had better skills

There seems to be an ability among these learners to recognize techniques which facilitate their psychomotor skill acquisition without their formal knowledge of learning strategies. This impressed me as an educator. It left me with the belief that students are reflecting on their learning preference and styles— insight which will assist them in their ability to be life-long self directed learners. However, as much as they sense what facilitates learning, the students also described instructional behaviors which hinder their ability to learn and impact their self concept as learners, discussed next.

Hindering learning. Often educators' intentions do not always match the students' preferred learning styles. This idea was articulated a few times throughout the students' interviews, although they did not always identify their displeasure as a mismatch between their learning style and the instructor's method of facilitation. Instead, often students who felt their instructors hindered learning spoke plainly about actions of instruction which they did not like. For example, Anna shared her views on how being watched by instructors bothered her:

I would be fine, if it was [Instructor A] watching me, or one of the others, as long as it is not [Instructor B] or [Instructor C], then I would do fine. They just make me nervous, I don't know why. Being watched... scrutinized, as you are learning is uncomfortable. That is why I am nervous to do it in real life too, because I feel like my instructor is just going to stand there and stare at me the whole time (*nervous*

laughter). I know they have to be in the room, and they have to supervise, but sometimes I found it was nice when the instructor was in the room, but they kind of stood off.

Debbie reported the same kind of nervousness created when instructors are silent. She recognized that by the third year of a four year program, she needed time to think critically through information surrounding the performance of a nursing skill. She recognized that there are two sides to an instructor's input during learning:

Sometimes when an instructor says nothing, it can create a bit of that pressure.

You don't really know what to do or you're hesitant to do something because you know maybe that's not right, or whatever, because they're not even telling you... so that just creates that whole stress factor! However, at the same time I don't like it when instructors are very talkative during assessments. Like, just let me do my own thing. There [are] both sides to that. In addition, it just depends a lot on us and if I'm doing something for the very first time, obviously, it's going to be a bit more nerve racking. Things change so you've got to be able to think critically or ask people.

Megan shared a very different memorable experience of psychomotor skills learning. During a skills lab demonstration, Megan's lab instructor chose to share a story from her own learning as a student. Megan related to the instructor's experience and she felt the story helped her to recognize that the instructor was aware that the students were vulnerable to mistakes. She attempted to verbalize the effect:

I don't know. It makes them seem more like us; I guess it makes you realize they were students once too. This professor specifically, she's such an amazing nurse. I wish I could be like her, but I can't imagine ever getting all the skills and

knowledge that she has, so it's nice to hear that she was a little nursing student once too. To hear about the instructors' experiences as nursing students, learning new things and doing a skill for the first time, like, she had done in that story, makes you feel they understand.

Megan appreciated the ability to identify with her instructor's experience. Learning is not always an easy process to facilitate or evaluate. Nursing educators are required to evaluate students to determine if learning has occurred and to prepare the learner for professional accountability. For nursing psychomotor skills in particular, there is ongoing discourse as to whether skills lab should include an evaluation component. This debate has two elements. First, is it ethical for students to practice skills on patients before being evaluated in the skills lab, and second, is skill performance evaluated in the skills lab enough to ensure competency. The presence of an instructor, as evaluator, in the skills lab can create a feeling of anxiety for students; this factor made it difficult for Eliza to learn:

Just kind of having the instructor there kind of made me anxious. I felt like I had to be prepared going there because she would kind of, in a way, be evaluating me, so I had to kind of be on top of my game and know what I was doing. So that kind of made me feel anxious. I just felt not very confident at the time, so I was kind of anxious going there, learning this skill. It's almost, like, you're going to be evaluated on it at the same time you're learning it!

On the other hand, skills testing can be a motivational force for some students. Beth explained:

I had a particularly... stressful person who would be testing me. Therefore, you learn your skills in lab and then you get tested on them. So I was very motivated!

Nursing students have a content saturated curriculum (Dalley, Candela & Benzel- Lindley,

2008). It has been my experience that content, when not tested, has a tendency to decrease in priority. Contrastingly, however, skill testing is not a strategy that supports Debbie's learning:

When we were tested, we would just have a situation on a little piece of paper where we would have to insert this or do this to a patient. We didn't know what we were getting. Our instructor would just be in the room with us and we would have to perform the skill. We were marked Pass or Fail. The labs tests are sort of really important to do, but generally, I didn't really like them because you had to memorize everything. You didn't have the steps in front of you. You're being tested, so you're under a lot of pressure. I never use that stepwise process again, only, maybe, a skill, if I don't do it a lot. You can just print off the little steps online from [Mosby, a learning resource for clinical skills] – they are very helpful.

As Debbie's statement highlights, the ways in which students need to learn procedures in the nursing skills lab has been changed by the advance of technology and the availability of information at our fingertips. The students seem to be able to identify areas of skill learning which have become nonsensical. If skills lab instructors are not fluent with teaching and evaluation strategies, students quickly recognize and question the instructor's role as an expert. Megan recounted one incident wherein she and her peers came questioned the purpose of a lab and the expertise of an instructor.

Yeah, we already know how to make beds, but just learning it in the nursing lab, it seemed so different and overwhelming. I think it was the long list of steps in that sheet that we just went Wow! Anyway, first year, first semester we did like changing beds and bathing people and really basic stuff like that and I think probably giving some injections. We practiced that on each other. And so I

forget if it was the midterm exam or the final exam for skills testing for first year, first semester, our instructor, [she was new to instructing] in that kind of situation.... When it came around to exam time, we were terrified but she was worse off than we were [in the sense of feeling nervous] [*laughing*]!

Thus, the perceived expertise of the nursing instructor could alleviate or elevate student anxiety. Similarly, students described situations in which they felt anxious about skills testing, about their reaction to perceived or actual criticism by instructors. Particularly unsettling for students was when a peer failed. Feeling supported, even in difficult testing situations, greatly alleviated anxiety:

[Megan:] We had another style of exams and skills testing at the end of first semester, when we were tested on Foley catheters, and IM injections. The way the instructor did it, the way she tested us, was more of one on one, or I guess one on two, because it was you and your partner that went in at the same time... kind of a coaching thing. She tested you to make sure you had all the steps down, but then she'd correct you, or added on extra things, or asked you a question to test you on the knowledge. If you didn't have it, she'd answer the question, but also give the rationale and the patho behind it and stuff to help us understand. That was nice because it was more of a learning experience than a big scary testing thing and she still got a good assessment out of us. She could tell whether we knew our stuff and all that. That was a good experience. It added to our knowledge as well, and helped us to understand things. We had that one-on-one time with her, not just in a testing way, but also in a getting to ask questions and be able to really understand the skills that we were doing.

The one-on-one moment with the instructor supported not only Megan's learning,

but seemed to affirm her value as a student. When Megan described how she felt the instructor could tell whether the students “knew their stuff,” I reflected on what evaluative techniques this instructor might be using and wondered for what type and level of comprehension was she searching? Additionally, Debbie’s ability to get Mosby’s skills online might be an example of resourcefulness in student learning. This next generation of nurses is quickly sharing the ability to adapt generational learning strategies to the acquisition of psychomotor skills, and these nurses are willing to share that experience with each other.

Peer mentoring in the skills lab is gaining attention as a strategy to enhance student learning (McKenna & French, 2010), and increase better utilization of faculty resources (Hunt & Ellison, 2010; Pullen, Murray & McGee, 2001). I include it here because I feel that peer mentoring demonstrates caring as a shared understanding of experience, a camaraderie. The students described how their peers helped them with skill acquisition of skills in ways that resonates with their current level of knowledge and understanding. Beth provided a simplistic statement summing up that students like to learn from and with their peers:

Just being able to come in and do that ... on your own time, or with a few other nursing students... to be able to give and get a little moral support.

Peer learning in the skills lab is not always about the moral support of peers, but sometimes the absence of instructors. The description of Anna’s concern about having instructors watch her “intensely” sets the stage for her appreciation of peer testing. She searched for a rationale of why she found that situation more to her liking:

We did peer reviewed skills testing and that was way better [*emphasis*] because it is your own peers. They still have to mark down what it is you have done, but it’s

not like it is your nursing professor sitting there looking at you, it's one of your student friends. It makes you feel more comfortable, probably because we all practice together, so we were all doing it at the same pace so it wasn't like they already know everything. We were all doing it together.

Megan shared nearly the same story of a peer testing experience as Anna. It was so similar, in fact, that I felt as though I was hearing the story for a second time, leading me to assume that the experience must have been particularly memorable. Megan provided more detail in her description of the testing event than Anna, adding how much fun they had while testing. However, I took most note of Megan's description of the instructor during the peer testing:

Each bed has a station at the bedside table. Beside each bed were the instructions for the exam, such as bed changing. You would do that, and your partner would have the ticky sheet with all the steps, making sure you did everything correctly. If it was a skill, we had to have specific knowledge about the rationale for something or the procedure, they'd ask you the question applicable to it, and you have to be able to answer it right. And so the instructor just kind of floated around the room.

In Megan's description, the instructor is almost a spirit like presence in the room supporting the learning but not intrusively present. It is interesting how some students assign a meaning of support to the instructor when she is present in the room, and other see her as an intrusive and judging presence. The elusive meaning of the instructor's presence may need to be clarified for the students before each lab. Clare expressed how she valued her peers in learning in a more concrete way—for Clare, the student TA's close proximity to her own age allowed her to feel comfortable in asking awkward questions about areas of

care that she had never encountered before:

I felt, ok, we are learning this together. In that situation, because we were all in the same age, we were all in the same situation; we had never done a catheter before. Then it was a lot easier to talk through that in lab where we have student TAs who are helping. That is a very useful thing too, because it is like, hey you just went through this process of just learning it. To perform a catheterization it was like, ok, ok, I can do it on this model, but when you are actually holding a penis for the first time... what is that like [*laughter*]? How was that for you? So, that was really helpful, having someone who was a close age able to talk through things and not like experts who are not thinking the same as us. Students TAs are very helpful because we all learn so differently.

The use of peers for learning and support not only works well in the lab. Eliza recounted a memorable learning experience that she had with a peer in providing a bed bath for a palliative patient. She felt that her student peer supported her in recalling the steps of a skill in a very stressful situation:

There was quite a bit of time from learning bed baths and practicing it to actually doing it in clinical practice. I found I had forgotten how to do it. So when it came to clinical, me and my partner had a palliative patient and it was time to do a bed bath on him and we were both just kind of like, I guess had forgotten how to do it. So we just kind of took our time and learned by trial and error and asked each other lots of questions and did the bed bath.

Eliza went on to describe how her instructor was unavailable because she was busy supervising another student, but learning with her peer for this skill worked well. What I enjoyed most about Eliza's story is that learning with and from her peer may suggest that

she also learned how to work and learn collaboratively with her peer, a relational competency for nursing in the twenty-first century(Bellack & O' Neill, 2000; Canadian Nurses Association, 2011). Eliza continued to describe how her knowledge of the procedure increased with more opportunities for practice and input from peers:

Each time I did it like the next probably few times, I would still kind of pick up one new thing each time. The next time I did the bed bath with an RN and she said, "oh careful there, you would contaminate the water if you put the peri cloth back in the water." I would pick up that one thing from that experience, and then I would learn that. Then I would go on and not make that mistake again. Then the RN would give me another tip "Oh, make sure you do this in your bed bath" or "this is something that will make it easier if you roll over the patient".

All of the stories about peer learning experiences suggested that students enjoy learning with and from their peers. As well, there were anecdotes like the one above where students related enjoying learning from practicing nurses either in their clinical rotation or during their summer employment experiences. I note, reservedly, that no students described negative experiences of learning psychomotor skills with peers, which is interesting considering the challenges that nursing students sometimes encounter when working in groups (Gagnon & Roberge, 2012). It may be of future interest to explore students' stories of peer learning in skills lab.

These students shared their experience of how learning in skills lab is different from other types of labs, facilitated or hindered by a relaxed atmosphere, facilitated or hindered by presence of an instructor or testing, and enhanced by peers and a sense of camaraderie. I wonder if other experiences I have encountered such as the physical environment of the lab, the students previous learning experiences, and the power of

imitation, also impact skill learning in ways which affect taking up the concept of care.

Personal perspectives on teaching psychomotor skills.

The learning environment. I became a lab instructor in the year 2000, which was the year that the Canadian Nurses Association deemed the change to baccalaureate level preparation to be the minimal educational requirement for entry into practice. The program at the university where I resided was one year old. Thoroughly ‘used’ equipment from the school of nursing site (literally) across the road furnished the new university skills lab. As I started my position, I received a list of skills to teach, a nursing fundamentals text book, and a lab that looked like a junk yard. The physical appearance of the learning space screamed at me how undervalued task based learning had become. Perhaps this experience was not occurring in other institutions, but the torn privacy drapes, the broken electric beds, and the worn and eyeless mannequins spoke loudly that this aspect of nursing education was not significant. Enjoying a challenge throughout the next year, I attempted to restore the skills learning environment. My colleague and I purchased new equipment, painted walls, and began designing learning modules with objectives, required readings, practice based research, and descriptors for the various skill topics. We devised case studies, questions for reflection, and evaluation tools for each skill. Although never formally captured, the students’ satisfaction with the skills lab learning increased, and feedback from faculty and clinical instructors gave credibility to our efforts. Two of the students interviewed, Beth and Clare, noticed the physical environment of the skills lab. In their stories, they recounted:

[Beth:] The scenario was good, because it was a real situation... even the way that the room was set up, like you were actually in a patient’s room.

[Clare:] The lab is laid out more or less to look like a hospital.

For me, caring is reflected in the organization and effort lab instructors infuse into their teaching, this means creating a welcoming structure in both space and content for psychomotor skill learning.

Relying on previous experience. It has become my belief during my ten years as a skills lab instructor that previous learning facilitates psychomotor skill acquisition. This phenomenon revealed itself to me most clearly in my experiences where students expressed anxiety about mastering medication administration. In this study, the students' stories of bringing previous knowledge from their family life, their previous studies, and their spiritual beliefs affirmed my experience. I think of Anna who described her experience as "being more comfortable than my peers" when a patient died, which she attributed to her experience growing up in a seniors' care home. As an educator, I have often used previous learning to help students gain confidence: While teaching the sequence of steps in preparing and administering medications, I have often asked students to reflect upon taking acetaminophen for a headache, and Anna and Beth discussed how they recognized that some students would have experiences with injections (diabetics or immunizations).

In addition to experience, values and beliefs also affect psychomotor skill learning. Beth described that basic differences individuals bring to their learning, including values, contributed to how they performed their psychomotor skills:

Just knowing that everyone has a different technique of performing a skill means that people's ability to perform a simple psychomotor skill is going to be different. Everyone comes in with obviously a different set of values that they have, or even ways of respecting. Their kind of personal engagement with their work, everything that that entails, definitely influences how they care.

Prior learning may also affect the way in which a student attempts to learn a skill or handle a piece of equipment. Debbie felt that dexterity was an area where she needed to use her own approach to develop a new technique for skill learning:

I guess I'm still learning, like even the dexterity of the fingers and everything. I find that sometimes troublesome but I love learning the skills. Everybody sort of approaches it in a different way – so that's one thing. You've sort of got to do it a few times until you find your niche, or find your own technique.

The process described by the students suggests merging prior knowledge together with new know-how. Eliza described how the instructor helped her with this:

I think just the instructor for me has made the biggest difference in how I learn psychomotor skills. Yeah, I think it would be good if in teaching, the instructor emphasized not like how you do it, we all learn how to do it, but also the way we do it, kind of help us learn a way in which, I mean each person does it differently in their own way, but that's what's important. I think if they emphasized that from the beginning, which would help.

Eliza's thoughts came from her observations of the variances in skills performed by practicing nurses. Students notice that even their instructors do not use the same techniques taught in lab. Appreciating the rationale which supports differences in performance is an important aspect of skill acquisition; it is only with a thorough underlying knowledge of a skill step (such as how microbiology relates to sterile technique) that practitioners can understand how skills may be safely and competently adapted to meet patient needs. Being an instructor who embraces caring when I teach means that I respect the student and his/her prior learning, and seek to assist them with developing their 'own way' (within the boundaries of competent practice) of performing a

psychomotor skill.

Imitation as a learning method. Imitation is a significant learning method.

Longstanding nursing education authors Alavi, Loh, and Reilly (1991) used Dave's taxonomy of neuromuscular coordination – imitation, manipulation, precision, articulation and naturalization to describe psychomotor skill acquisition. I can recall one specific fall semester where I learned how powerful imitation was as a learning strategy. My colleague and I were teaching about the insertion and care of nasogastric tubes.

Manufacturer suggestion states clearly on the packaging that safety and liability is assured only when equipment is used according the package insert. In nursing, equipment often needs modifications to adapt to patient needs; therefore, understanding product usage restrictions is essential knowledge for a nurse. Clearly specified on the nasogastric tube packaging were instructions to irrigate the tube with a syringe of greater size than 30 milliliters (ml). Although the packaging did not specify the rationale, the manufacturer indicated (in response to an email inquiry) that pressure created by using a smaller syringe may damage the tube. The day of the nasogastric insertion lab, there was not a 30 ml syringe available in the skills lab, so we substituted a 10 ml syringe, *emphatically* stressing to each and every student that this action was erroneous. To our dismay, twelve weeks later during skills testing, every student picked up a 10 ml syringe as used in the demonstration, instead of the 30 ml syringe required. In many other clinical scenarios as well, I have seen students imitate nursing behaviors without full understanding of the meaning. Anna spoke about how much she likes watching other nurses perform skills and how it helps her learn, and I challenged her on using imitation:

(Anna) I learn by watching people, a lot of the time. I think it would help if we went into clinical earlier and maybe did not do skills but shadowed a nurse, and

watched how she did her skills and how she interacts.

(Me) Do you like to copy her?

(Anna) I don't always copy everything the nurses do. If they do a skill a certain way and it looks good, I might. When you listen to staff talk to the patient, I think it helps. Especially in psych when you listen to staff ask the questions that you have to ask. I think that's hard for a lot of nursing students to ask difficult questions, especially when we came out of maternity right into psych. We have to ask patients if they are thinking about committing suicide. When you see someone else, they are kind of demonstrating how you can do it. You don't necessarily have to say it the same way that they say it, you can kind of...

(Me) Imitate?

(Anna) Yeah, kind of imitate but not, but not quite imitate. I think it gives you a little bit more confidence because you see how the patient reacts to that nurse.

Understanding the power of imitation, and how it works in nursing students' acquisition of psychomotor skills, is vital. Duffy (2006) reported on the caring behaviors used in nursing education, describing how preliminary evidence, while having gaps and inconsistencies, suggests that faculty caring through role modelling seems to enhance students caring behaviors (p.62). In the following section, I will describe my participant observation in a nursing skills lab. A short anecdote describes an instructor's caring actions, revealing how the taken for granted may illuminate our understanding of how caring is learned.

The participant observation.

As part of this study, I engaged in a participant observation experience with the third year students as they were reviewing and learning the skills that would take them into

their upcoming acute care clinical experience. The lab consisted of the students rotating through four, 45 minute learning stations, each focusing on a particular skill set. The lab time was also the initial meeting between the students and their new instructors who were demonstrating the skill sets. I participated in two observation sessions: The first was wound care and drains with the instructor I will refer to as Jill, and five students; the second was epidurals, patient controlled analgesia, and total parenteral nutrition with the instructor “Ruby” and six other students. There are too many vivid moments where caring was shown to describe all of them; however, I attempt in this section to relate two anecdotes that “make visible” the essence of caring in learning in the skills lab.

In the first case, I joined Jill the instructor and her five students reviewing wound care and drains. The students were very formal and regimented in their approach to learning the skill. As this was their first time together, Jill warmly welcomed the students asked their names. She sought out their learning preferences and reassured them that they would have plenty of practice experience in the upcoming clinical.

Jill used critical thinking questions to evaluate the students’ understanding of complex wound care. Jill demonstrated and talked the students through the steps of the procedure, pretending occasionally, such as pouring the sterile saline and using my hand as a garbage receptacle, in order to save supplies. The students’ voices were quiet and soft in their responses. They said only one word statements, “gloves,” “saline,” and “sterile scissors.” As Jill continued, she posed questions to the students. Some questions were technical, such as the direction for cleaning a wound, while others related to principles and complications. She spoke about how to remove sutures and inquired about prior learning in lecture and readings. The students continued to fix their eyes intently on her actions. At one point, Jill asked a critical thinking question about whether a nurse should be

concerned if there were 500 millilitres of blood in a hemovac. The students did not have the answer. During all of the discussion, the students looked anxious, and were quiet and attentive. They shuffled their feet due to the length of time we stood at the bedside. Finally, during one lull in the demonstration, one student asked with a tiny voice, full of concern: “Do they need pain meds before having the drain removed?” and “How soon before?” The furrowed expression on the student’s face indicated that there was great empathetic concern for the patient’s comfort during this procedure. In a reassuring voice, Jill answered their questions. She took the time to talk about caring for these concerns for the patient, and as she did, she placed her hand gently on the closest shoulder of the mannequin lying in the bed. She looked into the face of the mannequin, as though it was a real person, and the students’ eyes followed. Empathy made a mannequin real.

The second part of the participant observation occurred in a small room off of the main lab which doubles as a classroom. The second instructor Ruth had brought a mannequin on a stretcher into cramped space. Ruth greeted the students with a relaxed demeanor, constantly smiling, inquired for their names, and said she was happy to meet them. She asked about the students’ clinical assignments and commented on each response. She inquired about their summer experience, whether they had worked, and if they had seen many Intravenous’s (IVs) or Central Lines.

Ruth started her description of learning with a discussion on policy at different clinical institutions, explaining that some institutions had adopted nursing skill text books as standards of practice. She moved up and down the side of the stretcher as she spoke. Using her hands, she gestured and fiddled with the blankets that were covering the plastic mannequin. She fiddled with the mannequin’s arm band, and patted the sheets as she spoke.

When she began to describe the patient scenario for the students' learning, Ruth referred to the mannequin by a name (i.e. not "Mr. Chase"). Then, she moved to the end of the stretcher and began to gently caress the ankles of the mannequin. In my experience as a nurse, I have seen this action many times before and I suspect that any nurse that would have been present would recognize this action: a small forward and backward sliding of the hands from mid foot to mid anterior shin. I noticed that the students were watching her hands, their eyes were fixed on the motion as they listened to Ruth explain the composite of IV solutions hanging on the IV pole. Perhaps, tacitly, they were watching caring in action.

In every aspect of the learning for the remainder of the session, Ruth treated the mannequin as a person. Because she is a clinician, I wondered whether she would feel as comfortable to teach without a patient present. Although she had numerous topics to cover, she quickly, using proper technique, flipped the "patient" over on to his side to begin the introduction to the topics of spinal anesthesia, epidurals, and patient controlled analgesia. While repositioning, Ruth performed all of the appropriate body mechanics and alignment of the mannequin as though he was a "real" patient. She bent his knee, drew his body close to her using the bottom sheet, and log rolled him onto his side, stabilizing him gently with one hand. Accompanying this action, she asked the students, "What are the five sections of the spine?" The students slowly and laboriously spit out the answers. The students were reviewing more than anatomy without being aware: Ruth may have even implied the question, "What does caring look like?"

Besides the interaction with the mannequins where the instructors modelled caring behaviors, they also demonstrated caring behaviors to the students as well. This demonstration of caring might be considered an example of the professional comportment

of the nurse. I discuss this action as well as other attributes of instruction in Chapter Six in relation to how students learn to care through their experience with their instructors and educators.

Synopsis

Six students described differences in experience between learning in a nursing skills lab as opposed to other university labs. Aspects such as equipment, teaching styles, and content contributed to the difference according to the students, but most notably, the students *all* acknowledged a mindfulness of the eventuality of having to perform the skill with a person as affecting the atmosphere of the skills lab.

Some students preferred a calm learning atmosphere, while others found it to feel detached from the real experience of the clinical setting and had difficulty making meaning of learning in the lab, especially in the light of a “goofing around” attitude. In continuing to assess what helps and hinders learning, they offered their thoughts on instructors’ contributions to lab learning, skill testing, and the use of peer tutoring for learning. From my personal experiences, I have offered my thoughts, supported by students’ comments, of how the physical environment of the lab, previous student knowledge, and the power of imitation affect skill learning. Finally, two anecdotes from a participant observation session demonstrated how the phenomena of caring might be imbedded in skills lab learning.

Students did not speak much of caring for another when learning in skills lab. Most of the caring related to psychomotor skill learning in the skills lab was about instructional strategies and instructors behaviors and abilities. However, at the outset of this chapter I pointed out that the greater majority of students used stories from clinical learning to describe memorable skills learning. They were adamant that the real learning

happens in clinical: The next chapter discusses the most memorable of their experiences.

Chapter Five: Learning Skills in Clinical Settings

For Anna, Beth, Clare, and Debbie, the most memorable experiences in learning psychomotor skills were set in the clinical setting. While skills lab had many merits as a learning environment and was discussed in the previous chapter, Beth effectively summarized her feelings, and those of most of her peers, on the difference between learning in skills lab and learning in clinical with this statement:

Giving an injection to an orange, or practicing a catheter on Mr. Taylor [referring to the mannequin], or...a doll isn't quite the same as being in a real situation with a real patient!

Her peer, Clare, described lab learning as a place for

...sort of figuring out the skill with the hands on part of it, but without the fear of a person attached to it.

Lab learning experiences, while good for initial learning, are not the reality desired by students to confirm in their own mind a sense of skill mastery.

It seems obvious that eventually a student nurse would need a real person with whom to practice and learn psychomotor skills, and equally obvious that clinical would be best for learning caring behaviors. The students described their caring in clinical in many different ways, such as spending time, listening, doing little extras, being knowledgeable, being responsible, and empathizing. In clinical stories, students emphasized ways in which they embed caring into their learning. One student, Clare, described transitioning through a space that existed between the skills lab and the real life practice of clinical. When moving from the capacity to perform the skills in the lab to the unknown and foggy space of trying to perform those skills in clinical, students have a distinct period of transition. Clarity and feelings of competence came after the student had finally

experienced performing the skill in a real setting, where there are multiple layers of complexity and unpredictability. To understand what it is like to learn caring during psychomotor skill acquisition, we must consider this transition as something that is tacit, difficult to describe, and taken for granted.

This chapter will explore the transition space between learning skills in the lab and learning in clinical. I will attempt to describe how anxiety is present in this space, how the students attempt to cope with transition, and how after a student performs a skill in the ‘real’ environment, s/he considers the learning complete. Through the following stories of the students, I have come to understand this transition of uncertainty as producing anxiety. The anxiety or unknown-ness described in the transition is dissipated and the student cements his/her knowledge and increases in confidence and ability to care through the performance of a skill. This transition is not a hurdle to overcome, but a mired space to journey through.

Uncertainty

In my own learning, I have often experienced areas of uncertainty before mastery. Dorothy Mackeracher (2004) described these spaces of uncertainty in learning as metaphorical “swamps.” She further indicated the need for metaphorical tools, such as a compass and shovel, to find your way through. As I listened to the students describe transitions using words such as “grey zone,” “foggy,” and “not getting it,” I was reminded of that swampy place described by Mackeracher. One student described a difficult clinical situation where she and her peers were attempting to practice a method of patient transfer with a frail elderly patient. While the student had experience practicing this skill in the skills lab, the student found it much more difficult to perform the skill with a real patient. The student described how she felt that staff nurses observed judgementally and

chastised the students for failure to be prepared. Contrastingly, the student also described how the nurse was making certain that the student was performing the skill safely. The student expressed that she was overwhelmed during that experience because of her uncertainty and lack of experience, not only in a clinical setting, but also because of receiving supervision from staff instead of her instructors.

In this situation, the difficulty created was not because the student did not know how to complete a transfer (she has done that with her classmates in the lab), but because she had never used it with a 'real' patient. The 'realness' of a patient is created by their true dependence on the student nurses' competence: These third year students were acutely aware of their responsibility to the patient. These students were able to describe their skill learning in a context that considers the whole of patient care. They were considering both the implication of the skill as an act of healing and the impact of their performance competence on patient outcome.

Learning to perform skills in clinical settings does not happen in isolation from other aspects of caring for the patient. Consideration of the patient when performing the skill for the first time adds to the complexity and anxiety of a student's transitional experience. I did not recognize students' concern for the patient as such when I was a clinical instructor; instead, I believed students focused on self when practicing a skill for the first time in clinical. I have often heard it said that students are not even aware that the patient is exists when they go to give their first injection. Yet, the students' descriptions in this study countered this idea: They were acutely aware of the patient. To Clare, the change in learning environments from lab to clinical is a

big jump...between doing it in the lab, and doing it for real. This is totally a big thing...I think just the fact that it's a real person, who I want to respect first and

foremost...and then... give them the best care I can.

Beth also indicated that she experienced a jump in learning when a real person was the recipient of her skill performance. In her statements below, Beth examines her own competence (what she calls qualifications) against the patient's needs, leading her to identify this grey zone, as follows:

I definitely think about the whole experience for the patient when I am learning a skill, and it is exciting to think that you are going to be able to do this for a person, also scary to question yourself wondering if you have all of the qualifications.

You have all of this responsibility; [*whispering*] what if you do something wrong? I think about the responsibility most of the time in learning a skill. It's very hard to find a grey area some of the time.

Beth identified that she was "most of the time" thinking of the patient, in multifaceted ways. She continued:

You kind of dive into those points of information about the patient; it's almost like you can integrate more information, maybe, around from all aspects of the clinical experience. Like [learning to give a patient] bath, it's not quite so easy to isolate knowledge. You have to consider all the points: if they have a certain disorder, and the temperature of the water, and how much water, or if they have a wound, or have a catheter, or they are diabetic.

Beth's description includes integrating different forms of knowledge such as her own psychomotor competence, a sense of the importance of the skill she was about to perform, complicating factors in the patient's history, and empathy with the patient. Beth described the patient as someone "who experiences pain in the same way you experience pain."

Beth's story suggests that as students attempt to learn a skill in clinical, the breadth of

factors that they must consider is both large and deep. Expressing realization of the seriousness of the event of performing a skill on a real person, Anna expressed a fear of hurting someone. Both she and Beth talked about death as being a potential consequence of improper skill performance. This can (understandably) create a great deal of fear in a student. In several places during the conversation, Anna alluded to the notion of not wanting to hurt someone:

Well, I didn't want to hurt the poor gentleman. Umm, I think safety is you need to know your skill and you need to make sure that you, and the *patient*, [*emphasis in original*] are being safe... safety is really important.

Although it is not clear from her narrative, Anna may have been thinking about a patient having to live with the consequences of a nursing error, as a patient had died recently in the process of being transferred. It seemed to her that harming someone might indeed be worse than death. Her story caused me to reflect on the number of times in my teaching experience I have engaged in telling stories of errors and omissions in nursing care to create a sense of significance for students. My rationale has been to have students appreciate the importance of attention to detail, and the potential consequences of not attending to detail in learning. Anna's story makes me re-examine the intent versus the impact of these stories for those whom I teach. Her story highlighted how my intention to educate students about importance to detail in skill performance may contribute to their anxiety: I discuss later in this chapter how students experience a great deal of self created anxiety surrounding clinical skill performance. Perhaps the education value of sharing stories of errors and omissions is a teaching strategy which requires more consideration.

I was intrigued at the extent to which Anna was able to imagine how poor performance might impact not only the immediate aspects of the patient's experience (e.g.

the pain or harm of an improperly positioned needle during injection), but also into broader future consequences. For example, Anna described the importance of administering antibiotics properly because of the potential for nosocomial infection and the development of antibiotic resistant microorganisms. In another situation, she spoke of the safety of staff and patients when ensuring that patients on a psych unit received their medication. She talked about the impact of poor performance on her confidence, future practice, and licensing. These examples made me aware and confident that Anna appreciated the value and implication of skill performance. Beth was similarly aware of the impact of connecting all pieces of nursing performance together, but her focus on attending to the details had a patient focus:

Because there would be so much that you would miss, and even just my experience that I have, the little experience that I have in the hospital, is how easy it is for patients to fall through the cracks. Sometimes patients even die or just really, really deteriorate just because certain things may not be understood as relating to one another or of being of importance. It is important to know how to employ your knowledge and your skills and your caring and interrupt the process so they don't deteriorate quite so much or at all.

By third year, these students are aware, through reflection, experience, or critically reflecting on the intricacy of a human being, that patients are complex and that nursing care as it pertains to psychomotor skill performance is multifaceted and impacts the wholeness of real patients. Psychomotor skills are a part of the actions nurses perform to move people toward (or sustain) health or achieve a peaceful death. Anna recognized that patients have needs greater than merely being the recipients of procedures:

Yeah, I think because sometimes... people think that caring is just going in and

giving them their medications that you have to be able to realize that people have more needs than that.

Reflecting on these students' narratives, I would argue that embedded in the experiences of transitioning to real patient care is the experience of learning to care. During the learning performance of a psychomotor skill for the first time in clinical, these four students describe focusing on the patients' rights, concern over safety, and a breadth and depth of intention that extends beyond the immediate scope of the psychomotor skill itself. These concerns for the patient are caring behaviors that contrast a belief that students in a new clinical setting only focus on themselves. The first 'real' experience of a skill creates a space of anxiety through which the student must transition to achieve a personal sense of competency. After having achieved this first performance on a real patient, perhaps the student can possibly change their caring from originating from a place of anxiety and unknown-ness to caring that originates from a place of novice competence. In order to deal with this anxiety, the students were eager to describe the sources of their feelings.

Anxiety

When considering transitioning from lab performance to clinical performance of a skill, the predominant emotion expressed by the students interviewed was anxiety. In their narratives, students' awareness of the complexity of skills added to their anxiety. As well, consideration of the patient when entering a room to perform the skill for the first time added to the complexity of their experience of learning. Simply stated, Anna described being nervous just because, "Well, I didn't want to hurt the poor gentleman" *[with a nervous laughter]*. This anxiety about causing patient harm created feelings of avoidance for this student. She did not want to perform the skill in clinical without seeing

someone do it first, or helping her in some way. Later sections of this paper will discuss ways that these students coped with the anxiety.

Another factor that contributes to creating anxiety in clinical skill performance is what one student referred to as the ‘weight’ of the skill. Weight refers to the sense of pressure the student feels about learning a skill. For these learners, certain skills were associated with more pressure, similar to the way in which nursing education assigns skills to degree of difficulty or complexity. For example, in many nursing text books, bed-making is assigned a fundamental status, medication preparation is intermediate, and chest tubes might be considered complex (Hodson-Carlton & Worell-Carlisle, 2005, p. 352). Beth described her skill learning experience, recognizing these complexities and more:

I just felt that catheterization, it just seemed...a little bit more complex...and ah, little bit more substantial than maybe giving and injection. It seems like there is a lot more [that] can go wrong, you know there[are] a lot more steps in the sequence, there is a lot more prep work that has to be done. Not that there might necessarily be more in understanding... like if you are giving an injection you have to understand a lot more about the medication, and the needle size, etcetera, etcetera, etcetera. Catheterization just felt like a much weightier skill in terms of all the things you would have to do for it.

When Beth described “things that you would have to do for it,” she was speaking about entering an intimate space with the patient because of the personal nature of catheterization, which is to have to see, touch, and care for genitalia. All three students related memorable learning experiences that crossed social boundaries (i.e. that students would be unlikely to have experience with outside of nursing), such as giving injections

and performing catheterizations. Injections cross/break the physical boundary of the skin, while catheterizations cross the boundary of personal privacy. Crossing these boundaries of intimacy with a human being is a new experience for many nursing students. A naivety of the intimacy of some aspects of nursing care can create anxiety for the learner. The lack of such prior experiences of intimacy contributes to the magnitude of the transition experience in the performance of a skill in lab versus in clinical. Reflecting back on their impressions of the anticipated scope of the nursing profession, the students acknowledged a level of innocence or naivety. Anna thought that nursing would be an experience where, “I thought, like, I thought that nurses spent more time with their patients. Like one on one...” Clare’s experience was similar:

Coming into nursing, to be honest, I did not know that much about it. I didn’t know much about what a nurse would do...um... I knew I wanted to get into the medical field of some sort, and I knew that nurses had a lot more time with the patients at the bedside, and so, that really appealed to me. Like, I am a very relational person.

Both students indicated naivety in the reality of the scope of professional work. Anna exclaimed, “I didn’t realize that you ... had like, hours of paperwork.” Beth also revealed the change in her perspective over the course of her learning:

So even when I didn’t have any experience as a student nurse, or even much knowledge about what being in a hospital was like, I did think it was going to be more like this whole row of people that you are going to have to treat, and you don’t really get very in depth into any of the patients. Whereas now, you have a much deeper understanding of the one patient and you are much more involved and realizing all of these processes are subsystems of the patient.

Although Beth was able to articulate knowledge gained in professional nursing over the course of her last three years of study, she also discussed how some of the skills seemed foreign to her life experiences when she began nursing. For Beth, injections were not foreign because she surmised that most people had experiences with immunizations, but catheterizations made her ask, “Where else would you have any concept of any of the skills that you use in nursing outside of the nursing field?” What must seem to be an obscure and foreign intervention to persons unfamiliar with health care becomes quite ordinary to practicing nurses. Students experience much foreignness in nursing education; when does it transition from foreign to ordinary?

The constant changing of clinical specialities, hospitals, and educators keeps the students’ learning environment tumultuous. In some cases, minute differences may contribute to the foreignness students experience. Anna told a story about how she felt “paralyzed” in a clinical learning experience while giving an injection, where the foreignness of the situation was merely that the syringe was different, having a safety injection cap that involved a spring mechanism which she had never before encountered.

Part of the process of transitioning to skill performance in clinical is learning to integrate patient knowledge. Earlier in this paper, I stated how Beth demonstrated that in planning something as simple as a bath, she was aware of considering information related to the patient. My orientation to skill performance (as a previous skills lab instructor) is to think outward to the patient: the skill is adaptable to patient circumstance. However, after hearing the stories of these students I discovered an element in the students’ learning that puts patient before performance: the way, in fact, that it should be. Focusing on the patient creates more anxiety than simply worrying about your instructor’s evaluation. The students described how they transitioned through to performing skills in clinical by

incorporating several different strategies, which we turn to next.

Ameliorating Anxiety

I appreciate the thoughts of Dorothy Mackeracher (2004) as she describes our need to make sense of our experiences: “The activity of learning stems from a need to make sense of an experience, to reduce the unknown and uncertain aspects of life into a manageable level, and to act skillfully in ensuring one’s survival and security” (p. 6). In her use of the words “survival” and “security,” I find a resonance with my own experiences of learning, and with the experience expressed by the students: Sometimes learning causes feelings of anxiety as I attempt to make sense of what I am experiencing.

When the students described their memorable learning experiences, they included ways they coped with the anxiety resulting from performing the skill for “real.” Their methods of rationalizing and coping with these troubling experiences and their ways of dealing with feelings surrounding competence, patient’s rights, and potential harm were creative and ingenious. These coping strategies, by employing reflection, action, or both, allowed the students to proceed with the performance of a specific skill. The students’ tools include relying on the steps of the procedure, relying on the instructor, relying on the patient, and relying on personal strengths such as experience, faith, and calling.

Relying on the steps. For Anna, the best way to get through a skill procedure is to rely on the steps. Steps change the experience into a simplified, more manageable rote performance with emphasis placed on attendance to the sequence. For Anna, by clinging to the simplicity of a step-based approach as the procedure unfolds she becomes more aware of her overall competence. She described this pattern by stating, “... if you are overwhelmed, and you just start at step one, by the time you are done you’re thinking, ‘Oh, I remember how to do this!’”

This student used the individual steps to build confidence. In her account of learning subcutaneous injections, Clare also described how knowledge of the steps, attained through reading and attending demonstrations, provided her with the confidence to proceed. She also expressed her great appreciation for having learned the skill using a stepwise approach of practicing injections first on an orange, then progressing to a mannequin, then a student peer, and finally a patient. Clare recounted the experience of preparing to inject her classmate, when suddenly in the process of drawing up saline she realized, “ok, this is actually a person.” She consoled herself with the knowledge she would soon have to be an “actual person” for the benefit of her lab partner. This approach significantly decreased her sensation of fears. Clare was very satisfied with the way this step-based approach to learning minimized her anxiety with the procedure through each level. She also remarked how foreknowledge and strong understanding of the theoretical components of a skill helped her to build confidence in her own performance. The students’ stories suggest that as each arrived at this level of confidence in skills lab, they were still hoping for a guard or safety net for the “real” patient experience. This often was sought through the presence of the instructor.

Relying on the presence of the instructor. In addition to concern for the patient’s comfort, each student had varying feelings toward the supervision of the instructor. Anna recognized that clinical supervision is there to safe-guard the patient, but did not articulate this as being of any comfort to her:

That is why I am nervous to do it in real life too, because I feel like my instructor is just going to stand there and stare at me the whole time [*nervous laughter*]. I don’t think if they stared at you quite as intently...I know they have to be in the room and they have to supervise, but sometimes I found like, it was nice when the instructor

was in the room, but they kind of stood off, because you know how to do it: you had done it in lab!

While listening to Anna, I reflected on my clinical teaching experiences and recalled occasions where I, in my role as instructor, have felt my presence interpreted as both evaluator of and comforter to the learner. Nursing education literature discusses the role of the instructor in clinical education as being scaffolding for both the patient and the student, providing safety and comfort (Valdez, de Guzman, & Escolar-Chua, 2012). Could scaffolding the transition be another role for the instructor? Instructors might shed light upon the space between the student's performance being a learning experience and patient's right of having expert, or at least safe, care. Unfortunately, I have observed students using the instructors' presence as an excuse to step away from their responsibility to be prepared to perform a skill in clinical; some students over-rely on their instructors to direct them through the sequence of a skill performance, when this type of learning should have been done in the lab.

Some students utilize the instructor presence as means of coping with anxiety. For Clare, the presence of an instructor was like an ever present safety net. She described her learning as having an element of security:

I remember, even though I was really nervous, I was calm in the sense that I knew that nothing could go really, terribly, wrong just because back there behind you, as a reassurance... was the instructor.

Clare enthusiastically described a learning opportunity which arose and which she has since deemed as invaluable:

At clinical, my instructor was really, really good about learning skills, and I had heard that someone was needing a catheter and so I was like, "Can I do it?"

[*excitedly*], it wasn't one of our patients, and the nurse was like, "I do them all of the time, go for it." I think, "O.K., I've got to prepare myself for it." One thing that kind of helped was that my instructor kind of talked through it with me first...before we went in, so, that was helpful, just for me, to calm myself down. This is what I do, I know how to do it, and then, going into the room I just felt calm already, so that really helped me for the first time. Having my instructor there, as almost someone to watch, and say, 'maybe you can do it this way', was really helpful. Instead of, ok, step one, do this, step two, do this, [*slapping out her time on her wrist*]. The instructor really let me describe what I am planning to do, this is what I am going to do ...she was never like, ok stop, you need to do this, this, and this. That really helped my learning because she really let me get to a point where I was like, oh wait, if I do this then my hand won't be sterile anymore... and so that won't work anymore. Her interaction helped my learning because it was me having to figure it out, but still knowing that she was there, so that if something happened, I had her to help me...it was amazing for learning because of that experience!

It must have been very rewarding for this student and the instructor to have such a positive learning experience. Would this not be an exemplary description of facilitating learning at the patient's bedside? The student has the opportunity to gain self reliance transitions between lab learning and clinical performance—exactly the experiential growth desired. However, not all students achieve such insight or experience through such an ideal instructor presence.

Beth's experience with her instructors sat somewhere between Clare's appreciation story and Anna's anxiety story. While Beth felt that instructors added to her stress on

some occasions, during her summer student employment, she came to prefer staff supervision which allowed her to try on her own, but provided a safety net to protect her from making serious mistakes. She was opposed to staff that took over and gave detailed instruction. Some students enjoyed using their previous knowledge and experience to help them think critically through a skill performance. Like Beth, some students described how they learn to rely on their own strengths and developing competencies such as using critical thought.

Relying on Personal Strengths. The students' stories suggested they understood that learning and performing skills is not in isolation from previous learning, and that all students come into nursing with different life experiences. While Anna and I discussed how her experiences working and living in an elder care facility helped her cope with the death of her patient, she also shared how the experience caused greater upset among her peers than it did for her. In response to her self-description of being "immune to death", I posed the question:

Everybody brings their strengths to the learning situation and sometimes people have their real life experiences to rely on in learning. Nearly every subcutaneous injection lab I have taught, in the last twelve years, has had at least one diabetic [nursing student] who has given themselves an insulin injection daily through much of their life. These students are probably more expert at injections than I am. Did that happen in your class?

Anna agreed with me, and Beth and Clare also confirmed this phenomenon. Beth did not find injections difficult or anxiety-producing. She commented,

Almost everyone has had an immunization, or flu shots...you see it on TV all of the time, so that is a little less foreign.

Clare also described how her personal style of learning and retaining information helped her become self-reliant in her first clinical performance. She tapped into her own strengths and tried to understand the rationale behind the steps of a procedure:

I think, first of all, is just ... understanding why you're going to do it... at least here I found, the professors really prepare you with the biology, "this is why someone would need x," whatever it is, let's say ... sub-[cutaneous] injection...

For Beth, previous know-how, which she merited as a personal strength, was not the only tool she used for dealing with anxiety. Beth also believed that her developing skills and knowledge contributed to her confidence and ability to perform a skill correctly. Relaying a story from her summer work experience as an employed student nurse, she described her thoughts about the importance of skill awareness while performing assessments:

Sometimes you realize just how acute your skills and knowledge have to be. To be able to pick up on these tiny little things that you wouldn't have normally noticed. I think that goes along with being able to do your psychomotor skills well, like back to the catheter example... I did the bed bath and I was thinking that there wasn't very much drainage in the catheter... and there was something wrong with the catheter, and then we had to do a catheter flush.

Beth used her previous knowledge of physical assessment during a bed bath: She utilized her supporting knowledge of renal function to assess the patient's catheter care. To me, the inclusion of physical assessment during bathing reflects the full range of nursing care – the art of nursing. Being able to integrate physical assessment into bathing is a demonstration of attention to the skill performance and a commitment to patient care. Learning to assess physical details when bathing a patient is sometimes suggested in the sequence of bathing instructions; however, I suggest that perhaps Beth learned the

experience of integrating this previous knowledge from her lab learning. She was relying on previous knowledge from several types of courses. Tarnow and Butcher (2006), in describing the teaching of the art of nursing in the learning laboratory, stated that with time, “the full range of care that is the art of nursing can be ... simulated in the laboratory” (p. 375). Perhaps Beth had received excellent facilitation by lab instructors which contributed to her confidence in assessing the patient’s limited catheter drainage.

It is natural that all of the students considered their previous experiences and underlying knowledge as strengths, which aided them in coping with the anxiety of skill performance. Having access and time to practice and handle equipment in the skills lab was another factor that helped students gain confidence and reduce anxiety for their performance in clinical.

It seemed that knowledge of the basic science of the procedure, such as biology, anatomy, or physiology, provided students with confidence. In my teaching, I experienced “ah-ha” moments when students made connections with prior learning. One significant example was in teaching intramuscular injections, where students visualized the bone structure below the muscles on a skeletal mannequin and understood the exit points of large nerve fibers. By viewing an anatomy model, students gained a clear picture of safe injection sites, and often thought or said, “ah-ha!” In light of this, I identified with Clare’s statements that underlying knowledge increases confidence. Often, students related to my use of metaphors between ordinary life experiences and nursing skills: I used cling wrap to describe the tensions between the pleural and visceral lining of the lungs when describing chest tube insertions because for some learners, starting with the familiar provides confidence for learning. As another example, when introducing medication administration, most students have had the experience of taking analgesics. Salvage

(1998) tells us that when students are appraising situations in learning, the larger the gap between the relevance of the experience and their desire to complete that learning, the more they will feel threatened. Creating relevance through previous related experiences or knowledge may help students cope when performing a skill in the real world. Beyond these strengths, some students also described strengths not quite so tangential, which will be described next.

Personality and Calling. Two students, Beth and Clare, referred to personality (or personal essence) and personal commitment to spiritual and/or religious values as helping them overcome learning anxiety. Beth made an interesting comment about how each one of us has a unique set of values and strengths when undertaking a skill performance, and I thought this concept extension was interesting. She stated,

Well, even just knowing that everyone has a different technique of performing a skill...means that people's ability to... even perform a simple psychomotor care for that person is going to be different. In terms of a more personal caring, everyone comes in to nursing with obviously a different set of values. They have different ways of being respecting, of placing different value on things, like nursing research that relates to the skill they are performing. Their kind of personal engagement with their work, everything that that entails, definitely influences how they care for the patient, and then, how they view the patient.

Beth recognized the intrinsic values of the individual nurse as contributing to their performance of a skill. It might be interesting to look more closely at these subtle differences in performance of a skill and consider what the variations could mean. I wondered if the subtle differences of performance were the space from which the perception of caring was evaluated? It is intriguing that junior year students of nursing are

able to discern these spaces of difference.

Clare described how she relied on her religious faith to help her transition her “learned” skills into the anxiety-producing state of performing skills with real patients. She described a strength arising from her spiritual beliefs about the source and reason for caring. Clare expounded on her motivation for learning well, which supported her courage and gave her strength:

I want to be known as a good nurse, and I want to be known as a good nurse because I am representing my Christianity. I don't just want to sift or glide through the program. I want to excel in it. I feel like God puts on us the role to do things for him, and to do them to the best of our abilities.

Clare expressed a calling to excellence which provides her with strength and motivation to proceed through her learning transitions. Clare also articulated the manner in which she viewed her service to others: She held skill performance within a holistic view of service to others, who are whole beings with whole, complex needs. I found it interesting to contrast Clare's description of what she believes nursing to be—a calling to reverently care for humans—against Beth's factory-esque anticipation of what nursing would be:

You go in and do this dressing for this patient, and then you do the next thing with this patient. It's not like a line-up [of] skills you have to perform as a nurse, which is what I thought it would be.

Rather, Clare sees performing skills as responding to a spiritual responsibility:

God is the person who is dying on the street and who is the sick and the unclothed.

We have the call to be his hands, feet, and heart for the people of this world.

In some of the students' stories, the concept of viewing or considering the patient holistically as they performed nursing procedures was evident. Through reflecting on

their comments, I recognized that taking note of the person present in the skill performance was also a coping strategy in making the transition to real life experience, so that the patient now acts as both the source and cure for anxiety. As the students reflected on the experience for the patient holistically, they expressed recognition that the patient probably did not want the skill performed either, but that the patient recognized that the skill would assist him or her in healing. In a roundabout way, the students used this rationale to ease their anxiety about the performance of the skill, considering the patient's acceptance as a contribution of the patient to their learning as students.

Relying on the patient. In the students' descriptions of learning psychomotor skills in clinical, they often suggested ways in which patients' characteristics helped decrease their own anxiety. Beth described how, as a student, she was aware that her patient, who was being catheterized, was someone "who had [his] own thoughts and feelings about all of these things." Beth's identification with the patient helped her to accept that the patient would have thoughts and feelings about the experience of having a student perform the skill, while she as a student was experiencing her own anxiety about the skill performance. This might suggest the student is engaged in a holistic consideration of the patient, acknowledging that indeed the patient is involved, and that the focus is not all on self. I heard in Beth's description a sense of connection, camaraderie, and comfort which existed in identifying with the patient's anxiety. Beth expressed this story to me as a way of allaying her fear of getting through the procedure. In a similar way, Clare's account of a patient's contribution to relieving anxiety described how she thought of the patient giving to her learning experience by waiving rights to expert care in preference for opportunity to give a learning opportunity to a student. Contrasting this philosophical awareness of how patients give to learning, Anna gave a practical description

of a patient's contribution. Anna described the patient to whom she gave her first injection:

[She was a] senior at a nursing residence, and she had been getting insulin for years; she was a diabetic, and she was used to getting needles and most of the students were giving her morning insulin to practice, so she didn't mind. It helped me be more calm; she was used to it.

Such reflections and comments imply students are considering patients' experiences when they perform skills in clinical. Although the students exhibit appreciation to the patients for their contribution to the student's skill learning, I wonder whether, overall, maintaining respect for the patient creates great anxiety for the learner. Whether the patient is contributing to or lessening anxiety is up to the students' appraisal of, and relationship with, the patient. Perhaps it may rest along a continuum.

How the learner appraises the involvement of the patient, the instructor, and his or her previous knowledge and beliefs, together with the steps of the procedure, assist that learner in the transition through a "real" skill performance. The students in this study were eager to discuss how, after transitioning through their first real performance, their sense of competence and confidence increased.

Transitioning to the real experience

I have fond memories from clinical teaching of stepping outside a patient's room after a student has completed a skill for the first time and witnessing a sense of relief pouring out from that student. Often, the student's shoulders drop, her stance softens, and the instructor can often interpret a sense of jubilation on her face, which earlier may have held anxiety. I recall the feeling of completing a difficult task myself as a student: One of the hurdles I experienced was administering my first intramuscular injections.

As a child of a nurse, I recall rummaging in my mother's nursing bag and opening the polished silver containers that held long needles and glass syringes. In nursing school, the memories of long needles returned as I prepared to give my first injection, recalling the pain I imagined a needle could cause. Thirty years have passed, and I still recall brightly polished hospital floors, orderly nursing units, tidy bedside tables, nurses in crisp white uniforms all contrasting the chaos and apprehension inside of me as I prepared to give my first intramuscular injection. I identify with Beth's comments about the foreignness of health care and appreciate the students' anxiety of learning to perform injections on a real person. Similarly, I recall my exuberance at the completion of the experience: There was great relief in knowing that I would never have to experience that "first" again. The students' stories also suggested that they all experienced a sense of relief upon completing a skill for the first time in clinical. On the "finished" side of that first real experience, even though accuracy, fluency or knowledge can still improve, as a learner you now have a solid foundation in the knowledge that you can actually perform that skill—a sense of competence in your novice ability.

Solid foundations of experience

In descriptions of student nurses learning psychomotor skills, the term acquisition is often used. *Acquire* means to come to possess (Oxford Canadian Dictionary, 2005), as in something obtained, or some aspect of the learning completed or reached. Completing the performance of a skill with a real patient is so definitive that Clare called it "cementing." She stated,

Cementing skills ...they are firm in my abilities. It's not just some of the knowledge or some of the ability, but it's all coming together and it's all firmer in my ability to do it. It's just something that I don't feel that I am going to lose.

Cementing indicates a kind of permanence in ability, an assuredness that one has secured the ground work or established the foundation for competence. It provides the student nurse with a sense of self reliance from whence she can exercise independence in compassion and caring. Below is the narrative that Anna told about wanting to return to a place where she knew she could help a patient feel better. After sharing stories about learning, incompetence, and feeling anxious, and after expressing her opinion that caring was more than tasks and that people have more needs than simply tasks, Anna broke eagerly into a description of what she could do with a skill she had acquired.

I shampooed her hair for her ...well, she needed it. My instructor wanted me to give that patient's medication that day. The patient was feeling dirty, because she had been in hospital for a while. It's hard when you are in the hospital. It's hard to have a bath or a shower when you can't do it yourself. Well, I can do this, and I don't need help doing it. It's hard when you have to look for your instructor all of the time when they have to be with other people. I thought it will make her feel better, and so when her family comes to visit she feels semi presentable if not fully. I also put on her makeup [*giggling happily and proudly*]. And that is not what we learned in skills lab. Well we didn't learn shampoo cap in skills lab either, I just read the instructions. It makes you feel good because you can help them, and it is something simple that you can do that will make their day, better: instead of something that you are not so certain you can do.

In providing the shampoo cap for the patient, Anna performed a skill that others (her instructor and staff) questioned her for, because it was below her level of expertise. Anna felt torn because there were other activities that nurses and instructors wanted her to perform, which were in competition with the wants of the patient. This student may have

acted this way to bring her own transition to a place of competence. By using a skill set which allowed for a connection that was free of anxiety, she proved that she cared; she was not merely fulfilling her instructor's expectations or building rapport with a patient. Anna was able to enter into a space where she felt she was meeting the patient's needs. She was out of the competition between her learning needs and patient needs and so she could truly connect, and this connection was important and satisfying to Anna's experience of providing service and being a nurse. It moves the procedure of performing a nursing skill to an expression of care.

Learning from negative experiences

Eliza's memorable learning experience from clinical did not match the other students' narratives. She referred to it as a negative learning experience. The large sigh and disappointed expression with which she began her story established a heavy atmosphere in the small room where we conducted our interview. My usual enthusiasm turned to feelings of sadness that such experiences still occur for eager and trusting learners. There was no time of transitioning learning from skills lab to clinical in this experience: Eliza's story was memorable for many other reasons. During one semester Eliza was with other students in a senior's setting. The patient had been unwell and the clinical instructor had suggested that it would be a good learning experience for students to go in and do a thorough assessment. The students went in as a group. It was quite crowded with "different people doing different things. Some were doing a bed bath; some were doing the assessment, listening to the lungs." Eliza was standing back watching, not sure how to contribute. The patient began to cough and "it kind of got worse and she started kind of choking and then I kind of just like froze and I didn't know what to do." According to Eliza, the clinical instructor said, "Eliza! The patient is choking, what are you

going to do?” Eliza didn’t know what to do, and responded “Pat her on the back?” To Eliza, the instructor seemed quite annoyed and said, “No, that’s what a lay person would do. What are you going to do? You’re a nurse. Deal with it.” Eliza felt that she couldn’t “deal with it”: The patient was fine, but Eliza started crying and ran out of the room.

Although Eliza debriefed with the instructor after the situation, there are aspects of this learning experience which caused me to reflect. Was it appropriate to send so many students into a patient’s room? Was this an example of putting student learning needs over patient care needs? Did the instructor recognize the novice ability of the student? Would a different response by the instructor have made this a positive learning experience rather than an anxiety-provoking one? Would different body language or tone of voice have conveyed the caring between instructor and student that seemed to be missing in this incident as Eliza described it? In regards to this, Megan pointed out,

I try to show that I'm caring by what I say to the patient and also by my body language when I'm in the room with them and talking to their family or visitors, whoever is there, and that kind of thing, tone of voice and all that.

Perhaps this experience for Eliza failed to provide her with the care she needed in a confusing learning situation. Despite having other more positive experiences, it is interesting to note that Eliza held to this experience as the most memorable.

Stories of positive and negative learning experiences with educators suggest that students might see caring as being tangibilized through skill actions and experiences. This notion is the major point of my thesis and also my predominant experience and belief as an educator. Despite this, Debbie made a slightly different connection between skills and caring. In fact, to paraphrase her thoughts, she believed, “Finish the tasks, so you can care for the patient.” Debbie provided a refreshingly different perspective from a third

year nursing student, suggesting that skills might not be caring because in some ways you are hurting the patient when performing them. Debbie went on to describe this perspective in more detail:

[The tasks] just fit in like every day because you're in charge of that patient so you have to be able to do them and I can just see if you're better at them your day is going to go a little smoother; you won't be as worried about those skills because they'll be second nature to you. You feel as a nurse that these psychomotor skills are a big part but you don't really focus on them too much, you just do them because they're just happening so frequently. But it also depends on your area of practice, you might not get them at all.

Even further, she described a caring action for a patient, removing a band-aid, where her beliefs overshadowed consideration of patients' desires. When I asked her thoughts about caring through the performance of a skill, she stated:

[*Laughing*] Sometimes I'm not that person at all. I sort of do it roughly sometimes or I'm just maybe in a rush, or sometimes, quick is painless. So my friend, we were doing a dressing change and you know it sticks to your hair and I just pulled it right off, and she was like, I wouldn't have done it that way, I would've gone nice and slow, but I'm like, no way, I would've wanted that bandage off right now.

It is easy to see that it is not that Debbie does not consider the patient; instead, perhaps she is placing her own beliefs and values on patients. "Sometimes, quick is painless" suggests she is thinking about the pain that could occur for the patient during the procedure, even though she suggests she is thinking only about the task.

It is important to consider students' views regarding the connection between psychomotor skill performance and caring. Although Eliza experienced difficult

situations when being asked to perform a psychomotor skill, and Debbie did not directly acknowledge caring in psychomotor skill performance, the other four students provided stories which demonstrated that they do consider caring in the performance of a skill.

There were messages of empathizing with patients, respecting the patient as a person and appreciating how they contributed to the skill performance, achieving and considering competence by transitioning from a performance in skills lab to the real situation, and trying to integrate information about the patient into the skill performance.

Synopsis

When describing learning psychomotor skills, students discussed memorable experiences which alluded to transition between the experience of learning in the skills lab and that of performing in clinical with a real patient. One student aptly referred to this transition as “crossing a space” in experience which exists between the learner’s levels of competence in these two settings. Within this space, several issues are present which affect the learning experience and performance of the student. Nursing educators often think of the student’s first clinical performance of a skill as a time in which the learner is self-focused, or at the very least, skill focused. These students, however, described something different: an anxiety that arises in skill learning exacerbated by transitioning from the safety of the lab to the “real” patient experience, where there is a real person on the receiving end of the performance. The complexity of the skill also generated anxiety during this transitioning. Crossing personal boundaries to provide some forms of care (e.g. breaking the physical barrier of the skin, or viewing or touching genitalia) added to the students’ anxiety. By third year, students are no longer seeing these points of complexity in isolation, but have progressed into an area where they are considering a skill as a part of a complete system of providing intervention and healing for the physical,

emotional, and spiritual wellbeing of the patient.

In their attempt to learn nursing psychomotor skills, the students choose coping strategies which help them transition from lab to real performances. These strategies included relying on the steps of the procedure to navigate the way through; relying on the instructor's presence as a safety net or scaffolding mechanism; relying on personal strengths which come in the form of previous knowledge, personality, and spiritual beliefs; and finally, relying on the contributions of the patient to the learning experience.

After transitioning through the first performance in clinical, some of these students expressed novice competence, along with a sense of relief from the anxiety. This step toward goal achievement in the form of completing a skill brings great satisfaction and an increase in confidence. Performing skills in clinical was important and memorable for the students who participated in this research: Anna, Beth, Clare, and Megan generally related memorable stories from clinical learning experiences. Of the remaining two students, Eliza related a memorable learning experience which was negative as she felt over-extended in her knowledge and confused about respecting the patient. The other student, Debbie, described skill performance in ways that are disengaged from the concept of caring. In the next chapter, I attempt to answer the question, "How might all of these experiences in lab, in clinical and with instructors be 'learning to care' through the learning of psychomotor skills?"

Chapter Six: Thematic Analysis of Caring in Psychomotor Skill Learning

"I say that the nurse does for others what they would do for themselves if they had the strength, the will, and the knowledge..."

Virginia Henderson

I set out as the purpose of this thesis to describe the phenomena of “learning to care” in the acquisition of nursing psychomotor skills. My assumptions were that nurses demonstrate caring in the manner in which they perform skills. I was interested in the question posed by Dr. James A. Forbes (2008), “How do you 'tangibilitate' compassion?” I have experienced knowing that I am cared for, or not, in the hands of the person who merely cuts or styles my hair. How much more should “care” apply to the learning and performance of baccalaureate nursing students? I listened to the students’ learning experiences for evidence of the “taken for granted” part of learning to care. As I started to reflect on answering the research question, “How might this be caring?” I turned again to van Manen’s (2006) guidance: “[G]rasping and formulating a thematic understanding is not a rule bound process but a free act of seeing meaning” (p. 79). The meaning of caring in the narratives of the students resembled such themes as empathy, relationships, advocacy, integrating, affecting patient outcomes, and professional behaviors. In this chapter, I will discuss how the actions of students with patients, with instructors, and in the skills lab reflect caring under the themes described above. In doing so, I consider how these themes of caring resonate with the caring attributes described by Roach (2002), who theorized caring as a human mode of being.

Caring Reflected in the Stories of the Participants

The students who participated in this study understood and described caring in ways that resembled the themes of empathy, relationships, advocacy, integrating, affecting patient outcomes, and professional behaviors. When speaking about themselves or other

nurses, they described how they bring a part of their own values, beliefs, or ways of being into the performance of a nursing skill. Their descriptions of learning demonstrate that they are thinking about these attributes of care as they learn in the skills lab and transition to the real experience of completing a skill with a patient. The notion that self is part of caring resonates with the work of Sister Simone Roach (2002), who identifies caring as the “human mode of being.” For Roach, caring is expressed through habits and virtuous actions and is an energy source that transforms actions done to and for people into ministry of service. Roach’s premise that caring is either manifested or not expressed at all affirms my personal experience. She used personal anecdotes from her time as a patient to explicate how caring is an action. It was this tangible caring that I hoped the students would reveal in their stories of learning psychomotor skills: caring embedded in nursing work to heal the patient and move the patient toward health. The themes from the students’ stories affirmed the presence of caring in the learning of psychomotor skills, namely (a) empathy, (b) relationships, (c) advocacy, (d) integrating, (e) affecting patient outcomes, and (f) professional behaviors, which parallel the attributes of Roach’s model of caring and affirm the significant presence of caring in learning psychomotor skill acquisition.

Empathy as compassion in caring. The students used empathy with patients and with each other in learning. Megan exemplified this when she stated, “I think that caring is more of an empathy thing and emotionally supporting the patient.” Anna described feeling much empathy for the gentleman who died while in her care: She felt peaceful knowing she had bathed and shaved him. For Clare, peer teachers empathized with her anxiety over touching male genitalia during catheterization, and other students spoke empathetically from similar experiences during nursing education. These stories of

empathy describe a caring understood as identification with another individual, be it patient or peer, and parallel Roach's definition of compassion as a way of living, or an awareness of relationship to all which engenders a response of participation in the experience of the others—an attribute of caring which hardly needs defending (Roach, 2002). The students' stories reflected that they were compassionate about their care for others. They wanted to demonstrate empathy in simple ways such as understanding the experience of receiving and giving injections, to more complex ways, such as deep spiritual desires to be the "hands and feet of God." For the students who participated in this study, compassion is an attribute of caring linked with psychomotor skill acquisition.

That compassion links to students learning psychomotor skills may be an emergent idea for nursing education, given that we treat the learning of psychomotor skills in two distinct phases. First, the textbook knowledge practice occurs in the skills lab and secondly, the "real person" experience happens in clinical. Based on this separation, we should question whether the students are learning the sequence of a skill without an acknowledgement of person. These six students were aware that a person is going to be the recipient of their learning, and the student carries this awareness until it is actualized—that is, when he or she has completed the performance of the skill with a real patient. This fact may be the essence of why skills labs might differ from other types of science labs: Perhaps more importantly, it may contribute to baccalaureate graduates who might feel less than competent because they have never performed the skill with a real patient. While it is undeniable that nursing education cannot provide opportunities for every student to practice every skill with a real patient, nursing educational systems can ask how students are prepared to deal with the realities of their continued psychomotor learning after graduation.

Affecting as competence in caring. The story of Anna providing a shampoo cap to her patient is an excellent example of how a psychomotor skill can affect outcomes and how psychomotor performances might be related to caring. As I reflected on this story, a simple advertising jingle came to mind, “I’m gonna wash that gray right out of my hair” (Clairol, Inc., 1980), based on the song “I’m gonna wash that man right out of my hair” (Rodgers & Hammerstein, 1949) which is obviously an action response to a broken relationship. I am intrigued that society can recognize that performing physical actions can contribute to emotional healing in common life, but as an academic field, nursing has let go of the importance of the physical work or psychomotor skills we utilize in our profession. In other stories, the students recognized how their actions affected patient outcomes and related how other competent nurses’ work could help the patient heal and move toward health. Anna felt that she could help the patient who needed a shampoo, because she was competent. In the attributes of caring, Roach (2002) defined competence as “the state of having the knowledge, judgment, skills, energy, experience, and motivation required to respond adequately to the demands of one’s professional responsibilities” (p. 54).

In this study, students identified that they transitioned to a novice competence only after performing a skill on a real patient. Performing the skill with a real patient created a state of knowing which changed how the students perceived their ability for that particular skill. Beth described the experience of finally performing a skill with a real patient as cementing the skill in her repertoire of abilities.

That these students’ feeling of competence was dependent on performance with a real person is an interesting finding: Perhaps this study adds a new appreciation of where the boundary of competence should lie. Instead of being satisfied with a competence

which encompasses correct sequence and following principles such as in a skills checklist, assessing competence through a reflective experience of performing a skill with a real patient might be a clearer form of evaluation of skill performance. It is my perception that with current limited clinical opportunities, many nursing programs currently graduate students who have not had the opportunity to practice skills on real persons, but have only learned skills in simulated situations. Students may need to be taught that there will be a hesitation and concern in performing a psychomotor skill for the first time on a real person, and they should seek peer support or supervision as a newly graduated nurse as they navigate the first real experience. Alternatively, adopting a model of skill acquisition such as that proposed by Bjork and Kirkevold (2000) would provide students a framework of psychomotor skill learning. With ongoing changes of equipment and procedures in health care, students would find it an asset to be able to self-direct in their skills acquisition in the same manner they are able to self-direct in their knowledge-seeking behaviors.

How competent caring revealed itself differed slightly among the students who participated in this study, yet most students, with the exception of Debbie, related competent caring to actions. When Eliza described her thoughts on entering the field of nursing in terms of what a nurse would do, she described how a childhood memory of associating nursing with intravenous therapy framed her image of nursing. She equated caring with actions, as did Clare, who shared her belief that nursing skills help patients achieve their goals. Clare valued competency in skill performance as part of the caring process, helping patients to heal and leave the hospital. To her, helping them to leave the hospital sooner was caring for them.

For Roach, caring, as our human mode of being, calls forth an awareness of relationship to all which engenders a response of participation in the experience of the

others (2002). Performing skills is entering into a relationship with the patient whereby you help them achieve their goal of returning to good health. Without the nurse or doctor performing certain physical aspects of care, the patient would be unable to recover or reach optimal health within the experience of their illness. Thus, the patient enters into a relationship built on necessity. For the students, being willing to enter into this relationship with patients required confidence, which is the next of the six attributes of caring described by Roach.

Relationships as confidence in caring. As the students described their relationships with patients, peers, and educators, they considered their qualifications to provide care. Some of their stories reflected awareness of power differentials that existed in relationships, whether with patients or educators. Beth discussed how she was aware of the power differential that existed in relationships because of her knowledge of health care. In her performance of a skill for the first time in clinical she questioned whether she had the qualifications to complete the skill, knowing the patient could have the skill performed by someone who was completely and definitely competent. Such thoughts demonstrate awareness of power differentials. Beth was thinking of how the patient felt, and how confident the patient was in Beth's ability. Roach (2002) defined confidence as fostering trusting relationships, which were important to the students not only with patients but also with staff and instructors: Students considered and took note of confidence, describing it as a much desired attribute. Eliza desired to be like confident nurses because she believed confidence made the patient feel safe, and patients who feel safe share more with nurses. Conversely, Eliza believed that incompetent health care professionals created fear and anxiety for the patient, which demonstrates the necessity of competence, not just confidence, for developing trust and relationships. These findings resonate with recent

research evidence.

Carr (2010) explored the barriers and challenges to the provision of spiritual care in nursing, and her work revealed that patients encounter difficulties in discussing topics of deep meaning, such as those of a spiritual nature, if they have not built a trusting relationship with the nurse through the delivery of competent care. Similarly, Roach discussed how patients hold back their spiritual side, waiting for a space created in trust to share that which is most sacred and intimate:

“the sacred story is... communicated in a sacred space to others in trust. The sharing is often hampered by obstacles and resistance. It delays purposefully for the right person; it hopes for the appropriate time and place; and within a space of openness, reverence and wonder, it nurtures conditions for growth and healing” (p. 101).

Some students in this study described caring as more of a “sit down and talk” relational nature; however, they also identified that there were relationships formed through the performance of a skill. They described how many aspects of physical care connect to relationships from a holistic patient care perspective. Examples of the students being holistic in their care include the story of Anna and the shampoo cap, and Beth’s story where the bed bath was the opportune moment to discover her patient’s urinary retention. In another way, the relationship between the instructor and the student who is performing a skill for the first time demonstrates how having a trusted instructor provides the student with a sense of confidence. When students can reflect on and value the way trusting relationships in their own lives provide them with confidence to proceed, they have the potential to transfer that experience to the relationships they develop with patients. Knowing how to interact with another and demonstrate concern was important to these

nursing students. They sought to know the right way to behave so that no harm would come to the patient. This sense of advocacy is another of Roach's attributes of caring: conscience.

Advocacy as conscience in caring. Roach (2002) described conscience as "the voice where the claim of the one is asserted over the power and the persuasion of the many" (p. 58). For Roach, conscience is an expression of the moral self attuned to the values of personhood. The students in this study developed conscience and held a respect for others in their devotion to causing no harm while trying to complete nursing skills. During the years of my role as skills lab educator, I have noted in students a deep concern to avoid causing harm, present in both skill lab and clinical experiences, and as expressed earlier, I felt that this concern created a difference in the behavior of the learner. I wondered if, when, and how this attuning of conscience toward the patient occurred. The students who participated in this research affirmed that they hold a consciousness, described as anxiety, that at the completion of their learning in skills lab they would be performing their skills with real people. Does this consciousness focus on carrying a sacred value of the individual throughout the skill performance? I feel assured that it is a sense of sacredness, but if not, at the very least some students did describe an awareness of power differentials between themselves and the patients, indicating conscience in caring. The students described an understanding that they are in a place of privilege to have the patient participate in their psychomotor skill learning. In fact, Anna's description of the patient who was used to receiving insulin injections from the students is a wonderful demonstration of how students see patients as contributing to their learning. The mere awareness of this power differential and acknowledgement that the patient is providing an opportunity for her learning and others' learning demonstrates that Anna used her

conscience in caring.

For Roach (2002), conscience expresses itself as advocating for the patient and understanding the patients' rights. The students described the foundations of understanding the patients' rights even in relation to themselves as a learner, as in the example above. At the outset of the findings of this study, I described how the students' stories revealed a depth of learning greater than rote sequenced performance of steps of a procedure when acquiring psychomotor skills. These students experienced an anxiety for the real person on whom they performed the skill for the first time, which I attribute to conscience. The feelings that they embodied at the completion of the skill performance, which one student described as cementing, goes forward with the students in their understanding of what it means to be able to affect the health of another. Every piece of information and experience the student embodies as it applies to performing a skill with care is a commitment to becoming a caring nurse. In the following section, I describe how integrating information into the performance of a skill relates to Roach's attribute of commitment as caring.

Integrating information as commitment in caring. Bjork and Kirkevold's (2000) model of psychomotor skill acquisition addresses the importance of integrating patient information as part of a caring performance. Integration includes using information from the environment and recognizing how these directly impact on the skill performance, where integration is an adaptation of the skill, or a convergence of many pieces of information, processed by the nurse to complete a performance that reflects caring (Bjork and Kirkevold). For me, the process of integrating all of this information requires a commitment to expertise in care. Roach (2002) defined commitment as "a complex affective response characterized by a convergence between one's desires and

one's obligations, and by a deliberate choice to act in accordance with them" (p. 58). One might argue that it could be easier to provide rote sequenced care than to follow the obligation of being holistic and integrating when performing skills.

There are two points of integration of information into skill performance, and the students' stories reflected these. The first is the need for understanding the knowledge that supports skill performance. In the Bjork and Kirkevold model, this knowledge is the substance of a skill. The students identified many sources of prior knowledge such as understanding microbiology and/or pathophysiology as described by Megan and Eliza, or simple experiences from life, such as taking a pain medication or giving oneself insulin. Using prior knowledge and experience are important to skill performance. Benner (1996) contends that reflection on such prior experiences is what moves practice to expert performance.

The second aspect of integration of information is understanding information about the patient. Among the students, Beth seemed to exemplify the most developed sense of integration of patient information into skill performance. She described this as part of her commitment to think of the patient holistically: the importance of considering the patient's disorder and disease in planning and executing her skills. Her description of integration included simple things such as the temperature of bath water, while also considering extenuating factors such as if the patient had a wound, or if was diabetic, or had a catheter. I am certain that given more time on this topic, Beth would have described integrating other information such as the patients' possible anxieties about bathing, privacy, etc. A commitment to integrating patient information in skill performance was not, however, the way Debbie understood nursing psychomotor skills. Her perceptions of skills had patient concerns detached: Skills were things you had to do so that you would have time to spend

with the patient in more relational ways.

From my perspective, integration of patient information is essential to a caring skill performance. Most health care errors result from a lack of commitment to integrating patient information (as well as other information) into skill performances. Familiar stories where medications administered unrelated to the patient's disease cause one to question how these situations had integrated patient information. If nurses are committed to integrating patient information as an aspect of holistic care, how is it that these types of errors occur? Teaching students to value and view their patient holistically, incorporate foundational knowledge, use critical reflection, and integrate practice habits should provide substantial barriers against procedural errors!

Through comparing these two aspects of integrating information (either knowledge about the skill performance or knowledge about the patient), I understood the students' stories to highlight the integration of personhood or uniqueness of the individual. Beth expressed her belief of how each individual student and nurse engaged with the work according to his or her own values. She felt that the uniqueness of the learner influenced how they assessed and integrated information about the patient. It was her belief that some students and practicing nurses still view the patient as a number in a bed rather than a valued person, thus diminishing the performance of the skill. For Beth, commitment to caring requires the integration of self and other. What Beth described is what Bjork and Kirkevold (2000) incorporated into their model of psychomotor skill acquisition: Ideal performance in the care of the whole person requires accuracy and fluency combined with commitment to the patient's well being. What is different is that Beth extended the notion beyond merely integrating information about the patient to integrating parts of herself, her values, and her special way of performing the skill into the relationship. How a nurse is

present to the patient contributes to feelings of being cared for (McQueen, 2000; Wilkin & Stevin, 2004), and the students intuited how their intentions and their behaviors influenced how they were perceived and received by patients. It is important to discuss how behavior becomes the vehicle that translates caring intention. Roach uses the term *comportment* to describe this type of caring. The students' comments and stories focused on behaviors, appropriate or not, demonstrating that they are noticing comportment as an aspect of caring during psychomotor skill acquisition.

Professional behaviors as comportment in caring. Roach defined comportment as meaning "bearing, demeanor, or to be in agreements or harmony" (p. 64) as nursing tasks are implemented. Debbie described the most illuminating experience of caring comportment in the performance of psychomotor skills, revealing comments about the lack of association between the performances of a skill and caring. In her implicit honesty, she described caring as engaging in quality time spent focused on affirming and listening to the patient as a person, *not* in how she performed a skill. In her value system, the patient's illness was separate from the caring connection she desired to make with her patients. I recall her description of removing a band aid where she felt that she knew better than the patient: It was better to "get it over with!" Her peer Beth would describe this as Debbie's distinct way of bringing herself into the relationship: Debbie applied what she believed about psychomotor skills to her goals of care— to accomplish the skills as tasks, part of the everyday process of nursing, and then spend time with the patient. This is a great example of how personal beliefs translate into actions.

In their stories of learning psychomotor skills, similarly to Debbie, many students spoke of the value of being with the patient. Anna, Beth, Eliza, and Megan expressed how they believed that being with the patient—that is, spending time in conversation and

relationship—would be the most significant aspect of the work as a nurse. Megan thought of caring more as empathy and felt that body language and tone of voice demonstrated empathy. For Eliza, a stance of confidence was an important aspect of caring. She described her belief that confident nurses “came across” as knowing what they are doing, causing me to surmise that for Eliza, confidence was a readable quality found in posture and action. Eliza discussed how mannerisms such as smiling, open stance, and eye contact were ways of connecting meaningfully with patients, making them qualities and behaviors she desired in her role as a nurse.

The connections that students made through actions (such as shampooing hair) or attributes that students desire (such as confidence) may be a deeper spiritual calling from within. These meaningful connections might be the key to opening sacred spaces as described by Roach above, where healing and growth can occur. When I reflected on nurses trying to create such meaningful connections, my thoughts turned to my interview with Clare, who from a Christian nursing perspective described her way of being as a call to reflect Christ in her actions, to be “his hands and feet and heart.” Holding such a perspective would create a strong commitment of service to others, and no doubt, could not help but permeate one’s comportment. Professing a Christian world view myself, I am aware of how this affects my understanding of caring and my comportment as a nurse and educator. Roach (who also incorporates Christian worldview perspectives into her theory) described that the sacred space of the individual is not only a space requiring healing, but a place of growth as well. This growth may be learning; therefore, I contend that interaction with learners is entering into a very sacred space in their lives.

Interactions with educators, both in clinical and in the skills lab, have provided many rich descriptions of experiences where the students grew in their understanding of

these caring attributes while learning psychomotor skills. The following section describes students' interactions with instructors and how these interactions contributed to their learning to care during the acquisition of psychomotor skills.

Caring Reflected In Interactions with Educators

Many of the students' stories described learning to care from interactions with nursing educators. Instructors taught the students to care by either modelling caring behaviors or incorporating the concepts of caring in relationships with students. Duffy (2002) posited that if baccalaureate programs wish to graduate nurses who care, it is essential for nursing faculties to evaluate educational outcomes for specific caring behaviors. Caring is an imperative practice expectation and considered a major professional competency globally (Watson, Jackson, & Borbasi, 2005). Duffy suggested that a framework can support the development of caring relationships between students and faculty. It includes the values, attitudes, and behaviors that faculty members utilize in partnering with the students in learning. She contends that caring environments and role modelling are ways to facilitate learning the concept of caring for the student (Duffy, 2002). The students who participated in this study described ways in which educators facilitated their learning to care; I will attempt to relate how the students' understanding of caring behaviors of their instructors align with Roach's six caring attributes.

Modelling empathy/compassion. Anna felt little empathy from the staff nurses during her clinical placement in regards to her inability to use the Hoyer lift. Were the nurses' considering her lack of ability as a lack of preparation on Anna's part? How much empathy facilitates learning without trivializing the importance of the experience? Empathy, the ability to understand someone else's struggles (Oxford Canadian Dictionary, 2005), may be the means by which nurse educators create a relaxed atmosphere in skills

labs. Informing students that the intent of a relaxed atmosphere in skills lab was to support their learning, students might avoid making poor assumptions about the value of skill learning. Perhaps students could be informed that the relaxed learning environment was instated to facilitate learning to care.

In other ways, educators attempt to facilitate empathy for patients in skills lab by allowing students to understand the experience from the patients' perspective. In the past, students have practiced subcutaneous injections of saline on each other as a strategy for developing empathy. Although no longer an educational practice, the goal of developing empathy in the affective domain is laudable and as we heard throughout the student's stories, empathy is central to making connections. In this study, the students described how empathetic relationships develop in skills lab around the concept of "being a student," giving rise to the appreciation of peer tutors. Anna, Clare, and Eliza maintained that their peers had a greater understanding of the anxieties because of their own recent experiences of learning. Empathy is a desired competency in nursing (American Nurses Association, 2008; Canadian Nursing Association, 2011; Memarian, Salsali, Vabaju, Ahmadi, & Hajizadeh, 2007).

Tarnow and Butcher (2006), when discussing teaching in the skills lab, discuss ways to help students learn empathy as an element of the art of professional nursing. They contend that incorporating caring, nursing aesthetics, narrative pedagogy, and reflective practice enhance teaching the artistic side of nursing. By using reflection techniques such as asking students to consider the fact that they are able to walk away from the unpleasantness of a wound when a patient cannot enhances empathy (Tarnow & Butcher, 2006). Using this type of reflective practice is a more effective way nurse educators can incorporate and develop empathy as an attribute of caring during the learning of a

psychomotor skill than the practice of, say, adult diapering. I suggest that the former might create better learning outcomes.

Demonstrating competence/ affecting outcomes. The students in this study described that having an effect on patient outcomes gave them a sense of caring. Similarly, nurse educators having an effect on student success might equate to educators possessing and utilizing Roach's caring attribute of competence. Affecting student learning means using teaching strategies that provide support for the learner, such as teaching students to rely on the steps of a procedure through their first performance of a skill, or utilizing learning strategies such as those suggested above which foster empathy. Many of the students' stories reflected ways in which they appreciated competence in their educators. Some stories where educators placed students in learning situations beyond their abilities created negative learning outcomes for the students, and created distrust. This distrust has the potential to undermine the students' confidence in the competence of his or her instructor (Beck, 2001, p.101).

When educators choose learning strategies that allow students to learn from their peers, they are being competent. The students in this study talked about how supporting each other as learners affected their ability to become competent. Adult diapering practice did not seem to create among the students either feelings of competence or empathy. Megan described competent instructors as being empathetic to students' learning and promoting the development of values such as respect and empathy. Perhaps Megan desired respectful behaviors because of her awareness that the skills would soon be transferred to real situations with real people, and she anticipated the added complexity the "real" setting would mean for her practice. I felt that these students had an awareness of the complexity that was to come as they moved into a clinical learning experience.

Bjork and Kirkevold (2000) documented an often taken for granted reality, that novice nurses “had trouble communicating with patients while handling equipment... intent on fixing [the task] ...clients’ comments or expressions were often overlooked” (p. 362). This is the very rationale for using simulation mannequins when learning to perform procedures (Tarnow & Butcher, 2006). My participant observation experience in the skills lab illuminated for me that the purpose of using mannequins may not be simply to teach the ability to multi-task, which is to perform the skill and carry on a conversation with the patient. During my participant observation experience, both instructors modelled, as expert clinicians, that skill performances centered on the patient. Whether by conscious choice or not, both instructors had the opportunity to instruct about the current skill topic without the presence of a mannequin, yet both chose to place a person (mannequin) at the center of their teaching and their modelling of care. This subtle difference may be the type of competence that students desired, and it is taken for granted that they will absorb or imitate the instructor’s example. Most likely, unconsciously working from a place of “expert” as described by Benner (1998), the instructors modelled caring behaviors through the scenario identities they created for the mannequins. They even went so far as to provide comforting gestures such as gently caressing the mannequin’s feet. Undoubtedly an action familiar to many nurses, it was an opportunity for the students to observe the caring, dare I say the loving, nature of their instructors. For me, this is competence in teaching caring. I left the participant observation experience wondering if the students would imitate this action.

Imitation as a learning strategy is a model of apprenticeship learning: a pedagogical method that has lost its value in baccalaureate education programs. No longer considered a competent educational strategy, I question whether imitation combined with critical

thinking still might have a place in skill learning. If students do not perform by imitation in the skills lab, they will imitate the practice they see from the clinical setting, where educators have little control over the habits students take up. Competent educators could discuss with students the actions observed in demonstrations of a skill, as deconstructing observed performances develops skills of critical reflection and an appreciation of the rationale that underlies the steps of a performance. One of the best examples from my own experience occurred with a student who had observed a nurse advancing a suction catheter down a tracheotomy tube. The student had picked up the action of throwing the catheter in two inch increments into the tracheotomy tube, instead of inserting the suction catheter in one fluid motion. The student had no idea why she was doing this action; she just merely stated that it was how the nurse in the intensive care unit had shown her. Having the student perform a simple literature review into tracheotomy suction techniques produced a wiser student.

In order for educators to be competent, they must ask questions about the full meaning of competence in the performance of psychomotor skills. Is competence the ability to follow the sequence of a procedure, or the ability to integrate knowledge and patient information, or most notably, the ability to perform both of these with care? Educator competence, as an attribute of caring for our students, compels researchers in nursing education to seek, develop, and evaluate teaching strategies that facilitate excellent caring psychomotor skill performances.

Demonstrating relationships/confidence in caring. The students valued confidence as an important aspect of the relationship they have with patients. Valuing confidence may be associated with the students' desire to affect patient health outcomes because they have seen and described a knowledge that patients appreciate confident,

competent nurses. The students described noticing that patients listened to and respected nurses who were confident because these nurses appeared to know what they were doing.

How do students gain this confidence? Some of the students' stories attributed gaining confidence to the presence of the instructor and the relationship established between them. For Clare and Anna, the instructors' presence contributed to their confidence in transitioning between performances of a skill in lab to performance of a skill with a real patient. This is one way the students described the instructors' behaviors in relation to their individual learning style preferences. While it would be impossible for an instructor to be mindful of every student's learning preferences while planning educational activities in the skills lab, educators may want to reflect upon the fact that not all strategies will result in all students leaving the skills lab feeling confident. As early as 1998, the Minnesota Baccalaureate Psychomotor Skills Faculty Group (MBPSFG) stated that the use of learning objectives is one way of acknowledging different learning styles. Providing the learner with the intended outcomes of the session permits them to have opportunities to seek other learning materials or tutorial support if they were unable to master the objectives of the day. It also builds the relationship between the student and the instructor (MBPSFG, 1998). When students develop caring relationships with their educators and feel known, they feel more confident; they come to understand and trust the processes of nursing education (Gillespie, 2002, p.569).

Nursing curriculum content spans from bedside care to global health, and because of this the variance in course structure can be significant. I wonder how well educators appreciate this fact and articulate the differences in learning experiences for the student. It is difficult to develop confidence in the learning environment and instructors if learning expectations and expected behaviors are constantly in flux. Navigating these course

differences must be challenging for students; in this study, we heard Megan illuminate the inconsistency that exists just within the skills lab. Anna related how a simple difference in a syringe style paralyzed her confidence in her ability to perform the injection. At the other extreme Megan articulated her inability to discern whether she was supposed to be learning to be a nurse or a nurse practitioner. She expressed frustration that she missed the opportunity to get the basics. One of the values of having a single skills lab instructor is the consistency and expertise in skills learning (Pulleman, Murray, & Magee, 2003).

Instead of hearing about Megan's confidence being built in the skills lab, stories such as these uncovered the taken for granted aspects of learning to care in psychomotor skill acquisition. Some stories reflected tenuous relationships, anxiety, and belittling behaviors: actions not arising from a place of caring. Even Debbie, who appreciated instructors who were calm but stern and gave good critical feedback, stated how infrequently she received enough praise to affect her confidence in her competence. Instructors should be mindful of building students in positive ways and providing them with frequent and respectful positive feedback in a manner that respects and advocates for their learning and personal growth.

Demonstrating advocacy/conscience. How do instructors demonstrate caring through respecting students, or at least minimizing the negative feelings associated with learning? In a recent study evaluating what makes student nurses stay in baccalaureate programs of nursing, the researchers concluded a need for faculty to be more pastoral in their care (Knight, Corbett, Smith, Watkins, Hardy, & Jones, 2012). It is important for students to feel that instructors advocate for them. Beth indicated that she appreciated instructors who were respectful of the knowledge and previous experiences students brought to their learning. In describing what she deemed a memorable code blue learning

lab, Beth's memory included a respectful evaluation of her learning: The instructor asked questions and aided the students with answers. In the development of the attributes of caring, Roach examined the work of practicing nurses to provide insight to the characteristics of the attributes. The attribute of conscience included advocacy, sensitivity to knowledge of others, sorting out feelings, understanding rights, staying informed of standards, and a recognition that individuals deal with situations differently (2002). While this list specifically reflects the care nurses provide to patients, these characteristics can also extend to the caring between educator and student.

In the past when I have told nursing students stories about grave nursing errors, hoping to create in the student a dedication to knowledge and accuracy in performance and trying to prevent them from causing harm to an individual, my intent was an act of caring for students. Listening to the experiences of the six students in the study, I am now aware that this action could have added tension for already anxious learners. I will leave that teaching strategy behind as I move forward in my practice. The anecdote shared by Megan is similar, where "getting results" from a suppository was another example of a well meaning learning strategy gone awry. While on one hand, this sharing created a link between student and educator through the acknowledgement that we all make judgement errors, in other ways it showed disrespect for the feelings of individuals who need assistance with the private process of bowel function. Tarnow and Butcher (2006) suggest that there is room in skills lab for sharing stories, but these should be stories that reflect the essence of exquisite nursing care. They suggest that skills instruction can appeal to respect and conscience in caring through having simple signage in the lab asking, "Is that the way you want it done for your or a family member?" (p. 377). The way one would want the skill performed for a family member goes beyond the sequenced steps of a

performance. We can consider all nurse educators' actions, from planning curriculums, to integrating specific information about a learner, to modelling caring actions towards mannequins as forms of commitment necessary to be an excellent nurse educator.

Integrating information/commitment. If integrating information about the patient into a skill performance shows a commitment to the patients' well being, so too does integrating information about the learner demonstrate a commitment by educators. Ferguson (2005), when describing evidenced-based strategies in nursing education, asked if nurse educators are "walking the walk" in relation to curricular planning and facilitation, teaching, and learning methods. She charged that commitment to evidenced-based nursing education involves integrating research into our curriculums and classrooms. It involves considering evidenced-based teaching interventions, learners' needs, and the best use of resources (Ferguson, 2005, p.109). In the process of this research, as I reflected on the issues made less tacit through the students' stories, several questions arose about my own teaching style. I also reflected on the way in which nursing education continues with antiquated teaching and learning practices. Perhaps it is time for nurse educators to explore new philosophies about the learning and performance of psychomotor skills. I become defensive when faculty members propose or imply that "monkeys can learn nursing skills." Such comments lack recognition of the inherent complexity of psychomotor skills: that is, to build relationships between the patient and nurse and to tangibilitate care. New evidence about poor proficiency in CPR training (Krahn, 2011; Madden, 2006) is creating a resurgent interest in skill learning. There remain questions that nursing as a profession needs to research regarding baccalaureate nursing psychomotor skill education.

Megan asked why nursing programs continue to teach bed making—a question that

I believe resonates in the halls of many nursing education departments. Perhaps the more important question is not what to teach, but how to facilitate a process of self directed learning of psychomotor skills which provides baccalaureate nurses with the ability and understanding of skill acquisition so they can then teach others. If Debbie can carry the substance and sequence of a skill procedure in her smartphone, why are nurse educators concerned that she can memorize the fifty sequenced steps to bed making? “After all,” Megan pointed out, “all those sheets have elastics and corners already!” One of the problems in answering these questions is that the majority of nursing education research has moved forward to examine new teaching strategies involving technology and simulation, while limited research occurs in understanding the experience of the learner. Nurse educators need evidence about how nursing students take up psychomotor learning and how to integrate value of caring through psychomotor skills into our curriculums.

Despite the above discussion, the participant observation experience of this study provided a strong demonstration of how nursing instructors Jill and Ruby used integration of information about the students to show their commitment to the students’ learning. In their initial meeting with the students, they created connections by paying genuine attention to the students’ introductions. They asked the students about their summer employment experiences and past clinical placements. Before moving to new content, each asked about the students’ prior learning of the current topic. Ruby referred back to the students’ knowledge of intravenous therapy before going forward to teach about the more complex process of central lines. Similarly, Jill referred back to the students’ knowledge of simple dressing changes before teaching complex wound care. Moving from simple to complex and integrating prior learning were aspects that these instructors could have removed from their already time-strained teaching moment; instead, I believe

they were committed to including prior learning to help students connect with prior confidences. Building confidence is a quality the six students desired in their educators. They wanted to emulate confident nurses: This desire is why the comportment of the instructor is also an important aspect of relationship between student and instructor.

Demonstrating professionalism/comportment. The students in this study provided examples of ways they had seen instructors and practicing nurses exemplify professionalism and comportment as caring. The students told how they valued and therefore desired to imitate professional behaviors. Anna described how during her mental health rotation the nurses had the “right way” of asking the difficult questions. She wanted to use imitation because she felt that the unit nurses asked the questions in ways that were caring, that would not harm or upset the patient. Beth described how she believed intrinsic values contributed to the nurse’s performance of a skill, suggesting that professional conduct is value driven, a notion she admires. Clare described a deep faith-based desire for excellence in her role as a nurse—a spiritual grounding should certainly produce a performance steeped in professional comportment. For Debbie, professionalism was exemplified by the nurse who spent time being present to the patients by sitting with them. In contrast, Eliza and Megan provided images of nursing instruction that demonstrated poor modelling of professionalism. In my professional learning, I encountered many exemplary nurses whose subtle caring mannerisms I have embraced. It is important for nursing educators to be conscious that students learn subtly from behaviors. It is my belief that of all of Roach’s attributes of caring, comportment is one of those most easily taken up by students while they learn psychomotor skills. Returning to the story of the students who all repeated the incorrect choice of syringe size after a one time demonstration, how much more are student imitating from the behaviors and

mannerisms of their skills lab and clinical educators, with whom they spend hours?

We have seen in this section that students are not only able to recognize the caring attribute of comportment in their instructors and others, but that educators and instructors also model caring attributes of compassion, competence, confidence, conscience, and commitment in their interactions with students. The ability to teach caring in psychomotor skills acquisition using Roach's (2002) six attributes of care has implications for nurse educators. Both the skills lab and clinical learning environments can benefit from the contributions of the finding of this phenomenological inquiry.

During this discussion, I have argued that nursing education would benefit from adopting a nursing model of psychomotor skill acquisition, such as that developed by Bjork and Kirkevold (2000), and from creating atmospheres of excellence in skills lab. The lab should be a space where skill learning is highly valued as a complex process which has within the performances the opportunity to tangibilitate caring. In skills lab, students can integrate knowledge for excellent expert performance, later made competent in clinical practice. In the taken-for-granted aspects illuminated through the stories of the students' learning experiences, it has been revealed that there is much room for improvement in teaching psychomotor skills. Thus, in the next section I will summarize these findings with some implications for nursing education.

Implications for Nursing Education

The initial thematic analysis of the students' stories revealed that nursing students learn caring through the acquisition of psychomotor skills in many ways. There is a great deal of caring that creates anxiety for the student as they transition through the performance of a skill for the first time on a real patient. Most profoundly, they described this caring by secondary themes of empathy, relationships, advocacy, integrating, affecting

patient outcomes, and professional behaviors. Students told stories of how these caring themes, similar to Roach's attributes of care, were either facilitated or hindered in their experiences with patients, instructors, and peers. For nursing education, several implications emerged. I describe four here.

Foster the value of psychomotor skill acquisition. Nurse educators must heed how psychomotor skills (the physical work that nurse do) fit into nursing curriculums. Academics need to recover from the error of "throwing the baby out with the bathwater." Although baccalaureate nursing education has distanced itself from the nursing apprenticeship curricula, there remains the necessity to create not only strong critical thinkers, leaders, and future researchers, but also nurses who are competent in the process of psychomotor skill acquisition. Understanding the relationship of psychomotor skills to the overall scope of nursing requires further consideration and dialogue, followed by expert research to develop models of skill performance that maintain and contribute to healing and health.

Adopt a caring model of skill acquisition. Nursing seeks to describe itself by developing metaparadigms, theories, models, and concepts. Nursing education has been satisfied too long with borrowed models of psychomotor skill acquisition better suited to skill acquisitions that have no consequence for another human being. A model such as that proposed by Bjork and Kirkevold (2000) may aid some students' understanding that caring can be imbedded in skill performance. In this study, Debbie's descriptions demonstrated a disconnection between her thoughts about skill performance and care. She admitted having a difficult time understanding or appreciating how something that physically hurt could be caring. For Debbie, a third year student, caring remained in the relational affective mode. While I contend that it is not in the interest of education to force

ideologies of where care exist into the students personal values and beliefs, Tarnow and Butcher (2006) have suggested that the use of reflective practice in skill acquisition may help students to appreciate their experiences of being cared for through the actions of another (p. 387).

Create a consistent, respectful, and safe environment in the skills learning lab.

Nursing students require a respectful, safe, rich, and consistent learning environment in skills labs, and need to feel safe in their clinical learning experiences as well. As discussed above, educators, instructors, and practicing nurses have many opportunities to model the attributes of caring in their relationships with teaching students. Nurse educators need to facilitate strategies to ensure that students feel supported in their learning and can appreciate the opportunity to be experiential in their skill learning in lab, without compromising respect. Understanding how to help nursing students deal appropriately with the anxiety they feel in learning skills, such as intimate procedures which involve touching genitalia, requires further study. Merely acknowledging awkward feelings and anxiety may relieve some of the tension that students bring with them to skills lab. Modeling professional conduct and discussion about intimate and personal topics is an essential act of comportment for nursing educators. In addition, educators may want to be mindful that the physical space of the lab echoes the value placed on that aspect of the nursing curriculum. Skill labs may not need an abundance of high tech equipment, but the aesthetics of the skills lab, at minimum, should reflect that skills are valued as an important part of nursing education. As well, this study supports the benefits of peer tutoring for skill learning. Peer tutors have recent experiences and are more empathetic to the anxieties of the learners, an anxiety that instructors lose as they gain expertise in the profession.

Understand that there exists a space for learners, between skill lab performance and clinical performance. Until learners utilize the skill with a patient, they lack a sense of complete competence. One of the most important taken for granted aspects of skill learning is the transference of skill performance from the skills lab to the reality of clinical. Students in this study revealed that there is a caring concern for the patient, which reveals itself as a heightened anxiety, during the transition from skills lab learning to performing the skill in clinical for the first time. Reliance on past learning, the steps of the procedure, the instructor, and sometimes the patient's ability to contribute, can assist in the management of this anxiety for the student. This anxiety originates from feelings of empathy in the student's relationship with the patient. Other aspects of caring such as advocating for the patient, conscious integration of patient information, desiring good outcomes for the patient, and behaving professionally toward the patient are other ways students desire to demonstrate caring in their psychomotor skill performances. Clinical educators should be aware of all the many potential aspects of caring in the first performance of a skill with a patient, even though prevalent thought is that students are only able to focus on the skill performance (O'Conner, 2006). Instructors have the ability to help students transition through this learning by using their own caring behaviors. Further research into the significance of the first "real" learning experience is essential because most students graduate baccalaureate educational programs without having "real" experiences for many nursing skills. In addition, it may be valuable to gain further insight into how new graduates anticipate and respond to first "real" experiences after graduation.

Parting Words

Van Manen (2006) wrote that "phenomenology always addresses any phenomenon as a possible human experience. It is in this sense that phenomenological descriptions

have a universal (intersubjective) character.” (p. 58). It was from a place of understanding my own experience and wanting to understand the experience of nursing students that I undertook this thesis. The stories described herein and the understanding that I assign to them reflect my perspectives and interpretation of the students’ experiences. At best, I can hope to have reflected them rigorously as moments of uncovering the taken-for-granted in psychomotor skill acquisition. I then took it upon myself to ask how these moments might be learning to care.

These stories are valuable because they help us to understand the experiences of learners. I chose van Manen’s (2006) pedagogy as a phenomenological method because of his desire to create a pedagogical practice that is reflective of the learner. He states, what the phenomenological attitude gives to educators is a certain style of knowing, a kind of theorizing of the unique that sponsors a form of pedagogical practice that is virtually absent in the increasing bureaucratized and technological spheres of pedagogic life. (p. 154)

As nursing education embraces the challenges of faculty shortages, diminishing clinical opportunities, and an expanding knowledge base, it is important now, more than ever, for dependence on pedagogical practices that maximize learning in all domains.

While phenomenology is a philosophy of a highly personal and situated context, each person in coming to read this work will know it for its merit in their ability to recognize themselves amongst the stories of learning to care while learning psychomotor skills. If that is the outcome, then I will have the pleasure of considering this work successful. More important for me is the hope that this work contributes to some reconsideration of the taken-for-granted in psychomotor skill learning.

Let the wise hear and increase in learning and the one who understands obtain guidance.
Proverbs 1:5

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Appendix A: Email Recruitment Request

Hello,

My name is Anne Redmond and I am a nurse and a Master of Science in Nursing student. I am interested in how nursing students learn to perform skills - like giving needles. As part of my studies, I am doing a research project called, "Learning Psychomotor Nursing Skills."

I want to hear about 'when, where and how' you learned your skills for nursing. I will be asking you to share with me stories of times when you were in lab, clinical, or working as a student nurse, where you were learning/practicing a skill. I want to record these stories and look at them to understand the meaning of learning skills.

I would appreciate your participation. If you wanted to participate I would meet you for an interview lasting about one hour. Later, I might like to contact you to ask if my understanding matches your practices. You may ask any questions of me at any time during the research period. You may also withdraw from taking part at any time during the study and your information will be removed from the study, without any consequences for you. At all times your confidentiality in the study will be maintained. I will not share any information that could in at all identify you. If any concerns arose that I could not address, you would be free to speak to my thesis supervisor, Dr. Sonya Grypma at [contact information provided] or contact XX in the TWU Research office at [contact information provided].

I hope to share the findings of my thesis with other nurse educators through nursing journals and presentations at nursing conferences. I want to increase the knowledge nurse educators have about how students learn psychomotor skills.

Your input in the project would be greatly appreciated, and you can contact me by replying to this email, or contact me by telephone at the number below. In case you lose this contact information, there will be poster located inside [your nursing department] with my email and phone number.

Thank you for your time,
Anne Redmond, BSc, RN, BN
Phone XX

Appendix B: Recruitment Poster

[Photo removed]

Photo is property of A. Redmond, used with patient's permission.

If you are a third year student who would like to share your story about learning nursing skills, I would like to hear from you for my thesis research.
For more information email [Contact information provided]

Date Posted:

Thesis Supervisor: Dr Sonya Grypma [Contact information provided] You may also contact XX at the Trinity Western University Office of Research at [Contact information provided] if you have any concerns about your treatment or rights as a research participant.

Appendix C: Interview Script

Interview Script

Initial opening: I am interested in hearing how students experience learning psychomotor skills.

1) Could you tell me a story from a time during your education when you were learning a psychomotor skill and the experience was memorable?

I will then use succeeding questions to follow up on the students' answers. Some questions used to elicit deeper exploration of the experience may include:

2) What was it like for you to learn a psychomotor skill?

3) How did learning those skills relate to what you thought you would do as a nurse?

4) Can you describe how performing skills is part of nursing?

5) What is different about learning in a nursing lab compared to other labs you have learned e.g. chemistry lab?

Appendix D: Consent for Interview Participation

Project Title: Learning Psychomotor Nursing Skills

Principal Investigators: Anne Redmond- School of Nursing,
Trinity Western University Langley, BC,
Masters of Science in Nursing Student
[Contact information provided]

Thesis Supervisor: Dr Sonya Grypma [Contact information provided]

You are being asked to participate in this research study, which seeks to examine students' experiences of learning psychomotor skills. I am interested in your stories related to the experience of learning to perform nursing skills. I see you as someone who will be able to provide better understanding of how nursing students learn psychomotor skills.

Purpose of this project

This study is being undertaken as partial completion of my study in the Masters of Science in Nursing. It is my interest to understand the meaning of how nursing students learn psychomotor nursing skills. It is hoped that the findings of this study will be able to be shared with other nurse educators through publication in scholarly journals, or through presentations at conferences.

Procedure

Your participation in this study is voluntary so it is up to you to decide whether to take part. Before you decide, it is important for you to understand what the research is about and what agreeing to participate will mean for you. This consent form will tell you more about the study, why the research is being done, and what it will mean to you if you decide to participate. As well, it will describe any possible risks or benefits to you if you do decide to participate. If you decide to participate, you will be asked to give consent by signing this form.

If you decide at any time that you do not want to participate any further, you can stop at any time without giving any reasons for your decision, and without any consequence to you. It will not affect your schooling [at XX nursing program] in any way. Even meeting with me today to discuss possible participation will be kept confidential. No persons, and I highlight for your reassurance, that no teacher/ staff /or other student will be privileged to knowing you agreed to consider participation in this study.

Please read and consider the following information carefully. If you have any questions feel free to ask.

Who is conducting the study?

I am a Master's of Science of Nursing Student at Trinity Western University. I am completing this study in the academic calendar year of 20XX as the final requirement of my studies. I anticipate to be completed this project by December, 20XX. I have received no funding for this project. This project and the procedure are approved by the XX School

of Nursing and by the Ethics' Review Board at Trinity Western University.

Who can participate in this study?

You are invited to participate in this study if you are a third year nursing student at XX and have had experience learning nursing psychomotor skills at XX nursing skills lab. You must be interested in sharing with me a detailed description of your experience of learning a nursing skill. It is best if you can think of an experience that was very memorable for you, so that you can provide me with a vivid detailed description.

What does the study involve?

If you were to participate in the project, you would:

- 1) Send me an email indicating your interest and arrange a meeting with me to review the consent form. We would meet in a meeting room at XX or another confidential public space.
- 2) Review the consent form with me (the researcher) and sign it to agree to consent to participate. And if you are agreeable continue with the interview now or at a later time.
- 3) Participate in the interview lasting approximately one hour.
- 4) Potentially participate in a second interview, or be contacted via email, to clarify my understanding of your description of your learning experiences.

What are the potential benefits and risks?

Participation in the project will involve 1.5- 2.5 hours of your time. This total time would include 1.5 hours for the initial interview and perhaps an additional 1 hour to review the themes that have emerged from the research. There are no anticipated physical or psychological risks to the study. There is the potential benefit of learning more about psychomotor acquisition through your reflection and discussion with me. There is a benefit of sharing your knowledge to increase educators' understanding of what it means to teach nursing psychomotor skills.

Will my taking part in this study be kept confidential?

Your confidentiality will be respected at all times. Information that directly discloses your identity will only remain with me the researcher and will be disclosed only with your permission or as required by law. Identifying information will not even be disclosed to my thesis supervisor. The demographic data that you provide will be kept separate from your interview. We will meet in XX, or a public place convenient for you. Your identity will remain confidential when the project is being reviewed and presented on completion. Your interview transcripts will be identified by a letter tag, stored on a password protected computer, and only be accessed by the researcher and transcriptionist. The transcriptionist will sign a confidentiality agreement. It is unlikely, but if the need arises and paper copies of the interview are printed, they will be stored in a locked filing cabinet, and shredded at the completion of the study. Any information will be analyzed only by me the researcher.

Upon completion of the project, any documents will be securely stored for five years and then discreetly destroyed. Any further use of your interview will require review and permission from an ethical review committee.

No information that discloses your identity will be released or published. However, research records identifying you may be inspected in the presence of the investigator by the TWU Research Ethics Board for the purpose of monitoring the research. These personnel are required to keep your identity and personal information confidential.

Participation and withdrawal

You have the right to withdraw at any time without consequence and to withdraw any pertaining data related to yourself without penalty. You may withdraw simply by sending me an email indicating you no longer wish to participate, and your information will be removed from the study without any consequences for you. The audio or digital files will be destroyed and hard copies of data will be shredded.

If you have any questions about the project or your being a participant in the project you can call me, Anne Redmond [Contact information provided]. If you have any questions or concerns that you do not feel comfortable discussing with the researcher, you may also contact Dr. Sonya Grypma, my thesis supervisor at [Contact information provided] If you are interested in receiving information about the outcome of this research please feel free to contact me at any time.

You may also contact XX at the Trinity Western University Office of Research at [Contact information provided] if you have any concerns about your treatment or rights as a research participant.

Your signature below indicates that you have had your questions about the study answered to your satisfaction and have received a copy of this consent form for your own records.

Your signature indicates that you consent to participate in this study and that your responses may be put in anonymous form and kept for further use after the completion of this study.

Participant's signature

Date

_____ (Please Print Name)

I have explained the research to the above subject and answered all of his/her questions. I believe that he/she understands information and the procedure described in this consent form and freely consents to participate.

Researcher's signature

Date

Appendix E: Consent for Observation

Project title: Learning Psychomotor Nursing Skills

Principal Investigator: Anne Redmond- School of Nursing,
Trinity Western University Langley, BC,
Masters of Science in Nursing Student
[Contact information provided]

Thesis Supervisor: Dr Sonya Grypma.

You are being asked to consent to the presence of a research student in your upcoming nursing lab _____ (date) and asked for your consent to be observed during the skills lab. The researcher would like to participate with you in the nursing skills lab to learn more about your experience of learning psychomotor skills.

Purpose of the project

This study is being undertaken as partial completion of my study in the Masters of Science in Nursing Program [at Trinity Western University]. It is the interest of the researcher to understand the meaning of how nursing students learn psychomotor nursing skills. It is hoped that the findings of this study will be able to be shared with other nurse educators through publication in a scholarly journals, or through presentations at conferences.

Procedure

Your participation in this study is entirely voluntary so it is up to you to decide whether or not to take part. Before you decide, it is important for you to understand what the research is about and what agreeing to participate will mean for you. This consent form will tell you more about the study, why the research is being done, and what it will mean to you if you decide to participate. As well, it will describe any possible risks or benefits to you if you do decide to participate.

If you decide to participate, you will be asked to give consent by signing this form. If you decide at any time that you do not want to participate any further, you can stop at any time without giving any reasons for your decision, and without any consequence to you.

If you do not wish to participate, you do not have to give any reason for you decision. It will not affect your schooling at XX in any way. Even reviewing this form with me today to discuss possible participation will be kept confidential. No persons, and I highlight for your reassurance, that no teacher/ staff /or other student will be privileged to knowing you agreed to consider participation in this study, with the exception of your lab instructor who will be considering consent to participate as well.

Please read and consider the following information carefully. If you have any questions feel free to ask.

Who is conducting the study?

I am a Master's of Science of Nursing Student at Trinity Western University. I am completing this study in the academic calendar year of 20XX as the final requirement of my studies. I anticipate to be completed this project by December, 20XX. I have received no funding for this project. This project and the procedure are approved by the XX School of Nursing and by the Ethics' Review Board at Trinity Western University.

Who can participate in this study?

You are invited to participate in this study if you are a third year nursing student at XX and have had experience learning nursing psychomotor skills at XX's nursing skills lab. You must be interested in allowing me to observe you in a skills lab. I will be taking anecdotal notes of my observations of your learning, and writing a rich description of the experience. Later, I will reflect upon my observations and write about possible deeper meanings in the learning. No information that could be used to identify anyone being observed will be recorded.

What does the study involve?

If you were to participate in the project, you would:

- 1) Review this consent form with me, the investigator, and sign it to agree to consent to participate. We would then set a date, time for me to come to the skills lab and participate with you and your classmates and instructor in your learning activity.
- 2) Before undertaking the observation on the given day, your instructor will ascertain by verbal consent that everyone remains in agreement for me to come into the skills lab and complete my observations. It is my intent to be with you during the entire lab experience (1-2 hours); however, if at any time you feel uncomfortable, you may speak to your instructor and request that I leave.

What are the potential benefits and risks?

Participation in the project will involve 1-2 hours of time. There are no anticipated physical or psychological risks to the study. There is the potential benefit of learning more about psychomotor acquisition through your discussion and interaction with me. There is a benefit of sharing your knowledge to increase educators' understanding of what it means to teach nursing psychomotor skills.

Will your taking part in this study be kept confidential?

Your confidentiality will be respected at all times. No information that would disclose your identity will be recorded. Identifying information will not even be disclosed to my thesis supervisor. Your identity will remain confidential when the project is being reviewed and presented on completion. All data will be stored on a password protected computer. Any information will be analyzed only by the researcher. Upon completion of the project, any

documents or anecdotal recordings will be securely and discreetly destroyed. Any further use of the data will require review and permission from an ethical review committee.

No information that discloses your identify will be released or published. However, research records identifying the date, time and location of the class I observed may be inspected in the presence of the investigator by the TWU Research Ethics Board for the purpose of monitoring the research. These personnel are required to keep your identity and personal information confidential.

Participation and withdrawal

Your participation in this project is voluntary and you are under no obligation to participate. You have the right to withdraw at any time without consequence and to withdraw any pertaining data related to yourself without penalty. If you have any questions about the project or you're being a participant in the project you can call me, Anne Redmond at [Contact information provided]. If you have any questions or concerns that you do not feel comfortable discussing with the researcher, you may also contact Dr. Sonya Grypma, my thesis supervisor, [Contact information provided]. If you are interested in receiving information about the outcome of this research, please feel free to contact me at any time.

You may also contact XX at the Trinity Western University Office of Research at [Contact information provided] if you have any concerns about your treatment or rights as a research participant.

Your signature below indicates that you have had your questions about the study answered to your satisfaction and have received a copy of this consent form for your own records. Your signature indicates that you consent to participate in this study and that your responses may be put in anonymous form and kept for further use after the completion of this study.

Participant's signature

Date

Print name

I have explained the research to the above subject and answered all of his/her questions. I believe that he/she understands information and the procedure described in this consent form and freely consents to participate.

Researcher's signature

Date

Appendix F: Transcriptionist Confidentiality Agreement

Transcriber Confidentiality Agreement

I understand that the tapes I am to transcribe are to be kept confidential. No other person will have access to the tapes or typed transcripts while they are in my care.

I agree to maintain confidentiality by not discussing or disclosing at any time during, or after the project, any aspects of the tapes or typed transcripts with any other person other than with the researcher.

Tapes, transcripts and the computer disc will be returned to the researcher as soon as they are completed.

No copies of the tapes or transcripts will be retained on my computer.

Transportation of files will be via a password protected external digital data storage device such as a Scandisk.

Printed name:

Signed:

Date:

Witness of Researcher _____

Thesis Supervisor Approval Signature _____