THE RELATIONSHIP BETWEEN THE NUMBER OF HOURS TAKEN IN A SENIOR PRACTICUM COURSE IN PRELICENSURE NURSING EDUCATION AND THE SCORE OF PRECEPTION OF PROFESSIONAL COMPETENCE BY THE NEWLY GRADUATED NURSE

by

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Liberty University

A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree

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ABSTRACT

This study determined whether there is a relationship between the number of direct acute care hours completed in a senior practicum course during pre-licensure nursing education and the scores of perception of Nurse Professional Competence (NPC) in newly graduated nurses between the third and sixth month of employment. A sample of new hires of newly graduated nurses within a large, nonprofit healthcare system was used. Institutional Review Board (IRB) approval was obtained from Liberty University's IRB and the healthcare organization's IRB prior to the survey being sent out to prospective participants and data collected. A non-experimental, correlational design was used to examine the relationship between the number of acute care hours within a senior practicum course in pre-licensure nursing programs on the newly graduated nurses' perception of NPC and the individual categories within the NPC. Descriptive statistics was used to report the central tendency of the participants as it relates to the number of direct acute care hour groups within a senior practicum course in pre-licensure nursing education and the scores for perception of professional competence of the newly graduated nurse. A Pearson product-moment correlation was used to look at the grouped number of direct acute care hours within a senior practicum course in pre-licensure nursing education and the relationship this may have on perception of professional competence scores of the newly graduated nurse. The research failed to reject the null hypothesis. The research concluded that there is a positive correlation between the number of direct acute care hours within a senior practicum course in pre-licensure nursing education and the perception of professional competence scores of the newly graduated nurse.

Keywords: senior practicum course, capstone course, nursing preceptors, transition to practice, clinical nurse residency, retention

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List of Abbreviations

American Association of Colleges of Nursing (AACN)

Abstract conceptualization (AC)

Active experimentation (AE)

American Nurses Association (ANA)

Bachelor of Science in Nursing (BSN)

Concrete experience (CE)

Institute of Medicine (IOM)

Joint Commission on Accreditation of Healthcare Organizations (JACHO)

National Council Licensure Examination (NCLEX)

Nurse Professional Competence (NPC)

Reflective observation (RO)

Registered nurse (RN)

Robert Wood Johnson Foundation (RWJF)

Virginia Board of Nursing (VBON)

World Health Organization (WHO)

CHAPTER ONE: INTRODUCTION

Overview

Chapter One will discuss the background related to the newly graduated nurses' perceptions of professional competence based on the number of hours of direct acute care within a senior practicum course in pre-licensure nursing education. The problem statement will be discussed, including research from previous studies related to the implications of transition of newly graduated nurses from student nurse to registered nurse. The purpose of this study will be discussed, as well as the significance of this study to the body of knowledge about the current practice of senior practicum courses in pre-licensure nursing education. Finally, the research question will be introduced, with definitions pertinent to this study defined.

Background

The demand for effective nursing education in both knowledge and competencies has increased in recent years; this has been in response to labor market demands and needs (Bassendowski, Layne, Lee, & Hupaelo, 2010). The complexities of healthcare in the 21st century have increased and are in a continual state of flux as innovative technologies, medical advances, and globalization of health problems increase. Nurses are required to work with patients who are presenting with more advanced stages of illness on a regular basis on clinical units not previously equipped for such ill patients. This requires the nurse to have a more advanced skill set to appropriately care for patients considered high acuity. Gone are the days of long admission stays and low patient acuity. Not only has the patient acuity increased, the length of hospital stay has decreased, leading to increased requirements for patient education and referrals for home support. Additionally, healthcare administrators, educators, and the public

have become "progressively more alert to the need to recruit, mentor, and retain newly graduated nurses due to current trends and predicted nursing shortages" (Owens, 2013, p. 1).

The expectation of healthcare systems is that newly graduated nurses be work ready with all of the skills required to provide safe, quality patient care when even the experienced nurses have continued to report that a nurse's job is both demanding and difficult (Craig, Moscato, & Moyce, 2012). Newly graduated nurses having recently acquired the education and competencies needed to obtain nursing licensure, but have not fully been prepared for the job expectations he/she encounter in the transition to a registered nurse (Bigg & Schriner, 2010). Healthcare organizations have been vocal about the risk to compromised patient safety when patients are cared for by a novice nurse (newly graduated); this based on documentation of near misses, omissions, and errors in the performance of clinical skills (Palumbo, Rambur, & Boyer, 2012; Rush, Adamack, Gordon, Lilly, & Janke, 2013). Retention of newly graduated nurses has become a major concern of healthcare systems as high turnover rates of new employees, including newly graduated nurses, not only impacts the healthcare systems turnover cost, but also has an effect on patient safety (Lee, Tzeng, Lin, & Yeh, 2009).

The theoretical framework used within this study is Kolb's experiential learning theory, which offers nursing programs a way to structure the senior practicum course attended by student nurses in their final semester. Experiential learning is described by Kolb (1984) as a process whereby knowledge is created through the transformation of an experience (Bott, Mohide, & Lawlor, 2011; Kolb, 1984; Lisko & O'Dell, 2010; Stutsky & Laschinger, 1995). The experiential learning theory provides an explanation for how individuals learn individual knowledge in individual ways in reaction to their individual perceptions of experiences. The student nurses' experiential education within the senior practicum course, allows for the transfer of classroom

learning to be applied in actual practice settings. In the complex environment of healthcare, student nurses must be able to understand concepts, identify the relationships between concepts, define the patient problems requiring intervention, assess and collect relevant information, and research information regarding the patient (Stutsky & Laschinger, 1995).

The senior practicum experience can be defined as a meaningful values-based process for a senior student nurse that culminates liberal education, resulting in both a depth of understanding and a sense of accomplishment, creating bridging activities in anticipation of graduation, and evaluation opportunities for both the student nurse and the nursing program (Rebeschi & Aronson, 2009). Precepted senior practicum courses (capstone) have become the standard of practice to "prepare senior nursing students to enter the workforce" (Martin, Brewer, & Barr, 2011, p. 1). This allows the student nurse to connect their education to their lives (Schroetter, & Wendler, 2008). The senior practicum course with the use of preceptors is a largely "experiential approach to clinical nursing education in which a reciprocal teaching-learning relationship is established among a senior undergraduate nursing student, a registered nurse (RN) with whom the learner is partnered, and a faculty member" (Bott et al., 2011, p. 35).

The preceptor role was developed in the 1970's as a response to '*reality shock*' of newly graduated nurses. By using a preceptor, newly graduated nurses were guided from the "theory of nursing to the application of nursing theory, with the preceptor functioning as a role model, teaching clinical skills and clinical thinking" (Omansky, 2010, p. 698). Internationally, the "clinical learning environment has been identified as central to nursing education by providing undergraduate nursing students with the opportunity to combine cognitive knowledge with the development of psychomotor and affective nursing skill sets" (McClure & Black, 2013, p. 335).

Hospital-based preceptor training has a different focus to that required by pre-licensure

nursing education which needs to be, "oriented to the teaching and assessment of undergraduate students" (Broadbent, Moxham, Sander, Walker & Dwyer, 2014, p. 407). There is often a gap between theory and practice, and the preceptor may feel inadequately prepared an as evaluator of the student nurse in the senior practicum experience (Hallin & Danielson, 2008). With the increase in the number of baccalaureate nursing education programs, there has been an increased awareness of the need to prepare preceptors for their role (Bond, Godwin, Thompson, & Wittstrom, 2013; Martin et al., 2011; Stutsky & Laschinger, 1995).

The pre-licensure faculty educator plays a significant role in helping students acquire knowledge, skills, and attitudes necessary for the professional practice of nursing (Hsu, Hsieh, Chiu, & Chen, 2014). However, it is the preceptor who is "vital in the facilitation of education, practice, and professionalism for the novice nurse in today's hectic, challenging hospital environment" (Biggs & Schriner, 2010, p. 317). The faculty member as the essential link between clinical practice and the academic program is responsible to orient the student nurse and preceptor to the preceptorship experience and their roles, supporting the triangular function by acting as an educational resource and consultant throughout the duration of the senior practicum course (Bott et al., 2011).

Nurse competence has been defined by both the American Nurses Association (ANA) and the Joint Commission on Accreditation of Healthcare Organizations (JACHO) as the "ability to perform according to defined expectations" (Theisen & Sandau, 2013, p. 407). A positive clinical learning environment is crucial for the pre-transitional learning required of the senior student nurse within a senior practicum course. This learning environment provides some of the most important learning opportunities for student nurses in terms of skills, knowledge, attitudes, practice, reflection and cultural socialization allowing the student nurse to improve and

consolidate clinical skills and improve both patient and time management skills (Nash, Lemcke, & Sacre, 2009). To provide a positive learning environment requires extensive support of the preceptor with ongoing education, and faculty monitoring to ensure that student nurses' education needs are met (Warren & Denham, 2010). Preceptors are the "key providers of individualized experiential learning opportunities for students in professional practice courses" (Bott et al., 2011, p. 35). The preceptor not only needs the educational and experiential background in their area of practice (Kim, 2007), they also need the "ability to develop teaching skills, to meet students' everyday needs and to manage the students' sense of insecurity" (Hsu et al., 2014, p. 214).

Newly graduated nurses experience significant stress levels particularly during the first three to six months of employment linked to job-related ability, confidence level, mistakes made, and adjustment to the working environment (Lee et al., 2009; Owens, 2013). This process is likely to begin during the pre-transition period, when a student nurse may become more aware that one's skill level does not match one's expectations of the role and responsibilities of a practicing registered nurse (Nash et al., 2009). This underscores the importance of providing the opportunity for the student nurse to put theory into practice.

There is also a gap between perceptions of academic leaders and hospital nurse executives about the preparedness of new nurses. Rhodes et al. (2013) found that 90% of nurse educators in nursing programs perceived newly graduated nurses to be ready to practice in the hospital setting. This perception by faculty is occurring while "hospital nurse leaders have voiced concerns regarding the ability of newly graduated nurses to function independently in the hospital setting" (Rhodes, Amato, Bowden, Hazel, McClendon, Medas, & McNett, 2013, p. 524).

Newly graduated nurses' inexperience and inability to deal with complicated situations is shown to result in turnover rate of 30-60% of newly graduated nurses in the first year of employment (Lee et al., 2009; Owens, 2013). It has been estimated that the cost per nurse turnover is approximately $22,000 to more than $64,000, lending itself to financial strains as healthcare organizations may spend up to "$300,000 annually for every 1% increase in turnover" (Sorrentino, 2013, p. 83). With one-year turnover rates high, "hiring decisions have a significant economic impact on the institution, making it imperative to select candidates who are likely to succeed and stay" (Weathers & Raleigh, 2013, p. 468). In response to the significant costs of turnover of newly graduated nurses for healthcare organizations, hospitals must implement strategies to support and provide learning opportunities for newly graduated nurses during their first year (Wiseman, 2013). This can be accomplished by providing "clear direction and expectations for new graduates" (Theisen & Sandau, 2013, p. 410). Pertaining to newly graduated nurses, healthcare organizations must also "deal assertively and constructively with training, recruitment, retention, and the prevention of disillusionment" (Cleary, Horsfall, Muthulakshmi, Happell, & Hunt, 2013, p. 2606). It is estimated that 66.3% of newly graduated nurses will work in staff nurse positions (Zigmont, Wade, Edwards, Haynes, Mitchell, & Oocumma, 2015) and will make up approximately 10% of the clinical nurses in hospitals and health systems (Rhodes et al., 2013).

Benner's (2001) model of novice to expert nurse provides a framework to explain the "gap between the knowledge of a new nurse and that of an experienced nurse and has been accepted by several nurse residency programs" (Theisen & Sandau, 2013, p. 407). Advanced beginners are considered the newly graduated nurses (Benner, 2001; Fiedler, Read, Lane, Hicks, & Jegler, 2014; Fisher, 2014; Theisen & Sandau, 2013; Weathers & Raleigh, 2013). The

advanced beginner demonstrates marginally acceptable performance, having coped with enough real situations to not be shocked by the recurring meaningful situational components. However, like the novice who would be considered the student nurse, the advanced beginner can take in little of the situation. One continues to concentrate on remembering the rules one has been taught, and applying the rules in this new, complex environment of which one is a part. As an advanced beginner, newly graduated nurses require more support to incorporate and develop one's critical thinking abilities and practical skills (Theisen & Sandau, 2013). Due to the inability of the newly graduated nurse to apply critical thinking skills to complex situations, a patient with many coexisting health issues in a fast-paced healthcare environment is challenging.

The American Future of Nursing Report (2010) iterated that there is a "need to better manage the transition from student to RN in order to reduce the high turnover rate and support the development of the nursing workforce in the future" (Haggerty, Holloway, & Wilson, 2013, p. 162). Both the Institute of Medicine (IOM) and the Robert Wood Johnson Foundation (RWJF) have made four key recommendations within the Future of Nursing report, which includes student nurses, newly graduated nurses, and experienced nurses (Institute of Medicine, 2011). These four recommendations include: "1) Nurses should practice to the full extent of their education and training, 2) Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression, 3) Nurses should be full partners, with physicians and other health professionals, in redesigning health care in the United States, and 4) Effective workforce planning and policy making require better data collection and an improved information infrastructure" (Institute of Medicine, 2011, p. 4). This coincides with nurse leaders identifying better critical thinking skills with BSN-prepared nurses;

however, the newly graduated nurse has similar developmental needs, regardless of educational preparation type (Weathers & Raleigh, 2013).

Increasing the length of time in newly graduated nurse residencies has been recommended as a means of decreasing the turnover rate of newly graduated nurses and provide the time for the newly graduated nurse to acclimate to one's new roles and responsibilities as an RN. Although this has been widely received, the graduate nurse residency programs have not demonstrated an increase in safe, quality patient-care or a decrease in turnover rates among newly graduated nurses (Casey, Fink, Jaynes, Campbell, Cook & Wilson, 2011).

Problem Statement

With the contribution of a senior practicum course in pre-licensure nursing education, the effects of unsuccessful transitioning from student nurse to professional status is still seen in many healthcare organizations through lower work productivity, decrease in job satisfaction and burnout or attrition (Kim, 2007). The senior practicum course has been in place for the vast majority of baccalaureate nursing programs and is heralded as the best practice; however, the effectiveness of a senior practicum course has not been captured in the literature following the student nurse entering into practice as a newly graduated nurse. The transition period, lasting anywhere from one to two years, may be a significant source of burnout and attrition possibly having a significant impact on the future career direction of the newly graduated nurse (Diefenbeck, Herman, Wade, Hayes, Voelmeck, Cowperthwait, & Norris, 2015; Parker, Giles, Lantry, & McMillan, 2014; Tastan, Unver, & Hatipoglu, 2013). For the newly graduated nurse, the first three to six months in the hospital are especially frustrating and stressful, resulting in high turnover (Tsai, Lee-Hseih, Turton, Li, Tseng, Lin, & Lin, 2014). Newly graduated nurses' experience reality shock as they transition from the academic ideal of nursing to the clinical

reality of nursing practice (Nash et al., 2009; Owens, 2013; Palumbo et al., 2012). Hendricks, Wallace, Narwold, Guy, and Wallace (2013) found that there has been "relatively little systematic study regarding clinical education; efficacy, student satisfaction, and methodology have been largely overlooked" (p. 310).

The problem is that there have been relatively few studies completed concerning the effectiveness of a senior practicum course in the transition of the student nurse to a newly graduated nurse. In particular, there has been minimal research of how many hours should be required of the student nurse in a preceptor experience for the newly graduated nurse to feel comfortable in one's role as a RN.

Purpose Statement

The purpose of this study was to examine the relationship between the number of grouped direct acute care hours completed in a senior practicum course during pre-licensure nursing education and the newly graduated nurse's scores of perception of professional competence, during the third to sixth month of employment in a hospital setting. This study examined the predictor variable of number of direct acute care hours completed within a senior practicum course taken in the final semester of pre-licensure nursing education. Direct acute care hours can be defined as the number of direct care hours the senior student nurse has participated in within the acute care setting with a preceptor (Martin et al., 2011). The criterion variable is the perception of professional competence in the newly graduated nurse during the third to sixth month of employment on a clinical unit within the healthcare system. Nurse professional competence can be defined as the knowledge, skills, and attitudes seen in the professional registered nurse that can be transferred from one situation to another and from one setting to another (Bjorkstrom, Athlin, & Johansson, 2008). In this study, nurse professional competence

was predicted by the number of grouped direct acute care hours completed within a senior practicum course in pre-licensure nursing education. The senior practicum course was static based on the number of hours required from the pre-licensure nursing education program for a senior student nurse to successfully complete the course. The advantage of this study was the ability to look at the past (senior practicum course and grouped direct acute care hours within the practicum course) and determine the relationship this had on the perception of professional competence scores in the newly graduate nurse during the third to sixth month of employment on the clinical unit.

Significance of the Study

The significance of this study is that it provides pre-licensure nursing education programs with a measurement of perceived professional competence of the newly graduated nurse who has completed a senior practicum course during the third and sixth month of employment. Providing the senior student nurse with a senior practicum course experience is labor intensive and requires a commitment from both the academic and service sides of healthcare delivery. With the alarmingly high incidence of newly graduated nurse turnover and its' cost to healthcare organizations and ultimately patient safety, this study provides in empirical terms what was missing from the newly graduated nurses' repertoire of skills that can be enhanced specifically to decrease newly graduated nurse turnover (Fiedler et al., 2014; Lee et al., 2009; Owens, 2013; Rudman, Gustavsson, & Hultrell, 2014; Rush et al., 2013; Sorrentino, 2013). Minimal quantitative research has been completed that directly measures the impact of a senior practicum course on the perceived professional competence of the newly graduated nurse, particularly during the third to sixth month when newly graduated nurse may be contemplating a change in work environment or leaving the profession completely.

This study provides healthcare organizations with the knowledge of newly graduated nurses' perception of their professional competence within eight specific areas: nursing care, value-based nursing care, medical technical care, teaching/learning and support, documentation and information technology, legislation in nursing and safety planning, leadership in and development of nursing, and education and supervision of staff/student. The subcategories within the NPC have been grounded in both governmental and nursing education association mandates (AACN, 2012; IOM, 2010; Weather & Raleigh, 2013). Results from this study can assist in informing hospital educators, nurse managers, and administrators about those areas that might require future growth and development for the newly graduated nurse as one transition in practice.

There is an inordinate number of studies found in the literature related to the topics of: senior practicum courses (Hsu et al., 2014; O'Brien, Giles, Dempsey, Lynne, McGregor, Kable, Parmentor, & Parker, 2014; Payne, Hey, & Farrell, 2014), preceptors (Broadbent et al., 2014; Fisher, 2014; Martensson, Engstrom, Mamhidir, & Kristofferson, 2013), preceptor development course (Bond et al., 2013; Hykras, Linscott, & Rhundy, 2014; Payne et al., 2014), transition to practice (Feng & Tsai, 2012; Rudman et al., 2014; Owens, 2013), residency programs (Theisen & Sandua, 2013;Weather & Raleigh, 2013; Zigmont et al., 2015), and retention of newly graduated nurses (Neimi, McErlane, Vasseur, & Bohl, 2014; Palumbo et al., 2012; Rhodes et al., 2013). The potential benefits of a senior practicum course specifically for healthcare institutions has been addressed in the literature, however it is not well substantiated with data lacking to confirm this assumption (Rebeschi & Aronson, 2009).

Research Question

The research question for this correlation study is as follows:

RQ1: Do the number of direct acute care hours within a senior practicum course in pre-licensure nursing education have a relationship to the newly graduated nurses' perception of professional competence scores as measured by the Nurse Professional Competence (NPC) scale during the third to sixth month of employment?

Definitions

For this study the specific definitions are as follows:

1. *Senior practicum course* - Organized and planned learning experience in which the "senior nursing student, together with their preceptor, provided nursing care to clients" (Stutsky & Laschinger, 1995, p. 144) resulting in both a depth of understanding, and a sense of accomplishment; creating bridging activities into the professional practice of nursing (Rebeschi & Aronson, 2009).
2. *Direct acute care hours* - refers to the number of direct acute care hours the senior student nurse has participated in within the acute care setting with a preceptor (Martin et al., 2011).
3. *Nurse competence* - Knowledge, skills, and attitudes seen in the professional registered nurse that can be transferred from one situation to another and from one setting to another (Bjorkstrom et al., 2008).
4. *Preceptor* - Registered nurse with at least two years of clinical experience who reinforces the knowledge, skills, and attitudes taught in pre-licensure nursing education (Bond et al., 2013), providing individualized experiential learning opportunities for senior student nurses (Bott et al., 2011).

5. *Nursing preceptor orientation* - Preceptor development through a variety of adult learning educational strategies, meeting the diverse needs of the preceptors so as to facilitate their instruction of senior student nurses under their tutelage (Bond et al., 2013; Vos & Trewett, 2012).

6. *Kolb's experiential learning theory* - Process whereby knowledge is created through the transformation of an experience (Bott et al., 2011; Lisko and O'Dell, 2010; Stutsky & Laschinger, 1995).

7. *Preceptorship* - The act of being a preceptor for a senior student nurse for a set number of hours and specific requirements for which the student nurse will be evaluated (Carlson, Pilhammar, & Wann-Hansson, 2010; Hsu et al., 2014; Stutsky & Laschinger, 1995)

8. *Transition to practice* - Newly graduated nurses' integration into a variety of healthcare workplaces (Rush et al., 2013).

9. *Retention of newly graduated nurses* - "Calculated percentage of the number of new graduates leaving an organization within 12 months of their hire date divided by the number of new graduates hired during the same time period" (Rush et al., 2013, p. 350).

CHAPTER TWO: REVIEW OF THE LITERATURE

Overview

The clinical environment has been a mainstay in nursing education. Student nurses in the clinical environment have the opportunity to use the theory taught in the classroom and practice this learning with active involvement and contribution to patient care (Papathanasiou, Tsaras, & Sarafis, 2014). Papathanasiou et al. (2014) further "presupposes a consistent co-existence of theoretical knowledge, values and principles together with practical applications and technical details" (p. 58).

Students within the United States have numerous options open to them for nursing education. Upon entry to practice, however, research has indicated that there are "better patient outcomes with higher proportions of nurses educated at the baccalaureate level (BSN)" (Weathers & Raleigh, 2013, p. 468). The IOM in their 2010 report calls for more nurses to be educated at the baccalaureate level or higher (Institute of Medicine, 2011).

As a practice-based profession, student measurement of achievement has frequently been seen in the development of nursing competencies. As many states are intensifying their interests in the outcomes of higher education, accountability measures have been instituted to examine the institutions success in achieving student competence (Raines, 2010). Changes in the health care environment and public demands of positive patient outcomes have left the student nurse with a fragmented and frequently less predictable clinical experience.

To meet the goal of graduating nurses who are prepared to deliver safe, competent patient care, and who are accountable for one's actions, baccalaureate nursing programs have instituted preceptorship programs within a senior practicum course for senior student nurses. Over the past 15 years, the concept of the senior practicum course has changed little. It remains a senior level

practicum course, with a clinically-based RN assigned to the student for a predetermined number of clinical hours. The outcome for the student nurse in the senior practicum course is to develop one's knowledge, skills, and attitudes, linking theory and practice to have a successful entry to practice following graduation and passing of the national examination.

Preceptorship programs have been "established in response to a nursing faculty shortage and to the difficulties newly graduated nurses have had assuming their professional role" (Omansky, 2010, p. 702). The programs have been viewed as an important adjunct to nursing education; however, it has also been demonstrated that the preceptor feels a significant amount of stress in providing the preceptored experience for the student nurse. This stress is seen in both a lack of preparation for the role of the preceptor and work overload. Preceptors often feel stress from "multiple and competing priorities, demands, and expectations" (Cleary et al., 2013, p. 2905).

Newly graduated nurses are inexperienced and have the inability to deal with complicated situations as demonstrated by a turnover rate of 30-60% in the first year of employment (Lee et al., 2009; Owens, 2013). Newly graduated nurses come from a variety of nursing educational programs all with a variation of skill level for clinical practice as a RN. The transition period lasting anywhere from one to two years may be a significant source of burnout and attrition possibly having a significant impact on the future career direction of the newly graduated nurse (Diefenbeck et al., 2015; Parker et al., 2014; Tastan et al., 2013). For newly graduated nurses, the first three to six months in the hospital are especially frustrating and stressful, resulting in high turnover (Tsai et al., 2014).

A search of the literature was conducted to provide both the conceptual and empirical framework for the use of a senior practicum course for senior student nurses and the effect this

would have on the senior student nurses' transition to practice. A search was conducted via online databases.

This chapter reviews the literature that is essential for the understanding of the senior practicum course within pre-licensure nursing education and the linkage of a senior practicum course to experiential learning.

Theoretical Framework

Kolb's (1984) experiential learning theory offers nursing programs a way to structure the senior practicum course attended by many student nurses in their final semester. Experiential learning described by Kolb (1984) is a process where knowledge is created through the transformation of an experience (Bott et al., 2011; Lisko & O'Dell, 2010; Stutsky & Laschinger, 1995). Learning is where ideas are not fixed elements but rather ideas and concepts and are derived from and continuously modified by the individuals experience (Kolb, 1984). Within experiential learning there is the "central process of human adaptation to the social and physical environment" (Kolb, 1984, p. 31). It is this transactional relationship between human adaptation and the environment, which symbolizes dual meanings in terms of the experience; one that is subjective and personal, the person's internal state; and the other which is objective and environmental (Kolb, 1984). In the process of experiential learning, it is necessary for the student to recognize what is common between new and previous experiences, and to be able to identify not just what is different but why it is different. Once this has been achieved, the student begins learning how to "recognize circumstances which call for them to judge how to translate, or refine, learn to meet a new or unusual challenge and so enable extension of their existing learning" (Yardley, Teunissen, & Dornan, 2012, p. 162).

Contribution to Kolb's Theory

Kolb's (1984) theory is primarily built on the work of Dewey, 1938; Lewin, 1951, and Piaget, 1970 (Atkinson & Murrell, 1988). Dewey's model of learning emphasizes that feedback provides the basis for a continuous process of goal-directed action and evaluation of the consequences of that action making experience an important aspect in the process of learning (Atkinson & Murrell, 1988; Kolb, 1984). Lewin emphasizes that learning, change, and growth are facilitated by an integrated process that begins with the here-and-now experience followed by collection of data and observations about the experience leading to active participatory learning (Atkinson & Murrell, 1988; Kolb, 1984). Piaget looks at the learning process as a cycle of interactions between the individual and the environment where the key to learning lies in the mutual interaction of the individual with the environment (Atkinson & Murrell, 1988; Kolb, 1984). Learning is viewed as a continuous process with knowledge created by transforming experience into existing cognitive frameworks and changing the way a person thinks and behaves (Lisko & O'Dell, 2010). It can be seen as a conflict between opposing ways of dealing with the world, which suggests that learning results from resolution of conflict (Kolb, 1984). Experiences are understood through apprehension, participation in the actual experience, or comprehension, occurring outside the actual experience through abstract conceptualization (Lisko & O'Dell, 2010). Transformation is required for learning to take place, proceeding through either: extension, active external experimentation; or, intention, internal reflection of the experience (Lisko & O'Dell, 2010).

Phases of Adult Learning

For experiential learning to be effective, adult learners need to be able to adapt to four different abilities (Stutsky & Laschinger, 1995). This includes: concrete experience (CE), the

personal involvement with individuals in everyday situation; reflective observation (RO), patience, objectivity and careful judgment before taking action; abstract conceptualization (AC), the logical analysis of ideas, and systematic planning to understand problems or situations; and active experimentation (AE), where the learner learns by doing (Kolb, 1984; Stutsky & Laschinger, 1995). This four-part model of learning explains how individuals may understand the experience as they process the information, describing differences in how individuals may understand the information presented through different types of learning styles (Kolb, 1984; Sorrentino, 2013). The way a student acquires information is considered their learning style often referred to as their preferred method of learning which takes into consideration the learning environment and the context of the learning (Vinales, 2013).

Through conflict within the four-parts of experiential learning, new knowledge, skills, or attitudes are achieved (Kolb, 1984). The student must

> involve themselves fully, openly, and without bias in new experiences (CE); be able to reflect on and observe their experiences from many perspectives (RO); be able to create concepts that integrate their observations into logically sound theories (AC); and be able to use these theories to make decisions and solve problems (AE). (Kolb, 1984, p. 30)

Kolb's (1984) theory presents causal (concepts of learning and the learning cycle), and associational (concepts of experience and learning styles) concepts (Lisko & O'Dell, 2010). Four learning modes have been determined to have strong characteristics of the four abilities of CE, RO, AC, and AE. The diverger learns through observation, having strong CE and RO skills, preferring concrete, people-oriented learning experiences, being good at generating ideas, and seeing situations from a variety of perspectives (Laschinger, 1990). The assimilator learns by being presented with sound logical theories, having highly developed AC and RO, and excelling

at the development of meaningful conceptualizations of experiences, and preferring symbolic thoughtful learning experiences (Laschinger, 1990). The converger learns when practical application can be linked to concepts and theories, having strong AC and AE learning skills, and is good at testing out theories or ideas in practical situations, and is a capable problem solver with a situation involving the search for a single correct answer (Laschinger, 1990). The accommodator learns through the "hands-on" experience, having a highly developed CE and AE, and excelling at carrying out plans, seeking out new experiences, being less analytical and preferring to trust their instincts in problem-solving situations (Laschinger, 1990).

Application of Experiential Learning to Nursing

Experiential learning theory provides an explanation for how individuals learn individual knowledge in individual ways in reaction to their individual perceptions of experiences. Philosophical principle of constructionism is supported by the individualistic concept from which social interactions become fundamental to experiential learning (Yardley et al., 2012). In order to be an effective learner, the student must be able to apply skills from each of the learning modes in whatever combination required of the learning situation (Lisko & O'Dell, 2010; Stutsky & Laschinger, 1995). There are "five forces that shape an individual's learning style (a) personality type, (b) educational specialization, (c) professional career choice, (d) current job role, and (e) the current task and/or problem" (Stutsky & Laschinger, 1995, p. 144). The degree to which a learner effectively applies the knowledge, skills, and attitudes acquired during the learning process is referred to as transfer of learning allowing the students to transfer classroom learning and to apply the learning in the practice settings (Bond et al, 2013). In this way, the students' experiential education allows for the transfer of classroom learning to be applied in the actual practice settings. In the complex environment of healthcare, student nurses must be able to

understand concepts, identify the relationships between concepts, define the patient problems requiring intervention, assess and collect relevant information, and research information regarding the patient (Stutsky & Laschinger, 1995). Individuals within human service professions such as nursing have been observed to have concrete learning styles which comprise the personal involvement with individuals in everyday situation (Laschinger, 1990; Stutsky & Laschinger, 1995). Experiential learning theory is compatible with the goals of nursing education, considering its "holistic view of the learner and emphasis on both the cognitive and affective aspects of learning" (Laschinger, 1990, p. 992).

The nursing preceptorship experience considered to take place in a behavioral-affective learning environment may have significant effects on the student nurses' adaptive competency development leading to an improved person-environment fit for beginning practitioners (Stutsky & Laschinger, 1995). Vinales (2013) provided examples of how the experiential learning theory can be concretely applied to the senior practicum experience. In the concrete experience, the learner adapts to the unfamiliar environment and culture. Moving to observation, the learner observes the preceptor communicating with another healthcare professional or performing a nursing skill. In abstract conceptualization, the learner is thinking about a nursing skill to be performed and choosing a best option based on current practice. With active experimentation, the learner tests a learned concept using evidence-based practice to support the rationale for the action chosen. A supportive learning environment is essential for planned learning opportunities to occur, however, in the real-life nursing environment there needs to be allowances made for opportunistic, unplanned circumstances for learning while still upholding the supportive environment (Vinales, 2013). Through the emphasis on teaching the preceptor educational skills

rather than on the student tasks and activities to be reinforced an improved experiential program of learning for the senior student nurse may take place (Bond et al., 2013).

Related Literature

The senior practicum experience can be defined as a meaningful values-based process for senior student nurses that culminates liberal education, resulting in both a depth of understanding, and a sense of accomplishment, creating bridging activities in anticipation of graduation, and evaluation opportunities for students and programs (Rebeschi & Aronson, 2009). By providing connections for the senior student nurse with the integration of classroom learning, promotion of thinking and the testing of new potential solutions to practice issues (Payne et al., 2014), there is the development of the student nurse to professional status upon entry to practice. The senior student nurse preceptorship experience is the culminating clinical experience in baccalaureate nursing programs (Kim, 2007). Preceptor senior practicum courses have become the standard of practice to "prepare senior nursing students to enter the workforce" (Martin et al., 2011, p. 1) allowing the student to connect their education to their lives (Schroetter, & Wendler, 2008). The senior practicum course with the use of preceptors is a largely "experiential approach to clinical nursing education, in which a reciprocal teaching-learning relationship is established among a senior undergraduate nursing student, an RN with whom the learner is partnered, and a faculty member" (Bott et al., 2011, p. 35). It is during this final clinical experience that senior student nurses change theory into practice, master skills that define the nursing profession, and "refine their scope of practice, and gain a sense of social and professional culture" (O'Brien et al., 2014, p. 19) in nursing. A well-planned senior practicum program meets the needs of senior student nurses by increasing one's confidence and competence in the clinical setting and may help hospitals and healthcare organizations

"stabilize employment as well as cut orientation and turnover costs" (Kim, 2007, p. 370). Schools of nursing have a great deal of "content related to disease processes, procedural techniques, and critical-thinking processes, little time is devoted to managing workload complexities in care situations, and students must be taught these skills" (Hendricks et al., 2013, p. 312). It is through the senior practicum experience that senior student nurses have "access to the privilege of providing care to society's increasingly complex patient populations in increasingly technologically advanced health care settings" (Diefenbeck et al., 2015, p. 124). How well the student learns to "practice their nursing skills before graduating, may determine the success of their transition from being a student nurse to becoming a staff nurse" (Kim, 2007, p. 369). It is the practice of the skills fundamental to the nursing profession and the student nurses' exposure with increasing intensity and complexity to patient care, healthcare systems, and nursing roles across the healthcare system that makes the senior practicum course the anchor in the transition of the student nurse to graduate nurse. Nursing characteristics that senior nursing students need to attain prior to graduation includes: (a) being self-directed individuals, (b) learning new nursing skills and organizational activities, (c) applying nursing knowledge and skills to take care of the immediate needs of their patients, and (d) increasing and expanding their nursing experience and social skills in clinical settings (Callaghan, Watts, McCullough, Moreau, Lettle, & Gamroth, 2009; Kim, 2007; Stutsky & Laschinger, 1995). The senior practicum course provides substantial benefits for the student nurse, institution of higher education, and healthcare organizations, including the: "(a) opportunities for students to gain experience in a variety of settings not previously used; (b) professional socialization; (c) validation of professional role and commitment; (d) enhanced recruitment and retention; and (e) decreased orientation costs" (Kim, 2007, p. 371).

During the senior practicum course senior student nurses are "thrust into the everyday realities of nursing practice where they begin to internalize the values of the nursing profession" (Myrick, Yonge, & Billay, 2010, p. 82). This allows for professional socialization, being important for the acquisition of nursing skills and knowledge. What may be more important is that there is a development of the professional role and the taking on the responsibilities inherent in the professional role that may be transferred to the professional role in the newly graduated nurse.

Historical Overview

Over the past 30 years, nursing education has seen a "transition to, and a reliance on, student nurses being placed with staff nurse preceptors for additional clinical experiences" (Omansky, 2010, p. 698). The preceptor role during this time has "expanded into undergraduate nursing education to assist in bridging the gap from theory to practice" (McClure & Black, 2013, p. 336). Senior practicum courses have been instituted for several reasons, including: nursing faculty shortages, lack of available clinical sites (McClure & Black, 2013), to create a connection between "university educational activities and the 'real world' for soon-to-be-graduated student experiences" (Schroetter & Wendler, 2008, p. 72), and to "enhance socialization, improve transition to practice, and increase student accountability" (Diefenbeck et al., 2015, p. 124).

The preceptor role was developed in the 1970s as a response to *reality shock* of the newly graduated nurse. Through the use of a preceptor in a senior practicum course, student nurses are guided from the theory of nursing to the application of nursing theory, with the preceptor functioning as a role model to demonstrate the application of important concepts in practice, teaching clinical skills and clinical thinking (Bond et al., 2013; Omansky, 2010). The role of the

preceptor was initiated as a way of decreasing the *reality shock* of newly graduated nurses who felt a disconnection between academia and real-life practice as they transitioned to practice.

It is now common that nursing education, particularly in four-year institutions, have a culminating senior practicum course with a preceptor, and without faculty except for overseeing the experience. This gives the preceptor a tremendous amount of teaching responsibility as they guide the student nurse through the realities of nursing with the preceptor frequently not being prepared for nor had workload reduction to account for this added task in their work day.

Internationally, the "clinical environment has been identified as central to nursing education by providing undergraduate nursing students with the opportunity to combine cognitive knowledge with the development of psychomotor and affective nursing skill sets" (McClure & Black, 2013, p. 335).

During the senior practicum course, the student, preceptor, and faculty must work together in order to provide positive learning outcomes. The role of each participant is further delineated as the

> student is expected to be an active adult learner; the faculty is expected to assess the student's needs and arrange for a preceptorship learning environment consistent with program goals and to evaluate the student's work; and the preceptor is expected to provide day-to-day clinical teaching while meeting clinical practice expectations. (Payne et al., 2014, p. 168)

Preceptors

Preceptors are the cornerstone for the senior student nurses' senior practicum course. The senior practicum course, in which the student nurse is immersed in the clinical experience with an experienced (having at least two years of current experience) RN for a set number of hours

required for the semester is the environment where experiential learning takes place. The hours required within the senior practicum course may vary in different pre-licensure nursing education programs from 130 hours to almost 300 hours (Martin et al., 2011). The senior student nurse is ideally assigned to one preceptor for a set time period (semester) as a part of a formalized course within pre-licensure nursing education. This frequently occurs within the final semester of the nursing program. The preceptor working on a clinical unit and considered a part of the healthcare system is not considered an employee of the educational institution (Broadbent et al., 2014). It is through an "organized and planned learning experience that the senior nursing student, together with the preceptor, provided nursing care to clients" (Stutsky & Laschinger, 1995, p. 144). In higher education, the learning environment encompasses the clinical setting in which the preceptor offers socialization into the profession or work culture, patient care-oriented learning, creates a climate for learning, imparts knowledge or a way of knowing about nursing, and provides a cost-effective approach to educational programs (Myrick et al., 2010). The preceptor may be considered an extension of the faculty, providing the knowledge, skills, and attitudes that are essential to the role formation process of the RN (Fisher, 2014). Working one to one with the senior student nurse in the selected clinical setting, the preceptor provides individualized teaching-learning strategies so that the student can experience day-to-day practice with a role model and resource person immediately available within the clinical setting (Biggs & Schriner, 2010; Callaghan et al., 2009; Kim, 2007; Myrick et al.; Stutsky & Laschinger, 1995; Warren & Denham, 2010). The preceptor provides qualified clinical instruction based on their experience, preceptor role development, and engagement of the senior student nurse (Ownby, Schumann, Dune, & Kohne, 2012). The precepted experience has been shown to contribute more to the student nurses' development of adaptive competencies more so than previous clinical

experiences because of the close working relationship the preceptor has with the student nurse to provide 'reflection, feedback, and evaluation' (Carlson et al., 2010; Stutsky & Laschinger, 1995). The experience is "thought to foster a strengthened knowledge base and clinical skills, improved critical thinking in practice, enhanced student self-confidence, better interpersonal communication, role socialization, and reduced conflict in role expectations" (Hendricks et al., 2013, p. 311). The preceptor performs a significant role in the development of the senior student nurse and preparing the student nurse for transition to practice.

Preceptor workload. The retention of hospital-based RN's as preceptors is paramount to the student nurses' success within a senior practicum course. However, being a preceptor has proven to be stressful, and time for precepting is seldom allocated to nurses (Carlson, 2012). Workload and daily routines have been identified as the most constraining aspect for preceptors in managing their client load and preceptorship responsibilities (Broadbent et al, 2014; Carlson, 2012; Hallin & Danielson, 2008). Preceptors have to manage the "preceptorship frequently without any real reduction of clinical work and often without proper pedagogical training for the preceptor role" (Carlson, 2012, p. 458). Martensson et al. (2013) have noted that preceptors work under various extraneous conditions on top of their regular work which can both increase their workload and give added stress to precepting the student nurse. These conditions include:

> organizational (nurses need to prioritize patient care and precepting is something added on top of their clinical work), collaborative (nurses need collegial support and relations with colleagues are of importance), and personal (nurses' own experiences of the preceptor role, need for feedback and notions of benefits). (Martensson et al., p. 445)

Preceptor rewards and benefits. Callaghan et al. (2009) described "preceptorships

as cost-effective for nursing education programs" (p. 246). Hallin and Danielson (2008) report a "statistically significant correlation between commitment to the role of preceptor and availability of benefits and rewards" (p. 162). Broadbent et al. (2014) have determined that the nature of acknowledgment, benefits and rewards has no consensus in contemporary literature. Categories of support can include the organizations, the universities, and the individual's ability to create supportive environments (Broadbent et al., 2014). However, there is a lack of consensus and inconsistency on what type of support is needed to create any or all of the supportive environments (Broadbent et al., 2014). Although preceptors note that they are supported philosophically by their peers and the healthcare organization, the business of healthcare continues throughout the preceptorship experience. Not only is it important to educate the preceptor regarding the senior practicum experience, it is also necessary to educate the clinical unit and the nurse managers on the responsibilities and duties of the preceptor. If the preceptor is to have the time to spend with the student nurse, to actively engaging them in the knowledge, skills, and attitudes of a registered nurse, there needs to be both recognition and changes to workload to provide substance to this important learning experience.

A point acknowledged in the literature is that recognition of the commitment of time and resources given by the preceptor "enhances the commitment of the preceptor to undertake the role in the future" (Broadbent et al., 2014, p. 404). The intrinsic reward for the preceptors is the opportunities to share with the student nurse the knowledge and enthusiasm for learning, to foster student learning-behaviors, and to follow the students' development of skills, attitudes, and confidence (Broadbent et al., 2014; Hallin & Danielson, 2008). Hyrkas et al. (2014) report a "strong positive correlation between preceptors' perceptions of benefits and rewards, and their perceptions of support and commitment to the preceptor role" (p. 131).

Preceptor evaluation. Evaluation of the preceptor and precepting role needs to be conducted following the preceptorship. Evaluation should include the nurse managers, students, and faculty, to provide the preceptor with both feedback and recognition of the impact they have made to the senior nursing students' learning. Although "final grading remains the responsibility of the faculty; a greater involvement of preceptors in evaluation demonstrates a way of honoring their contributions to the students' education and socialization" (Yonge, Myrick, & Ferguson, 2011, p. 2). Faculty relies on preceptors to "provide accurate evaluations of students' clinical performance" (Yonge et al., p. 1). A framework for evaluation including the appropriate tools for formative evaluation is "essential for the student's growth, providing direction and helping to boost confidence, increase motivation and self-esteem" and summative evaluation, the process by which determination of the student nurse reaching the course outcomes can be determined, are needed to facilitate the evaluation process (Yonge et al., p. 1). The evaluation process is challenging for preceptors who are faced with making the decision albeit the secondary decision of ensuring that the student nurse is competent for entry into practice as a newly graduated nurse. Collaboration and support from faculty is essential for this process to be successful.

There is a need for the healthcare organization to understand the effectiveness of the preceptorship through ongoing implementation and re-evaluation of the program (Hyrkas, et al., 2014). This implies that a system of evaluation should be set up and maintained so that preceptors will perceive that their fulfillment of the preceptor role is rewarded and supported (Hyrkas et al., 2014). This is particularly true if the student nurse is hired on the unit where the senior practicum course was completed.

Preceptors assist in modifying the reality shock that is often experienced by newly

graduated nurses upon entry to practice and may assist in bridging the gap between pre-licensure nursing education and clinical position (Warren & Denham, 2010). This can be accomplished through the preceptor engaging the senior student nurse in increasingly complex decision making within a directed and safe environment (Palumbo et al., 2012) and by "helping the student nurse to become proficient in the clinical application of theoretical principles" (McClure & Black, 2013, p. 337). Nash et al. (2009) reported that a "positive learning experience in a supportive environment may assure the senior student nurse that they will be able to successfully negotiate the full transition to professional practice" (p. 50). This can be considered as a practical retention strategy for graduate nurses during role transition from student nurse (Owens, 2013).

Preceptorship

The preceptorship is perhaps one of the most important professional relationships during baccalaureate nursing education and may have "long term effects on how well a student integrates into the practice environment" (O'Brien et al., 2014, p. 23). The preceptorship involves a preceptor "teaching students about practice within a complex, unpredictable, continually changing, and often chaotic environment" (Hsu et al., 2014, p. 214). Student nurse "responsibilities and independent functioning gradually increases, and they eventually take over the duties of the staff nurses" towards the end of the preceptorship (Kim, 2007, p. 371). Carlson et al. (2010) stated that "clinical practice and the opportunity to work with practicing nurses is vital for student nurses, facilitating the development of clinical competence and integration of theory and practice" (p. 433). Carlson (2012) found that the preceptorship was "influential on how student nurses reflect on nursing as a profession and as a future career choice" (p. 458). This is influenced by providing a "model of the realities of everyday nursing practice that is found

important in the student nurses' preparation for new graduate practice" (Callaghan et al., 2009, p. 248).

Knowledge gap. Preceptors with a diploma or associates in nursing are precepting and assessing student nurses undertaking a degree for which the preceptor has had no experience in at either an undergraduate or post graduate level (Broadbent et al., 2014). This raises the question of how well "RN's are prepared in the training, and more importantly in understanding the precepted experience requirements for BSN students" (Broadbent et al., 2014, p. 407). Hospital-based preceptor training has a different focus to that required by pre-licensure nursing education which needs to be "oriented to the teaching and assessment of undergraduate students" (Broadbent et al., 2014, p. 407). There is often a gap between theory and practice and the preceptor may feel inadequately prepared an as evaluator of the student nurse in the senior practicum experience (Hallin & Danielson, 2008). The senior practicum experience is built on a trusting relationship between preceptor and student nurse, with the preceptor assessing, adjusting, and planning learning activities suited to the individual level of knowledge and skill of the student nurse (Carlson, 2012). Preceptors require knowledge, clinical competencies, abilities to establish student relationships that promote meaningful idea exchange and teaching skills to be effective (Warren & Denham, 2010). This not only includes that the preceptor is "current in both nursing practice and knowledgeable in the culture of the settings in which student nurses are assigned but can also provide support for students' involvement in learning opportunities as they arise" (Callaghan et al., 2009, p. 246). The preceptor must have the understanding of the "demands and expectations of the preceptor role and what students can and cannot do in clinical practice setting" (Hallin & Danielson, p. 162). If preceptor programs are to be effective they

must be “designed on educational principles aimed at maximizing learning for adults” (Bassendowski et al., 2010, p. 25).

Faculty. Preceptors are better able to meet their obligations if they receive support and a collaborative relationship is developed with the university (Hallin & Danielson, 2008; Rush et al., 2013). The pre-licensure faculty play an important role in helping students acquire knowledge, skills, and attitudes necessary for the professional practice of nursing (Hsu et al, 2014), however, it is the preceptor who is “vital in the facilitation of education, practice, and professionalism for the novice nurse in today’s hectic, challenging hospital environment” (Biggs & Schriner, 2010, p. 317). The faculty as the essential link between clinical practice and the academic program is responsible to orient the student and preceptor to the preceptorship experience and their roles, supporting the triadic function by acting as an educational resource and consultant throughout the duration of the senior practicum course (Bott et al., 2011). The preceptorship program must reflect a cooperative partnership between nursing education and nursing service throughout its development and implementation (Kim, 2007). This relationship between the faculty member and the preceptor must be a supportive one, demonstrating trust and respect, being cognizant of individual learning needs, and having a sense of shared responsibility, and open communication (Callaghan et al., 2009). Faculty within a preceptorship are not directly involved in the actual teaching and supervision of students in the clinical setting but remain the custodians of the teaching-learning process, entrusting the experiential development of clinical performance to preceptors, as the preceptors provides the day-to-day teaching, supervision, and guidance of students in the clinical setting (Luhanga, Myrick, & Yonge, 2010; Payne et al., 2014). This requires that preceptor expectations of the faculty be

recognized and strongly considered in preceptor role development. Wiseman (2013) stated that preceptors expect the faculty members to make at

> "least two site visits during the defined experience, should be prepared to ask the preceptor questions about the student's performance related to the course objectives and the adequacy of the client selections and should answer preceptor questions related to the evaluation and handling of student problems." (p. 254)

This should be congruent with all faculty members involved in the senior practicum course. Nurse competence has been defined by both the American Nurses Association (ANA) and the Joint Commission on Accreditation of Healthcare Organizations (JACHO) as the "ability to perform according to defined expectations" (Theisen & Sandau, 2013, p. 407). This requires nursing programs to "develop in their students professional values compatible with the roles and responsibilities of a nurse" (Fisher, 2014, p. 37) and focus on the development of critical thinking and clinical reasoning (Tastan et al., 2013; Theisen & Sandau, 2013) going beyond the education of skills and policies to also include education in values, attitudes, general nursing knowledge, and clinical skills (Theisen & Sandau, 2013).

Nursing schools and hospital organizations must examine the preceptorship program to verify that the content is adequate and accurate, and includes opportunities for growth in the competencies of attitudes, skills, and knowledge (Theisen & Sandau, 2013). This requires a variety of "pedagogies, styles, and strategies of instruction to prepare a nursing student for practice" (Smith, Lollar, Mendenhall, Brown, Johnson, & Roberts, 2013, p. 660).

Preceptor Development Program

A positive clinical environment is crucial for the pre-transitional learning that is required by the senior student nurse within a senior practicum course. This environment provides some of

the most important learning opportunities for student nurses in terms of skills, knowledge, attitudes, practice, reflection, and cultural socialization allowing the student nurse to improve and consolidate clinical skills, improve patient and time management in an environment of positive reinforcement and nurture (Nash et al., 2009). For this to be provided to the student nurse requires extensive support of the preceptor with ongoing education, and faculty monitoring to ensure that students' education needs are met (Warren & Denham, 2010). Eddy (2010) specified three broad categories to include in a preceptor development program: "program development, preceptor development, and preceptor performance post-educational intervention" (p. 198).

Preceptors are the key providers of individualized experiential learning opportunities for students in the senior practicum course (Bott et al., 2011). They not only need the "educational and experiential backgrounds in the students' area of practice" (Kim, 2007, p. 371), they also need the "ability to develop teaching skills, to meet students' everyday needs and to manage students' sense of insecurity" (Hsu et al., 2014, p. 214). The purpose of a preceptor development program is to provide preceptors with "tools to incorporate educational trends into their daily practices" (Bond et al., 2013, p. 2) and interactions with student nurses. In order for the preceptorship to be a useful teaching-learning strategy, it needs to be guided by well-designed education, orientation and evaluation criteria (Payne et al., 2014).

Hyrkas et al., (2014) and McCarthy and Murphy (2010) stated that despite the implementation of a preceptor development course, both internationally and domestically preceptors continued to feel ill-prepared for the precepting role. It has been estimated that 86% of U.S. accredited pre-licensure nursing programs use a preceptor model in undergraduate nursing education (McClure & Black, 2013). The statements by preceptors of feeling ill-prepared

may be in part due to shorter hospital stays, greater turnover of patients and a reduction in nursing staff leading to severe demands being placed on preceptors while they also educate and assess student nurses in clinical practice (McCarthy & Murphy, 2010).

Martensson et al. (2013) found that the experiences of the preceptor role can be integrated into three dominant themes:

> role ambiguity (lack of clear descriptions and a gap what is envisioned and reality), role conflict (manager's lack of recognition of extra work), and role overload (work overload and stress resulting from a lack of understanding on the part of managers and co-workers). (p. 445).

Many preceptors within a senior practicum course are "given their position on the basis of availability and willingness but may lack the skills required for quality teaching" (Hsu et al., 2014, p. 214). Although clinical experience is necessary, it is not a sufficient determinant for a good preceptor. Every nurse may be capable of undertaking a preceptoring role, however, the effective accomplishment of this activity requires an array of clinical, personal, and academic qualities developed over time (McCarthy & Murphy, 2010). Upon selection of the preceptor, faculty must assess their ability to conduct individualized teaching and help students set goals for their learning (Hsu et al., 2014). Teaching competencies are defined as an "integrated set of personal characteristics, knowledge, skills, and attitudes that are needed for effective performance in various teaching context" (Hsu et al., 2014, p. 214). Faculty must consider it important to "explore the preceptors' teaching competencies as they guide students in clinical practice" (Hsu et al., 2014, p. 214). Four factors of clinical teaching competencies are identified as: student evaluation; goal setting, and individual teaching; teaching strategies; and demonstration of organized knowledge (Hsu et al., 2014). Preceptors should be "attentive to the

different learning objectives, capabilities, and needs of the individual and facilitate a positive clinical experience for the student" (Hsu et al., 2014 p. 221). In order to successfully guide students during the experiential process and for transfer of learning to occur, preceptors must recognize, understand, and value the performance outcomes recommended by professional leaders (Bond et al., 2013).

Successful preceptor development and training includes a variety of educational activities and resources to meet the diverse needs of all preceptors as part of their continuing professional development (Vos & Trewett, 2012), with the understanding that "preceptors are adult learners and have many different preferred learning styles" (Vos & Trewett, 2012, p. 1). An organized approach assists preceptor teaching that encourages student nurses to become more holistic in their views and learn to think like a nurse in clinical practice (Hsu et al., 2014). Vos and Trewett (2012) found that "preceptors who had received training were more confident than preceptors who had not received training in clarifying expectations, evaluating a student's knowledge, and fostering critical thinking skills" (p. 1). Preceptors who have a "concrete knowledge about what is expected and adequate guidelines to assist them in their roles, tend to be more highly motivated and fulfilled as they assist nursing students to learn skill competencies and professional roles" (Warren & Denham, 2010, p. 8). For adequate preceptor preparation, both formal and informal opportunities to meet the preceptors teaching and learning needs must be met. Formal opportunities would include preceptor education and informal opportunities such as networking, partnership, and collaboration with the educational institution.

Preceptor development programs should focus on the program goals, specific course objectives and student assignments so that preceptors can "design and plan experiential activities and to effectively teach and evaluate students" (Payne et al., 2014, p. 172). The emphasis should

be focused on "teaching precepting skills rather than on the student tasks and activities to be reinforced" (Bond et al., 2013, p. 2).

Transition to Practice

Transition has been defined as "starting with an ending, followed by a period of confusion and distress and leading to a new beginning" (Nash et al., 2009, p. 48). It is the transition of newly graduated nurses from an educational program into the professional practice that has been widely recognized as a long-standing issue and a period of stress, role adjustment, and reality shock (Fink, Krugman, Casey, & Goode, 2008). Recognized as multidimensional, complex, and challenging, transition has been identified as a period of adjustment and transition for the newly graduated nurse (Cleary et al., 2013; Feng and Tsai, 2012; Niemi et al., 2014; Lee et al, 2009; Owens, 2013; Parker et al, 2014; Rudman et al., 2014; Tastan et al., 2013). The pre-transition process enables the student nurse to "build their clinical confidence and consolidate their clinical skills, while developing positive professional qualities and work attitudes" while concurrently beginning to "fully understand their prospective responsibilities as professionals and comprehend the boundaries that define safe and ethical practice" (Nash et al., 2009, p. 49). It is during the pre-transition period when the student nurse may become more aware that their skill levels do not match the expectations of the role and responsibilities of a practicing registered nurse underscoring the importance of the opportunity of the student nurse to put theory into practice (Nash et al., 2009).

The transition period, lasting from one to two years, may be a significant source of burnout and attrition, and may possibly have a significant impact on the future career direction of the newly graduated nurses (Diefenbeck et al., 2015; Parker et al., 2014; Tastan et al., 2013). For

the newly graduated nurses, the first three to six months in the hospital are especially frustrating and stressful, resulting in high turnover (Tsai et al., 2014).

As newly graduated nurses, 66.3% will work in staff nurse positions (Rush et al., 2013; Zigmont et al., 2015) and will make up approximately 10% of the clinical nurses in hospitals and health systems; working in a variety of settings and roles, increasing the nurse workforce in a relatively short time period (Rhodes et al, 2013). This is in part due to economic improvement and nurses who have delayed retirement that are now leaving the workforce. It is important that healthcare organizations hire new graduates who "will stay, grow in competence, and meet performance expectations" (Weathers & Raleigh, 2013, p. 469).

Newly graduated nurses often experience *reality shock* as they transition from the academics of nursing education to the clinical reality of nursing practice (Nash et al., 2009; Owens, 2013; Palumbo et al., 2012). This frequently occurs when the newly graduated nurse faces a cultural shift from university to clinical practice, where there is a change in expectations of the new graduates' competence, inadequate staffing levels, and a lack of formalized support (Horsburgh & Ross, 2013) to assist the newly graduated nurse in his/her transitional experience. It is the adjustment of the new graduates' internal expectations of the RN role and the external realities of which he/she may not feel adequately prepared. The newly graduated nurse may feel that there is a major disconnection between the "values and practice patterns instilled as a student and those fostered by their professional peers, particularly with the abrupt end to the support and mentoring received as a student upon entering the working world" (Diefenbeck et al., 2015, p. 131). Newly graduated nurses have reported that they have

> felt there was a deficiency in clinical practice opportunities during undergraduate education even with the integration of critical thinking skills in nursing education

> programs and the recognition that students cannot be prepared for every situation they may encounter in clinical practice. (Rush et al., 2013, p. 353)

Estimates of newly graduated nurses predict that 50% leave their employment during the first year (Niemi et al., 2014; Parker et al., 2014) and that there is a "voluntary turnover rate of 30% in the first year of employment and 57% within two years" (Feng & Tsai, 2012, p. 2065). The personal impact of transitional stress on the newly graduated nurse and a "financial loss for acute care hospitals estimated at $40,000 per graduate nurse who leaves in the first year of practice" (Fink et al., 2008, p. 341) has grave consequences for healthcare systems.

Expectations from nurse leaders, healthcare organizations and perhaps even the newly graduated nurses themselves communicate that one should and will be ready from the first day of employment in the healthcare system This places a great amount of stress on the newly graduated nurse as one feels a strong degree of role insufficiency in assuming the behaviors attached to the nursing role. Newly graduated nurses' satisfaction with their experience is largely contingent on the capacities of unit staff, nurse leaders, and organizations to engage the newly graduated nurse, supporting one's learning and gradual assumption of the full expectations and responsibilities of a RN. (Parker et al., 2014; Weiss, 1984).

Benner Novice to Expert

Benner (2001) provided a strong model of nursing competencies as the student nurse, newly graduated nurse, and experienced nurse moved through five levels of proficiency. Raines (2010) stated that "competencies are characteristics that drive performance in a given job, role or function with nurse competency defined as the ability to perform or act with desirable outcomes under the varied circumstances of the real world" (p. 163). In order to be considered competent,

the nurse needs to be able to interpret the context of the situation, have a repertoire of possible actions to take, and have learned how to enact the possible actions (Raines, 2010).

Benner (2001) incorporated the "Dreyfus Model of Skills Acquisition which states that student nurses and nurses pass through five levels of proficiency: novice, advanced beginner, competent, proficient, and expert" (p. 13). These five levels of proficiency, which are the underpinning of Benner's (2001) model, are reflective of three general aspects of skilled performance:

> movement from reliance on abstract principles to the use of past concrete experiences; change in the learner's perception of the demand situation, in which the situation is seen as less of a compilation of equally relevant bits, to more of a complete whole in which only certain parts are relevant; and, detached observer to involved performer, where the performer no longer stands outside the situation but is now engaged in the situation. (p. 13)

The novice to expert model begins with the novice nurse, having little had "no experience of the situation in which they are expected to perform" (Benner, 2001, p. 20). Advanced beginners are considered the newly graduated nurse (Benner, 2001; Fiedler et al., 2014; Fisher, 2014; Theisen & Sandau, 2013; Weathers & Raleigh, 2013). The advanced beginner is able to demonstrate marginally acceptable performance, having coped with enough real situations to not be shocked by the recurring meaningful situational components. However, like the novice who would be considered the student nurse, the advanced beginner can take in little of the situation. The advanced beginner continues to concentrate on remembering the rules he/she have been taught in this new, complex environment of which they are now a part. As an advanced beginner, newly graduated nurses require more support to incorporate and develop his/her critical thinking

abilities and practical skills (Theisen & Sandau, 2013). Due to the inability of the newly graduated nurse to apply critical thinking skills to complex situations, a complex patient in a fast-paced healthcare environment is challenging because it "demands recognition of and response to subtle changes that result in delivery of safe patient care to prevent errors" (Sorrentino, 2013, p. 83).

The competent nurse is one who has worked in the same or similar situations for two to three years and has begun to see their "actions in terms of long-range goals of which they are consciously aware, having feelings of mastery and the ability to cope with and manage the many contingencies of clinical nursing" (Benner, 2001, pp. 26-27). Benner (2001) placed most newly graduated nurses at the level of advanced beginner, instead of competence, "proposing that competence develops only with growth as a result of the same type of patient care experiences over two to three years" (Weathers & Raleigh, 2013, p. 468). The nurse considered proficient "perceives situations as a whole because they perceive its meaning in terms of long-term goals" (Benner, 2001, p. 27).

Benner's (2001) model of novice to expert nurse provides a framework to explain the "gap between the knowledge of a new nurse and that of an experienced nurse, which is why it has been accepted by several nurse residency programs" (Theisen & Sandau, 2013, p. 407)

Healthcare Organizations

Healthcare administrators, educators, and the public have become "progressively more alert to the need to recruit, mentor, and retain newly graduated nurses due to current trends and predicted nursing shortages" (Owens, 2013, p. 1). Central to recruitment and retention concerns has been "newly graduated nurses' transition to practice heightened by the movement of nursing education into universities, the growing acuity and complexity of care, and technological

advancements all of which have been identified as a global phenomenon" (Rush et al., 2013, p. 346).

Newly graduated nurses are "expected to be job ready in work environments that experienced nurses report are both demanding and difficult" (Craig et al., 2012, p. 202). This has been demonstrated by a "significant and problematic developmental lag existing between being a student nurse and entering the workplace as a graduate nurse" (Rush et al., 2013, p. 346). Newly graduated nurses have acquired the "education and competencies needed to obtain nursing licensure yet are not fully prepared for the job expectations they encounter" (Biggs & Schriner, 2010, p. 317); this being recognized by many healthcare organizations. This may have grave consequences for healthcare organizations, as vacancies are coming available due to both retirement of an aging work force and high turnover rates for new graduates, both of which are most likely to be filled with newly graduated nurses (Theisen & Sandau, 2013).

Concerns have been raised by healthcare organizations of the risk of compromised patient safety when patients are cared for by a novice nurse based on documentation of near misses, omissions, and errors in the performance of clinical skills (Palumbo et al., 2012; Rush et al, 2013). Newly graduated nurses often have little clinical experience, creating economic and fiscal stress that stretches the available resources of the organization (Theisen & Sandau, 2013). Healthcare delivery systems are facing a tremendous transformation including: "rapid technological change, accelerating patient turnover rates, rising acuity of patients, increasing complexity of patient care needs and reimbursement constraints, which place pressure on nursing personnel" (Feng & Tsai, 2012, p. 2064), all of which may have a direct effect on safe, quality patient care.

There is also a gap between perceptions of academic leaders and hospital nurse executives about the preparedness of new nurses. Rhodes et al. (2013) found that 90% of nurse educators in nursing programs perceived newly graduated nurses to be ready to practice in the hospital setting. At the same time hospital "nurse leaders have voiced concerns regarding the ability of newly graduated nurses to function independently in the hospital setting" (Rhodes et al., 2013, p. 524). Although many new graduates meet basic expectations of patient care assessments and changes, "learning needs still exist regarding initiating decisions, differentiating urgency, reporting essential data, anticipating relevant medical orders, and identifying rationale for decision-making" (Rhodes et al., 2013, p. 525). New graduated nurse transitional programs have "emerged to facilitate and support the development and integration of the newly graduated nurse into the workplace" (Rush et al., 2013, p. 346). The potential benefits of a senior practicum course specifically for healthcare institutions has been addressed in the literature, however it is not well substantiated with data making it difficult to confirm this assumption (Rebeschi & Aronson, 2009).

Retention of Newly Graduated Nurses

Retention rates of newly graduated nurses indicate the "number or percentage of new graduates remaining at an organization at the end of a defined period" (Rush et al., 2013, p. 350). Turnover rates represent a "calculated percentage of the number of new graduates leaving an organization within 12 months of their hire date divided by the number of new graduates hired during the same time period" (Rush et al., p. 350). The United States has a projected a nursing shortage reaching to 260,000 registered nurses by the year 2025 (Rhodes et al., 2013). This is in part due to a growing population of elderly patients, creation of more roles within nursing, and older nurses in the workforce retiring. Other reasons include insufficient staff numbers with an

increase of workload for those left behind, too few graduates, comparatively low salary and a stressful work environment (Cleary et al., 2013).

The newly graduated nurse has the inexperience and inability to deal with complicated situations as demonstrated by a turnover rate of 30-60% in the first year of employment (Lee et al., 2009; Owens, 2013). Newly graduated nurses come from a variety of nursing educational programs all with a variation of skill level for clinical practice as a RN. There are also grave concerns of nurse leadership in the readiness of the newly graduated nurse to assume positions in complex healthcare systems. There is the sudden responsibility incumbent of the newly graduated nurse for not only specific patient care but also the "learning curve present on many clinical units" (Theisen & Sandau, 2013, p. 409). With nursing turnover rates negatively impacting patient care, nursing care, and financial outcomes, it has been estimated that turnover costs for new graduates is $856 million for healthcare organizations (Fiedler et al., 2014). Professional turnover, the result of experienced nurses leaving the profession, also has all the disadvantages of job turnover, in that it is "costly, causing shortages and unstable nurse staffing that may compromise patient care" (Rudman et al., 2014, p. 613). It has been estimated that the cost per nurse turnover is approximately $22,000 to more than $64,000, which lends itself to financial strains as healthcare organizations may spend up to "$300,000 annually for every 1% increase in turnover" (Sorrentino, 2013, p. 83). With one-year turnover rates high among newly graduated nurses, "hiring decisions have a significant economic impact on the institution, making it imperative to select candidates who are likely to succeed and stay" (Weathers & Raleigh, 2013, p. 468).

Healthcare systems have become alarmed at turnover costs particularly in view of high turnover rates of new employees not only impacting the healthcare systems turnover cost, but

also affecting patient safety (Lee et al., 2009). From the perspective of the healthcare system, "unsafe nurses are not only a quality issue but also a financial one, given that unsafe, dissatisfied new nurses are likely to leave their position in the first year" (Palumbo et al., 2012, p. 474). Rudman et al. (2014) reported a "strong link has been established between intention to leave the nursing profession and a subsequent decision to actually leave with the intention to leave a significant predictor for actually leaving the profession" (p. 613). It is more efficient for healthcare organizations to keep new graduates in the profession than it is to continually hire and train new graduates.

In response to the significant costs of turnover of newly graduated nurses for healthcare organizations, hospitals must implement strategies to support and provide learning opportunities for the new graduates during their first year (Wiseman, 2013) by providing "clear direction and expectations for new graduates" (Theisen & Sandau, 2013, p. 410), and "deal assertively and constructively with training, recruitment, retention, and the prevention of disillusionment" (Cleary et al., 2013, p. 2606). Healthcare policy makers need to play a role in the retention of newly graduated nurses by being "aware of the value of ensuring that care providers in general have a satisfactory work environment and time to learn and develop" (Rudman et al., 2014, p. 621).

Newly Graduated Nurse Transition Programs

Parker et al. (2014) reported that the "newly graduated nurses' ability to assimilate into a workforce, workplace and cultural milieu is challenged by an environment of constant change and complex organizational and social dynamics" (p. 150). Newly graduated nurses' stress comes from both organizational (shift rotations, high job demand, lack of support from peers, inability to reach physicians, unfamiliarity with situations, lack of essential resources, work

overload, low organizational commitment) and professional factors (role ambiguity, lack of knowledge and skills, sudden increase in responsibility, awareness of individual accountability) (Feng & Tsai, 2012). There are many distressing events filling the transition period for the newly graduated nurse. Although not limited to, these events include: "overloads of work and responsibility, the fear of making mistakes, clinical skills deficits, inconsistent preceptors, having to cope with patients' deaths, and time management" (Tastan et al., 2013, p. 406). The transition to practice is to a "large degree a personal journey of learning to negotiate the workplace culture, building skill and confidence over time" (Parker et al., 2014, p. 155). In learning to balance the needs of the patient and the environment the biggest issue identified by newly graduated nurses is the "discrepancy between the amount and quality of support they believe they required and the amount and quality of support they received" (Parker et al., 2014, p. 155). This perception of the lack of support of the newly graduated nurse may be the largest contributor for staying or leaving the profession.

Nursing leadership and national associations. Healthcare system nursing leadership and national associations have recommended that there be an expansion and extension of clinical residencies for newly graduated nurses. The American Future of Nursing Report (2010) iterates that there is a "need to better manage the transition from student to RN in order to reduce the high turnover rate and support the development of the nursing workforce in the future" (Haggerty et al., 2013, p. 162). Both the Institute of Medicine (IOM) and the Robert Wood Johnson Foundation (RWJF) have made four key recommendations within the Future of Nursing report, which includes student nurses, newly graduated nurses, and experienced nurses. These recommendations include:

> RN's should practice to the full extent of their education and training; scope of practice limitations should be removed; nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression; nurses should be full partners with other healthcare professionals in redesigning health care in the United States; and effective workforce planning and policy making requires better data collection and an improved information infrastructure. (IOM of the National Academies, 2010)

The American Association of Colleges of Nursing (AACN) are behind another recommendation from the IOM report to "increase the number of nurses with baccalaureate degrees from 50% to 80% by 2020 and encouraging nurses with associate degrees and diplomas to enter baccalaureate programs within five years of graduation" (AACN Policy Brief, 2010). This coincides with nurse leaders identifying better critical thinking skills with BSN-prepared nurses; however, the newly graduated nurse has similar developmental needs, regardless of educational preparation type (Weathers & Raleigh, 2013).

Socialization to the culture of the unit and to nursing, as well as the need to make adjustments in their personal lives, tends to be an overall trend of difficulty for the newly graduated nurse (Feng and Tsai, 2012; Parker et al., 2014). Several strategies have been suggested related to educational preparation, socialization, and introduction to working life to decrease turnover and attrition of newly graduated nurse. This can occur through the use of a realistic and pedagogical sound orientation program, "qualified mentors and decent work environments (e.g. reduced job demands and workload)" (Rudman et al., 2014, p. 622). Administrators, educators and nurse leaders can benefit from "an awareness of newly graduated

nurses' concerns and ensure appropriate workforce planning and the provision of supportive infrastructure and processes" (Cleary et al., 2013, p. 2905).

Residency programs. The increase of newly graduated nurse residencies has been recommended to decrease the turnover rate of newly graduated nurses and to increase safe, quality patient-care. Newly graduated nurses frequently receive a less than adequate transitional orientation for a variety of reasons leading to many new graduates becoming disappointed about the reality of nursing work and not having the ability to provide the care that they aspire to provide (Cleary et al., 2013).

The length of clinical nurse residencies having been "expanded from 5 to 6 weeks in 2008 to 11 to 12 weeks in 2010" (Craig et al., 2012, p. 206) has not greatly increased safe, quality patient-care or decreased turnover rates among newly graduated nurses. The orientation program should be designed to retain the newly graduated nurse for the critical period of one year after hire. Yearlong nurse residency programs have evolved within many healthcare organizations (Theisen & Sandau, 2013). This requires the newly graduated nurse to be with an assigned experienced preceptor for six months, followed by organizational support for the following six months. Organizational support has been defined as (1) "strategies for providing feedback, and (2) opportunities for reflection" (Palumbo et al., 2012, p. 473). Fiedler et al., (2014) noted that the "turnover rate of new graduates after the yearlong planned and appropriately executed residency to be much lower than the current national average for all RN's of 14.7%" (p. 421). By providing orientations that use innovative learning strategies, there has been reported an improvement in outcomes including "increased retention rates, greater levels of job satisfaction, increased commitment to organizations, improved competency, and patient outcomes" (Zigmont et al., 2015, p. 80). Developing an orientation experience should include the

use of adult learning theory. Through the use of experiential learning theory and deliberate practice, learning is viewed as a continuous process with knowledge created by "transforming experience into existing cognitive frameworks and changing the way a person thinks and behaves" (Zigmont et al., 2015, p. 80). This calls for a more individualized approach with a focus on "skill development, formal training for preceptors, mentoring on the unit, consideration of patient care and level of acuity, and constructive feedback" (Zigmont et al., 2015, p. 80). The failure to cultivate the newly graduated nurse and provide a nurturing atmosphere may contribute to attrition during the first year of employment due to feelings of inadequacy in response to feeling overwhelmed, unsupported, and disillusioned (Owens, 2013).

Summary

The "use of a preceptorship in the final semester of a nursing education program can reduce reality shock and ease students' transition" (Kim, 2007, p. 370) into the role of a newly graduated nurse. As a process, the preceptorship assists the senior student nurse to integrate increasingly complex knowledge and skills before assuming the professional nurses' role (Carlson, 2012; Kim, 2007). By creating a learner-centered environment, the preceptor prepares students for their future role as staff nurses, assisting the student in developing clinical competence and confidence in making the transition to the role of the professional nurse (Bott et al., 2011; Hsu et al, 2014). Through seeking and exploiting opportunities and making decisions, the student nurse has identified these competencies as most influenced by the preceptorship experience resulting in a higher self-rating of levels of adaptive competencies (Stutsky & Laschinger, 1995). The demand for effective student training in knowledge and competencies has "increased in response to labor market needs" (Bassendowski et al., 2010, p. 23). Reported by Rebeschi and Aronson (2009), "new graduates tend to stay at their senior practicum

institutions for the first year or two after graduation" (p. 11) resulting in positive outcome for healthcare organizations, university programs, and the graduate nurse. The newly graduated nurses' entry into practice provides an opportunity for orientation to the professional world of nursing. The transition process can determine the difference between a successful career and abandoning the profession (Feng & Tsai, 2012). Turnover of newly graduated nurses is of particular concern "given that one in four new graduates leave the hospital setting within the first-year, and the majority leaving the hospital within 18 months" (Zigmont et al., 2015, p. 80). As the hospital is the site of the socialization of newly graduated nurses, his/her initial experiences in the hospital are important to retention, job satisfaction and role identification (Feng & Tsai, 2012).

Even with the implementation of a senior practicum course, the effects of unsuccessful transitioning from the student status to professional status has been seen in many healthcare organization through lower work productivity, decrease in job satisfaction and burnout or attrition (Kim, 2007). Although senior student nurses who had a positive preceptorship experience demonstrate higher levels of role transition, professional role conception, and perception of performance as compared with nurses who did not have positive preceptorship experiences (Kim, 2007, p. 371) there remains the significance of newly graduated nurse turnover within healthcare systems. Through a planned senior practicum course, student nurses learn to think as a nurse, including an open-minded approach to implications, options, and individual variations in response to interventions (Nelson et al., 2012). With a senior practicum course in place for the vast majority of baccalaureate nursing programs, are student nurses prepared for the newly graduated nurse role? A large majority of baccalaureate nursing programs have initiated a senior practicum course in their curriculum. The effectiveness of the senior

practicum course, heralded as best practice, has not been captured in the literature following the student nurse entering into practice. To date, there have been minimal quantitative studies completed that look at the senior practicum course and the newly graduated nurses' transition to practice.

CHAPTER THREE: METHODOLOGY

Overview

The purpose of this study was to use survey data to examine the relationship between the number of grouped direct acute care hours in a senior practicum course during pre-licensure nursing education and the newly graduated nurses' perception of professional competence scores during the third to sixth month of employment in the healthcare system. Chapter Three will elaborate on the design, participants and setting, instrumentation, procedures, and data analysis selected for this study.

Design

A correlational design was used in this study to compare the relationship between the number of grouped direct acute care hours within a senior practicum course in pre-licensure nursing education and the newly graduated nurses' perception of professional competence scores in the third to sixth month of practice on the clinical unit. This design was appropriate for this study as it allowed the researcher to determine the strength and direction of the relationship between the predictor variable (grouped direct acute care hours within a senior practicum course in pre-licensure nursing education) and the criterion variable (newly graduated nurses' perception of professional competence score during the third to sixth month of practice). This is a similar design to the study conducted by Kim (2007) in which the researcher "examined the perceptions of senior nursing students in their clinical preceptorship experiences and the relationship between their level of competence in providing nursing care to patients and their degree of interaction with their assigned preceptor" (p. 372). A correlational design is integral to this study as it was a good fit for the research question in determining a relationship between grouped direct acute care hours in a senior practicum course in pre-licensure nursing education

and the newly graduated nurses' perception of professional competence scores during the third to sixth month of practice.

Research Question

The research question for this study was as follows:

RQ1: Do the number of direct acute care hours within a senior practicum course in pre-licensure nursing education have a relationship to the newly graduated nurses' perception of professional competence scores as measured by the Nurse Professional Competence (NPC) scale during the third to sixth month of employment?

Null Hypotheses

The null hypothesis was as follows:

$H_0$1: There is no statistically significant relationship between the number of direct acute care hours in a senior practicum course in pre-licensure nursing education and the newly graduated nurses' perception of professional competence score as measured by the NPC scale during the third to sixth month of employment.

Participants and Setting

Participants were selected through a convenience sample of newly graduated nurses during their third to sixth month of practice on the clinical unit within a healthcare system in Virginia. A convenience sample was appropriate for this study on the basis that participants would be solicited from the email addresses of new hires between the months of January, February, March, April, May, June, and July 2017. The healthcare system was a large, faith-based, not-for-profit organization with seven distinct hospitals. Each hospital within the healthcare system had a different bed count and specialty. The healthcare system was chosen based on the researchers' relationship with the nurse educators of each hospital through an

Academic-Service Partnership with the College of Nursing. The time for gathering the survey data (during the third to sixth month of employment) was specifically chosen based on the literature review to coincide with the time that a newly graduated nurse experienced the highest job-related stress (Lee et al., 2009; Nash et al., 2009; Owens, 2013), during the third to sixth month of employment.

To be considered a newly graduated nurse, participants graduated from an accredited pre-licensure nursing program including Diploma, Associates, or Baccalaureate nursing programs and have passed the NCLEX® examination. Recruitment of participants was completed using a list of email addresses for all new hires between the months of January, February, March, April, May, June, and July 2017, obtained from the Human Resources Department of the healthcare system which may also include RNs who were not newly graduated.

For this research study, the number of participants sampled was 44. This exceeds the minimum requirement for a medium effect size. According to Gall, Gall, and Borg (2007), 42 participants would be the minimum required for a medium effect size with a statistical power of .5 at a .05 alpha level (p. 145). The sample came from seven hospitals, four within Central Virginia, and three near the eastern coast of Virginia. Although each of these hospitals was under one healthcare system, each one had a specific specialty and a different clientele based on population demographics. Each of the hospitals had a centralized new graduate orientation with a specified length of orientation based upon the clinical area to which the new graduate was going to work. This sample consisted of two males and 42 females. This is not unusual within the field of nursing where males make up “approximately 7% of the nursing workforce” (Colby, 2012, p. 36). The average age of the participants was 27 years old. This is not unusual in that there are many new nurses who have completed their second degree. Participant gender, age, type of

employment, type of pre-licensure nursing education, participation in a senior practicum course, number of direct care hours in senior practicum course, designated preceptor, and length of time on the clinical unit central tendencies were collected from each new graduated nurse participant.

Instrumentation

The NPC scale (see Appendix A) was developed in 2014 in Sweden and is used to measure the perceptions of professional competence in both the student nurse and the practicing nurse (Nilsson et al., 2014). The instrument is based on World Health Organization (WHO) guidelines and the Swedish Board of Health and Welfare formal competence requirements (Nilsson et al., 2014). Within the literature, it has been established that a "high degree of clinical competence among nurses has been shown to be associated with lower mortality rates among patients within hospital settings" (Nilsson, Gardulf, and Lepp, 2016, p. 100). The NPC scale was validated in Sweden using 1086 student nurses from 11 universities within Sweden. Nilsson et al., (2014) state that the "psychometric properties of the NPC scale were comprehensively tested and found satisfactory with results indicating that this instrument can make a valuable contribution to safe high-quality patient care by assessing nurses' competence from various perspectives" (p, 578). It further stated that "all factors achieved Cronbach's alpha values greater than 0.70 and evidence of known-group validity was obtained" (Nilsson et al., 2014, p. 574). Further, the NPC scale was found to have a reliability of each of the scaled items a Cronbach's alpha of 0.75 - 0.96 with a 0.97 for the entire NPC scale (Nilsson et al., 2014). The NPC scale is an 88-items survey and examines eight principal areas considered necessary for nurse competence on the clinical unit and includes: nursing care; value-based nursing care; medical technical care; teaching/learning and support; documentation and information technology; legislation in nursing and safety planning; leadership in and development of nursing; and

education and supervision of staff/students. Each item under the eight major categories is listed as a sentence using a 5-point Likert scale one to four with 1 = to a very low degree; 2 = to a relatively low degree; 3 = to a relatively high degree; and 4 = to a very high degree. The fifth option is for those who are undecided and listed as, 5 = cannot take a standpoint.

This instrument was chosen for this study as it has the "capacity to evaluate the quality of nursing education programmes and to identify skill gaps in clinical care" (Nilsson et al., 2014, p. 578). This is due to NPC scales' capability to assess the level of ability of the nurse, whether it is a student nurse or a practicing nurse, to perform nursing tasks. Although this instrument is considered relatively new, there have been studies conducted that articulates the importance of using a reliable and valid tool to assess nurse competence (Leskell, Gadulf, Nilsson, and Lepp, 2015; Nilsson et al., 2014; Theander et al., 2016). Permission to use this instrument was requested through Rightslink and granted (see Appendix B).

Procedures

Institutional Review Board (IRB) approval was obtained from Liberty University's IRB (see Appendix C) and the healthcare organization's IRB (see Appendix E) prior to data collection and to the survey being sent out to prospective participants. Participants were obtained from a list of new hires between January, February, March, April, May, June, and July 2017, given to the researcher from the Human Resources department of the healthcare system in Virginia. The list of participant information included: name, email address, start date, and clinical unit on which the participant worked. An email to the participants was sent through the researchers' Liberty University Outlook account in order to have a record of the number of participants solicited for this study. In the recruitment email, each potential participant received a statement of purpose for the study (see Appendix F) and consent to participate in the study (see

Appendix D). Upon reading the recruitment email (see Appendix F), participants were asked to consent to the study (see Appendix D) by clicking on the link to the survey located at the bottom of the consent form. This link took the participant to the survey document. Once the participants were in the survey, written instructions for the study were available (see Appendix D). Following the instructions being read, the participants were asked if they agree to participate in the study by clicking on the yes button or decline participation in the study by clicking on the no button. The survey was completed electronically using Qualtrics at Liberty University with an expected time frame of no longer than one week to complete the survey from the date the survey was initiated by each participant. Responses to the survey were given a coding number for each of the participants within Qualtrics that was unidentifiable to the researcher. This code had no identifying information, thus ensuring participant confidentiality. Upon the close of the survey, all data was placed in SPSS 25, a statistical analysis product. It is from SPSS 25 that all data was processed for analysis.

Data Analysis

Descriptive statistics was used to report the central tendency (mean, standard deviation) of the participants, thereby describing and summarizing participant data. Correlational studies involved the observation of the relationship between two variables. Pearson product-moment correlation was an appropriate statistical test, as it looked at the grouped direct acute care hours within a senior practicum course in pre-licensure nursing education and the relationship this had on the perception of professional competence scores of the newly graduated nurse during three to six months of practice on the clinical unit. This correlational coefficient was useful in observing both the relation of newly graduated nurses' perception of professional competence scores and the direction of the perception scores in relation to the grouped direct care hours within a senior

practicum course in pre-licensure nursing education. This correlation was tested at the 95% confidence interval. The assumptions required for Pearson product-moment were: assumption of bivariate outliers which will be determined using a scatter plot between the predictor variable (x) and the criterion variable (y); assumption of linearity in which a scatterplot will be used between the predictor variable (x) and the criterion variable (y); and, assumption of bivariate normal distribution in which a scatterplot will be used between the predictor variable (x) and the criterion variable (y) (Plichta Kellar, & Kelvin, 2013).

CHAPTER FOUR: FINDINGS

Overview

The purpose of this correlational research design was to determine if the number of grouped direct acute care hours within a senior practicum course in pre-licensure nursing education have a relationship to the newly graduated nurses' perception of professional competence scores as measured by the Nurse Professional Competence (NPC) scale during the third to sixth month of employment.

Chapter Four will provide a comprehensive analyses and presentation of the research study results. The first section provides a descriptive analysis of the characteristics of the 44 participants in the survey, collected using the NPC scale. The subsequent sections address the research question and the corresponding hypothesis. The final section provides a summary of the findings.

Research Question

The research question for this study was as follows:

RQ1: Do the number of direct acute care hours within a senior practicum course in pre-licensure nursing education have a relationship to the newly graduated nurses' perception of professional competence scores as measured by the Nurse Professional Competence (NPC) scale during the third to sixth month of employment?

Null Hypotheses

The null hypothesis was as follows:

$H_0$1: There is no statistically significant relationship between the number of direct acute care hours in a senior practicum course in pre-licensure nursing education and the newly

graduated nurses' perception of professional competence score as measured by the NPC scale during the third to sixth month of employment.

Descriptive Statistics

The number of participant who responded to the Nurse Professional Competence survey were n = 75; however, (*n* = 43, 41.3%) did not meet the inclusion criteria and that data was removed from analysis. Consequently, the following analysis is based on the responses of n = 44, (*n* = 44, 58.7%) of the respondents. Table 4.1 represents the frequencies/number, percentages, mean, standard deviation and variance of reported participant characteristics.

The majority of participants (*n* = 42, 95.5%) are female. The age range of the participants was 21 years old to over 42 years old; with the majority of the participants being between the ages of 25 to 30 years old (*n* = 17, 38.6%). Seven participants were African-American (15.9%); two participants were Asian or Pacific Islander (4.5%); 32 participants were Caucasian (72.7%); two participants were Hispanic (4.5%), and one participant chose not to answer (2.3%). Forty-two participants (95.5%) had a designated preceptor for their senior practicum course with two participants (4.5%) not having a designated preceptor for their senior practicum course.

The majority of participants graduated from baccalaureate pre-licensure nursing education program (*n* = 38, 86.4%) with the majority of participants (*n* = 20, 45.5%) participating in a senior practicum course with 200-224 direct acute care hours. Participants were grouped based on hours of direct acute care within a senior practicum course in pre-licensure nursing education.

Table 4.1

Frequencies and Percentiles of Participant Characteristics

Variable	*f*	%	*M*	*SD*	s^2
Gender			1.95	.210	.044
Male	2	4.5			
Female	42	95.5			
Age			2.27	1.38	1.92
21-24 years	15	34.1			
25-30 years	17	38.6			
31-36 years	4	9.1			
37-41 years	1	2.3			
>42 years	7	15.9			
Ethnicity			3.59	1.26	1.59
African American	7	15.9			
American Indian /Alaskan Native	0	0			
Asian or Pacific Islander	2	4.5			
Caucasian	32	72.7			
Hispanic	2	4.5			
Other	0	0			
Prefer not to answer	1	2.3			
Employment			1.04	.301	.091
Full time	43	97.7			
Part time	0	0.0			
PRN	1	2.3			
Type of Nursing Program			1.02	.15	.023
Associates	6	13.6			
Diploma	0	0.0			
Baccalaureate	38	86.4			
Hours in Senior Practicum Course			3.81	1.52	2.33
125-149	7	15.9			
150-174	1	2.3			
175-199	3	6.8			
200-224	20	45.5			
225-249	10	22.7			
250-274	1	2.3			
275-299	2	4.5			
Designated Preceptor			1.04	.210	.044
Yes	42	95.5			
No	2	4.5			
Months on Unit as a Graduate Nurse			2.00	1.05	1.11
3 months	19	43.2			
4 months	11	25			

5 months	9	20.5
6 months	5	11.4
Greater than 7 months	0	0.0

Results

A Pearson product-moment correlation statistic was used for the statistical analysis of the data for the research question. Preliminary data screening was conducted to identify any data inconsistencies. No inconsistencies were found.

Assumptions

Using bivariate correlation as the basis for the analysis of the statistical data, there are assumptions required to be met to provide accurate interpretation of the data. Preliminary analysis showed that there were no violations in the assumptions of bivariate outliers, linearity, and bivariate normal distribution (Plichta Kellar, & Kelvin, 2013).

Assumption 1: This assumption assumes bivariate outliers do not measure differently in scores to other participant scores. This assumption was met as demonstrated in Figure 4.1.

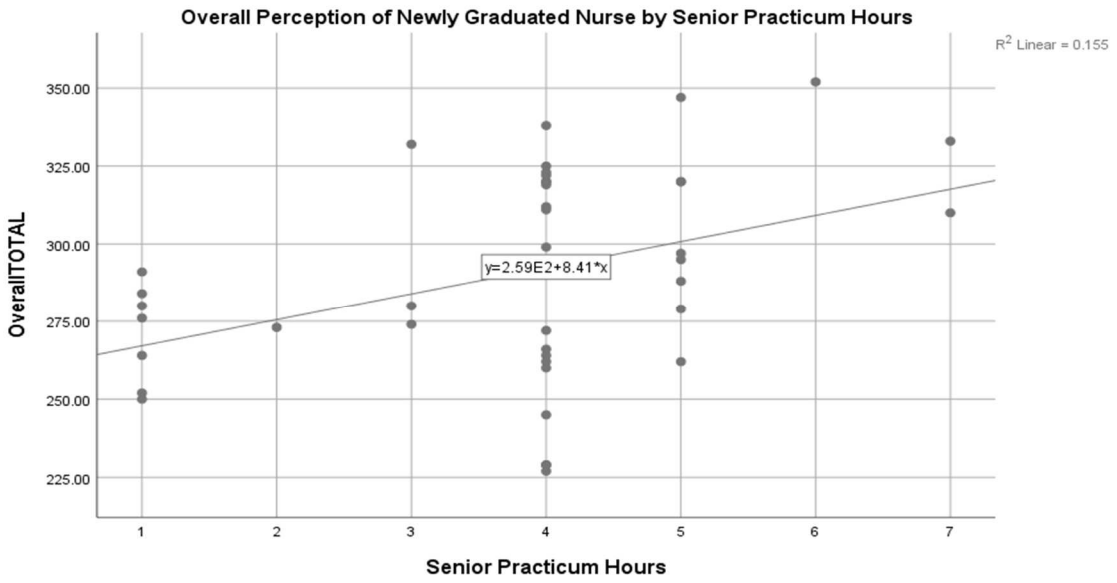

Figure 4.1 Scatterplot for the assumption of bivariate outliers, linearity, and bivariate normal distribution.

Assumption 2: This assumption presumes linearity; this is a relationship between the categories of direct acute care hours within a senior practicum course and the newly graduated nurses' perception of nurse competence. This assumption was met demonstrating a positive relationship; as the number of direct acute care hours increased within a senior practicum course in pre-licensure nursing education, there was an increase in the newly graduated nurses' perception of professional competence during the third to sixth month of employment. Figure 4.1 summarizes this finding.

Assumption 3: This assumption presumes that bivariate distribution (population distributions) is normal. Figure 4.1 demonstrates that this assumption was tenable.

Hypotheses

A Pearson Product Moment correlation was performed to test the null hypothesis that there is no statistically significant relationship between the number of direct acute care hours in a senior practicum course in pre-licensure nursing education and the newly graduated nurses' overall perception of professional competence scores during the third to sixth month of employment. The correlation, $r(42) = .394$, $p < .011$, two-tailed, was statistically significant. The null hypothesis was rejected at the $\alpha = .05$ level. Table 4.3 summarizes these results.

Table 4.2

Correlation Between Senior Practicum Hours and Overall Perception NPC

		Senior Practicum Hours	Overall Perception NPC
Senior Practicum Hours	Pearson Correlation	1	.394*
	p (2-tailed)		.011
	N	44	41
Overall Perception NPC	Pearson Correlation	.394	1
	p (2-tailed)	.011	
	N	41	41

*Correlation is significant at the 0.05 level (2-tailed).
Newly graduated nurses' perception of nurse professional competence (NPC) during the third to sixth month of employment based on the number of direct acute care hours completed in a senior practicum course in pre-licensure nursing education.

The perception of the newly graduated nurses' professional competence was measured using the NPC scale, comparing the categories of direct acute care hours within a senior practicum course. A Pearson product-moment correlation coefficient (*r*) was conducted to test the null hypothesis, that there is no relationship between grouped direct acute care hours in a senior practicum course in pre-licensure nursing education and the newly graduated nurses' perception of professional competence scores during the third to sixth month of employment (n = 44). There was significant evidence to reject the null hypothesis and conclude that there is a moderate positive relationship between grouped direct acute care hours in a senior practicum course in pre-licensure nursing education ($M = 3.82$, $SD = 1.529$, $s^2 = 2.338$) and newly graduated nurses' perception of professional competence scores during the third to sixth month of employment ($M = 290.29$, $SD = 33.37$, $s^2 = 993.13$). Therefore, the null hypothesis was rejected where $r(42) = .394$, $p<.011$, two-tailed.

Higher levels of perception of professional competence scores of the newly graduated nurse during the third to sixth month of employment were demonstrated with increasing hours of direct acute care hours in a senior practicum course within pre-licensure nursing education. The

number of direct acute care hours in a senior practicum course helps explain 15.5% of the variability in the newly graduated nurses' perception of professional competence. The other 84.5% of newly graduated nurses' perception of professional competence is in part influenced by "coping challenges, perceived knowledge deficits, difficulty managing stress, difficulty managing interpersonal conflicts, difficulty prioritizing tasks and care of patients, time management, not feeling cared about by coworkers and/or administration, and unrealistic career planning" (Bonczek, Quilan-Colwell, Tran, & Wines, 2016, p. 269).

Additional Analysis

Additional analysis was completed for each of the eight categories in the NPC scale in relationship to the number of direct acute care hours in a senior practicum course. Positive correlation as demonstrated in each of the following categories: value-based nursing ($M = 29.31$, $SD = 3.15$, $s^2 = 9.94$), $r(42) = .345$, $p < .022$); teaching/learning and support ($M = 34.40$, $SD = 5.40$, $s^2 = 29.17$), $r(42) = .389$, $p < .009$); documentation and information technology ($M = 13.88$, $SD = 1.87$, $s^2 = 3.49$), $r(42) = .350$, $p < .020$); leadership in and development of nursing ($M = 83.16$, $SD = 13.55$, $s^2 = 183.61$), $r(42) = .416$, $p < .006$); and, education and supervision of staff/student ($M = 12.97$, $SD = 4.60$, $s^2 = 21.23$), $r(42) = .336$, $p<.026$). Table 4.3 demonstrates the results of the relationship of newly graduated nurses' perception of professional competence scores within the individual categories of the NPC scale during the third to sixth month of employment and the overall grouped direct acute care hours within a senior practicum course in pre-licensure nursing education

Table 4.3

Relationship of Newly Graduated Nurses Perception of Competence Scores within the Individual Categories of the NPC scale During the Third to Sixth Month of Employment and Grouped Overall Direct Acute Care Hours within a Senior Practicum Course in Pre-licensure Nursing Education

NPC Scale	*n*	*M*	*SD*	s^2	*r*	*p*
Nursing Care	44	50.42	5.22	27.27	.102	.522
Value-Based Nursing Care	44	29.31	3.15	9.94	**.345***	.022
Medical Technical Care	44	34.77	3.83	14.69	.116	.454
Teaching/Learning and Support	44	36.40	5.40	29.17	**.389****	.009
Documentation and Information Technology	44	13.88	1.87	3.49	**.350***	.020
Legislation in Nursing and Safety Planning	44	30.65	3.77	14.23	.287	.059
Leadership In and Development of Nursing	44	83.16	13.55	183.61	**.416****	.006
Education and Supervision of Staff/Student	44	12.97	4.60	21.23	**.336***	.026

***Correlation is significant at the 0.05 level (2-tailed).
****Correlation is significant at the 0.01 level (2-tailed).
NPC = Nurse Professional Competence

Further correlational analysis of the eight categories of the NPC survey demonstrated significance for specific questions within each of the specific categories (nursing care, value-based nursing, medical technical care, teaching/learning and support, documentation and information technology, legislation in nursing and safety planning, leadership in and development of nursing, and education and support of staff/student). Within the category of nursing care, the question "I have the ability to meet the patient's psychological and social need" showed positive correlation as demonstrated in Table 4.4.

Table 4.4

Nursing Care

I have the ability to:	*n*	*M*	*SD*	s^2	*r*	*p*
Enhance patient care	44	3.41	.542	.296	.148	.338
Independently apply the nursing process (assessment)	43	3.47	.505	.254	-.039	.804
Independently apply the nursing process (nursing diagnosis)	43	3.16	.531	.272	-.045	.776
Independently apply the nursing process (nursing intervention)	44	3.27	.624	.381	-.093	.548
Independently apply the nursing process (planning, implementation, evaluation)	44	3.16	.608	.351	.082	.597
Meet the patient's basic physical needs	44	3.68	.471	.228	.015	.925
Meet the patient's specific physical needs	44	3.36	.532	.276	-.003	.987
Meet the patient's psychological and social needs	44	3.48	.590	.351	**.356***	.018
Meet the patient's cultural and spiritual needs	44	3.30	.701	.491	.181	.239
Manage changes in the patient's status	44	3.16	.479	.223	.040	.795
Document the patient's physical status	44	3.61	.493	.247	.059	.704
Manage changes in the patient's psychological status	44	3.36	.613	.371	.072	.642
Document the patient's psychological status	44	3.59	.497	.251	.175	.256
Recognize the patient's experiences and suffering	44	3.59	.542	.300	.161	.297
Alleviate the patient's experiences and suffering	44	3.16	.526	.272	.066	.672

***** Correlation is significant at the 0.05 level (2-tailed).

Within the category of value-based nursing care, the two questions "I have the ability to enhance the patients' and relatives' knowledge and experience," and "to contribute to a holistic view of the patient" each showed positive correlation as demonstrated in Table 4.5.

Table 4.5

Value-Based Nursing Care

I have the ability to:	*n*	*M*	*SD*	s^2	*r*	*p*
Respectfully communicate with patient's, relatives, and staff	44	3.80	.408	.163	.163	.291
Perform nursing care based on humanistic values	44	3.75	.534	.258	.228	.137
Show respect for patient autonomy, integrity, and dignity	44	3.80	.408	.166	.274	.071
Enhance the patients' and relatives' knowledge and experiences	44	3.52	.505	.255	**.367***	.014
Show respect for different values and beliefs	44	3.82	.390	.152	.177	.250
Act upon patients' and relatives' wishes and needs	44	3.66	.526	.276	.239	.118
Use principles of research ethics	44	3.41	.726	.526	.236	.123
Contribute to a holistic view of the patient	44	3.57	.501	.251	**.472****	.001

*Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Within the category of medical technical care, the question "I have the ability to support patients during examinations and treatments" showed positive correlation as demonstrated in Table 4.6.

Table 4.6

Medical Technical Care

I have the ability to:	*n*	*M*	*SD*	s^2	*r*	*p*
Manage drugs and clinical application of knowledge in pharmacology	44	3.16	.568	.323	.141	.361
Independently perform or participate in examinations and treatments	44	3.27	.585	.342	-.099	.522
Independently administer prescriptions	44	3.64	.532	.283	.117	.450
Pose questions about unclear instructions	44	3.61	.579	.336	-.081	.601
Support patients during examinations and treatments	44	3.55	.548	.300	**.399****	.007

Follow up on the patients' condition after examinations and treatments	44	3.45	.504	.254	.170	.269
Handle medical/technical equipment	44	3.45	.548	.300	.018	.909
Apply hygienic principles and routines	44	3.73	.451	.203	.163	.291
Prevent complications in relation to care	44	3.23	.565	.319	-.086	.580
Prevent transmission of pathogenic microorganisms	44	3.68	.471	.222	.144	.352

** Correlation is significant at the 0.01 level (2-tailed).

Within the category of teaching/learning and support, the four questions "I have the ability to inform and educate groups of patients and relatives," "make sure that information given to the patient is understood," "pay attention to patients who do not themselves express information needs," and "educate and support patients and relatives in groups to enhance health" showed positive correlation as demonstrated in Table 4.7.

Table 4.7

Teaching/Learning and Support

I have the ability to:	*n*	M	*SD*	s^2	*r*	*p*
Provide patients and relatives support to enhance participation in patient care	44	3.43	.501	.251	.196	.202
Inform and educate individual patients and relatives	44	3.20	.509	.260	.168	.275
Inform and educate groups of patients and relatives	44	3.09	.676	.457	**.354***	.018
Make sure that information given to the patient is understood	44	3.45	.589	.347	**.326***	.031
Pay attention to patients who do not themselves express information needs	44	3.45	.663	.440	**.496****	.001
Motivate the patient to adhere to treatments	44	3.23	.711	.505	.253	.098
Identify and prevent risk factors for ill health	44	3.32	.674	.455	.238	.120
Motivate changes in lifestyle	44	3.20	.795	.632	.242	.114
Identify and assess patient's ability						

to self-care	44	3.43	.587	.344	.297	.050
Educate and support patients and relatives individually to enhance health	44	3.36	.650	.423	.232	.130
Educate and support patients and relatives in groups to enhance health	44	3.23	.774	.598	**.390****	.009

** Correlation is significant at the 0.05 level (2-tailed).
*Correlation is significant at the 0.01 level (2-tailed).

Within the category of documentation and information technology, the two questions "I have the ability to make use of relevant data in patient records," and "scrutinize the quality of my own documentation" showed positive correlation as demonstrated in Table 4.8

Table 4.8

Documentation and Information Technology

I have the ability to:	*n*	*M*	*SD*	s^2	*r*	*p*
Make use of relevant data in patient records	44	3.48	.505	.255	**.326****	.031
Scrutinize the quality of my own documentation	44	3.48	.628	.395	**.334****	.026
Use information technology as a support in nursing care	44	3.43	.625	.391	.230	.133
Document according to current legislation	44	3.50	.591	.349	.232	.130

**Correlation is significant at the 0.05 level (2-tailed).

Within the category of legislation in nursing and safety planning, there were no questions that showed significance as demonstrated in Table 4.9.

Table 4.9

Legislation in Nursing and Safety Planning

I have the ability to:	*n*	*M*	*SD*	s^2	*r*	*p*
Comply with current legislation and routines	44	3.45	.504	.254	.049	.750
Handle sensitive personal data in a safe way	44	3.68	.471	.222	.273	.073
Advocate patients' rights	44	3.64	.574	.330	.294	.053
Provide contact with the right authority regarding patients' rights	44	3.52	.590	.348	.288	.058
Comply with safety routines and notify						

according to current legislation	44	3.45	.504	.254	.231	.132
Act adequately in the event of unprofessional conduct among employees	44	3.43	.661	.437	.263	.084
Manage violent and/or threatening situations	44	3.18	.843	.710	.080	.604
Act according to regulations in case of fire or other devastating events	44	3.27	.758	.575	.084	.588
Apply principles of disaster medicine	44	3.02	.927	.860	.183	.233

Within the category of leadership in and development of nursing, the 15 questions "I have the ability to motivate and contribute to a good care environment," "care for an esthetical care environment," "search and review relevant literature for evidence-based nursing," "implement new knowledge for evidence-based nursing," "initiate, participate in and/or carry out development activities for improved care," "initiate and participate in research," "continuously engage in professional development," "develop groups and manage conflict," "motivate the team and give feedback," "involve staff in how to develop patient care," "provide person-centered care with a focus on quality," "enhance research and development," "participate in strategic planning and evaluation," "interact with other professionals in care pathways," and "enhance information and communication to obtain continuity, effectiveness, and quality" showed positive correlation as demonstrated in Table 4.10.

Table 4.10

Leadership In and Development of Nursing

I have the ability to:	*n*	*M*	*SD*	s^2	*r*	*p*
Participate in continuous quality assurance and patient safety work	44	3.23	.611	.373	.222	.148
Act based on an environmentally friendly perspective	44	3.37	.655	.430	.197	.204
Motivate and contribute to a good care environment	44	3.56	.502	.252	**.381***	.011
Care for an esthetical care Environment	44	3.44	.629	.395	**.316***	.036

Participate in improvement of work environments	44	3.33	.778	.606	.191	.215
Observe work-related risks and prevent them	44	3.26	.581	.338	.083	.594
Critically reflect upon current routines and methods	44	3.30	.599	.359	.241	.114
Inspire dialog for implementation of new knowledge	44	3.16	.668	.473	.230	.133
Search and review relevant literature for evidence-based nursing	44	3.23	.649	.421	**.375***	.012
Implement new knowledge for evidence-based nursing	44	3.23	.751	.564	**.446****	.002
Initiate, participate in and/or carry out development activities for improved care	44	3.23	.718	.516	**.381***	.011
Initiate and participate in research	44	2.93	.910	.828	.261	.081
Independently analyze my own professional strength and weaknesses	44	3.44	.548	.300	.212	.167
Continuously engage in professional development	44	3.35	.613	.375	**.419****	.005
Lead and develop health staff teams	44	2.79	.888	.788	.244	.111
Evaluate actions taken by the health Staff	44	3.07	.856	.733	.084	.589
Develop groups and manage conflicts	44	2.91	.811	.658	**.362***	.016
Motivate the team and give feedback	44	3.07	.737	.543	**.450****	.002
Involve staff in how to develop patient care	44	3.05	.872	.760	**.465****	.001
Provide person-centered care with a focus on quality	44	3.47	.592	.350	**.562****	.000
Provide person-centered care with a focus on economy	44	3.07	.768	.590	.051	.742
Enhance research and development	44	2.81	.906	.822	**.378****	.011
Lead and provide nursing care based on best knowledge	44	3.16	.785	.616	.280	.066
Participate in strategic planning and evaluation	44	2.98	.859	.738	**.373***	.013
Interact with other professionals in care pathways	44	3.42	.663	.40	**.425****	.004
Enhance information and communication to obtain continuity, effectiveness, and quality	44	3.30	.741	.549	**.361***	.016

*Correlation is significant at the 0.05 level (1-tailed).

**Correlation is significant at the 0.01 level (1-tailed).

Within the category of teaching/learning and support, the two questions "I have the ability to teach, supervise, and assess students," and "enable mufti-professional education activities to optimize patient care" showed positive correlation as demonstrated in Table 4.11.

Table 4.11

Ed*ucation and Support of Staff/Student*

I have the ability to:	*n*	*M*	*SD*	s^2	*r*	*p*
Participate in supervision of staff/students in development activities for improved care	44	2.64	.892	.795	.240	.116
Teach, supervise, and assess students	44	2.52	1.17	1.37	**.340***	.024
Supervise and educate staff	44	2.50	1.22	1.51	.223	.146
Develop health-care teams	44	2.55	1.17	1.37	.265	.083
Enable multi-professional education activities to optimize patient care	44	2.77	1.09	1.09	**.321***	.033

*Correlation is significant at the 0.05 level (2-tailed),

CHAPTER FIVE: CONCLUSIONS

Overview

Chapter Five provides a discussion of the research results. The researcher will review the discussion of findings, conclusions of the findings, implications of the study for pre-licensure nursing education and healthcare systems, limitations of the study, and recommendations for future research.

Discussion

The Nurse Professional Competence (NPC) scale (Nilsson et al, 2014) was used to collect data from newly graduated nurses during the third to sixth month of employment on the clinical unit within a large healthcare system in Virginia. For this correlational study, the researcher administered the NPC with established valid and reliable variables (Cronbach alpha > .97) related to eight categories of nurse professional competence (nursing care, value-based nursing, medical technical care, teaching/learning and support, documentation and information technology, legislation in nursing and safety planning, leadership in and development of nursing, and education and support of staff/student). Nurse competence has been defined by both the American Nurses Association (ANA) and the Joint Commission on Accreditation of Healthcare Organizations (JACHO) as the "ability to perform according to defined expectations" (Theisen & Sandau, 2013, p. 407). It is during the pre-transition process (senior practicum course) that the student nurse is able to "build their clinical confidence and consolidate their clinical skills, while developing positive professional qualities and work attitudes" while concurrently beginning to "fully understand their prospective responsibilities as professionals and comprehend the boundaries that define safe and ethical practice" (Nash et al., 2009, p. 49).

The researcher used the demographics of the participants to capture important data as it pertained to the literature review, and to collect a variety of data to define the socio-demographic characteristics of the newly graduated nurse.

Evidence was provided to address the research question: Do the number of direct acute care hours within a senior practicum course in pre-licensure nursing education have a relationship to the newly graduated nurses' perception of professional competence scores as measured by the Nurse Professional Competence (NPC) scale during the third to sixth month of employment?

A group of 44 newly graduated nurses during the third to sixth month on the clinical unit within the healthcare system were grouped based on the number of direct acute care hours completed within the senior practicum course in pre-licensure nursing education. The relationship between grouped direct acute care hours (125-149; 150-174; 175-199; 200-224; 225-249; 250-274; and, 275-299) demonstrated a statistically significant moderate positive correlation between the number of direct acute hours within a senior practicum course in pre-licensure nursing education ($M = 3.82$, $SD = 1.529$, $s^2 = 2.338$) and newly graduated nurses' perception of professional competence during the third to sixth month of employment on the clinical unit ($M = 290.29$, $SD = 33.37$, $s^2 = 993.13$), $r(42) = .394$, $p = .011$). This was observed in five of the eight categories of the NPC scale: Value-Based Nursing Care, $r(42) = .345$, $p = .22$ (2-tailed); Teaching/Learning and Support $r(42) = .389$, $p = .009$ (2-tailed); Documentation and Information Technology, $r(42) = .350$, $p = .020$ (2-tailed), Leadership In and Development of Nursing, $r(42) = .416$, $p = .006$ (2-tailed), and Education and Supervision of Staff/Student, $r(42) = .336$, $p = .026$ (2-tailed). These results coincide with Numminen, Leino-Kilpi, Isoaho, Meretoja (2017) findings that "nurses felt well equipped for the core nursing tasks from the start

of their career" (p. 37). The remaining categories (Nursing Care, Medical Technical Care, and Legislation In Nursing and Safety Planning) demonstrated no significant correlation to direct acute care hours in pre-licensure nursing education and the perception of nurse professional competence scores for the newly graduated nurse.

These finding are not surprising in their positive correlation as it may be expected that both confidence and perception of competence would increase as the number of direct acute care hours within a senior practicum course increased. The majority of the participants had a designated preceptor (95.5%). These findings are collaborated with previous studies (Bott et al., 2011; Martin et al., 2011; O'Brien et al., 2014; Schroetter & Wender, 2008), where a well-planned senior practicum program meets the needs of senior student nurses by increasing his/her confidence and competence in the clinical setting through the use of a designated preceptor and may help hospitals and healthcare organizations "stabilize employment as well as cut orientation and turnover costs" (Kim, 2007, p. 370). Casey, Fink, Jaynes, Campbell, Cook, and Wilson (2016) state that there is "evidence that an intensive, preceptor-guided clinical experience for senior nursing students is effective in increasing the confidence of graduate nurses" (p. 648). Although there is evidence through bivariate correlation of an increased perception of competence as the hours within a senior practicum course increase, this does not imply causation.

There is a strong emphasis for newly graduated nurses to be prepared for their role as a RN. Both observations by healthcare organizations and nurse managers, as well as scores on hospital measures, indicate that this is clearly not happening. Turnover rates of newly graduated nurses continue to be a professional and financial liability for both clinical units within the healthcare system, healthcare organization, and more importantly, the effects that turnover of the

newly graduated nurses may have on patient outcomes. Casey et al. (2016) stated that "feeling inadequately prepared for the pace of acute care, the challenge of high-acuity patients and disempowering, understaffed work environments are cited as reasons they leave the profession" (p. 647). However, many newly graduated nurses are continuing to experience *reality shock* leading to an increased turnover rate of newly graduated nurses, and at the very worst, a compromise of safe patient care. As a practice-based profession, student measurement of achievement has frequently been seen in the development of nursing competencies. Using Kolb's (1984) experiential learning theory within a senior practicum course, the use of a designated preceptor, and the student nurse working together with a designated preceptor there is a creation of knowledge and critical thinking abilities through the transformation of the learning experience (Bott et al., 2011; Kolb, 1984; Lisko & O'Dell, 2010; Stutsky & Laschinger, 1995). It is within this "experiential approach to clinical nursing education, in which a reciprocal teaching-learning relationship is established among a senior undergraduate nursing student, a RN with whom the learner is partnered, and a faculty member" (Bott et al., 2011, p. 35) that transformational learning takes place. The use of preceptors in a senior practicum course assist in modifying the *reality shock* that is often experienced by newly graduated nurses upon entry to practice and may assist in bridging the gap between pre-licensure nursing education and clinical position (Warren & Denham, 2010). Previous learning is important to the process involved in the senior practicum course. The student nurse must be confident in both prior skills learned and practiced, and the classroom theory application to the clinical site. Any part of this dyad that may be missing can lead to both a decrease in student confidence and a decrease in perception of professional competence upon becoming a newly graduated nurse. In the complex environment of healthcare, student nurses must be able to understand concepts, identify the relationships between concepts,

define the patient problems requiring intervention, assess and collect relevant information, and research information regarding the patient (Stutsky & Laschinger, 1995). Biggs and Schriner (2010) noted that healthcare systems recognize that "education and competencies needed to obtain a nursing license" have been reached, however, the newly graduated nurse is still "not yet fully prepared for the job expectations they encounter" (p. 317). Although many new graduates meet basic expectations of patient care assessments and changes, "learning needs still exist regarding initiating decisions, differentiating urgency, reporting essential data, anticipating relevant medical orders, and identifying rationale for decision-making" (Rhodes et al., 2013, p. 525).

There has been established a disconnect between nurse educators within pre-licensure nursing education and the nurse managers of the clinical unit as to the preparedness of the newly graduated nurse. Numminen, Laine, Isoaho, Hupli, Leino-Kilpi, and Meretoja (2014) state that "nurses working in practice complain of novice nurses' insufficient clinical and patient management skills, whereas educators claim to prepare beginners rather than competent practitioners who are able to think critically and who are committed to lifelong learning" (p. 813). This is due to a mismatch of the expectations of the healthcare organization of the newly graduated nurse who has been educated to graduate as an advanced beginner and has the skills and competencies to provide safe, quality patient care to a stable group of patients. In the hospital setting, "nursing care is highly specialized, and managers' expectations may suggest that a high level of competence is expected of nurses in these settings" (Numminen et al., 2014, p, 818). According to Benner (2001), the advanced beginner nurse is able to demonstrate marginally acceptable performance, having coped with enough real situations to not be shocked by the recurring meaningful situational components. As an advanced beginner, newly graduated

nurses require more support to incorporate and develop his/her critical thinking abilities and practical skills (Theisen & Sandau, 2013). Benner (2001) "emphasizes the significance of experience, referring to theoretical thinking and judgment, rather than the length of service" (Numminen et al., 2017, p. 30). This would imply that "competence development is not linear in time but advances stepwise from plateau to plateau being associated with the development of the nurse's intellectual skills, such as critical thinking and judgment" (Numminen et al., 2017, p. 35). If "competence develops along a trajectory whereby graduate nurses have foundational competencies that are transferable across situations, then the new graduate nurse will require time, support and opportunities to develop competence in a specific setting" (Lima, Newall, Kinney, Hordan, & Hamilton, 2014, p. 354).

Implications

The findings from this study may have implications for nursing education, preceptors, hospital educators, and healthcare organizations. The challenge for nursing educational programs is two-fold: provide experiential learning for student nurses that will allow the student to grow in competence and confidence, and provide strong orientation and faculty support for preceptors undertaking the student nurse through their senior practicum course. "Capstone subjects include theory but predominantly focus on the clinical immersion under the guidance of a preceptor with the aim of consolidating students' learning in the context of practice" (Usher, Mills, West, Park, & Woods, 2015, p. 3245). The importance of optimizing the clinical learning experience for the senior student nurse is strongly linked to the quality of the graduate upon transition to nursing practice (Usher et al., 2015). Kolb's (1984) experiential learning theory offers nursing programs a way to structure the senior practicum course so as the student nurse may recognize what is common between new and previous experiences, and be able to identify not just what is different

but why it is different. As demonstrated in this study, there was a statistically significant moderate positive correlation between perception of nurse professional competence scores and grouped direct acute care hours. The majority of direct acute care hours was found in the 200-224 hours and above of the grouped directs acute care hours (75%). Furthermore, the results indicate that 15.5% of the direct acute care hours in a senior practicum course at the end of a pre-licensure nursing education program accounts for the newly graduated nurses' perception of professional competence scores. This indicates that other factors account for 84.5% of the newly graduated nurses' perception of professional competence scores. These findings have implications for pre-licensure nursing education in that nursing programs may want to consider a senior practicum course with the lower end of direct acute care hours beginning in the 200-224 hours range. This study is also one of a very few that has looked at the relationship of direct acute care hours within a senior practicum course in pre-licensure nursing education and the newly graduate nurses' perception of professional competence, particularly during the third to sixth month of employment at a healthcare organization. The results of this study increase the knowledge of providing a senior practicum course in pre-licensure nursing education that is more intentional in the use of a designated preceptor, orientation of the preceptor in precepting a student nurse, and the number of direct acute care hours required in a senior practicum course.

Healthcare organizations have not only the responsibility for attracting and retaining newly graduated nurses, these institutions have the fiscal responsibility of running a financially profitable organization, but for also providing a safe environment for patients. Recognizing that transition programs offer one part of the equation for retaining newly graduated nurses, it is incumbent upon healthcare administrators to understand that newly graduated nurses come into the profession as advanced beginner nurses. With the expectations that new graduate nurses be

work ready upon graduation, a disconnect occurs when the new graduate nurse may not feel fully prepared for complex situations and/or complex care expectations that they may frequently encounter. This may be repeatedly overlooked by nurse managers, where required staffing is needed to provide safe patient care. The new graduate nurse may find oneself in a stressful situation of being responsible for a group of patients prior to having the confidence or competence to accept this assignment. Should this type of situation occur frequently, it can be a factor that is reflected in newly graduated nurses' thoughts or desires of changing positions or healthcare systems, or may be the reason for ultimately leaving the clinical unit and perhaps nursing altogether. Estimates of newly graduated nurses leaving their employment may be as high as 50% during the first year of employment (Niemi et al., 2014; Parker et al., 2014) and a "voluntary turnover rate of 30% in the first year of employment and 57% within two years" (Feng & Tsai, 2012, p. 2065).

Hospital educators can play a pivotal role in both the education and support of the preceptor within their preceptorship for both the student nurse and the newly graduated nurse, as well as in the transition process of the newly graduated nurse onto the clinical unit post-graduation. The hospital educator can provide both support and in-depth training to assist in preparing the new graduates transition to practice. As newly graduated nurses, 66.3% will work in staff nurse positions (Rush et al., 2013; Zigmont et al., 2015) and will make up approximately 10% of the clinical nurses in hospitals and health systems (Rhodes et al. 2013); it is imperative that transition to nursing programs offered to the newly graduated nurse pay attention to both confidence level and perceptions of competence as both may affect the patients' safety. However, as stated by Adamack and Rush (2014) "best practices uptake has been slow often reflecting leaders wanting to support new graduates (preceptorship, enculturation), but facing

contextual realities that limit their support (e.g. financial, commitment) of transition programs" (p. 26). In providing and implementing a transition program for new graduate nurses, the hospital educator should work closely with both preceptors and nurse managers to ensure smooth transitioning of the newly graduated nurse to the professional role. Although financial constraints and patient safety goals play key roles for transition programs, the cost may be much higher for healthcare organizations if smooth transitioning of the new graduate nurse does not occur. The costs, in terms of liability to healthcare systems, for inadequate preparation of the new graduate nurse can include chronic staffing shortages, increase in problems related to patient safety, and community perceptions of the healthcare system.

With the changes to the nursing workforce (retirement of baby boomers and the increased hiring of newly graduated nurses), pre-licensure nursing education programs and hospital educators need to work together towards retaining newly graduated nurses. With turnover rates of 30-60% in the first year of employment (Lee et al., 2009; Owens, 2013: Tsai et al., 2014) and financial expenditures of $856 million for healthcare organizations (Fiedler et al., 2014), recognition of possible areas for transitioning the new graduate nurse, both pre-licensure nursing education programming and healthcare organizations needs to be addressed and worked on collaboratively.

Although strategies have been implemented through a senior practicum course in pre-licensure nursing education and a transition to practice program in the healthcare system, there appears to continue to be a downward spiral of newly graduated nurses' being overwhelmed and leaving the profession.

Results of this study have identified that there is a moderate positive correlation between the number of direct acute care hours within a senior practicum course in pre-licensure nursing

education and newly graduated nurses' perception of professional competence scores during the third to sixth month of employment within the healthcare system. There is a 15.5% variability of the moderate positive correlation is from direct acute care hours within a senior practicum course in pre-licensure nursing education. There is opportunity for additional recognition by pre-licensure nursing education programs, healthcare systems, and governing bodies to look at other areas of possibility to build and strengthen new graduate nurses' entry to practice.

Limitations

The limitations to this study include threats to internal and external validity. Threats to internal validity were small but may have a large effect upon responses to the survey. The major threat may be seen in the category of history. This pertains to differences in the "experimental treatments that extend over time" (Gall et al. 2007, p. 384). Although the survey captured one moment in time for the new graduate nurse participants, a number of factors could have contributed to the responses. This study was open to all new graduate nurses during their third to sixth month on the clinical unit at a large healthcare system who chose to participate in this study. This included new graduate nurses from a variety of pre-licensure nursing programs and varying level of pre-licensure program (associates, diploma, BSN). The study did not distinguish between which school the new graduate nurse graduated from, but rather the number of direct acute care hours required in a senior practicum course. Because pre-licensure nursing programs have varying curriculums including how the senior practicum course is delivered, this can be a factor in the participants' response to the survey. Although data was collected on specific participant characteristics (age, ethnicity, gender) it is unknown if these factors influenced participant responses.

The threats to external validity include both population and ecological validity. Threats to population validity is the "extent to which on can generalize from the experimental sample to a defined population" (Gall et al., 2007, p. 389). This study was conducted within one healthcare system, which is private, faith-based, and non-profit. Findings from this study may not be generalizable to all healthcare organizations, especially those which are for-profit, or state owned. Attributes of the participants such as diversity/ethnicity, age, and gender may not be typical of other pre-licensure programs across the nation. This would make it unlikely that the results of this study can be representative of all newly graduated nurses' who participated in a senior practicum course in pre-licensure nursing education across the United States. Therefore, the finding may have threatened external validity as they may not be generalizable to all newly graduated nurses' perceptions of professional competence scores.

Threats to ecological validity include the "Hawthorne effect and experimenter effect" (Gall et al., 2007, p. 390-391). Both the Hawthorne effect and experimenter effect are included as a threat to ecological validity because the researcher may have been known to many of the participants who participated of this study. As a faculty member responsible for the senior practicum course at the college of nursing within the healthcare system, there may have been response bias from the participants who knew the researcher in this previous capacity. Both anonymity of the participants' answers and voluntary status of the consent to participate are a part of the consent document (Appendices A and B), however, respondents may have felt that they needed to answer the questions in a positive response due to previous interactions with the researcher.

Recommendations for Future Research

Further research needs to be conducted to determine the requirements for the newly graduated nurses' indoctrination into the profession of nursing. Completing this study to a larger, more diverse group of newly graduated nurses may enhance the statistical analysis of the study and provide for a more comprehensive examination of how newly graduated nurses perceive their professional competence during the third to sixth month. Results from a larger sample size could provide the justification to making changes in both pre-licensure nursing education programs and in transition to practice programs. Lima et al. (2014) state that the "professional competence of newly graduated RNs entering today's complex healthcare systems has become a crucial issue relating to clinical skills, the quality of nursing care and patient safety, including the risk of in-hospital mortality" (p. 168).

The use of a different instrument for the measurement of professional nurse competence may be needed. Although the instrument used for this study was found reliable and valid in previous studies, the instrument itself was developed in Europe. Some of the language may not be understandable to newly graduated nurses or may have a different meaning than the one intended. Although language nuances are different across the United States, the reading materials required for pre-licensure nursing education are similar; the language should be consistent with previous learning and the national registered nurse examination language.

It would also be beneficial to conduct a mixed methods study to examine the perception of professional competence scores of newly graduated nurses who transfer position within a healthcare system during their first year of employment or who leave either the healthcare system and/or the nursing profession completely. By conducting this type of study, healthcare system administrators and hospital educators could use data from perceived professional

competence scores and may be able to determine what is missing in a transition to practice or nurse residency program that can be enhanced to benefit the newly graduated nurse. Through the use of open interviews with newly graduated nurses who are leaving a clinical unit or the nursing profession, themes can be uncovered that may assist in assuaging the exodus of newly graduated nurses during their first year of practice.

Examining the practicality of Benner's (2001) model of novice to expert within the complex hospital environments may be required to update the theory or to revise the theory based on what is occurring within the healthcare environment that new graduate nurses are currently facing. Much has changed since Benner's (2001) model was developed. It may now not be an adequate description of today's new graduated nurses. Through examination of Benner's (2001) model within a rapidly changing and increasingly complex healthcare system, descriptive characteristics of the new graduate nurse can be updated and/or modified.

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APPENDICES

Appendix A: Nurse Professional Competence Scale

Please answer the following questions about yourself.

1. What is your gender?
   a. Female
   b. Male

2. What is your age?
   a. 21-24 years
   b. 25-30 years
   c. 31-36 years
   d. 37-41 years
   e. >42 years

3. What is your ethnicity?
   a. African-American
   b. American Indian/Alaskan Native
   c. Asian or Pacific Islander
   d. Caucasian
   e. Hispanic
   f. Other
   g. Prefer Not to Respond

4. Type of Employment
   a. Full Time
   b. Part Time
   c. PRN

5. What Type of Pre-licensure Nursing Program did you graduate from?
   a. Associates
   b. Diploma
   c. Baccalaureate

6. Did you participate in a senior practicum course as part of your pre-licensure nursing education?
   a. Yes
   b. No

7. If yes, what was the number of Direct Patient Acute Care Hours you participated in your senior practicum experience?
   a. 125-149 hours
   b. 150-174 hours
   c. 175-199 hours
   d. 200-224 hours
   e. 225-249 hours
   f. 250-274 hours
   g. 275-299 hours

8. Did you have a designated preceptor in the senior practicum course?
   a. Yes
   b. No

9. How long have you been on the unit as a newly graduated nurse?
   a. 3 months
   b. 4 months
   c. 5 months
   d. 6 months
   e. Greater than 7 months

The remainders of the survey questions are asked to determine nurse professional competence as a newly graduated nurse. Please answer the questions based on your present abilities.

NURSING CARE: the ability to:

10. Enhance patient care
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

11. Independently apply the nursing process (assessment)
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

12. Independently apply the nursing process (nursing diagnosis)
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

13. Independently apply the nursing process (nursing intervention)
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

14. Independently apply the nursing process (planning, implementation, evaluation)
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

15. Meet patient's basic physical needs
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

16. Meet patient's specific physical needs
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

17. Meet patient's psychological and social needs
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

18. Meet patient's cultural and spiritual needs
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

19. Manage changes in patient's physical status
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

20. Document patient's physical status
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

21. Manage changes in patient's psychological status
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

22. Document patient's psychological status
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

23. Recognize patient's experiences and suffering
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

24. Alleviate patient's experiences and suffering
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

VALUE-BASED NURSING CARE: the ability to:

25. Respectfully communicates with patients, relatives and staff
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

26. Perform nursing care based on humanistic values
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

27. Show respect for patient autonomy, integrity and dignity
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

28. Enhance patients' and relatives' knowledge and experiences
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

29. Show respect for different values and beliefs
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

30. Act upon patients' and relatives' wishes and needs
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

31. Use principles of research ethics
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

32. Contribute to a holistic view of the patient
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

MEDICAL TECHNICAL CARE: the ability to:

33. Manage drugs and clinical application of knowledge in pharmacology
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

34. Independently perform or participate in examinations and treatments
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

35. Independently administers prescriptions
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

36. Pose questions about unclear instructions
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

37. Support patients during examinations and treatments
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

38. Follow up on patient's conditions after examinations and treatments
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

39. Handle medical/technical equipment according to legislation and safety routines
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

40. Apply hygienic principles and routines
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

41. Prevent complications in relation to care
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

42. Prevent transmission of pathogenic microorganisms
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

TEACHING/LEARNING AND SUPPORT: the ability to:

43. Provide patients and relatives with support to enhance participation in patient care
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

44. Inform and educate individuals patients and relatives
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

45. Inform and educate groups of patients and relatives
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

46. Make sure that information given to the patient is understood
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

47. Pay attention to patients who do not themselves express information needs
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

48. Motivate the patient to adhere to treatments
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

49. Identify and prevent risk factors for ill health
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

50. Motivate changes in lifestyle
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

51. Identify and assess patient's ability to self-care
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

52. Educate and support patients and relatives individually to enhance health
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

53. Educate and support patients and relatives in groups to enhance health
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

DOCUMENTATION AND INFORMATION TECHNOLOGY: the ability to:

54. Make use of relevant data in patient records
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

55. Scrutinize the quality of own documentation
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

56. Use information technology as a support in nursing care
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

57. Document according to current legislation
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

LEGISLATION IN NURSING AND SAFETY PLANNING: the ability to:

58. Comply with current legislation and routines
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

59. Handle sensitive personal data in a safe way
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

60. Advocate patients' rights
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

61. Provide contact with the right authority regarding patients' rights
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

62. Comply with safety routines and notify according to current legislation
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

63. Act adequately in the event of unprofessional conduct among employees
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

64. Manage violent and/or threatening situations
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

65. Act according to regulations in case of fire or other devastating events
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

66. Apply principles of disaster medicine
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

LEADERSHIP IN AND DEVELOPMENT OF NURSING: the ability to:

67. Participate in continuous quality assurance and patient safety work
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

68. Act based on an environmentally friendly perspective
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

69. Motivate and contribute to a good care environments
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

70. Care for an esthetical care environment
    f. To a very low degree
    g. To a relatively low degree
    h. To a relatively high degree
    i. To a very high degree
    j. Cannot take a standpoint

71. Participate in improvement of work environments
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

72. Observe work-related risks and prevent them
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

73. Critically reflect upon current routines and methods
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

74. Inspire dialogue for implementation of new knowledge
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

75. Search and review relevant literature for evidence-based nursing
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

76. Implement new knowledge for evidence-based nursing
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

77. Initiate, participate in and/or carry out development activities for improved care
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

78. Initiate and participate in research
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

79. Independently analyze own professional strength and weaknesses
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

80. Continuously engage in professional development
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

81. Lead and develop health staff teams
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

82. Evaluate actions taken by the health staff
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

82. Develop groups and manage conflicts
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

83. Motivate the team and give feed-back
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

84. Involve staff in how to develop patient care
    a. To a very low degree
    b. To a relatively low degree
    a. To a relatively high degree
    b. To a very high degree
    c. Cannot take a standpoint

85. Provide person-centered care with focus on quality
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

86. Provide person-centered care with focus on economy
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

87. Enhance research and development
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

89. Lead and provide nursing care based on best knowledge
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

90. Participate in strategic planning and evaluation
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

91. Interact with other professionals in care pathways
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

92. Enhance information and communication to obtain continuity, effectiveness and quality
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

EDUCATION AND SUPERVISION OF STAFF/STUDENTS: the ability to:

93. Participate in supervision of staff/students in development activities for improved care
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

94. Teach, supervise and assess students
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

95. Supervise and educate staff
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

96. Development of health-care teams
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

97. Enable multi-professional education activities to optimize patient care
    a. To a very low degree
    b. To a relatively low degree
    c. To a relatively high degree
    d. To a very high degree
    e. Cannot take a standpoint

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Appendix C: Liberty University IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

April 14, 2016

Arlene Holowaychuk
IRB Exemption 2449.041416: The Effects of a Capstone Course in Pre-Licensure Nursing Education on the Professional Competence of the Newly Graduated Nurse

Dear Arlene,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

> (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
> (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

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Appendix D: Informed Consent, Liberty University

The Liberty University Institutional Review Board
has approved this document for use from
4/14/16 to -- Protocol # 2449.041416

CONSENT FORM

THE EFFECTS OF A CAPSTONE COURSE IN PRE-LICENSURE NURSING EDUCATION ON THE PERCEPTION OF PROFESSIONAL COMPETENCE OF THE NEWLY GRADUATED NURSE

Arlene Susan Holowaychuk
Liberty University
Department of Education

You are invited to participate in a research study concerning the effects of a capstone course in pre-licensure nursing education on the perceptions of professional competence in the new graduate nurse. You were selected as a possible participant because of your attendance in the new hire orientation between January, February, March, April, May June, and July 2017. I ask that you read this form and ask any questions you may have before agreeing to be in the study. Arlene Holowaychuk, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information:

The purpose of this study is to look at the number of direct acute care hours with a preceptor in a capstone course in pre-licensure education to determine if there are a specific number of hours that would account for an increase in the perceptions of professional competence of the newly graduated nurse, particularly during the 3rd to 6th month of employment.

Procedures:

If you agree to be in this study, I would ask you to complete an anonymous survey, which should take approximately 20 minutes.

Risks and Benefits of being in the Study:

The risks involved in this study are no more than the participant would encounter in everyday life.

The participant will receive no benefits associated with participation in this study.

Compensation:

The participant will not be compensated for taking part in this study.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

Anonymity of the participants' answers is ensured through the use of an anonymous survey. Data will be stored within Liberty University's Qualtrics database.

Voluntary Nature of the Study:

Participation in this study is voluntary. The decision whether or not to participate will not affect the participants' current or future relations with Liberty University or Bon Secours Health System, Inc. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Arlene Holowaychuk. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at (804)627-6506 or

email to Arlene_holowaychuk@bshsi.org. You may also contact the research's faculty advisor, Dr. Steven McDonald, at samcdonald2@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Carter 134, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information to keep for your records.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

Click the link below to begin the study.

Appendix E: Bon Secours Virginia Health Care System IRB Approval

DATE: November 29, 2017

TO: Arlene Holowaychuk RN, MSN, CNE

Assistant Professor

Bon Secours Memorial College of Nursing

8550 Magellan Parkway, Suite 1100

Richmond VA 23227

FROM: Ryan Ehrensberger, PhD

Vice Chairperson, BSR IRB

Richmond, VA

RE: **BSR IRB #: BSR087**

Title: The Effects of A Capstone Course In Pre-Licensure Nursing Education On The Professional Competence Of The Newly Graduated Nurse

On 11/22/2017 the following **change(s)** to your research study have ***qualified for exemption*** according to 45 CFR 46.101(b) Category 2. This determination reflects the revisions received in the Office of Research on November 3rd, 2017. This determination includes the following items reviewed by this Panel:

PROTOCOL: The Effects of A Capstone Course In Pre-Licensure Nursing Education On The Professional Competence Of The Newly Graduated Nurse (Research Plan, Date Received 11/3/2017)

CONSENT/ASSENT: The Effects of A Capstone Course In Pre-Licensure Nursing Education On The Professional Competence Of The Newly Graduated Nurse Information Sheet, Version 11/3/2017 (attached)

- Because the project is exempt from federal regulations, the procedures described in § 46.116 (Consent) and 46.117 (Documentation of Consent) are not applicable to your research study. Nevertheless, the Common Law of the Commonwealth of Virginia, as well as the canons of sound ethics require you to inform potential subjects of foreseeable risks and possible benefits (if any) associated with participation in your research study. Therefore potential subjects should be informed of foreseeable risks and possible benefits of participation in your research study. They should also be informed that they may refuse to participate in your research and they should understand that they might withdraw at any time without penalty. This process of informed decision-making should be documented along with other information associated with the study.

If you have any questions please contact Isabelle Taylor at Isabelle_Taylor@bshsi.org or (804) 627-5268.

Sincerely,

Ryan Ehrensberger, PhD

Vice Chairperson, BSR IRB

BON SECOURS
RICHMOND HEALTH SYSTEM
Bon Secours Virginia Health System

DATE: September 11, 2016

TO : Arlene S. Holowaychuk, RN, MSN/Ed, CNE
Bon Secours Memorial College of Nursing
8550 Magellan Pkwy
Richmond, VA

FROM Gerald Keightley, III, MD
Chairperson, BSR IRB
Richmond, VA

RE: **BSR IRB #: BSR 087**
Title: The Effects of A Capstone Course In Pre-Licensure Nursing Education On The Professional Competence Of The Newly Graduated Nurse

On 9/1/2016 the following **change(s)** to your research study have ***qualified for exemption*** according to 45 CFR 46.101(b) Category 2. This determination includes the following items reviewed by this Panel:

PROTOCOL: The Effects of a Capstone Course in Pre-Licesnsure Nursing Education on the Professional Competence of the Newly Graduated Nurse.

CONSENT/ASSENT:

- Per 45.CFR 46.101, a signed consent document is not necessary for studies that are approved under Exempt Category 2.
- Information Sheet, Version Date 08/22/2016, Received by the Office of Research on August 22nd, 2016

ADDITIONAL DOCUMENTS:

- The IRB acknowledges the name change of the dissertation from The Effects of a Capstone Course in Pre-Licensure Nursing Education on the Professional Competence of the Newly Graduated Nurse to *The Effects of a Capstone Course in Pre-Licensure Nursing Education on the Perceived Professional Competence of the Newly Graduated Nurse*

If you have any questions please contact Isabelle Taylor at Isabelle_Taylor@bshsi.org or (804) 627-5268

Sincerely,

Gerald Keightley, III, MD
Chairperson, BSR IRB
Richmond, VA

STUDY INFORMATION SHEET

THE EFFECTS OF A CAPSTONE COURSE IN PRE-LICENSURE NURSING EDUCATION ON THE PERCEPTIONS OF PROFESSIONAL COMPETENCE IN THE NEWLY GRADUATED NURSE

Arlene Susan Holowaychuk

Liberty University
Department of Education

You are invited to participate in a research study concerning the effects of a capstone course in pre-licensure nursing education on the perceptions of professional competence in the new graduate nurse. You were selected as a possible participant because of your attendance in the new hire orientation between May, June, and July 2016. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

Arlene Holowaychuk, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information:

The purpose of this study is to look at the number of direct acute care hours with a preceptor in a capstone course in pre-licensure education to determine if there are a specific number of hours that would account for an increase in the perceptions of professional competence of the newly graduated nurse, particularly during the 3rd to 6th month of employment.

Procedures:

If you agree to participate in this study which should take approximately 15 minutes to complete, I would ask you to complete an anonymous survey.

Risks and Benefits of being in the Study:

The risks involved in this study are no more than the participant would encounter in everyday life.

The participant will receive no benefits associated with participation in this study.

Compensation:

The participant will not be compensated for taking part in this study

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

Anonymity of the participants' answers is ensured through the use of an anonymous survey. Data will be stored within Liberty University's qualtrics database.

Voluntary Nature of the Study:

Participation in this study is voluntary. The decision whether or not to participate will not affect the participants current or future relations with Liberty University and/or Bon Secours Health System, Inc. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Arlene Holowaychuk. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at (804)627-6506 or email to Arlene_holowaychuk@bshsi.org.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Bon Secours Richmond Institutional Review Board at 804-627-5268 or RP3intake@bshsi.org.

Please notify the researcher if you would like a copy of this information to keep for your records.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

Click the link below to begin the study.

https://liberty.co1.qualtrics.com/SE/?SID=SV_78y1duVxkOOZif3