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Effects of Undergraduate Nursing Student-Preceptor Relationship on the Student's Self-Reported Clinical Competence, Self-Esteem, and Readiness to Work as a Registered Nurse (RN)

Gloria N. Otoo

This research was completed as part of the degree requirements for the Nursing Department at Molloy College.

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EFFECTS OF UNDERGRADUATE NURSING STUDENT-PRECEPTOR

RELATIONSHIP ON THE STUDENT'S SELF-REPORTED CLINICAL COMPETENCE,

SELF-ESTEEM, AND READINESS TO WORK AS A REGISTERED NURSE (RN)

A dissertation

by

GLORIA N. OTOO

submitted in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

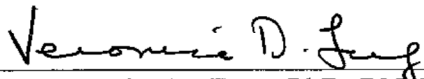April 2016

MOLLOY COLLEGE

DIVISION OF NURSING

The Dissertation of _____Gloria Otoo_____

entitled: <u>THE EFFECTS OF UNDERGRADUATE NURSING STUDENT-PRECEPTOR RELATIONSHIP ON THE STUDENT'S SELF-REPORTED CLINICAL COMPETENCE SKILLS, SELF-ESTEEM, AND READINESS TO WORK AS A REGISTERED NURSE (RN)</u>
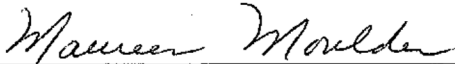
in partial fulfillment of the requirements for the degree of

_____<u>Doctor of Philosophy</u>_____

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Abstract

Graduating from a baccalaureate program as a new registered nurse is a great accomplishment. The years of academic study and integrated clinical experiences combine in an intensive curriculum for all nursing students. Apart from the classroom work, the clinical aspect is integral to the development of a nurse, whether it is with a clinical instructor during the program, or with a preceptor towards the end of the nursing program. The clinical experiences provide critical opportunities for the purpose of preparing students to become confident and ready to be productive in the work force. The literature abounds with research about the state of new nurse graduates in their new role. Although their practicum education should prepare them for the great responsibility of the Registered Nurse's (RN) role, new nurses often feel like they do not possess the expertise to perform adequately in their chosen career. A certain level of stress is expected in every new role, but to feel inadequate to deliver care puts patients at risk. In any setting where such new nurses find themselves, the feeling of incompetence affects practice, including patient care.

While there is evidence of the problem in the literature, there is less known about how the student-preceptor relationship impacts students' perceptions of their self-reported competence in learned clinical skills, acquired self-e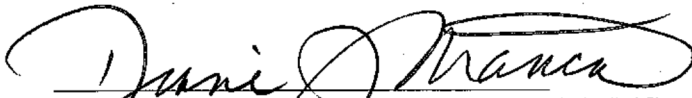steem and readiness to work as a Registered Nurse (RN). The aim of this study was to describe and explore the relationship between student report of preceptor characteristics and student-preceptor relationship in the final pre-graduation clinical experience (also known as practicum, capstone, clinical intensive etc.) and (a) personal self-esteem; (b) selected student learned professional competencies/skills; and (c) student self-reported readiness to begin practicing as a Registered Nurse (RN).

This study used a web based survey of a national sample of more than 1,000 graduating seniors from baccalaureate programs who are members of the National Nursing Students' Association (NSNA). This descriptive correlational study identified how the student-preceptor relationship influences these new nurses as they are about to enter their careers as registered professional nurses.

Dedication

This dissertation is dedicated to a number of people without whose unwavering support this journey would have been extremely difficult or even impossible.

First, this study is lovingly dedicated to my mother, my "Mama" Janet Smith-Mensah (Nunoo), a true prayer warrior whose prayers, love, strength, and encouragement undergirded me to persevere through this. You taught me how to fight through all life's trials and hardships to become the strong woman I am today. Mama, you are truly the wind beneath my wings.

For my husband John (Kwame) who shares this accomplishment with me. In dedicating this study to you, I want to sincerely thank you for your relentless prayers and belief in me throughout my educational journey. For your continuous encouragement with soothing phrases such as "you will be smiling someday." You were right; I have been smiling since my defense.

It is also my pleasure to dedicate this work to my children who supported me in so many different ways from loving me unconditionally, to teaching me how to effectively use the computer as a tool. Knowing that my example will enrich your lives kept me going on days when I felt like giving up. Nana-Adwoa, Maame-Esi and Kobina, thank you for keeping me on this path till the end, "we did it with God's help."

To my sister Marian and her family and other family members from my husband's side, Afua Nyameye who tutored me for the general registration exams (GRE), my church family, my sister intercessors and friends who prayed, cooked, babysat, and encouraged me, this dedication is also yours for your tremendous love and support.

To my cohort colleagues, my "PhDivas" as we called ourselves; every one of you played a major part in this journey. I learned more from you than you ever did from me and your cheerleading support never faded.

Finally, this dissertation is dedicated to the memory of Pastor Jorge Vega, who was my biggest inspiration in the pursuit of my doctoral degree. My pastor started referring to me as a "doctor to be" when I graduated in 2008 with my bachelor's degree. He did not relent until he introduced me as Dr. Gloria Otoo to the entire church about a month before his untimely, sad, and shocking passing. Although I still mourn him, I am glad he was allowed to see his prophesy come to pass.

Each of the aforementioned is dear to my heart because of their help in one way or the other, to make this great accomplishment possible. I am eternally grateful to all of you!!!

ACKNOWLEDGEMENTS

addition to higher education in today's healthcare field. The Jonas foundation for scholarship and funding certainly made life easier considering all the other privileges that come with becoming a Jonas Scholar. I cannot forget the stakeholders who together established the Nurse Forgiveness Loan (NFL) program. I am a proud beneficiary of your well calculated strategy to financially support higher education in nursing while bridging the overwhelming shortage-of-nursing gap. Thank you for caring.

All of you made this great challenge achievable and attainable. Indeed, life becomes easier when great people and organizations offer their shoulders for others to stand on. Thank you!!!

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Chapter 1: Background of the Problem

Introduction

Nursing school prepares students for an anticipated career in nursing. The transition from student to new nurse is a phase experienced by all students as they leave the academic world to a world in which they must apply what they have learned. Hospitals and health systems eagerly wait for the new supply to enter the workforce. Novice nurses, especially, rely upon the principles of care and theoretical knowledge they learned in their nursing program (Ferguson & Day, 2007). Nursing educators provide the classroom instruction and coordinate the students' practical experiential learning and clinical skill-building in order to produce a competent clinician upon graduation.

Given the documented challenges of the aging nursing workforce and the predicted shortage of health professionals, there are concerns related to undergraduate nursing students' readiness for practice as safe and competent registered nurses (Baltimore, 2004; Jackson, Clare, & Mannix, 2002). To prepare nursing students to integrate into the discipline of nursing, nursing education must achieve a balance between methodological purity in education and practical clinical application (Borbasi, Jackson, & Wilkes, 2005; Fitzpatrik, 2007). As the developing student reaches the threshold of transition to the work world, their pre-graduation experiences in clinical sites with preceptors, provide the final opportunity for maturing into a professional nurse.

The preceptor is needed in this final experience to function as a mentor for the undergraduate nurse. The ability of the registered nurse preceptor to facilitate students' clinical understanding and competence in practice, the skill of communicating effectively with other members of the healthcare team, and to help build students' self-esteem and confidence levels are integral to a student's readiness to practice effectively in the workforce. During the

preceptorship process, nursing students are required to master related skills and professional competencies described as a combination of knowledge, skills, attitudes, values and abilities that underpin effective and/or superior performance in a professional area (Cant, Mckenna, & Cooper, 2013).

Preceptors possess the ability to enhance the student's preceptorship experience. Therefore, the student-preceptor relationship must be one that fosters an atmosphere in which the student can develop in multiple areas including that of confidence in inter-professional communication/collaboration, clinical competence and self-esteem levels to be able to function effectively as a new graduate nurse. Healthcare is entering a critical phase with many changes occurring within the system. The Affordable Care Act mandate, the boost of technology use, and the record number of nurses retiring due to the dawn of the "Baby Booming" season have heightened the focus on nursing which has the largest population of healthcare workers. With the increasing pressures to improve healthcare and with the IOM (Institute of Medicine) 2010 report challenging nurses to lead change and improve health, it is overwhelmingly important to transform the clinical piece of nursing education through student practice training such as the preceptorship experience, to ensure that new graduate nurses coming into the nursing workforce are competent in their nursing skill set, have healthy self-esteem, and feel ready to practice.

New Graduate Nurse as Novice

Novice nurses who have had no previous experience and new graduates who have completed the course of study (including hospital practice) in an accredited nursing program (Benner, 1984), often have limited experience in the care settings in which they work, and therefore tend to view decision-making as responding to patient complaints and following

protocols or documented care plans. As they make decisions, their focus leans toward doing, rather than on thinking and reflecting (Benner, 1984; Benner, Tanner, & Chesla, 1992; Haffner & Raingruber, 1998). Novice nurses often do not appreciate or recognize the relevance of deviations from the ideal textbook picture of a clinical situation (Benner, Tanner, & Chesla, 1996; Tabak, Bar-Tal, & Cohen-Mansfield, 1996), which is usually the ideal image because of minimal exposure and lack of experience.

When confronted with complex or unfamiliar clinical situations, novice nurses frequently respond by drawing on theoretical knowledge and psychomotor skills, whereas decision-making that addresses the complex and multidimensional nature of the situation is more complicated. In addition, most novice nurses may rely excessively on more experienced nurses and avoid situations that require them to apply critical thinking in the decision-making process when they lack confidence in the clinical setting (Gillespie & Peterson, 2009). Thus, the new graduate nurse is often in need of professional validation to enhance confidence. Similarly, transitional education must be provided by the workplace to ease new graduates into their role and to ensure that they are ready to function in the hospital today.

Health care institutions need competent employees. The full significance of this problem becomes evident when viewed in the context of the following double current trends in healthcare:(a) first, due to the 'Baby Boomer' situation, a significant percentage of the nursing workforce is expected to retire within the next decade (Yancey, 2005), and (b) secondly, there is an increase in complexity and high acuity levels of patients in every sector of health care (Ebright, Patterson, Chalko, & Render, 2003). Although it has been suggested that new nurses become experts in their practice when they have sufficient experience in the clinical setting – thus to move from reliance on abstract principles to the application of concrete experience and to

view clinical situations within context and as a whole – these theoretical ideals may neither serve the novice nurse well because of the tendency to feel incompetent nor the employer, who needs for a new graduate to be ready to practice (Benner et al., 1996; Decker, 2006).

Principles of Care and Theoretical Knowledge

The assumptions that student nurses go on to become registered nurses and therefore are safe caregivers, puts unimaginable pressure and stress on student nurses in their final year of their course of study and also in their preceptorship programs. Just as Benner (1984) has consistently emphasized the need for new graduate registered nurses to work with experienced staff, preceptorship processes must also be able to direct student nurses in effective ways of critical thinking to address complex situations. There have been numerous authors writing about the gap between theory and practice over the years (Cody, 2003, Ekebergh, Lepp, & Dahlberg, 2004; Gallagher, 2004; & Maben, Latter, & Clarke, 2007). Kant has a famous quote which states, "Theory without practice has no power, it is mere intellectual play, but practice without theory is blind" (Kant, 1904). The responsibility falls to nursing educational programs to balance the two by understanding the underlying phenomena of students' practice experiences where these formative skills are finalized before graduation.

Within the human sciences, a scientific theory is built on a number of concepts, definitions, assumptions, and describes the inter-relationships between them (Nordenfeldt, 1982). A theory might be on a general level, describing the theoretical foundations on a meta-level. It might also be more particular and as such describe a limited phenomenon. A theory might be strictly descriptive and testable, but it can also be normative as its purpose is to describe how something should or could be.

Clinical caring science is an academic autonomous discipline, oriented in the human science paradigm and has its overall aim to promote caring ideals leading to reality and vice versa (Eriksson, 2003; Dahlberg &Segesten,2010). The idea is to make the intrinsic value of caring science obvious or manifest in a clinical context. The dedication of clinical caring science is anchored in knowledge where the understanding comprises the whole human being (Kapborg & Berterö, 2003). Research within this area leads towards the integration of theory- research- practice, and suggests patterns or methods as tools or factors to decrease the possible gap between caring as a practiced art and caring theories (Eriksson, 2003). Effective transition requires skilled preceptors. However, currently, in practice settings, nurses functioning in the preceptor role may be assigned the task with few supports to fully assist and mentor the transitioning student. Nationally, these nursing education learning experiences are common but without clear requirements, preparation or expectations. Different schools describe a variety of arrangements for the "preceptorship" experiences. It is therefore critical to understand how these important mentors are identified, prepared, and interact with their students, and how their characteristics and skills affect the students' preparation and readiness for work.

Preceptor

The preceptor functions as a mentor for undergraduate nurses in their final year of the nursing program. The Commission on Collegiate Nursing Education describes preceptors as being extensions of faculty who are academically and experientially qualified for their role in assisting in the achievement of the mission, goals, and expected student outcomes (CCNE, 2013). The CCNE document further elaborates that the roles of preceptors with respect to teaching, supervision, and student evaluation must be clearly defined, congruent with the

mission, goals, and expected student outcomes, and also congruent with relevant professional and nursing standards and guidelines (CCNE, 2013). Similarly, the Accreditation Commission for Education in Nursing have described in standard 2.4 of their site visit report that preceptors, when utilized, are academically and experientially qualified, oriented, mentored, and monitored, and have clearly documented roles and responsibilities (ACEN, 2013).

Preceptors/mentors are also introduced in many institutions to facilitate the integration of new nurses into their role responsibilities and new work environment. According to several authors (Carroll, 2004; Greene & Puetzer, 2002; Murphy, 2008; Pfeil, 1999), many hospitals have introduced structured, instructional orientation and/or preceptorship/mentorship programs to ease the role transition experiences of new nurses. New nurses are placed under the supervision and care of experienced nurses commonly known as preceptors who often act as role models, coaches or mentors to assist new nurses in their difficult transition periods. It has been found in the literature that clinical supervisor and mentor have been used synonymously with the term preceptor. For the purpose of clarity in this dissertation, the term preceptor has been selected for use.

According to Hallinand Danielson, (2008), registered nurses (RNs) acting as preceptors have to balance the needs of nursing students with those of seriously ill patients in workplaces with high staff turnover, high care technology, and demands for cost effectiveness. According to several authors (Stone & Rowles 2002; Shannon, Walker-Jeffreys, Newbury, Cayetano, Brown, & Petkov, 2006), being a preceptor is stimulating and challenging, while others (Hautala, Saylor, O'Leary-Kelly, 2007; Yonge, Myrick, Haase, 2002b) have said it is a stressful experience. Preceptors report that time spent supervising students conflict with their care delivery (Watson, 2000), and that in such situations, patients' needs have priority while students' needs must be set

aside (Coates &Gormley, 1997). In addition, preceptors often experience a gap between theory and practice (Landmark, Hansen, & Bohler, 2003), and they have little time to reflect on students' experiences (Ohrling & Hallberg, 2000). Furthermore, various researchers have also described preceptorship as demanding and time-consuming (Hautala, Saylor, & O'Leary-Kelly, 2007; Yonge, Krahn, Trojan, Reid, &Haase,2002b;). The culture of accepting the role of the preceptor varies in institutions. According to Bally (2007), the culture in the acute care area in an organizational environment usually carries through and becomes the center of belief in the organization. Consequently, if the belief is that which does not acknowledge preceptorship as an integral part of the leadership team and as an institutional advantage in a particular organization, the role of the preceptor is not well embraced and or respected.

Nevertheless, there are some rewards in precepting, beginning with the highest ranked rewards, which are preceptors' opportunities to share students' knowledge and enthusiasm for learning, to foster their learning-behaviors, and to follow their development of skills, attitudes and confidence (Shannon et al., 2006; Stevenson, Doorley, Moddenman, Benson-Landau, 1995; Stone & Rowles, 2002;). Other important rewards include paid time off, salary increases, and participation in workshops (Stevenson et al., 1995). In two Canadian studies and one Australian study (Dibert & Goldenberg, 1995; Hyrkas & Shoemaker, 2007; Usher, Nolan, Reser, Owens, & Tollefson,1999) the benefits and rewards of acting as a preceptor have revealed a statistically significant correlation between commitment to the role of preceptor and availability of benefits and rewards.

Preceptors' workloads are often complex, especially when staff teams have more students than they have the capacity to support (Hutchings, Williamson, & Humphreys, 2005). Consequently, it is not always possible to provide appropriately qualified nurses for all students,

and preceptors may therefore be appointed on a 'now it is your turn' basis (Landmark et al., 2003). These give a good reason for preceptors to receive initial structured preparation, and ongoing support throughout the preceptorship process to encourage them to build rewarding relationships with their students.

Preceptor Preparation

According to Hautala et al., (2007), some nurses feel prepared for the preceptor role while others feel unprepared. Nurses are often unsure about students' responsibilities for their own progress (Landmark et al., 2003), and many feel inadequately prepared as evaluators (Coates & Gormley, 1997; Lofmark &Thorell-Ekstrand, 2000; Lofmark & Thorell-Ekstrand, 2006). Some report that evaluating students has become more complicated and more demanding since nursing schools became incorporated into universities. Support from colleagues is considered vital for preceptors, but is problematic when colleagues do not understand the goals of the preceptor program (Usher et al., 1999). Some of the major problems are when students have poor skills, and when there is insufficient support from managers and educators (Hautala et al., 2007; Luhanga, Yonge, & Myrick, 2008). Lack of recognition and didactic plans also represent barriers to achieving the goals of precepting students (Landmark et al., 2003).

Feeling supported is related to preceptors' opportunities to talk directly to teachers (Watson, 2000). Thus, there is the need for teachers to spend time with preceptors to discuss curricula and andragogical strategies (Ohrling & Hallberg, 2000), including guidelines about the demands and expectations of the preceptor role, and what students can and cannot do in clinical practice. Studies suggest that RNs can better meet their preceptor obligations if they receive support (Yonge et al., 2002b) and a collaborative relationship is developed with the university

(Ohrling & Hallberg 2000). A strategy recommended by Hutchings et al. (2005) is to give preceptors the opportunity to share knowledge and experiences with colleagues. This also means that an inexperienced preceptor should work together with an experienced preceptor for the development of confidence and the building up of knowledge. This strategy has the further advantage of optimizing preceptor–student contacts when preceptors have irregular working hours (Hutchings et al., 2005).

Attributes of the preceptor have been found to influence the quality of the preceptorship. For example, interest in supervision has been shown to enhance the development of a good relationship between preceptors and students (Brammer, 2006). Self-confidence and self-awareness have a bearing on the preceptor's inclination to critically appraise their role as preceptor (Landmark et al. 2003). Age and years of nursing experience have also been shown to correlate statistically significantly with perceptions of receiving support (Hyrkas & Shoemaker, 2007), while years of preceptor experience and educational background were of less importance in some studies (Dibert & Goldenberg, 1995; Hyrkas & Shoemaker, 2007; Usher et al.,1999). Nevertheless, Watson (2000) found that preparatory courses for preceptors help to make nurses feel more secure in their role. A variety of preceptor/mentor/supervisor and collaboration models have been proposed in the literature to prepare preceptors to serve as a bridge between theoretical education and the actual experiences of students who are preparing to enter the clinical work environment (Watson, 2000). All these measures are to help ease the feelings of inadequacies of functioning in final year nursing students and novice nurses' in their new work environments.

Transitioning to a New Work Environment

The process of role transitioning from student to professional nurse is of particular importance in meeting the need for individuals' ability to settle into the professional work environment quickly and effectively (Ryan &Twibell, 2002). Hospitals, especially those with expected turnover of staff in the work environment, must be prepared at all times to receive new nurses who are not familiar with the day-to-day processes that occur in that environment. The current health care environment of increased patient acuity and complexity makes it difficult, especially for new graduates who did not experience effective preceptorship during their training. Nurse managers are often responsible and charged to evaluate and implement strategies to improve the experiences of final year nursing students preparing to role transition as new nurses and the consequent outcomes for their employing organizations. These strategies must include clear guidelines of activities in the specific areas, well-organized orientation processes, and excellent mentoring that could assist in maturing student learners towards future retention of new nurses in their new environment within the healthcare system. But nurse managers alone do not own the responsibility: nurse educators in hospitals and nursing faculty at the home institutions should all be cognizant of what contributes to the optimum preparation of the new nurse as new employee. These different stakeholders may have different proximal goals in their roles with the transitioning nurse, but the ultimate goal is to be sure that patients are safe and patient care is optimized in the employment setting (Ryan &Twibell, 2002).

New Nurse Retention

The health care industry considers recruitment and retention of nurses as a critical issue, and the transition of newly qualified nurses into the health care system is viewed as an important

part of the process. Experiencing role dissatisfaction may cause some novice nurses to leave the profession (Messmer, Gracia Jones, & Taylor, 2005). Historically, new registered nurses in the United States leave the profession within the first six-twelve months at rates of 35-69% (Hayes & Scott, 2007; Holden & Hamblet, 2007; Fitzpatrick, 2007). It is reported by several authors (Bowles & Candela, 2005; Hayes & Scott, 2007; Nelson, Godfrey, & Purdy, 2004;) that the number of newly hired graduates who plan to leave after the first year of employment is 33% in response to their inability to critically think while balancing multiple tasks and the unexpected heavy patient load (Crow, Smith, & Hartman, 2005; Starr & Conley, 2006; Walsh & Seldomridge, 2005). If a final year nursing student is not well equipped with all the resources needed to succeed including self-development skills, heavy patient load can become an obstacle for success in the nursing career.

According to Hofler (2008), it is the responsibility of nursing education leaders including practicing nurses (preceptors), to prepare students for roles that demand leadership regardless of the number of patients for whom they provide care. The learning process by nurse educators and nurse leaders must assist students through to become competent new nurses, with the knowledge that competency contributes to job satisfaction, which ultimately leads to nurse retention and positive patient outcomes.

Patient Safety in Nursing

Patient safety is one of the core principles of the nursing profession. According to Culley, T., Babbie, A., Clancey, J., Clouse, K., Hines, R., Kranek, M., Tutro, J., & Wittmann, S. (2012), both new graduates and experienced nurses face significant challenges when starting a position in a hospital. New nurses are at risk for making mistakes that cost time, money, and sometimes endanger patient safety. Some nurse educators try during such times to turn errors into a learning

opportunity for new nurses, but most times, such mistakes undermine the confidence of the learner. Due to the influence of nurse turnover on patient safety, turnover intent has received considerable attention worldwide. According to Aiken, Clarke, Sloane, Sochalski & Silber (2002), in a study done on 10,184 staff nurses, there is a direct link to the increased risk of patient mortality and a higher patient-nurse ratio. The most frequently reported reason for new graduates leaving their first position is related to stress associated with unacceptable patient-nurse ratios, acuity of clients, and feeling that their patient care was unsafe (Mellor & Greenhill, 2014). Transition from nursing student to registered nurse carries significant responsibility often coupled with an unpredictable clinical environment which is different to that of being a nursing student.

Statement of the Research Problem

So how do nurse educators and faculty prepare the new graduate to take on the responsibility that comes with employment? And how do their final clinical experiences shape the nurses they will become? Nurse scholars have voiced concerns related to students' and new graduates' responsibility of taking on professional identity reflective of caring ideals of dignity, respect, and accountability in their everyday practice (Flint, 2006; Paton, Martin, McClunie-Trust, & Weir, 2004). There are documented challenges facing healthcare today including the aging nursing workforce and the predicted shortage of health professionals, which raises concerns related to undergraduate nursing students' readiness for practice as safe and competent registered nurses (Baltimore, 2004; Jackson, Clare, & Mannix, 2002). In addition, several authors (Baxter & Boblin, 2008; O'Neill, Dluhy, & Chin, 2005) have stated that clinical decision-making for a novice nurse is difficult because of documented emotional barriers of low self-esteem, low confidence, and high anxiety. Clance (1985), reported similar findings about the

graduate nurse's self-confidence, skill competence, and the "imposter" syndrome, which describes novice nurses as feeling like aliens in their new nursing roles. Duchscher (2008), in the classic article "*Transition Shock,*" discussed the initial professional adjustment issues that face the new nurses in terms of the feelings of anxiety, inadequacy, instability, and insecurity. Considering all these potential challenges, it is clear that new nurse graduates may face problems in their new roles in the demanding healthcare environment today.

Despite expansive literature that discusses the preceptorship experience, according to Krautscheid (2008), the effects of the relationship are still unclear. The impact of the student-preceptor relationship, in terms of the strength of the relationship itself and how it prepares students in the areas of developing competence in the clinical experience, self-esteem, and their confidence to begin working independently is the focus of this study. What is also not clear is the variety and range of preceptorship experiences on a national level that share the objectives of launching a new graduate, but are not certain in the area of preceptor qualifications, characteristics, and arrangement of the education-practice experience.

In order to develop strategies in nursing education for adequately preparing graduates who are ready to work, nursing faculty, hospital nurse educators, and unit nurse managers need to understand how different preceptorship experiences are executed and how the characteristics of the preceptors affect the graduating students' self-reported self-esteem and readiness to practice. A substantial body of research-based literature from work done by researchers Baltimore, 2004; Charleston & Happell, 2005; Hartigan-Rogers, Cobbett, Amirault, & Muise-Davis, 2007; McCarthy, 2006; Myrick & Yonge, 2002 support the benefits of preceptorship in student learning.

However, minimal research-based literature describes the impact of the relationships students and preceptors form reported from students' perceptions. While some studies have focused on the academic and experiential aspects of the preceptorship experience as it affects the graduate nurse's self-esteem, confidence, and readiness levels, this study will focus on the student nurse's own perception of how the relationship with the preceptor of the final clinical preceptorship experience affected their personal self-esteem, self-reported professional competence, and their readiness to begin working as a registered nurse.

Study Aims

The aim of the study was to describe and explore the relationship between student report of preceptor characteristics and student-preceptor relationship in the final pre-graduation clinical experience (also known as practicum, capstone, clinical intensive etc.) and (a) personal self-esteem; (b) selected student learned professional competencies/skills; and (c) student self-reported readiness to begin practicing as a Registered Nurse (RN). This study will provide information for both the educational and clinical understanding of novice nurse transition to practice with ways to tailor the preceptorship experience, focusing particularly on interpersonal aspects of preceptor fit and preceptor programs designed to facilitate optimally effective preceptorship experiences. The theoretical frameworks used in the study will integrate components from (a) Malcolm Knowles' Andragogical Approach, principles of student-centeredness, relationship-oriented, and collaborative approach; (b) Albert Bandura's Social Cognitive Theory, and (c) Hildegarde Peplau's Interpersonal Relationship Theory. These components will be discussed further as they form the basis of reaching the aims for this study.

Research Questions for this Study

1.   What is the relationship of the student-preceptor experience (in the final pre-graduation clinical experience) on students' self-reported professional competencies?

a. What is the relationship between the students' reported preceptor characteristics (communication; interaction with others) and students' self-reported professional competencies (general and communication)?

b. What is the relationship between the student-preceptor relationship (interactions with student) and students' self-reported professional competencies (general and communication)?

2.   What is the relationship of the student-preceptor experience (in the final pre-graduation clinical experience) on students' self-esteem?

a. What is the relationship between the students' reported preceptor characteristics (communication; interaction with others) and students' self-esteem?

b. What is the relationship between the student-preceptor relationship (interactions with student) and students' self-esteem?

3.   What is the relationship of the student-preceptor experience (in the final pre-graduation clinical experience) on students' self-reported readiness to work as a registered nurse?

a. What is the relationship between the students' reported preceptor characteristics (communication; interaction with others) and students' self-reported readiness to work?

b. What is the relationship between the student-preceptor relationship (interactions with student) and students' self-reported readiness to work?

4.Does the type of clinical environment in the final clinical experience (number of hours, preceptor credentials, size of hospital, student-offered employment) and student-preceptor relationship predict students' readiness to work as a registered nurse (RN)?

Relationship Model:

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                                    ┌─────────────────────┐
                                    │     STUDENTS'        │
                                    │   PROFESSIONAL       │
                                    │    COMPETENCE        │
                                    └─────────────────────┘
┌──────────────────────┐           ┌─────────────────────┐
│   PRECEPTORSHIP &     │           │                     │
│  STUDENT-PRECEPTOR    │───────────│ STUDENTS' SELF-ESTEEM│
│    RELATIONSHIP       │           │                     │
└──────────────────────┘           └─────────────────────┘
                                    ┌─────────────────────┐
                                    │  STUDENTS' READINESS │
                                    │     TO WORK          │
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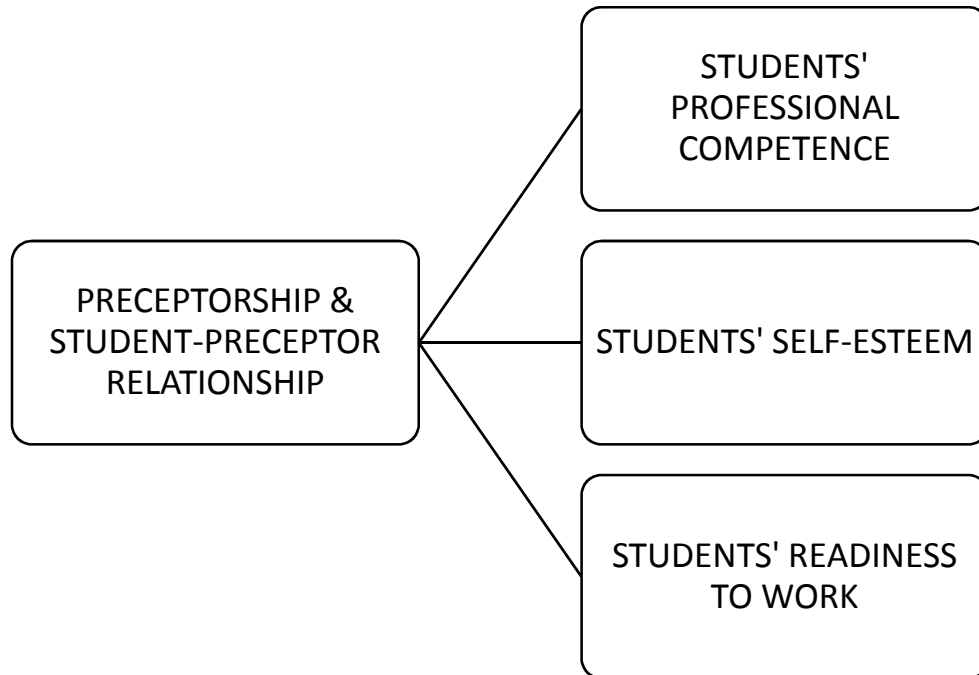
Design

This study used a descriptive, correlational design to test the relationships between and among variables. A national sample of baccalaureate nursing students who are members of the National Student Nurses Association (NSNA) and self-identified their graduation date within the month were recruited via email and surveyed using Surveymonkey®. Surveys were distributed by the NSNA as a similar procedure to their membership surveys. Based on previous NSNA surveys, the sample obtained in this process with a modest incentive offered, with non-responses expected, totaled more than 500 senior graduating seniors, which was adequate for the analysis. The questionnaire included multiple instruments with reported or tested validity and reliability that captured the variables of interest.

Measures

A series of measures were incorporated into a single survey designed for ease of administration and data collection. These measures include:

- The Rosenberg (1965) Self-Esteem Scale – Reported validity and Reliability.

- The Nursing Professional Behaviors/Competencies (Sub-scale) of the Self-Assessment Clinical Competence Questionnaire (CCQ) – Ching Yu & Shwu-Yu (2013).

- Readiness for Work (Author-developed instrument tested for content and construct validity, and reliability on a previous sample of nursing students in pilot studies),

- Preceptor Characteristics and Student-Preceptor Relationship Instrument – a combined instrument of items modified from scales developed by Feeg &Gessner, (2003); Salamonson et al., (2011); and Washington, (2013). (Author adapted instrument to be tested for reliability with the study sample).

Conceptual Definitions

Practicum/Capstone/Preceptorship/Clinical Intensive Pre-graduation: Is defined as the final pre-graduation clinical experience with a preceptor or a mentor in a clinical setting. These generally occur in the final semester of the nursing program and involve a set number of hours during the semester and being assigned to a preceptor in the clinical setting.

Preceptor: A mentor or facilitator who directs education in a clinical setting

Clinical environment: An environment which fosters and encourages safe practice.

Final Year Nursing Student (BSN): A Baccalaureate nursing student in the last quarter of either the second year from an accelerated program or in the last quarter of the fourth year from a generic program.

 Preceptorship: The entire experience within which the final year student learns under the mentorship of a preceptor in a conducive learning environment.

Independent Variables

Preceptor characteristics: Defined as descriptive statements about the preceptors' communication and interaction characteristics related to other staff.

Communication – Is active listening, clear speech and the provision of feedback without judgment.

Interaction – A way of relating to others verbally or non-verbally.

Student-preceptor relationship: Relationship is defined as the way by which two or more people/groups behave towards each other, or a particular type of connection between two or more people/groups, such as the relationship between a student and a teacher. These characteristics are specifically described as related to the student.

Characteristics of the preceptorship environment: The student-reported preceptor credentials (if known); the length of time of preceptorship in hours and size of unit/hospital.

Dependent Variables

Self-esteem: Is a realistic respect for, or a favorable impression of one's self.

Professional competence: The ability for a person to display an expected level of related professional skills in practice. The nursing professional competencies include general behaviors and communication. (NOTE: See 3 items on the scale selected from CCQ)

Readiness to work as a registered nurse (RN): Prepared or available for service, work, action, or progress.

Summary

Transitioning from student nurse to a staff nurse has been widely studied and is documented to have a number of challenges. The preceptorship program was established to deal with those challenges and hopefully minimize or remove them before the new nurse enters the workforce. Many aspects of preceptorship and the student nurse have been studied but this study

deals specifically with how the student-preceptor relationship affects the student's self-esteem, self-reported professional competence in the learned clinical skills, and readiness to enter the workforce and practice.

This proposed study will research the operationally defined variables via survey in addition to reviewing all the other aspects of preceptorship to determine how the student-preceptor relationships affect the student's perception in the specific areas. Although it has been reported that preceptors benefit from the knowledge, expertise, and wisdom they acquire during the relationship as they work through challenging, complex, and unpredictable situations, the focus of this study is on how the student is impacted by the relationship.

Malcolm Knowles' philosophy, Albert Bandura's social cognitive learning theories, and Peplau's theory will be used as theoretical underpinnings of this work. Malcolm Knowles' theory influenced by Carl Rodger's theory of interpersonal relationship compliments andragogical teaching and learning approaches with principles that are student-centered, relationship-oriented, and collaborative in nature (Bolden, 2008). Bandura's social learning theory also suggests that people learn from one another by observing, imitating and modeling, and Peplau's inter-personal relationship theory suggest that the student preceptor relationship can determine how well students perceive their preparedness and readiness to practice as newly graduated novice nurses. Throughout nursing education, particularly during the preceptorship process which occurs towards the end of the nursing program, students need an environment in which they can effectively observe and imitate and also need a preceptor who encourages student independence, enhances self-esteem, and increases critical thinking (Blondy, 2007).

Chapter 2: Review of Literature

Introduction:

This chapter will provide a review of literature that informs this study. Each theoretical framework used to underpin the assumptions made will be described separately and then merged to reveal the importance of using all three theories in this study. Literature about preceptorship will then be extensively reviewed within the context of inter-professional communication, competency in nursing skills, self-esteem, and students' confidence levels related to their readiness to practice as registered nurses by graduation. Information on final year nursing students, preceptors, and the preceptorship environment will be discussed. The challenges that novice nurses face in the work environment will also be reviewed.

Data sources of literature review for this study include Cumulative Index to Nursing and Allied Health Literature (CINAHL), CINAHL Plus, Science Direct, Nursing Outlook, Nursing and Allied Health collection, MEDLINE, Google Scholar, EBSCO Host databases and from books about Preceptorship. Numerous documents and publications were reviewed for the acquisition of a wide range of literature for the rich background of this study.

Primary Theoretical Framework: Malcolm Knowles' Andragogical Approach

Malcolm Knowles' philosophy relates to andragogical methods of teaching and learning and was greatly influenced by Carl Rodgers' theories on interpersonal relationship in the facilitation of learning (Blondy, 2007; Smith, 2002). Carl Rodgers' theory discusses qualities of interpersonal relationships that facilitate learning and compliments andragogical teaching. It uses concepts and principles that are student-centered, relationship-oriented, and collaborative in nature. The aforementioned principles are deemed more effective with regard to facilitating

learning, reducing stress, and enhancing critical thinking in adult learners (Bolden, 2008).

Interpersonal relationships may be the foundation of all learning for students in their final

nursing education experiences, where transition to the impending new role is shaped. New nurse

graduates are often expected to assume full scope of nursing practice roles after the institution's

designated number of orientation weeks.

Throughout nursing education, particularly during preceptorship which occurs towards

the end of their nursing program, the student needs a preceptor and a clinical environment that

encourages student independence, enhances self-esteem, and increases critical thinking (Blondy,

2007), while simultaneously supplementing clinical skills and knowledge to prepare the senior

nursing student for professional clinical practice. When the preceptorship environment is such

that students experience their clinical learning in an andragogical manner, self-esteem will be

enhanced, confidence in inter-professional communication and collaboration will be well

developed, and competence in patient care will continuously improve.

Theoretical Principles/Concepts
Student Centered Principle

Malcolm Knowles' andragogical model is an adult learning, student-centered approach to

education (Blondy, 2007). Within the model, there is a collaborative and horizontal power

distribution between the teacher and the student-learner. Andragogical methods propose for an

environment that encourages student independence, increases critical thinking, and enhances

self-esteem. First, the student-centered approach includes both facilitative and collaborative

teaching styles (Blondy, 2007). In the facilitative style, the teacher encourages the student to

learn, elicits and accepts the student's feelings, offers back feelings towards the student and

sometimes utilizes silence in teaching. In the collaborative style on the other hand, the teacher

elicits and accepts the student's ideas and empathizes with the student. The student is encouraged to critically think to enhance comprehension of the material, improve skill performance, and solve problems in the relationship.

Relationship Oriented Principle

Secondly, considering the complex nature of the nursing baccalaureate program, relationships built during preceptorship orientations must be ones that will enhance the learning process. According to research done by Timmins and Kaliszer (2002), students identified that some of the sources of their stress included strained relationships with teachers and faculty.

Students who participated in a phenomenology study reported that having sensitive and perceptive faculty members helped them succeed in the nursing program (Cangelosi, 2007). Bolden (2008) stated that andragogical approaches encourage empathic interactions, independence, and self-directedness in students. In addition, Rodgers (1967) believed that when students felt threatened, they became inflexible during the learning process, but on the contrary, relaxed when they felt completely free to explore information and incorporate theoretical knowledge into life and clinical experiences. These approaches also served as role model team building behaviors which translated into inter-professional communication and collaborative efforts that are vital to nursing today.

Collaborative Principle

Last but not least, the collaborative approach facilitates students to ask questions and discuss concerns about the process using eye contact, listening skills, and therapeutic communication with the preceptor and staff (Blondy, 2007). Students are encouraged to develop solutions to their problems in a nonjudgmental manner. When the preceptor and staff model therapeutic communication during clinical interactions, students observe and learn how to utilize

the collaborative style of interaction in situations such as in conflict resolution and problem

solving, professionally and independently with staff and also with others.

Bandura's (1997) cognitive theory has similarities with Malcolm Knowles' principles and will be

included in this study as the secondary theoretical framework to answer the research questions in

this study.

Secondary Theoretical Framework: Albert Bandura's Social Cognitive Theory

Bandura's social learning theory suggests that people learn from one another by

observing, imitating, and modeling. The theory encompasses attention, memory, and motivation,

and is therefore often called the bridge between behaviorist and cognitive learning theories. This

social cognitive theory teaches that by observing others' attitudes, behaviors, and the outcomes

of those behaviors (modeling), personal ideas are formed by the observer of how new behaviors

are performed, these ideas become coded information which serve as a guide for the observer's

future action (Bandura, 1997).

By applying Bandura's theory, the model or the preceptor has the great responsibility of

modeling appropriately and effectively. For the instructor (model) to be able to reach the student

(observer) effectively with modeling, Bandura says there has to be possession of a high level of

self and instructional efficacy. Instructors with high levels of instructional efficacy are more

likely to develop challenging activities and have the ability to help students succeed. Teachers

with low instructional efficacy may avoid planning activities that will exceed their capabilities

and will not expend much effort to teach and re-teach in alternate ways that might enhance

student understanding (Bandura, 1997).

According to Bandura (1997), students' understanding of the modeled clinical material

depends on factors in the environment in which the learning process takes place. In addition,

there is the cognitive, affective, and biological events which constitute the personal and behavioral factors in Bandura's model. By observing others in a social environment where learning occurs, the observer acquires skills, rules, knowledge, strategies, beliefs, and attitudes developed through interpersonal relationships as discussed by Peplau.

Third Theoretical Framework: Peplau's Interpersonal Relationship Theory

Peplau, a renowned nursing theorist, addresses phases of interpersonal relationships between nurses and patients which are applicable to preceptors and prospective graduating nurses (Forchuck, personal communication, September 9, 2007, and November 20, 2011). Peplau's relationship theory is comprised of the orientation, identification, exploitation, and resolution phases which can enhance seamless transitioning into nursing practice. During the orientation phase, the preceptor and final year nursing student come to know each other and learn how to work together as the student recognizes the need for assistance with the transition. The identification phase is the time to discover opportunities for learning and improvement, and for the student to recognize the preceptor as a resource. During the exploitation phase, the final year nursing student uses the preceptor as a resource to support identified learning needs. When resolution occurs with the achievement of goals, mentoring can continue as the student becomes more competent and continues to transition into a professional nurse (Washington, 2013).

These three theoretical frameworks are all instrumental in understanding the relationship between the preceptor and the student in the clinical experience. Each framework contributes to the description and prediction of how the characteristics of the preceptor and the preceptorship experience influence the outcomes of students' readiness for work prior to graduation. Novice nurses' transition to become fully proficient in their professional roles and will be more efficient if they arrive better prepared.

Merged Theoretical Framework

      Merging the three selected theoretical frameworks is necessary to lay a foundation for this study and to reveal the similarities and the ease with which these theories work together to enhance comprehension of the underlying concept. Nursing students in their final year are considered adult learners and fit perfectly into the three andragogical principles explained by Malcolm Knowles which are; the student-oriented principle, the relationship-oriented principle, and the collaborative principle. These principles describe the need for a collaborative and horizontal power distribution between a teacher and an adult student-learner, and advocate for an environment that encourages student independence to increase critical thinking and enhance self-esteem. In a collaborative and horizontal power distribution experience, the teacher shares the learning experience with the student learner and encourages learning by doing and experiencing. The student's educated opinions are valued rather than depending on the teachers' wisdom and expertise only to transmit knowledge (Ahmed, 2013). Within the collaborative principle, learners are given ownership to decision-making processes regarding their own learning curve, including the content and methods in their curriculum to develop student learners' independence.

      Andragogical theory advocates for a lasting relationship between the student and the preceptor to enhance the learning process and create an environment in which the preceptor and staff can teach the student by modelling therapeutic communication during clinical interactions, and how to utilize the collaborative style of interaction in situations such as in conflict resolution and problem solving. Bandura's social cognitive theory encompasses attention, memory, and motivation, and compliments Malcolm Knowles' theory by suggesting that people learn from one another through observation, imitation, and modeling. Hildegarde Peplau's modified interpersonal relationship theory adds to the discussion by stating that the relationship between a student and a preceptor must be cordial and compatible for work, a time of discovery of

opportunities for learning and improvement, where the student is capable of recognizing the preceptor as a resource to meet identified goals, and finally, a place and time to resolve and achieve learning objectives.

All together, these three theories help to explain how the variable student-preceptor relationship, relates to the student's self-esteem, clinical competence skills, and readiness to practice at the time of graduation. These similarities lay a strong foundation towards the preparation of a student in the clinical setting to be a competent, confident novice nurse, ready for the different and complex challenges in the nursing workforce. The first step of Peplau's interpersonal relationship theory is the orientation phase which talks about the development of a cordial relationship between two people to enrich the learning process (Washington, 2013).

Bandura's theory suggests that the model or the preceptor has a great responsibility of modeling appropriately and effectively. The preceptor therefore has to possess the ability to relate to the student in such a way that will enhance the student's cognitive learning skills. Social cognitive theory teaches that by observing others' attitudes, behaviors, and the outcomes of those behaviors (modeling), personal ideas are formed by the observer of how new behaviors are performed, and these ideas become coded information which serves as a guide for the observer's future action (Bandura, 1997). The student is encouraged to critically think to enhance comprehension of the material, improve in skill performance, and problem solve in the relationship. These relationships may be the foundation of all practice learning processes for students in their final nursing education experiences, where transition to the impending new role is shaped.

Merged Theoretical Framework:

(Venn diagram)
- MALCOLM KNOWLES ANDRAGOGICAL THEORY
- ALBERT BANDURA'S SOCIAL LEARNING THEORY
- IDEAL PRECEPTORSHIP
- HILDEGARDE PEPLAU'S RELATIONSHIP THEORY MODIFIED BY FORCHUCK &WASHINGTON
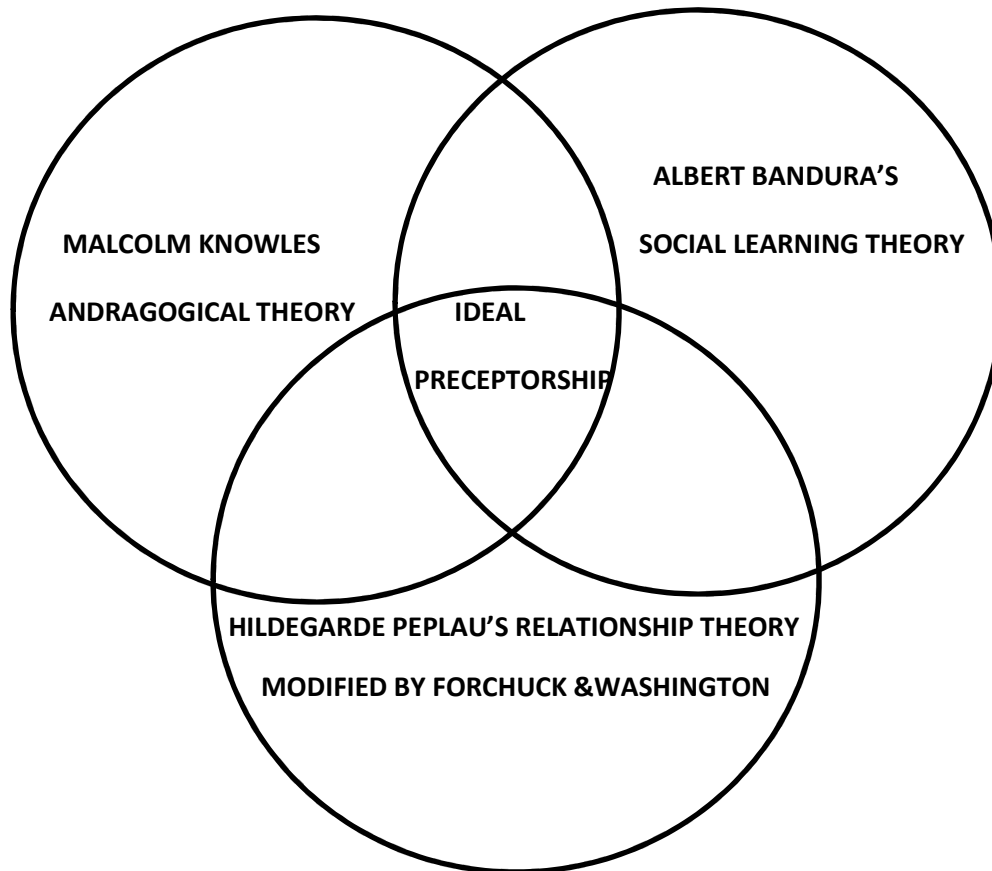
Final Year Nursing Student (BSN)

Final year in the baccalaureate nursing program must be an exciting time for nursing students because of the closeness to the end of their nursing education. As nursing students enter their final year of study, it should be expected that they are preparing to take responsibilities of their profession with confidence (Drexler, 2009). In addition to everything they have learned over the initial year(s), there is more learning of new information and skills, particularly on how to perform and deal with real life challenges in the practice arena, which has the potential of making the transition from student to nurse stressful and complex.

According to Lofmark & Thorell-Ekstrand (2006), final year nursing students rate their strongest areas as being holistically focused, being aware of ethical issues, communicating with patients, cooperation, and self-knowledge; and their lowest confidence in the amount of practical experience they have had. It has been suggested by Drexler, (2009) that interventions, strategies, and programs that can help build and maximize student confidence in relation to social learning include: the use of clinical demonstrators, mentors, peer instructors, models, human patient simulators, feedback, praise, humor, and mindfulness training, to mention a few. Final year nursing students have reported a lack of confidence in fulfilling the expectations and responsibilities of professional nursing. It is therefore essential that students are provided with constructive learning environments (Drexler, 2009), and support through preceptors and matured staff in the practice learning environment.

Challenges Faced by New Graduate Nurses in the Workforce

Existing documented challenges of the aging nursing workforce, and the predicted shortage of health professionals raise concerns related to undergraduate nursing students' readiness for practice as safe and competent registered nurses (Baltimore, 2004; Jackson, Clare, & Mannix, 2002). In addition, the literature describes concerns related to students' and new graduates' responsibility of taking on professional identity reflective of caring ideals of dignity, respect, and accountability in their everyday practice (Flint, 2006; Paton et al, 2004). Therefore, the registered nurse preceptor's role modeling of accountability is crucial in nurturing the new graduate's sense of accountability and respect towards patients and their family. Furthermore, it is contended by Stockhausen (2005), that the registered nurse in the preceptor role is essential to the student learner's acquisition of sense of personal identity as a nurse.

The imposter phenomenon is described in the literature about feeling like an imposter, which is a sense of pretense, not being who one really is, has been reported across a variety of professions (Clance & Imes,1978). They reported finding evidence of the phenomenon in a study of 150 women in the professional fields of law, nursing, medicine, social work, and higher education. The report discusses the fact that inspite of outstanding academic and professional accomplishments, women in particular who experience the imposter phenomenon continue to believe that they are not as intelligent and prepared as others think they are. In the preceptorship experience, such nursing students must be identified and affirmed as part of their preparation to enter the nursing workforce. Some of the symptoms exhibited in an imposter are lack of self-confidence, generalized anxiety, depression, and frustration due to the inability to meet the standards they have set for themselves. This can be applied to preceptors and the importance of effectively preparing students to build confidence and a sense of readiness in the areas of professional communication, practical skill competence, and self-esteem.

When the novice nurse who is feeling like an imposter (according to the imposter phenomenon) exits, the institution experiences three critical losses. First, a talented employee who could possess both tacit and explicit organizational knowledge is lost. In the present higher education environment, this knowledge may be critical to the strategic efforts of the institution, thereby making the knowledge valuable. Second, the exit of the novice nurse represents a considerable loss of organizational resources as many hours of mentoring, assessment and feedback, as well as development funds have been invested in the employee. Thirdly, the resources invested in preparing the novice nurse could have been used to develop a different employee, one more likely to remain committed to the organization (Clance & Imes,1978).

Similarly, the original phenomenon of Kramer's "Transition Shock" (Kramer, 1974) builds on her work by outlining how the contemporary new graduate engaging in a professional practice role for the first time is confronted with a broad range and scope of physical, intellectual, emotional, developmental and socio-cultural changes that are expressions of, and mitigating factors within the experience of transition shock. New nurses often identify their initial professional adjustment in terms of the feelings of anxiety, insecurity, inadequacy, and instability it produces. Transition shock focuses on the aspects of the new graduate's roles, responsibilities, relationship, and knowledge that both mediate the intensity and duration of the transition experience and qualify the early stage of professional role transition for the new nursing graduate. According to several authors (Alexander, Entwisle, & Horsey 1997; Cataldi & KewalRamani, 2009; Midgley, Feldlaufer, & Eccles, 1989), although many studies focus on the importance of early teacher-student relationships, some studies have found that teacher-student relationships are important during the transition time: the years when students are transitioning to a higher class or expectation. In conclusion, transition shock reinforces the need for preparatory theory about role transition for senior nursing students and the critical importance of bridging undergraduate educational curricula with the reality of workplace expectations. The goal of such knowledge is the successful integration of new nursing professionals into the highly dynamic context of professional practice (Duchsher, 2008).

Increased demand of quality nursing care, patient to nurse ratio, technology demands, and the shift in today's healthcare environment certainly places tremendous need and importance on the rapid progression of a new graduate novice nurse to a competent nurse. Lack of skill in clinical competencies essential to the nursing profession can hinder a novice nurse from working with confidence, and can lead to unacceptable caring practices in the work environment.

According to Benner (1984), competence is the integration of fundamental knowledge, clinical ability, performance, and attitude in the context of a nursing situation. A number of researchers have reported the levels of anxiety, feelings of inadequacy, and the lack of confidence expressed by novice nurses in their new role. In addition, some new nurses have stated that due to the feelings of inadequacy and incompetence in practicing their skill, they have developed low self-esteem and perceive they are not career-ready.

Competency in Nursing Skills

While there is no single accepted national definition, competence is defined as a generic quality referring to a person's overall capacity, and competency refers to specific capabilities such as leadership, made up of knowledge, attitudes, and skills. Conceptually, there are two approaches. The first, which is the behavioristic approach, focuses on tasks and skills and depends on direct observation of performance of each for evidence of competence. The second approach is holistic and regards competence in terms of broad clusters of abilities which are conceptually linked and which focuses on general attributes such as knowledge or critical thinking that are essential to effective performance (Policy +, 2009). A nursing skill is therefore a generic task that can only be completed by someone who has been prepared as a nurse through rigorous theoretical and practical education. Nursing students learn nursing skills throughout nursing school and are expected to be proficient by the time of preceptorship. During the preceptorship process, the student needs guidance and support to perfect or to become competent in most of the basic nursing skills such as in therapeutic patient/family communication, professional accountability, taking vital signs, performing full body assessments, and administering patient medication.

Theory from classroom learning, nursing school laboratory experiences, simulation laboratory sessions, and clinical orientations are structured to enhance proficiency of nursing skills. However, students need sufficient time during the preceptorship process to put into practice what they have learned in these previously mentioned experiences, under direct or indirect supervision and sometimes independently to build their confidence. Nevertheless, it is beneficial for students to know that most advanced nursing skills such as dialysis therapy, tracheostomy, and/or central line management are learned and perfected in specialty areas overtime. According to Clark, Owen, and Tholcken (2004), when students have a higher sense of self-confidence about their skills, they are more likely to think of these skills as important in nursing care and have an increased commitment to using them to benefit patients. Disempowering experiences can lead to fragile levels of self-confidence which can result in students disengaging from placements or leaving the program (Bradbury-Jones, Samsbrook, and Ervine, 2007), negatively impacting students' self-esteem.

Self-Esteem

According to Baumeister, Campbell, Krueger, & Vohs (2003), the appraisal of the effects of self-esteem is complicated by several factors because many people with high self-esteem exaggerate their successes and good traits. High self-esteem is also a heterogeneous category encompassing people who frankly accept their good qualities along with narcissistic, defensive, and conceited individuals. Although the modest correlations between self-esteem and school performance do not indicate that high self-esteem leads to good performance, high self-esteem is partly the result of good school performance. In addition, boosting self-esteem in students have not been proven to improve academic performance except the finding of its correlation with job performance, although the direction of causality is yet to be established.

While low self-esteem has been associated with externalizing behavior, delinquency, and depression under some circumstances, there is persuasion from some studies that high self-esteem does lead to greater happiness, happier outcomes, and enhanced initiative, regardless of stress or complex circumstances such as found in clinical practice areas. In contrast, low self-esteem was the best predictor of increases in sadness, while sadness predicted decreases in self-esteem (Ciarrochi, Heaven, & Fiona, 2007), a possible marker on a final year nursing student's feeling of readiness to practice.

Readiness to Practice

Readiness to practice after a college education in the world today is developed by career-ready standards for learning, and is geared toward more efficiently aligned systems of assessment and accountability that support higher levels of learning for all students, such as the development of skill competence through which positive self- esteem can be derived. Career-ready standards for learning provides a platform for nursing educators to develop more flexible designs of practical learning so that their graduates can meet the challenges of a world in which both knowledge and tools for learning are changing rapidly (Darling-Hammond, Wilhoit, & Pittenger, 2014). This report recommends an accountability approach that focuses on meaningful learning, enabled by professionally skilled and committed educators. It should be supported by adequate and appropriate resources, so that all students are prepared for their career when they graduate from college, especially after the preceptorship experience.

Preceptorship

Preceptorship is an essential clinical teaching method, particularly for undergraduate nursing students in the final year of their program. The Merriam-Webster online dictionary (2016) defines preceptorship as a formal, one-to-one relationship of pre-determined length,

between an experienced nurse and a student nurse, or a novice nurse (preceptee) designed to assist the preceptee in successfully adjusting to and performing a new role in a healthy environment. Luhanga, Dickieson, and Mossey (2010) have to contend that the success of the preceptorship experience depends greatly on adequate preparation of preceptors to maximize the clinical experience. Seldomridge and Walsh (2006) affirm that "the readiness and ability of preceptors to fulfill the demands of their role is influenced by the quality of orientation and the nature of ongoing support" (p. 172). It is reported that despite these observations, preceptors are often not adequately prepared for their role and rather learn through experience (Kemper, 2007; Smedley & Penny, 2009; Yonge, Ferguson, Myrick, & Haase, 2003).

According to Krautscheid (2008), literature provides insight into teaching-learning strategies that facilitate learning as well as interdisciplinary healthcare communication frameworks. The impact of a preceptor-student relationship is integral to implement and establish many of these strategies. Larew, Lessans, Spunt, Foster, and Covington (2006) argued that the development of nursing competency requires practice in the clinical environment. Integrating Clinical Assessment Simulations (CAS) is another area in which nursing education has made an effort to evaluate a student's ability to communicate effectively. In addition, deliberate practice with preceptor and faculty facilitation is necessary in gaining understanding and strengthening learning in the order of attaining higher-order thinking. A well-trained preceptor possesses the ability to lead in deliberate and repetitive student performance in the clinical setting of intended psychomotor or cognitive skills coupled with rigorous skills assessment that provides learners with specific, informative feedback, resulting in increasingly better skill performance (Issenberg, McGaghie, Hart, Mayer, Felner, Petrusa, Waugh, Brown, Safford, Gessner, Gordon, & Ewy, 1999). An example is applying the (SBAR), Situation-

Background-Assessment-Recommendation framework recommended by the Institute for Healthcare Improvement (IHI) and The Joint Commission (TJC) as a structured learning tool to prepare student nurses to communicate effectively within the clinical setting, as an optimal strategy (Krautscheid, 2008).

Baker, Grant, and Morlock (2008) have stated that teachers play an important role in the trajectory of students throughout the formal education experience. Although most research regarding teacher-student relationships investigate the pedagogical years of education, teachers have the unique opportunity to support students' social and academic development at all levels of schooling. As stated by numerous authors (Baker et al., 2008; O'Connor, Dearing, & Collins, 2011: Silver, Measelle, Armstrong, & Essex, 2005), positive teacher-student relationships enable students to feel secure and safe in their learning environments and provide scaffolding for important academic and social skills. Students are impacted positively in their long-term educational trajectory by teachers who support them in the learning process (Baker et al., 2008; O'Connor et al., 2011; Silver et al., 2005).

It is beneficial when teachers form positive bonds with students because classrooms and learning environments become supportive spaces in which students can engage in socially and academically productive ways. Positive teacher-student relationships are classified as having the presence of warmth, closeness, and positivity (Hamre & Pianta, 2001). Students who have positive relationships with their teachers use them as a secure base from which they can explore the classroom or learning environment both academically and socially, to take on academic challenges and work on social-emotional development. These challenges include peer relationship building, developing self-esteem and self-concept, through which students learn about socially and professionally appropriate behaviors, as well as academic expectations and

how to achieve them (Hamre & Pianta, 2001). Nursing students in clinical/preceptor rotations can especially benefit from positive relationships with their instructors/preceptors.

Another possible reason for the association between academic improvement and positive teacher-student relationships is students' motivation and desire to learn (Wentzel, 1998). Motivation may play a key role in the relationship between teacher-student relationships and academic outcomes. Motivational theorists suggest that students' perception of their relationship with their teacher is essential in motivating students to perform well (Bandura,1997; Fan & Williams, 2010; Pajares & Graham, 1996; Ryan, Stiller, & Lynch 1994; Wentzel, 2003; Zimmerman, Bandura, & Martinez-Pons, 1992). Students who perceive their relationship with their teacher as positive, warm, and close are motivated to be more engaged in school and to improve their academic achievement (Hughes, Cavell, & Jackson, 1999). Wentzel, (1998) suggests that students' motivation to learn is impacted positively by having a caring and supportive relationship with a teacher.

Preceptor-New Graduate Interpersonal Relationships

Interpersonal relationships with preceptors have been found to be associated with developing a sense of belonging and higher job satisfaction in new graduates (Shermont & Krepcio, 2006). Research by McNaughton (2000, 2005) supported both the presence and importance of interpersonal relationships. In an integrated review of literature and a qualitative study of data from audio recordings, one study showed that the relationship develops over time and that the longer a relationship exists, the stronger the relationship and the more work accomplished. It was determined that one-sided or difficult relationships are unproductive in solving problems. The key to mutual problem identification is building relationships and using appropriate behaviors to develop solutions to those problems.

Researchers of several quantitative studies (Forchuk, 1994b; Poorman, Mastorovich, Malcan, & Webb, 2009) determined that each relationship is unique and that, if a working relationship is not established within six months, it is unlikely to develop. Forchuk (1994a) determined that preconceived notions influenced how long the orientation phase lasted and how long it took, if ever, for the relationship to reach the working phase as described by Washington (2013). It was noted that the impression formed at the beginning of the relationship, positive or negative, was the impression that lasted; there was no change over a three month period. Forchuk et al. (1998) determined that, if the nurse was unavailable or distant, progress was slowed, if not halted. If the relationship progressed to the working phase, it was considered powerful and successful.

In the preceptor and new graduate relationship in the workplace, the preceptor model is the most common method of facilitating the transition of new graduates. This model facilitates development of competence and confidence, acceptance, and retention in new graduates (Fox, Henderson, & Malko-Nyhan, 2006). Although there is no published research measuring the strength of this relationship, research does exist explaining the effects of the relationship and its effect on the new graduates' work environment, which may influence job satisfaction and turnover (Lavoie-Tremblay, Paquet, Marchionni, & Drevniok, 2011; Romp & Kiehl, 2009).

Roche, Lamoureux, and Teehan (2004) conducted research evaluating an orientation program in collaboration with a healthcare system. They reported strong negative correlations between satisfaction with orientation and working with more than four preceptors. Contrary to Delaney's (2003) findings, these new graduates indicated that one to three preceptors gave them opportunity to work with more than one practice pattern. This study, as most other preceptor studies, provides insight for the new graduate programs, orientation to the workplace, and

hospital based transition interventions for new graduates. But none of them address the same issues of the student-preceptor experiences in the final year of undergraduate education.

A phenomenology study investigating new graduates' transition experiences revealed that, when final year nursing students had positive relationships with their preceptors, both their thoughts and progression in orientation were positively affected. Less experienced or inconsistent preceptors led to negative thoughts, slower progression, and confusion coupled with frustration for the new graduates (Chesnutt & Everhart, 2007; Delaney, 2003; Peplau, 1997; Wright, 2002). Several studies indicated that preceptors helped with confidence building and ease of transition, provided emotional support, and helped with learning and advice on professional issues (Fox et al., 2006; Sorensen & Yankech, 2008). Kramer (1974), Farnell and Dawson (2005) concluded that new graduates needed to spend time with preceptors to feel supported and to take advantage of the preceptor's knowledge and skills. They, too, concluded that working with multiple preceptors decreased the ability to build a relationship, which does affect the ability to attain competency. The theory of interpersonal relations also states that time spent in a therapeutic relationship helps individuals develop the competencies needed for personal development and problem solving (Forchuk, 1993). It is also important to assess the level of this "therapeutic" relationship in the preceptorship experience prior to the new graduate's employment.

The Health Resources and Services Administration's 2010 report stated that of all the nurses employed in the United States, 62.2% worked in hospitals. The hiring of newly graduated nurses have increased due to the decrease in experienced nurses being continuously lost to retirement. As new nurses enter the challenging workforce, there must be strategic processes in place both during clinical preparation and in the practice environment to facilitate successful

transition from student to professional nurse. According to Washington (2013), preceptors have a great influence on that transition by becoming catalysts in final year nursing students' ability to become successful novice nurses or not.

Summary

Chapter 2 has elaborated on the important role preceptors play in the graduating student nurses' career by influencing their decision to either stay or leave the nursing profession. The theoretical framework and the importance of student-preceptor relationship, the preceptorship environment, student accountability, and preceptor preparation discussed in this chapter suggest that preceptorship plays a major role in the future of a student nurse's career. Easy and smooth transitioning from a final year nursing student to an efficient novice nurse depends on the diverse factors discussed in this chapter, based on the student-preceptor relationship. Chapter three will discuss the methods by which this study was conducted.

Chapter 3: Methods

Introduction

In this chapter, the research design, study population, the sample and sampling procedures and hypotheses tests are discussed. Data collection and preparation procedures, instrumentation, and ethical considerations are described while the operational definitions of the research variables, including the procedure used for answering the questions of this study are described.

Research Design

This is a quantitative, correlational, descriptive study that included several open-ended questions designed to determine the extent of a relationship between the study variables of interest. In this type of design, relationships between and among the preceptorship/preceptor/student relationship, and the student's self-perceived nursing professional competencies (including general and communication skills), self-esteem and readiness for work in the clinical setting were investigated and analyzed. The survey was posted on SurveyMonkey®, a web based on-line data collection tool used frequently with the study population. Responses and participant demographics on the survey were requested after providing the final year nursing students with complete information about the study. The students were told that consent was implied by completion and submission of the survey.

Study Population

This study recruited student nurses from the National Student Nurses' Association's (NSNA) database. The National Student Nurses' Association was established in 1952 (Mancino, 2002), and is represented by nursing students from the District of Columbia, the US Virgin Islands, Guam and Puerto Rico in addition to participants from all fifty states (US). According to

information found on the National Student Nurses' Association's Home page (2015), NSNA, a nonprofit organization has a membership of approximately 60,000 nursing students. NSNA constitutes a broad spectrum of nursing students from Associate Degrees, Diploma, Baccalaureate, and Generic Graduate Nursing Programs. Although schools can opt for school membership which is known as the "Total School Membership Plan," individual students can become members on their own. NSNA also has a small percentage of members who are in RN to BSN programs.

The NSNA mission statement reads: "To mentor nursing students preparing for initial licensure as registered nurses as well as those enrolled in baccalaureate completion programs and to convey standards, ethics, and skills, that students will need to become responsible and accountable leaders and members of the profession" (NSNA.org. 2015). The National Student Nurses' Association prepares its members in several areas including giving them opportunities of either participating in the NSNA Leadership University where students can learn about shared governance and earn academic credit from participating nursing programs. They may also attend the Annual NSNA Convention which usually attracts approximately 3,000 nursing students each year. In addition, NSNA members are given the opportunity to participate in the Midyear Career Planning Conference. Members are exposed to several publications including the *Imprint* magazine published five times each year; *Getting The Pieces to Fit Handbook* for State Associations and School Chapters; *Guidelines for Planning* booklets for the various program areas that NSNA offers, and weekly news broadcast emails (*Getting The Pieces to Fit, 2015*).

Since 2008, NSNA has surveyed its members (graduating seniors) each September (Mancino, 2013) to examine employment and workforce trends. In addition, they survey membership on a variety of topics using the same web survey process and the membership list

database. The web survey process provided the source of the sample for this study. Baccalaureate nursing students who indicated their graduation date in the Winter 2014 and Spring of 2015, received emails inviting them to participate as the weeks approached graduation (April – June). For six weeks prior to mid-May (2015), senior graduating nursing students in baccalaureate programs were invited to click on the link to a study about their final months in school. A modest incentive was offered ($100) to be sent to one participant in a drawing at the end of the study. Up to two reminders were sent as needed to those that had not yet responded to obtain at least 500 participants. A final reminder to non-respondents was sent in early July, with the assumption that new graduates, if employed, were just beginning their new jobs.

Method of Recruitment/Sampling

Criteria for recruitment was a target of students in their final year in baccalaureate registered nurse (RN) programs, since such programs usually incorporate preceptorship experiences in the trajectory of the final year nursing student's curriculum. The proposed sample for this study was11,225 baccalaureates who graduated in Fall2014 and Spring 2015 (RNs removed). With an expected 30% return, the potential sample was approximately 3,300 participants from many different baccalaureate pre-licensure RN programs across the United States of America. A total of 6,316 surveys were sent initially, out of which 13.5% (851) responded, 0.3% (21) opted out and 1.3% (79) surveys bounced. The second invitation comprised of 4,789 surveys, 14.3% (685) responded, 0.4% (21) opted out, and 2.1% (102) bounced bringing the total number of respondents to 1,536. The principal investigator collaborated with the NSNA office to end the survey period when the adequate number of responses required per power analysis for this design of study was reached, assuming a moderate effect with an alpha =.05 and power at .80.

Sample

Email addresses of respondents were compiled under the auspices of NSNA to avoid compromising the integrity of their mailing list. The single package dissemination to subjects/participants comprised of the study description, freedom of participation and the option of refusal to participate, and anonymity information. In addition, the package included the risks and benefits of the study and study results, a web link to the survey, the deadline of response, an explanation that agreement of participation was their form of consenting, and finally the option to request study results. The primary investigator requested a mailing address at the end of the study to identify a recipient for the $100 gift certificate.

Instrumentation and Operational Definitions of Research Variables

The questionnaire disseminated to participants via a link in the emails sent by NSNA was developed from a combination of single instruments which were designed to measure all the variables under study in this research project. While organizing the survey, care was taken to delineate labels from each of the instruments used to avoid compromising their origin. According to Dillman, Smyth, Christian and Mcbride (2009), questions in surveys are better grouped so that the knowledge of topics organized are as in a conversation. Dillman et al. (2009) also suggested that it is better to begin with questions that are likely to be relevant to most respondents. In this survey, demographics were requested prior to the last of the questions, preceded by questions that are targeted to measure the independent variables which are the student-preceptor relationship and the preceptorship environment. Next were questions to measure the three dependent variables which are: competence in general clinical skills and communication, self-esteem in nursing practice, and readiness for RN practice.

Independent Variable

Student-Preceptor Relationship

The predictor, antecedent, or independent variables under study were (a) the relationship of the student and preceptor; (b) characteristics of the preceptor; and (c) characteristics of the hospital where the preceptorship occurred.

*Relationship***:** A relationship must be such that the people involved are related, connected, or associated with each other in respectful and considerate ways that will create a healthy connection or rapport to enhance the teaching/learning process. This relationship must be mutual, one in which all participants expect the same results, and are able to maintain an open communication throughout the learning process to boost self-esteem and confidence levels, and to improve the student's self-perceived performance levels (Hughes, Cavell, & Jackson,1999). The *Student-Preceptor Relationship* was measured by an instrument which combined source items from 3 originally developed tools that tested this relationship (a) the "clinical learning environment" items from the Salamonson, Bourgeois, Everett, Weaver, Peters and Jackson study (2011); (b) the "preceptor relationship scale" items from the Feeg and Gessner (2003) study on humor in the student-preceptor relationship; and (c) the "phases of the preceptor-new graduate relationship" scale by Forchuk & Brown, (1989), and Washington (2013).

The items formed a composite measure of the student-preceptor relationship clustered conceptually into 3 areas of (1) "preceptor general and communication skills"; (2) "preceptor interaction with others"; and (3) "preceptor interaction with me." The scale included a total of 32 statements with 5 Likert-type responses from Strongly Disagree (SD) to Strongly Agree (SA). Validity was based on the original tool development theoretical rationale for combining the components (see below). The higher the score on the instrument, the more positive the student-preceptor relationship. After combining these components, the new scale was tested for

reliability on the NSNA sample responses. Psychometric analysis to determine if the tool could split on high-low scores were done.

(a) ***Clinical Learning Environment*** (Salamonson et al., 2011): This original scale had 19 items used in studies to assess students' clinical learning environment. The original scale has a reported validity and reliability (coefficient alpha = .93). Items selected from this tool for the composite instrument were chosen based on appropriate application to this study questions and methodology.

(b) ***Preceptor Relationship Scale*** (Feeg & Gessner, 2003): This original scale of 28 items was developed for a study that tested the relationship of humor on the preceptor-student relationship. The original scale has reported validity (Factor analysis for 3 factors, including preceptor supportiveness [coefficient alpha = .71]; preceptor satisfaction [coefficient alpha = .79]; and preceptor social competence [coefficient alpha = .85]). Items selected from this tool for the composite instrument were chosen based on appropriate application to this study questions and methodology.

(c) ***Phases of the New Graduate-Preceptor Relationship*** (Washington, 2013): This original tool measured a patient's perception of different phases of their relationship with their nurse. Items selected from a modified version of this tool for the composite instrument were chosen based on appropriate application to this study questions and methodology. The adaptation of the Phases of the New Graduate-Preceptor Relationship was done prior to selecting items for the tool.

The four phases of relationship are between the orientation phase and the resolution phase and are measured on a 7-point Likert scale, with midpoints between each phase (Forchuk, 1994b; Forchuk & Brown, 1989). The components of each phase of the nurse-patient

relationship were identified directly from Peplau's theory, providing construct and content validity. Three mental health clinical nurse specialists with theory-based practices evaluated the relationship form for content validity. Inter-rater reliability for this form was found to be 91% (Forchuk & Brown, 1989).

The preceptor-student relationship version of the items was adapted for use with preceptors and graduating seniors with the permission of C. Forchuk (personal communication, December 10, 2007, and November 20, 2011). The adaptation included changing "nurse" to "preceptor," "client" to "new graduate," "integrates illness" to "integrates new RN role," "initiate rehabilitation plan" to "initiate orientation plan," "help plan for total needs" to "help plan for total orientation needs," and "teach preventive measures and self-care" to "assists preceptee to be self-directed." "Uses work stimuli" was deleted for this context, as suggested by Forchuk.

The adapted form yielded items to be used that determine graduates' perception of the phase of the relationship with preceptors. By understanding these relationships, nurse educators can help the individuals address challenges and solve problems (Forchuk, 1994a; McNaughton, 2005; O'Toole & Welt, 1989).

Characteristics of the Preceptorship Experience

To test the relationship of the preceptorship structure and clinical environment, a number of questions were added to the demographic questionnaire that asked respondents to describe to the best of their ability the size of institution, number of hours of preceptorship, placement in the curriculum, and whether the preceptor was a volunteer or was assigned by the institution. In addition to demographic questions about the students' age, gender and race, the respondents were asked if they received an offer to work in their preceptorship institution. These

characteristics were used to describe the range of preceptorship experiences that tested hypotheses predicting students' self-reported readiness to practice.

Dependent Variables

Nursing Professional Behaviors/Clinical Competency Skills

According to Ching-Yu and Shwu-Ru (2013), although researchers have evaluated nurse competence in past studies, few focused on the competence levels of nursing students immediately prior to graduation. Additionally, many of the competence scales were not supported with strong evidence of reliability or validity. The instrument used in this study is a slightly modified version of the Clinical Competence Scale developed and tested by Ching-Yu and Shwu-Ru, (2013). The purpose of the original study was to develop and test the psychometric properties of the Clinical Competence Questionnaire (CCQ) that measures the perceived clinical competence of rising baccalaureate nursing graduates.

The Clinical Competence Questionnaire was developed based on Patricia Benner's "From Novice to Expert" model. This developed instrument was evaluated in a cross-sectional study. A total of 340 baccalaureate students in their final semester of a 2-year RN-to-BSN program in Taiwan completed and returned the questionnaire. Out of the 340 students, data from 293 students who did not have work experience were used to test reliability and validity of the scale. The instrument was tested for content, construct, and criterion-related validity. The Cronbach's alpha for the entire CCQ was .98. Content and known-groups validity were confirmed. Principal component analysis showed a high degree of explanation of competence and revealed four components of competence: nursing professional behaviors, core nursing skills, general performance, and advanced nursing skills.

The results from Ching-Yu and Shwu-Ru (2013) study indicate that the CCQ demonstrates good reliability and validity for measuring the perceived clinical competence of upcoming baccalaureate nursing graduates. The CCQ is also a useful tool and is easy to administer for the self-assessment of nursing clinical competence. Study limitations and further recommendations for nursing were discussed. The CCQ items selected and used were chosen from a reduced set of items to minimize subject burden including the subscales of "general nursing professional behavior" and "communication" based on the focused area of this study. The 16 items were tested for reliability on the NSNA sample. The respondent was asked to rate each of the 16 activities with the following choices:

- Do not know at all in theory or practice;

- Know in theory but not confident at all in practice;

- Know in theory; can perform some parts in practice independently; need supervision available;

- Know in theory; competent in practice; need contactable source for supervision; and

- Know in theory; competent in practice without supervision.

A subset of communication competence items were used to measure the respondents' self-report of how competent they believe they were to perform the activities.

Self-Esteem

Self-esteem was measured by the "Rosenberg's Self Esteem (RSE) Scale" (1965), a widely used measure of global self-esteem. It is a ten-item Guttman scale with high internal reliability and a coefficient alpha of .92. The Rosenberg Self-Esteem Scale, a self-report instrument for evaluating individual self-esteem, was investigated using item response theory. Factor analysis identified a single common factor, contrary to some previous studies that

extracted separate "Self-Confidence" and "Self-Deprecation" factors. A one-dimensional model for graded item responses was fit to the data. A model that constrained the ten items to equal discrimination was contrasted with a model allowing the discriminations to be estimated freely. The test of significance indicated that the unconstrained model better fit the data-that is, the ten items of the Rosenberg Self-Esteem Scale are not equally discriminating and are differentially related to self-esteem. The pattern of functioning of the items was examined with respect to their content, and observations are offered with implications for validating and developing future personality instruments.

Readiness to Work as a Registered Nurse (RN) Scale

The Readiness to Work as a Registered Nurse (RN) Scale is an investigator-developed tool that was developed in a prior pilot study work. The instrument "Readiness of a Bachelor of Science Registered Nurse to Practice on Graduation" was developed using items from the literature and assessed for psychometric properties on a convenience sample of 48 undergraduate nursing students, with a follow-up on 32 graduate nursing students (n=74). The instrument was reviewed by three experts and received a content validity index score of (CVI = 91%) and a reliability (Chronbach's Alpha = 0.856). The revised and cleaned instrument was analyzed for construct validity based on known groups, testing the hypothesis that graduate students (who are registered nurses) will score higher on their "Readiness to Work as a Registered Nurse" than the undergraduate (senior) students. The results of the study demonstrated a statistically significant difference ($p<.05$) of the mean scores for graduate (m=62.8, sd. = 5.9) and undergraduate seniors (m=56.6, sd. = 6.3).

The final items on the Readiness to Work as an RN scale includes 15 Likert-type statements that respondents are asked to respond from 5 choices, from 1=Strongly Disagree (SD)

to 5=Strongly Agree (SA). The higher the total score, the more "readiness to work" reported by the respondent. Reliability of this scale was assessed on the NSNA sample.

Method of Data Collection

Data were collected via email surveys sent and responses were collected from the internet from final year students from the National Student Nurses' Association (NSNA) as they approached graduation (self-reported Winter 2014 and Spring 2015). Respondents' demographics were compared to that of non-respondents of NSNA membership to ensure that representativeness of the entire population was being studied, as suggested by Miller & Smith, (1983). A modest incentive ($100) was offered in a drawing at the conclusion of the study for one participant. Reminders were sent via the National Student Nurses Association usual procedures within their system of follow-ups for participants who did not respond. These were sent twice in six weeks, and the final reminder was sent a month following graduation, corresponding with the students' identified graduation dates (Spring 2015).

Hypotheses

The following are the hypotheses that were tested.

- H0: The student-preceptor experience is not related to the students' self-reported professional competencies.

- H1: There is a positive relationship between the student-preceptor experience and the students' self-reported professional competencies.

- H1: There is a positive relationship between the student report of preceptor characteristics (communication and interaction with others) and the students' self-reported professional competencies (general and communication skills).

- H1: There is a positive relationship between the student report of student-preceptor relationship (interactions with student) and the students' self-reported professional competencies (general and communication skills).

- H0: The student-preceptor experience is not related to the students' self-esteem.

- H1: There is a positive relationship between the student-preceptor experience and the students' self-esteem.

- H1: The relationship between the student report of preceptor characteristics (communication and interaction with others) and the students' self-esteem.

- H1: There is a positive relationship between the student report of student-preceptor relationship (interactions with student) and the students' self-esteem.

- H0: The student-preceptor experience is not related to the students' readiness to work as a registered nurse (RN).

- H1: There is a positive relationship between the student-preceptor experience and the students' readiness to work as a registered nurse (RN).

- H1: There is a positive relationship between the student report of preceptor characteristics (communication and interaction with others) and the students' readiness to work as a registered nurse (RN).

- H1: There is a positive relationship between the student report of student-preceptor relationship (interactions with student) and the students' readiness to work as a registered nurse (RN).

- H0: The type of clinical environment in the final preceptor experience (i.e. acute care, intensive care, specialty care), number of hours per week in the experience, and the

student-preceptor relationship does not predict students' readiness to work as a registered nurse (RN).

- ■ H1: The type of clinical environment in the final preceptor experience (i.e. acute care, intensive care, specialty care), size of the hospital/unit; number of hours per week in the experience, and if the student has already been offered a position in the hospital will predict students' readiness to work as a registered nurse (RN).

Ethical Considerations and Consent

Category of Review

The research proposal sent to the Molloy Institutional Research Board (IRB) requested review in the exempt category because the study did not require respondent names except for the email addresses to send the surveys. Email addresses were known only by the NSNA management and were not made available to the researcher until they were volunteered by the participants at the end of their questionnaire, because of their interest in the results of the study. Responses were known by the researcher and were not made available to NSNA. Participants were promised anonymity until the end of the study and one selected respondent the random winner was asked to provide a mailing address for the $100 gift card incentive to be sent.

Students were informed in the original NSNA survey that if they agreed to be a part of the study, completion of the surveys signified their consent to participate. The original invitation letter, which was sent via the National Student Nurses Association email distribution database included the title and purpose of the study, the risks and benefits of participating in the study, the benefits of the findings, and the freedom to decide not to participate in the study. In addition, confidentiality related to their email contact was explained and the time necessary for completion

of the survey was clearly stated. Finally, the use of the aggregate results of the study in conferences and publications were also described.

Data Preparation

Collected data was exported from SurveyMonkey® into the Statistical Package for Social Sciences(SPSS) for analysis with embedded labels and codes. Data calculation and coding per each measurement was done on the data set. Reverse coded questions were reversed and dummy codes were applied to categorical data such as data in demographics.

Method of Proposed Analysis

The study collected data on two separate independent predictor variables (student-preceptor relationship and demographic characteristics of participant and preceptorship site) and on three dependent variables. All data were entered and analyzed using IBM SPSS Statistics version 22. Correlation, Independent Sample t-tests, and ANOVA analyses were done appropriately. Final analysis included multiple regression with characteristics assessed for potential predictive values on the outcome variables.

Plan for Dissemination

Findings from this study can help inform undergraduate programs about their student-preceptor placement experiences. Preceptor-student fit and clinical experiences can be improved locally, with a potential for national dissemination via presentations and publication, to inform nursing education in general.

Chapter 4: Analyses and Findings

Introduction

Chapter 4 will address the four stated research hypotheses and the implemented analytic processes using the responses collected from the survey. This was a quantitative correlation survey study sent via Surveymonkey ® to the National Student Nurses' Association database for student responses. Five Likert- type scale survey instruments described as follows and a number of individually selected questions were used in data collection.

Student Self-Esteem was measured by the Rosenberg Self-Esteem Scale with high ratings in reliability areas; internal consistency was 0.77, minimum coefficient of reproducibility was at least 0.90 (M. Rosenberg, 1965, and personal communication, April 22, 1987). One item was omitted on the questionnaire in error.

Competence in skills was measured by a Nursing Professional Behaviors/Competencies (Sub-scale [16 items] of the Self-Assessment Clinical Competence Questionnaire – CCQ – Ching Yu & Shwu-Ru, 2013).

The **Student-Preceptor Relationship** was measured by an instrument which combines source items from 3 originally developed tools that tested this relationship (a) the "clinical learning environment" items from the Salamonson, Bourgeois, Everett, Weaver, Peters and Jackson study (2011); (b) the "preceptor relationship scale" items from the Feeg and Gessner study on humor in the student-preceptor relationship (2003); and (c) the "phases of the preceptor-new graduate relationship" scale by Forchuk and Brown (1989) and Washington (2013).

Student Readiness for Work (Working as a Registered Nurse) was measured by Registered Nurse "readiness" for work questionnaire, an author developed instrument with psychometrics to be reported in this chapter.

Selected demographic questions were used to capture demographics and covariates of this study. The rest of this chapter will present and describe general demographics of participants, characteristics of the preceptorship experience captured for this study, construct validity and reliability of the measures used in the survey study and modifications needed for the final analyses. Results are presented in both the narrative and in tables.

Study Purpose

The purpose of this study was to determine whether there are any positive or negative effects of a student-preceptor relationship on the student's perceived levels of competence in performing clinical skills, self-esteem, and the confidence of feeling ready to step into the registered nursing role at the completion of the preceptorship experience. It describes and explore the student-preceptor relationship in the final pre-graduation clinical experience (also known as practicum, capstone, clinical intensive etc.) related to the student's (a) personal self-esteem; (b) selected student learned professional competencies/skills; and (c) student self-reported readiness to begin practicing as a Registered Nurse (RN). This study will provide information for educational and clinical understanding of graduating nurses' transition to novice practicing nurses, with ways to tailor the preceptorship experience to ultimately benefit the student, nursing programs, and the healthcare system. The study focuses particularly on interpersonal aspects of preceptor fit and investigates already designed preceptor programs to ensure that they facilitate optimal effective preceptorship experiences to enhance the transition process. The findings of this study will assist nursing educators in arranging effective preceptor placements.

Table 1: Data Sources and Sample

<u>Data Sources and Sample</u>
<u>Data Sample   N = 1,536</u>

<u>Survey   N = 1,536</u>

General Description of Participants

Sample Characteristics

This chapter begins with an overview and description of the demographic characteristics of all survey participants. The researcher's target number (N) was 500 nursing students however, 1,536 nursing students with completed preceptorship experiences responded to the survey. A total of 928 nursing students completed all the questionnaires, and 608 students completed the surveys partially. All participants were Baccalaureate degree students from both the pre-licensure entry level and accelerated nursing programs (pre-licensure entry level for students with Bachelor's degrees in another field), and from Registered Nursing (RN) to Bachelor of Science in Nursing (BSN) degree programs. Nursing students from Associate Degree, Diploma, and Masters (Pre-licensure) programs were excluded.

Out of the total number of 1,536 respondents, 1,276 students representing (83%) of the participating respondents were entry level Baccalaureate students, 237 students representing (16%) of the respondents were from Accelerated programs, and 14 students representing (1%) of the respondents were RN to BSN students. After data cleaning, 608 participants (39%) with missing data were removed before the analysis. All participants were adults aged 20-60 years old.

Data collected on gender for this study is consistent with the gender proportion in the nursing workforce: 849 students (91%) were female, and 79 respondents (9%) were male nursing students. Majority (76%) were Caucasian, (7%) African American, (7%) Asian, (5%) were

Hispanic or Latino, 4% were from mixed race, and 2% were either American Indian/ Alaskan or Hawaiian native / Pacific Islander.

Participants were also asked if they were employed as registered nurses at the time of data collection: (20%) worked as registered nurses, (27%) worked as certified nursing assistants, (3%) were licensed practical nurses, and (52%) had other jobs other than nursing, or were unemployed at the time. Almost half of the selected population, 405 participants (43%) reported that they had their experience in a large institution (over 500 beds), 282 participants (30%) had their experience in a medium size institution (300-500 beds), 186 respondents (20%) in a small institution (under 300 beds), and 69 students (7%) did not know the size of the institution. When asked about the number of preceptors each participant had for the entire process, 547 students (60%) had one preceptor throughout the process, 200 respondents (22%) had two preceptors in all, and 171 participants (19%) had more than two preceptors by the end of their experience. There was a wide variety of number of hours of preceptorship ranging from 100-600 hours with some outliers removed before the frequency analysis. Participants were asked whether they had their preceptorship in the specialty area of their choice, and majority of them, 715 students (76%) reported that they were able to have the preceptorship in their specialty interest area, while 225 students (24%) did not.

When participants were asked whether their preceptors were assigned or were volunteers, 244 respondents (26%) said their preceptors were assigned by the healthcare institution, 535 students (57%) stated that their preceptors were volunteers, and 162 students (17%), did not know. Considering the kind of impact a prior summer internship can have on a student's preceptorship experience, participants were asked to report whether they had a prior summer

internship experience. A total of 779 participants (83%) reported that they had no prior summer internship experience while 158 students (17%) reported having prior internship experiences. A total of 355 participants (38%) of the respondents were excited to report that they had been given job offers at their preceptorship institutions, whereas a larger number of 584 participants (62%) were not given any job offers.

Knowing that the preceptorship experience is referred to by several names in different nursing institutions across the country, participants were asked to give the name of their final year one-on-one clinical experience. More than 650 participants (69%) called their experience a "preceptorship," 22% representing 213 students said their schools called the experience the "capstone;" 6% of students representing 52 participants came from a school where it was called an" internship;" 2% accounting for 16 students called it an "externship;" and 1% of the respondents representing 7-9 students said that theirs was either a "mentorship" or an "intensive orientation." Descriptive statistics, frequencies and percentages for personal and preceptorship characteristics are presented in Table 2.

Table 2: Characteristics Frequency and Percent

Participant Characteristics Frequency and Percent

Characteristics (N = 928)	f	%
Age:		
Range 20-60	928	100%
Gender:		
Male	79	9%
Female	849	91%
Race:		
Caucasian	851	76%
Black or African American	78	7%
Asian	70	6%
Hispanic or Latino	59	5%
Mixed Race	40	4%
Native Hawaiian or other Pacific Islander	13	1.5%
American Indian or Alaskan Native	5	0.5%
Type of Nursing Program:		
Baccalaureate Degree	1,276	83%
Accelerated Baccalaureate Degree	237	15.43%
RN to BSN	14	1%
Size of Preceptorship Institution		
Large - (Over 500 beds)	405	43%
Medium-(300 - 500 beds)	282	30%
Small - (Under 300 beds)	186	20%
Don't Know	69	7%
# of Preceptors:		
One	547	60%

Two	200	22%
More than two	171	18%

Hours of Preceptorship:

Range 100-600 hours	836	100%

Preceptorship in Specialty Area:

Yes	715	76%
No	225	24%

Preceptor:

Volunteered	535	57%
Assigned	244	26%
Don't Know	162	17%

Participant in Prior Summer Internship:

Yes	158	17%
No	778	83%

Job Offer at Preceptorship Institution:

Yes	355	38%
No	584	62%

*Note: Frequencies may not equal 928 and percentages may not equal 100% due to multiple responses and statistical rounding.

Instrument Reliability Analysis

This subsection contains summaries to demonstrate reliability of scales and subscales used for data collection in this study. All instruments used are established with measurement consistency and widely used except the subscale developed from three reliable instruments specific to

measure student-preceptor relationship, and the scale that measured registered nursing student's readiness to practice. Instrument reliability refers to the "consistency of measurement" determined by measuring each scale's Cronbach's alpha - a measure of internal consistency of an instrument to see if all areas within the subscales correlate with each other. Alpha coefficient ranges from 0 to 1. The closer a scaled coefficient is to 1, the greater the reliability of the instrument. Table 3 depicts each scale used in this study, coefficient alpha, and stratification of questions used for subscales.

Stratification of Questions

Table 3 clarifies specific questions directly related to dependent or independent variables used in this study. This study measured two independent variables which are (a) the student-preceptor relationship, modeled by the preceptor's characteristics in general, in communication, and in interactions with others (PCGCIO, PCGC, PCIO) combined with the preceptor's relationship in interacting with the student (PRIS), and (b) specific factors related to the preceptorship environment. The three dependent variables assumed to be impacted by the independent variables are (a) the students' competency skills, (b) the student's self-esteem, and (c) the student's feeling of readiness to practice as a registered nurse at graduation. The first independent variable (student-preceptor relationship) was measured by Preceptor Characteristics General Communication and Interaction (with others and with the student) instrument developed with specific items adapted from the following three established instruments;

a) The Clinical Learning Environment Inventory instrument (CLEI=19) developed by Salamonson, Bourgeois, Everett, Weaver, Peters & Jackson (2011), Journal of Advanced Nursing, 67(12), 2668-2676.

b) Preceptor Relationship Scale. Humor in the Student-Preceptor Relationship by Gessner & Feeg, (2003). George Mason University Presentation.

c) Phases of the Preceptor-New Graduate Relationship instrument by Forchuk & Brown (1989) and Washington (2013). Journal for Nurses in Professional Development.

The first dependent variable 'student's competence in skills' in general and in communication (SPCGCCS, SPCG, SPCCS) was measured by a Nursing Professional Behaviors/Competencies (Sub-scale [16 items] of the Self-Assessment Clinical Competence Questionnaire – CCQ by Ching Yu & Shwu-Ru, 2013) The second dependent variable "self-esteem" (SSE) related to this experience is measured by the Rosenberg Self-Esteem Scale with high ratings in reliability areas with an internal consistency was 0.77, minimum coefficient of reproducibility was at least 0.90 (M. Rosenberg, 1965, and personal communication, April 22, 1987) whereas the third dependent variable "student's readiness to work" (SRTW) was measured by an author developed instrument the "Registered Nurse (RN) Readiness to Practice" scale, pilot tested in a college between second year nursing students and newly recruited graduate nursing students with reliability results by a Cronbach's Alpha coefficient of .79.

Table 3 Reliability of the Measurement Instruments

***18 items **7 items *7 items

Instruments	Published "alpha"	Variable Description & Names Subscales from Instruments & Questions	In Study "alpha"
a. Preceptorship Relationship Scale***	PSu = .71 PSa = .79 PSC = .85	Preceptor characteristics (communication and interaction with others) PCGCIO. Questions 1-15	.92
b. Clinical Learning Environment Inventory**	.93	Preceptor characteristics (general communication with others) PCGC. Questions 1-8	.90
c. Phases of the Preceptor-New Graduate relationship* Items selected from these instruments and combined for Questions 1-32	.91	Preceptor characteristics (interaction with others) PCIO. Questions 9-15	.77
		Preceptor relationship (interactions with student). PRIS. Questions 16-32	.92
Self-Assessment Clinical Competence Questionnaire – CCQ.(Sub-scale [16 items]	.97	Student professional competency in general. SPCG. Questions 1-13	.91
		Student professional competency in communication skills. SPCCS Questions 14-16	.88
Registered Nurse "readiness" for work questionnaire.	Pilot Tested .79	Student' readiness to work as a registered nurse. SRTW	.87

Rosenberg Self-Esteem Scale.	.90	Student's self-esteem developed during preceptorship experience. SSE	.88

Note: Preceptor Supportiveness - Psu; Preceptor Satisfaction - PSa; Preceptor Social Competence - PSC

Descriptive Statistics

Descriptive statistics of quantitative measures were computed to provide summaries specific to this sample in relation to the purpose of this study. Nine measures were computed for mean (M), standard deviation (SD), and range (Ra) depicted in Table 4 for a meaningful interpretation.

Table 4: Instrument Measures of Central Tendency

Instruments	Mean	SD	Range
Preceptor Characteristics General Communication	4.34	.71	1-5
Preceptor Characteristics Interaction with Others	4.24	59	1-5
Preceptors Characteristics General Communication Interaction with Others	4.29	.62	1-5
Preceptor Relationship Interaction with Student	4.10	.63	1.24-4.94
Student Professional Competency General	4.56	.42	1.23-5
Student Professional Competency Communication Skills	4.30	.65	2-5
Student Professional Competency General Communication Skills	4.51	.44	1.38-5

Student Readiness to Work	3.98	.51	1.67-5
Self Esteem	3.96	.46	1.56-5

Note: SD = Standard Deviation

Professional Competency

Students' professional competency in general and communication skills (SPCGCS; M = 4.51, SD = .44, a 16 item competency scale) expected to be developed by the end of the preceptorship experience, was determined from a dual student perception angle. The first angle was from how the preceptor's characteristics in general, in communication and interaction with others (PCGCIO; M = 4.29, SD = .62,) within the preceptorship environment impacted the student, measured by the first 15 questions out of a 32 item preceptorship scale. The second was from the student's perception of how the preceptor's relationship and interaction with the student (PRIS; M = 4.10, SD = .63) impacted the student's professional competency skills, measured by questions 16-32 of the preceptorship scale.

Responses to professional competency questionnaires from both perspectives ranged from 1-5, 1 being strongly disagree and 5, strongly agree. Student professional competency general (SPCG; M = 4.56, SD = .42, questions 1-13 of the competency scale), with communication skills (SPCCS; M = 4.30, SD = .65) a subscale of questions (14-16) from the competency scale; preceptor characteristics general communication (PCGC; M =4.34, SD = .71, questions 1-8 of the preceptorship scale); and preceptor characteristics and interaction with others (PCIO; M = 4.24, SD = .59, questions 9-15 of the preceptorship scale), are subscales developed with selected questions from within the main scales to aid in measuring the variables of this study.

Self-Esteem

Students' self - esteem expected to be positively developed by the end of the preceptorship experience was measured by Rosenberg's 10 item Self-Esteem scale with Likert type questions ranging from 1-4. 1 being strongly disagree and 4, strongly agree without a neutral answer. The inter-rated mean of this scale for this sample was (SSE; $M = 3.96$; $SD = .46$), in relation to preceptor characteristics in general and communication with others, and the student's self-report of the student-preceptor relationship.

Readiness to Work

Students' self-report of feeling ready to work by the end of the preceptorship experience was measured by a researcher developed instrument (SRTW; $M = 3.96$, $SD = .46$), a 15 item Likert type questionnaire with responses ranging from 1-5, 1 being strongly disagree and 5, strongly agree. Students' readiness was measured in relation to the preceptorship experience based on preceptor characteristics in general and communication interaction with others, and on the student preceptor relationship.

Table 5: Quantitative Research Hypotheses, Variables, Measurements and Analyses

Quantitative Research Hypotheses, Variables, Measurements and Analyses			
# Hypothesis	Variable Type	Measurement(s)	Analysis
1) H0: The student-preceptor experience is not related to	Independent	PCGCIO	Correlation & regression
the students' self-reported professional competencies.	Independent	PRIS	
H1: There is a positive relationship between the student-preceptor experience and the students' self-reported professional competencies.	Dependent	SPCGCCS	

2) H0: The student-preceptor experience is not related to the students' self-esteem.	Independent	PCGCIO	Correlation & regression
	Independent	PRIS	
H1: There is a positive relationship between the student-preceptor experience and the students' self-esteem	Dependent	SSE	
3) H0: The student-preceptor experience is not related to the students' readiness to work as a Registered Nurse (RN).	Independent	PCGCIO	Correlation & regression
	Independent	PRIS	
H1: There is a positive relationship between the student-preceptor experience and the students' readiness to work as a Registered Nurse (RN).	Dependent	SRTW	
4) H0: The type of clinical environment in the final preceptor experience- summer internship, age, specialty area, job offering, number of hours of the experience, # of preceptors, preceptor assignment, size of institution, and the student-preceptor relationship does not predict students' readiness to work as a Registered Nurse (RN).	Independent/ covariates	Demographic Independent questions 5, 7, 9, 11, 12, 16, 19 and 20.	sample tests
		variance	Analysis of
	Dependent	SRTW	Correlation
H1: The type of clinical environment in the final preceptor experience- specialty area, number of hours of the experience, job offering, age, summer internship, # of preceptors, preceptor assignment, size of institution, and the student-preceptor relationship predicts students' readiness to work as a Registered Nurse (RN).	Dependent	SRTW	Regression

Research Questions, Hypotheses, and Data Analysis Results for this Study

Research Question 1

1.   What is the relationship of the student-preceptor experience (in the final pre-graduation clinical experience) on students' self-reported professional competencies?

a. What is the relationship between the students' reported preceptor characteristics (communication; interaction with others) and students' self-reported professional competencies (general and communication)?

b. What is the relationship between the student-preceptor relationship (interactions with student) and students' self-reported professional competencies (general and communication)?

Hypothesis

- H0: The student-preceptor experience is not related to the students' self-reported professional competencies.

    H1: There is a positive relationship between the student-preceptor experience and the students' self-reported professional competencies.

To examine research question 1, separate Pearson product-moment correlation coefficients were computed to assess the (a) relationship between preceptor characteristics in (communication and interaction with others) and the students' self-reported professional competencies (general and communication skills), and (b) preceptor characteristics (communication and interaction with the student) and the students' self-reported professional competencies (general and communication skills) with resulting analysis presented in Tables 5(a) and 5(b).

1.   H1: There is a positive relationship between the student report of preceptor characteristics general (communication and interaction with

others) and the students' self-reported professional competencies (general and communication skills).

Table 5(a). Correlation Coefficient between Variables: Preceptor Characteristics General Communication Interaction with Others and the Student's Self-Reported Competency Skills (General & Communication).

N 928	Student's Self-Reported Competency Skills	
	r	p
Characteristics General Communication Interaction with Others	.273**	.000

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

2. H1: There is a positive relationship between Preceptor General Communication (interactions with student) and the students' self-reported professional competencies (general and communication skills).

Table 5(b). Correlation Coefficient between variables: Preceptor Relationship (Interaction with Student) and the Student' Self-Reported Competency Skills (General & Communication).

N= 928	Student's Self-Reported Professional Competency Skills	
	r	p
Student-preceptor Relationship (Interactions with Student)	.308**	.000

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

Both Pearson correlation analysis tables show strong significant correlation levels in table (5a) (r = .273, n = 928, p = .000 two tailed) and (5b) (r = .308, n = 928, p = .000 two tailed), with p values of $p<$ .01 signifying that the null hypothesis (H0) can be rejected for question 1.

Research Question 2

2.   What is the relationship of the student-preceptor experience (in the final pre-graduation clinical experience) on students' self-esteem?

  a. What is the relationship between the students' reported preceptor characteristics general (communication; interaction with others) and students' self-esteem?

  b. What is the relationship between the student-preceptor relationship (interactions with student) and students' self-esteem?

Hypothesis

  • H0: The student-preceptor experience is not related to the students' self-esteem.

    H1: There is a positive relationship between the student-preceptor experience and the students' self-esteem.

To examine research question 2, separate Pearson product-moment correlation coefficients were computed to assess whether (a) there was any significance in relationship between preceptor characteristics in general (communication and interaction with others) and the students' self-esteem, and (b) preceptor characteristics general (communication and interaction with the student) and the students' self-esteem. Resulting analyses are presented in Tables 6(a) and 6(b).

  3. H1: There is a positive relationship between the student report of preceptor characteristics general (communication and interaction with others) and the students' self-esteem.

Table 6(a). Correlation Coefficient between Variables: Preceptor General Communication Interaction with Others and the Student's Self-Esteem.

N= 928	Student's Self -Esteem	
	r	p
Characteristics General Communication Interaction with Others	.276**	.000

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

    4. H1: There is a positive relationship between the student report of preceptor relationship and interaction with student (general & communication) and the students' self-esteem.

Table 6(b). Correlation Coefficient between variables: Preceptor Relationship (Interaction with Student) and the Student's Self-Esteem.

N= 928	Student's Self-Esteem	
	r	p
Student-preceptor Relationship (Interactions with Student)	.352**	.000

**Correlation is significant at the 0.01 level (two tailed)

The Pearson correlation analysis tables show strong significant correlation levels in tables (6a) (r =.276, n = 928, *p* = .000 two tailed) and (6b) (r = 352, n = 928, *p* = .000 two tailed) with p values of *p*<0.01 signifying that the null hypothesis (H0) can be rejected for question 2.

Research Question 3

3. What is the relationship of the student-preceptor experience (in the final pre-graduation clinical experience) on students' self-reported readiness to work as a registered nurse?

    a. What is the relationship between the students' reported preceptor characteristics (communication; interaction with others) and students' self-reported readiness to work?

b. What is the relationship between the student-preceptor relationship (interactions with

student) and students' self-reported readiness to work?

Hypothesis

- H0: The student-preceptor experience is not related to the students' readiness to work as a

    registered nurse (RN).

    H1: There is a positive relationship between the student-preceptor experience and the

    students' readiness to work as a Registered Nurse (RN).

To examine research question 3, Pearson product-moment correlation coefficients were

computed to assess whether (a) there was any significance in relationship between preceptor

characteristics in general (communication and interaction with others) and the students' self-

reported readiness to work as a registered nurse, and (b) preceptor characteristics general

(communication and interaction with the student) and the students' self-reported readiness to

work as a registered nurse. Resulting analyses are presented in Tables 7(a) and 7(b).

5. H1: There is a positive relationship between the student report of

    preceptor characteristics general (communication and interaction with

    others) and the students' readiness to work as a registered nurse (RN).

Table 7(a). Correlation Coefficient between Variables: Preceptor General Communication Interaction with Others and the Student's Readiness to Work as a Registered Nurse (RN).

N= 928	Student's Self-Reported Readiness to Work	
	r	p
Characteristics General Communication Interaction with Others	.322**	.000

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

6. H1: There is a positive relationship between the student report of

    preceptor relationship and interaction with student (general and

    communication) and the students' readiness to work as a registered

    nurse (RN).

Table 7(b). Correlation Coefficient between variables: Preceptor General Communication Interaction with Student and the Student's Readiness to Work as a Registered Nurse (RN).

N 928	Student's Self-Reported Readiness to Work	
	r	p
Student-preceptor Relationship (Interactions with Student)	.405**	.000

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

The Pearson correlation analysis tables show strong significant correlation levels in tables (7a)

$(r = .322, n = 928, p = .000$ two tailed) and (7b) $(r = .405, n = 928, p = .000$ two tailed) with p

values of $p < .01$ implying that the null hypothesis (H0) can be rejected for question 3.

Multivariate Linear Regression Analysis

To assess which of the independent variables; preceptor characteristics general

(communication and interaction with others) and the preceptor relationship and interaction with

student (general and communication) is the strongest predictor on the dependent variables;

students' self-report of competency skills, self-esteem, and the student's readiness to practice.

Refer to regression model Tables 8, 9 and 10.

Table 8: Regression Analysis for Student's Professional Competency.

Summary of Multivariate Regression Analysis for Student Professional Competency						
Variable	B	SE(B)	Beta	t	F	Sig.(p)
Preceptorship	.194	.022	.273	8.626	74.15	.000
Relationship	.213	.022	.308	9.835	96.722	.000

Note: Preceptorship R = .273, R² = .074   Relationship R = .308, R² = .095

Model One**: Preceptor Characteristics (with others) and Relationship with Student as Predictors of Student Professional Competency Skills**.

Correlation Tables 5 (a & b) suggested that there were positive correlations between (a) preceptor characteristics (general and communication) and interaction with others; (b) the student-preceptor relationship and interaction with the student; and the student's professional competency skill level. The bivariate regression analysis confirms that both independent variables are predictors of student competency skill levels, however, there is a greater difference between the student- preceptor relationship (β = .308; t = 9.835; p = .000) and the student's professional competency skills than the preceptor's characteristics (general and communication) and interaction with others (β =.273; t = 8.626; p = .000).

The R value represented a minimal degree of correlation between the two independent variables and the dependent variable competency, but suggests a relatively stronger correlation with the student-preceptor relationship (R = .308) than with the preceptor characteristics (others), (R = .273). The R^2 value represented how much of the variability in the dependent variable professional competency skill, can be explained by the independent variables preceptor characteristics (others) (R^2 = .074), and student-preceptor relationship (R^2 =.095). In this case, only 7.4% of the variability (or variance) in student professional competency skill can be explained by preceptor characteristics (others), and 9.5% of the variability in student professional competency skill is explained by student- preceptor relationship. The F-test also delivered a statistically significant finding (F = 74.1, df =926) in preceptor characteristics (others) and (F = 96.7, df =926,) in student-preceptor relationship, thus supporting the minimal contribution of both preceptor characteristics (others) and student- preceptor relationship on student professional competency skills. T-tests indicate that the predictor variables in this case contribute

to the model (t = 8.626), and (t= 9.835) respectively which are: Preceptor characteristics (others) and student-preceptor relationship. With the significant influence on student professional competency skills, each unit increase of preceptor characteristics (others) in the positive direction results in .273 increase in student professional competency skills. Similarly, each unit increase in student-preceptor relationship results in .308 increase in student professional competency skills. Student professional competency skills could be predicted in a modest manner, from the levels of both preceptor characteristics (others) and student-preceptor relationship explained by the following regression equations:

One can be 95% confident that the slope of the true regression line is positive and that at a 95% CI, the population mean student professional competency skill can be found between .152 and .268 for each unit increase in preceptor characteristics, and between .191 and .316 for the student-preceptor relationship variable. Based on the statistical significance of the regression model that was applied which is p< .01, the model can predict the outcome value, suggesting that the null hypothesis must be rejected for the alternative.

Table 9: Regression Analysis Table for Student Self Esteem

Summary of Multivariate Regression Analysis for Self-Esteem						
Variable	B	SE(B)	Beta	t	F	Sig (p)
Preceptorship	.205	.102	.276	8.732	76.096	.000
Relationship	.258	.023	.352	11.447	131.028	.000

Note: Preceptorship R = .276, R² = .076   Relationship R = .352, R² = .124

Model Two**: Preceptor Characteristics (with others) and Relationship with Student as Predictors of Students' Self-esteem.**

Correlation Tables 6 (a & b), suggested positive correlations between (a) preceptor characteristics (general and communication) and interaction with others; (b) the student-preceptor relationship and interaction with the student, and the student's self-esteem. The bivariate regression analysis confirms that both are predictors of student self-esteem, however, there is a relatively stronger correlation between the student- preceptor relationship (β = .352; t = 11.447; p = .000) and the student's self-esteem than the preceptor's characteristics (general and communication) and interaction with others (β =.276; t = 8.732; p = .000) and the student's self-esteem. The R value represented slight degrees of correlation between both predictor variables and the dependent variable self-esteem, but suggested a relatively stronger correlation with the student-preceptor relationship (R = .352) than with the preceptor characteristics (others), (R = .276). The R^2 value represented how much of the variability in the dependent variable self-esteem, can be explained by the independent variables; preceptor characteristics (others) (R^2 = 0.076), and student-preceptor relationship (R^2 =0.124). In this case, only 7.6% of the variability (or variance) in student professional competency skill can be explained by preceptor characteristics (others), and 12.4% of the variability in student self-esteem is explained by student- preceptor relationship. The F-test also delivered a statistically significant finding (F = 131.0, df =926) in preceptor characteristics (others) and (F = 76.0, df =926) in student-preceptor relationship, thus supporting the slight contribution of both preceptor characteristics (others) and student- preceptor relationship on student self-esteem. T-tests indicate that the predictor variables in this case contribute to the model (t = 8.73), and (t = 11.45) respectively. Preceptor characteristics (others) and student-preceptor relationship have significant influence on

students' self-esteem; each unit increase of preceptor characteristics (others) in the positive

direction results in .278 standard deviation increase in student self-esteem. Similarly, each unit

increase of positive student-preceptor relationship results in .352 standard deviation increase in

student self-esteem. Student self-esteem could be predicted modestly from the levels of both

preceptor characteristics (others), and student –preceptor relationship. One can be 95% confident

that the slope of the true regression line is positive and that at a 95% CI, the population mean

student self-esteem can be found between .214 and .338 for preceptor characteristics and

between .292 and .412 for the student-preceptor relationship variable. Based on the statistical

significance of the regression model that was applied which is $p < .01$, the model can predict the

outcome value suggesting that the null hypothesis must be rejected for the alternative.

Table 10: Regression Analysis for Student Readiness to Work

Summary of Bivariate Regression Analysis for Student Readiness to Work						
Variable	B	SE(B)	Beta	t	F	Sig(p)
Preceptorship	.264	.026	.322	10.355	107.221	.000
Relationship	.427	.050	.530	8.511	93.963	.000

Note: Preceptorship R = .322, R² = .104   Relationship R = .405, R² = .164

Regression analysis was done separately due to strong collinearity of independent

variables.

Model Three**: Preceptor Characteristics (with others) and Relationship with Student**

as Predictors of Student Readiness to Work.

According to correlation Tables 7 (a & b), there were positive correlations between

(a) preceptor characteristics (general and communication) and interaction with others; (b)

the student-preceptor relationship and interaction with the student; and the student's

readiness to work. The bivariate regression analysis confirms relationship between both

independent

variables and the dependent variable and suggests that both are predictors of student

readiness to work. However, it shows a larger difference between the student-preceptor

relationship ($\beta = .530$; $t = 8.511$; $p = .000$) and student readiness to work than with

preceptor characteristics (general and communication) and interaction with others ($\beta = .322$;

$t = 10.355$; $p = .000$). The R value represented correlations between both predictor variables

and the dependent variable readiness to work, however, suggested a relatively larger

difference with the student-preceptor relationship (R = .405) than in the preceptor

characteristics (others), (R = .322). The R^2 value represented how much of the variability in

the dependent variable readiness to work, can be explained by the independent variables

preceptor characteristics (others) ($R^2 = .104$), and student-preceptor relationship ($R^2 = .164$).

In this case, only 10.4% of the variability (or variance) in student readiness to work can be

explained by preceptor characteristics (others), and 16.4% of the variability in student

readiness to work is explained by student- preceptor relationship. The F-test also delivered

a statistically significant finding (F = 107.22, df =926) in preceptor characteristics (others)

and (F = 93.96, df =925) in student-preceptor relationship, thus supporting contributions of

both preceptor characteristics (others) and student- preceptor relationship on student

readiness to work. T-tests indicate that the predictor variables in this case contribute to the

model ($t = 10.35$), and ($t = 8.51$) respectively. Preceptor characteristics (others) and student-

preceptor relationship have significant influence on student professional competency skills;

each unit increase of preceptor characteristics (others) in the positive direction results in

.322increase in student readiness to work. Similarly, each increase in student-preceptor

relationship results in a .530 standard deviation increase in student readiness to work. Student readiness to work could be predicted modestly by both preceptor characteristics (others) and student-preceptor relationship. One can be 95% confident that the slope of the true regression line is positive. That means, at a 95% CI, the population mean student professional competency skill lies between .261 and .383 in relation to preceptor characteristics and between .364 and .464 in relation to student-preceptor relationship. Based on the statistical significance of $p<.01$ applied, the outcome value can be predicted suggesting that the null hypothesis must be rejected in favor of the alternative.

Research Question 4

- H0: The type of clinical environment in the final preceptor experience (i.e. acute care, intensive care, specialty care), number of hours per week in the experience, and the student-preceptor relationship does not predict students' readiness to work as a registered nurse (RN).

  H1: The type of clinical environment in the final preceptor experience, specialty area, size of the hospital, number of hours of the entire experience, and if the student has already been offered a position in the hospital will predict students' readiness to work as a registered nurse (RN).

An independent samples test was done to determine whether there is any significant correlation between a student's prior participation in a summer internship program between the junior and senior years of nursing, a job offer at the preceptorship institution and the student's self-reported readiness to work. Measures of central tendency are displayed in Table 11.

Table 11: Measures of Central Tendency

Age	N	M	SD
	928	26	7.543
# of Hours of Preceptorship	N	M	SD
	928	160	133.762
Note: M = Mean	SD = Standard Deviation		

Independent Samples Test Results for Categorical and Continuous Variables

Table 12: Independent Samples 'T' Test

N=928	Student's Self-Reported Readiness to Work	
	t	*p*
Participation in a Summer Internship	2.0	.037*
Job Offer at Preceptorship Institution	5.4	.000**
Number of Preceptorship Hours	36.6	.000**
Preceptorship in Specialty Area	3.0	.003**
Age	108.0	.000**
*Correlation is significant at the 0.05 level (two tailed).		t(926)
**Correlation is significant at the 0.01 level (two tailed).		

Independent Samples "T" tests show strong significance at the 0.01 level for the

variables: (1) Job offer at preceptorship institution (p = .000); (2) Number of

preceptorship hours (p = .000); (3) Preceptorship in specialty area (p = .003); (4) Age (p

= .000) and (5) moderate significance at the 0.05 level for the variable, "Participation in a

Summer Internship" (p = .037).

Analysis of Variance Test Results for Categorical (3+) and Continuous Variables

Table 13: ANOVA Tests

Analysis of variance tests showed no significant differences between the preceptorship

N = 928	Student Self-Reported Readiness to Work			
	Sum of Squares	F	P	(df)
Size of Institution	1.56	1.98	.115	4
Number of Preceptors	0.25	0.48	.614	4
Preceptor Volunteered or Assigned 1.49		2.84	.059*	3

*p = .059 (two tailed) non-significant but should be considered.

environment characteristics readiness to work, the number of preceptors, and students' readiness

to work as a registered nurse. Preceptor assignment on the other hand, had some significance on

the 0.05 level. Further tests, in this case a regression model was done to determine the strengths

of the suggested relationships with the dependent variable, readiness to work. Table 14 depicts

the results of the regression model.

Table 14: Regression Analysis Model Tabled Results.

Summary of Multiple Regression Analysis for Readiness to Work[2]					
Variable	B	SE(B)	Beta	t	Sig (p)
P. Vol/Assigned	-050	.023	-063	-2.153	.032*
Job Offer	.106	.031	.101	3.374	.001**
# of (P) Hours	.000	.000	.116	3.965	.000**
Age	.009	.002	.137	4.672	.000**
Specialty Area	-046	.036	-038	-1.291	.197
Summer Intern	.133	.041	.097	3.262	.001**
S-P Relationship	.322	.024	.400	13.492	.000**

Note: R =.472, R^2 = .223　　　　　　　　　　　　　　　　　　(F = 37.5, df = 915)
  *Correlation is significant at the 0.05 level (two tailed).
 **Correlation is significant at the 0.01 level (two tailed).

Model Four: Regression Analysis Model table shows strengths of several relationships depicted

by the Independent Samples "T" tests Table 12 and the ANOVA tests Table 13, and nullifies the

relationship between preceptorship in a specialty area (β = -038, t = -1.291, p =.197) and

students' readiness to work. The multiple regression analysis table confirms that being offered a

job in the preceptorship institution (β = .101, t = 3.374, p = .001); Number of hours of the

preceptorship experience (β = .116, t = 3.965, p = .000); age (β = .137, t = 4.672, p = .000);

participants with prior experience in a summer internship (β = .097, t = 3.362, p = .001); and the

student-preceptor relationship (β = .400, t = 13.492, p = .000) are strong predictors of students'

self-report of their readiness to work. There is also a moderate significant finding of relationship

on the 0.05 level between whether a preceptor was assigned or a volunteer, and students'

readiness to work. Overall, there is a relatively stronger correlation between the student-

preceptor relationship (β = .400) and students' readiness to work, making the student-preceptor

relationship the strongest of the predictors.

The R value (R = .472) represented moderate degrees of correlation between the

significant relationships with students' readiness to work. The R^2 value (R^2 = .223) represented

how much of the variability in the dependent variable readiness to work, can be explained by the

independent variables or covariates. In this case, 22.3% of the variability (or variance) in student

readiness to work can be explained by being offered a job at the preceptorship institution,

number of hours of the preceptorship experience, age, having a prior summer internship

experience, preceptor assignment, and the student-preceptor relationship. The F-test also

delivered a statistically significant finding (F = 37.5, df = 915), thus supporting the contribution

of the stated predictor variables. T-tests indicate that the predictor variables in this case

contribute to the model. Based on the statistical significance of the regression model that was

applied which is $p < .01$, and $p < .05$, the model can predict the outcome values suggesting that the null hypothesis must be rejected for the alternative in the significant relationships and accepted for the variable specialty area.

Interesting Findings

Based on additional correlation analyses and a regression analysis done, strong relationships were found between the dependent variable "students' readiness to work" and both students' self-esteem and students' professional competency skill level as depicted in the following tables.

Table 15: Correlation Analysis Between Dependent Variables and Student Readiness to Work[2]

N 928	Student's Self-Reported Readiness to Work[2]	
	r	p
Student Self-Esteem	.600**	.000
Student Professional Competency Com. Skills	.530**	.000

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

The Pearson correlation analysis table above shows strong significant correlations between students' self-esteem, students' professional competency (general and communication), and student's readiness to work as a registered nurse (RN). Table 16 depicts results of a follow-up regression analysis done to determine the strengths of the relationships and to identify the strongest predictor.

Table 16: Regression Analysis for Students' Readiness to Work[2]

Summary of Multivariate Regression Analysis for Student Readiness to Work[2]					
Variable	B	SE(B)	Beta	t	Sig(p)
Self-Esteem	.520	.028	.472	18.854	.000
Professional Competency	.866	.136	.744	6.384	.000

Note: R = .698, R² = .488 (F = 293.27)

Regression analysis table 16 confirms relationships and suggests that both are predictors of

student readiness to work. However, it shows a stronger correlation between students'

professional competency skills (β = .744; t = 6.384; p = .000) and student readiness to work

than students' self-esteem and readiness to work (β =.472; t = 18.854; p = .000). The R

value (R = .698) represented correlations between both predictor variables and the

dependent variable readiness to work. The R^2 value (R^2 = .488) represented how much of

the variability in the dependent variable readiness to work, can be explained by students'

self-reported competency levels and students' self-reported self-esteem. In this case,

48.8% of the variability (or variance) in students' self- report of readiness to work can be

explained by students' professional competency skill level including communication skills,

and students' self-esteem. The F-test also delivered a statistically significant finding (F =

293.2, df = 927) and supports the relationships with readiness to work. T-tests indicate that

the predictor variables in this case contribute to the model (t = 6.384) and (t = 18.854)

respectively.

Readiness to Practice Model 1:
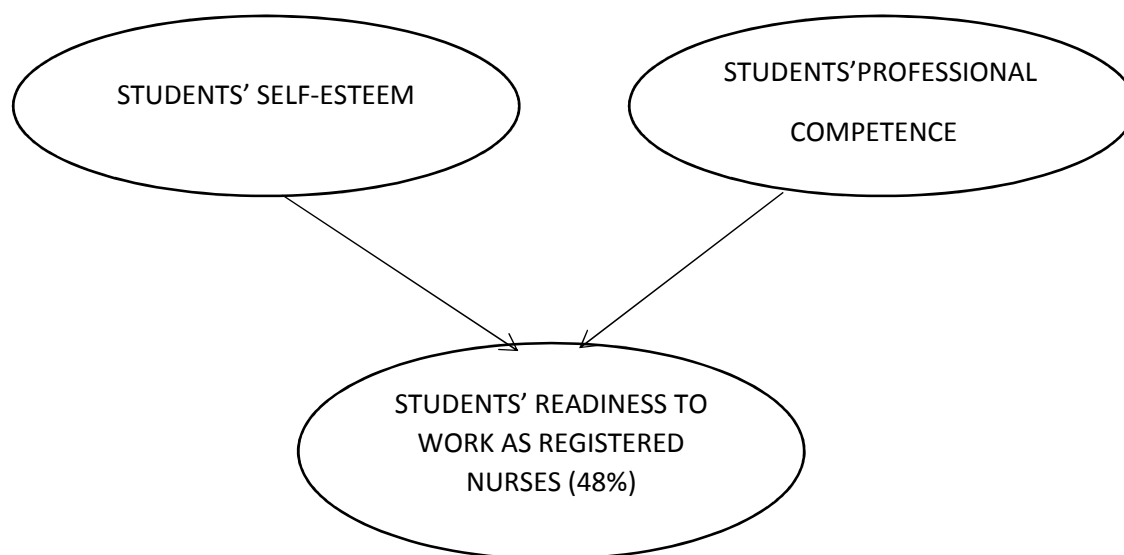
Summary of Chapter 4

This quantitative correlation study explored factors that affect final baccalaureate nursing students' self-reported perceptions on their professional competence, self-esteem, and readiness to work as registered nurses. Theoretical frameworks (3) used proposed that effective preceptorship was linked to students' clinical development. The literature reviewed for this study also implied and supported the idea that a number of external factors influenced a nursing student's preparation towards transitioning into a practice nurse. According to the 983 participants of this study, most of the suggested influencers are determinants and predictors of a preparing competent and confident novice nurses. While there were differences in reporting, the underlying conclusion from these findings are that effective and cordial relationships during the preceptorship process are needed to produce proficient future nurses. Chapter five will continue with the discussions of the findings in this chapter.

Chapter 5: Discussions, Limitations, Recommendations and Implications

Introduction

The purpose of this study was to test a conceptual research model which hypothesized that (1) student-preceptor relationship, characterized by the preceptor's interaction in general including communication with the student, and (2) the preceptorship environment, characterized by the environment itself, and how preceptor characteristics in general (communication and interactions with others) affect the student's professional competency skills, self-esteem, and readiness to practice by graduation. The results of this study supports the fit between survey data collected and the hypothesized relationships between the variables contained in this research and its conceptual model. These findings will provide information for educational and clinical understanding of graduating nurses' transition to novice practice nurses, with ways to arrange effective preceptor placements. In addition, these findings will assist nursing education to tailor the preceptorship experience to ultimately benefit the student, nursing programs, and the healthcare system. The study focused particularly on interpersonal aspects of preceptor fit and investigated already designed preceptor programs to ensure that they facilitate optimal effective preceptorship experiences mainly through relationships to enhance the transition process. Discussion will be about findings obtained from sample demographics and hypothesized analyses as laid out in chapter four. Limitations of the study, recommendations and implications will also be discussed in this chapter.

Sample Demographics

Gender results were consistent with the established gender population in the nursing profession, where females have greatly dominated the profession in a 9-1 ratio. The results for the type of baccalaureate nursing program responses also reflected the established numbers of

enrolment in the sample population. Majority of the respondents had recently completed the preceptorship process and had 2014 Fall or 2015 Spring reported as their year of graduation. One would have expected that because the concept of preceptorship is integral to nursing education, a uniform name/term would be established and used by all participating nursing programs to enhance standards, parameters and definitions. Responses from the participants of this study gave at least five most common names: (68.9%)668 called the experience preceptorship, (22.1%)213 a capstone, (5.6%)54 an internship, (1.7%)16 an externship, (0.9%)9 a mentorship and (0.7%)7 used intensive to describe this process. The remaining 195 respondents used 29 other terms such as practicum, leadership, transition to practice, passion assignment and many other names across nursing programs in the USA. Given the number of different names used for this important program, it is not surprising that students are not sure of what the standards and expectations are for them as laid out by the American Association of Colleges of Nursing (AACN, 2008) in the Essentials of Baccalaureate Education for Professional Nursing Practice and by the Accreditation Commission for Education in Nursing (ACEN) in the Evaluation of the Standards of Criteria/Standards for Accreditation of Baccalaureate and Graduate Nursing Programs documents.

Preceptor credentials were as expected for undergraduate teaching: Majority of the preceptors were certified in their specialty areas, most were bachelor's degree prepared registered nurses, some had their master's degree and there were a few midwives. Respondents of this study had their experience in all the different areas of nursing practice in their preceptorship institutions, from obstetrics to geriatrics and everything in between. Every area involving nursing was covered including informatics and different therapeutic areas. The rest of

the demographic questions were used to target pertinent information which could possibly be predictors and are therefore discussed in the covariate section.

Professional Competency in Nursing Skill

Students' professional competency in nursing skills was measured from a dual student perspective and consequently, is discussed from two angles. Forchuk and Washington (2007) reported that the preceptor model is the most common method of facilitating the transition of new graduates and the development of competence, confidence, acceptance, and retention in new graduates (Fox, Henderson, & Malko-Nyhan, 2006).

In this study, student professional competence (competency skills) measured by the Clinical Competence Questionnaire (CCQ), and related to preceptor characteristics in general (communication and interaction with others, PCGCIO) resulted in a statistically significant correlation with findings suggesting that 7.4% of the variance in the dependent variable professional competence, can be explained by the independent variable preceptor characteristics (communication and interaction with others).

Similarly, students' professional competence measured by the CCQ and related to the preceptor's relationship and interaction with the student (PRIS) also yielded a statistically significant correlation with results implying that 9.5% of the variance in the dependent variable professional competence, can be explained by the independent variable preceptor relationship and interaction with the student. Students' responses in this study were consistent with the significant finding of positive correlation between mentoring (precepting) and student self-efficacy (competence) reported by Hayes (1998). Malcolm Knowles' andragogical teaching methodology stated that in adult learning, a good interpersonal relationship between the student and the teacher facilitates learning and generates confidence (Blondy, 2007; Smith, 2002). It

follows yet another report which states that when students have a higher sense of self-confidence about their skills, they are more likely to think of these skills as important in nursing care and have an increased commitment to use them to benefit patients (Clark, Owen, & Tholcken, 2004). These study findings show that both independent variables positively impact students' professional competence, with student-preceptor relationship as the strongest predictor.

Student's Self-Esteem

Literature makes it clear that self-esteem is a complex human trait to determine, because of several complicating factors. According to Baumeister, Campbell, Krueger and Vohs (2003), the appraisal of the effects of self-esteem is complicated by several factors because many people with high self-esteem exaggerate their successes and good traits. Similarly, they reported that high self-esteem for example is a heterogeneous category encompassing people who frankly accept their good qualities along with narcissistic, defensive, and conceited individuals. In this study, student's self-reported self-esteem measured by the Rosenberg's Self-Esteem Questionnaire (SSE) and related to preceptor characteristics general (communication, and interaction with others PCGCIO) resulted in a statistically significant positive correlation. Regression analysis results suggested that 7.6% of the variability in the dependent variable student self-esteem can be explained by the independent variable, preceptor characteristics general (communication and interaction with others).

Measurement of student self-reported self-esteem related to the preceptor's relationship and interaction with the student also resulted in a statistically significant positive correlation. Regression analysis results implied that 12.4% of the variability in students' self-reported self-esteem, could be explained by the student-preceptor relationship. Although Baumeister et al, (2003) reported that boosting self-esteem in students had not been proven to improve academic

performance, they found its correlation with job performance and happy outcomes. Stockhausen (2005) contended that the registered nurse in the preceptor role is essential to the student learner's acquisition of sense of personal identity as a nurse. Findings in this study confirm existing literature such as found in Malcolm Knowles' collaborative and horizontal power distribution between the teacher and the student-learner, which is strategic for an environment that encourages student independence, critical thinking, and enhances self-esteem. Similarly, study findings show that although the student-preceptor relationship is stronger in predicting student self-reported self-esteem than preceptor characteristics general (communication and interaction with others), both independent variables positively impact students' self-reported self-esteem.

Students' Readiness to Practice in the Registered Nurse Role

Career-ready standards for learning provides a platform for nursing educators to develop more flexible designs of practical learning so that their graduates can meet the challenges of a world in which both knowledge and tools for learning are changing rapidly (Darling-Hammond, Wilhoit, & Pittenger, 2014). In this study, students reported from a dual angle on their readiness to practice at the completion of their preceptorship experience. Correlation and regression analysis resulted in modest correlations between students' self-reported perception of their readiness to practice and the preceptor characteristics general (communication and interaction with others); and the preceptor's communication and interaction with student (student-preceptor relationship). Regression results accounted for 10.4% and 16.4% of the variance in students' readiness to practice related to the two stated independent variables respectively. A large body of literature including that of (Bandura, 1997), elucidates the importance of a preceptor's ability to relate to a student in a way that will enhance the student's cognitive and social learning skills by

encouraging the student to observe others' attitudes, behaviors, and outcomes of behaviors (modeling), and to form personal ideas of how new behaviors are performed. These formed ideas which according to Bandura will become coded information and serve as a guide for the student's future action makes the described relationship necessary in the development of final year nursing students during the preceptorship experience.

Student-Preceptor Relationship

This study confirms what some researchers have reported in their findings about the importance of precepting, mentoring, guiding, and preparing final year nursing students during their preceptorship orientation to become ready and equipped with the professional competence needed for the workforce. Fortunately, many students in this study participated in excellent preceptorship learning experiences which is encouraging and will serve them well for their future nursing careers. The impact of the student-preceptor relationship, in terms of the strength of the relationship itself and how it prepares students in the areas of developing competence in the clinical experience, self-esteem, and their sense of confidence and readiness to begin working has been the focus of this study. Findings from this study have consistently shown that although the preceptor's general characteristics (communication and interaction) with others in the preceptorship environment affect how students perceive themselves as either competent or incompetent, the impact of the student-preceptor relationship on how students' perceive themselves is paramount in the future of students as they transition into professional nursing.

The preceptorship program in nursing education is a part of keeping the IOM (2003) report of nurses "Leading Change and Advancing Health," in perspective. Preparing final year baccalaureate nursing students to become competent and confident to practice in the real world is integral to healthcare. Effective preparation of transitioning final year nursing students will

greatly minimize, if not completely reverse, existing reports of several authors such as (Baxter &
Boblin, 2008; O'Neill, Dluhy, & Chin, 2005) who stated that clinical decision making for a
novice nurse is difficult because of documented emotional barriers of low self-esteem, low
confidence, and high anxiety. Clance's (1985), reports of similar findings about the graduate
nurse's self-confidence, skill competence, and the "imposter" syndrome, which describes novice
nurses as feeling like aliens in their new nursing roles will be effectively addressed. Finally,
Duchscher's (2008) "*Transition Shock*" concept which discussed the initial professional
adjustment issues that face the new nurses in terms of the feelings of anxiety, inadequacy,
instability, and insecurity will be history.

Additional Findings

Interestingly, but not completely shocking, findings of positive effects of the student-
preceptor relationship on students' self-esteem, affects students more than the modest numbers
suggest. As depicted in Table 17 (p. 104), students' who had their self-esteem improved due to
good student-preceptor relationships were heavily impacted in their confidence levels and
feelings of readiness to practice by graduation. Similarly, students who reported modest
improvement in their professional competencies due to the student-preceptor relationship, have
comparatively, greater levels of desire to enter the world of nursing practice. The assumption that
a fruitful student-preceptor relationship builds students up and makes them ready to enter the
complex professional nursing arena has been additionally confirmed indirectly by these non-
hypothesized findings.

New Knowledge about Preceptorship

The main new information identified by these study findings are related to the reports of
specific strengths recorded in percentages of the different relationships. Particularly, that of the

student-preceptor relationship and how it impacts the student's self-reported perception of competency in nursing skills, self-esteem, and readiness to practice is made clear in the results. Due to limited reference to specific strengths of the student-preceptor relationship in the literature, this study sought to provide percentages of the different strengths in both chapters four and five. Percentages which may look modest in numbers, but suggest that the lack of a positive and cordial relationship between a student and a preceptor during the preceptorship process will deprive the student of an important aspect of clinical development, and will adversely impact professional competency, self-esteem, and readiness to practice as registered nurses.

Sample Demographics (Covariates)

To control other potential factors that could impact a final year baccalaureate nursing student's self-reported readiness to practice as a registered nurse, students were asked to answer questions on the following covariates; student's participation in a summer internship, whether students were given a job offer at the preceptorship institution, size of the preceptorship institution, number of preceptors each student had, whether their preceptors were assigned or volunteers, number of preceptorship hours, whether students were fortunate enough to have their preceptorship experience in their special interest area and participants' ages.

In reference to Table 11 on page 82, there were statistically significant correlations between students' self-reported perception of their readiness to practice and several other factors. This indicates that while the student-preceptor relationship is critical to learning, students' perceptions are that the preceptor relationship is only one of many factors associated with student clinical learning. In the multiple regression analysis Table 13, having a preceptorship orientation in preferred specialty areas, seized to be significant with readiness to practice despite a positive significant finding in the Pearson's correlation analysis table among all the other factors.

Preceptor assignment was significant and consistent with results of some prior studies such as reported by (Hayes, 1998), that students who had their preceptorship with volunteers who were sometimes chosen by the students themselves, benefitted more than those who had institution assigned preceptors. During clinical orientations, students must be encouraged to take notice of nurses on the different units who worked well with them, for future preceptorship purposes.

Surprisingly, being offered a job at the preceptorship institution was significant to students' self-reported perception of readiness to practice. Although there are numerous reports of nursing shortage, many healthcare institutions have placed full time hiring on hold due to economic reasons. According to (Feeg & Mancino, 2014), graduate nurses reported that they felt misled by their nursing programs about obtaining jobs right at the completion of their education. Many students obtained loans to enable them to get through nursing school and therefore need paying nursing jobs at graduation to help them repay their loans. Frustration sets in if there are no responses to their job applications, and according to the results of this study, students felt well prepared and ready if they were offered jobs by their preceptorship institutions while they were precepting. According to Itano, Warren, & Ishida, (1987), preceptorship programs are, so far, well received by agencies, most of which see the program as a means of recruiting potential employees to benefit new graduates but also an excellent approach to cut cost due to decreased time of orientation.

Number of hours of the preceptorship experience was significant to students' self-reported readiness to practice. In practice, it must follow that the more time made available to a learner, the better prepared and ready the learner will feel. In an integrated review of literature and a qualitative study of data from audio recordings, one study showed that the student-

preceptor relationship develops overtime and that the longer a relationship exists, the stronger the relationship and the more work accomplished (McNaughton, 2005). In this study, students reported a wide range of time used for the preceptorship orientation, approximately 60-600 hours. There must be consistency and standardization of time needed for the preceptorship process in the final year baccalaureate curriculum across the United States, agreed upon by development boards of all participating nursing schools.

There was a statistically significant correlation between students' ages and their self-reported readiness to practice. The age range for students in this study was from 20 to 60 years, making it necessary for specific additional research to be done to investigate and obtain accurate differences in the age groups, in relation to students' readiness to work as a registered nurse. Additional specific questionnaires may reveal in more depth the age group that is the weaker, moderate, and strongest predictor of students' self-reported readiness to enter the workforce. Although it will be interesting to know, the use of such information will be debatable because it can encourage or discourage the different age groups.

Having a previous summer internship was also significant to students' self-reported readiness to practice, consistent with nursing student Ashwill's story shared by (Thomas, 2014) as follows.

> "Being placed in the float pool turned out to be a huge benefit to me as it allowed me to experience life as a nurse on many different units and in many different areas of medicine." "I saw patients from severe car accidents, children in the burn unit who were victims of abuse, women in labor including 15-year olds with no family support, and babies who were fighting to survive in the neonatal intensive care unit," "Tanaha was an exceptional preceptor and I gained so much knowledge working with her," Ashwill said. "At the beginning of the internship I watched her and listened to her quite a bit, but she gradually allowed me to perform treatments and procedures, and by the end of the internship I functioned as a full-time nurse."

Nursing school summer internships occur between the third and fourth year and they are mostly paid. Students get to work with preceptors and do similar activities such as in a final year baccalaureate preceptorship program with like objectives such as; utilizing the nursing process to provide safe patient care, completing reports and assessments and collecting data in a timely manner for the appropriate clinical site staff, enhancing communication skills with patients, families, coworkers, and other members of the health care team, demonstrating accountability for nursing actions consistent with professional standards, and demonstrating accountability for personal and professional development (CentraCare Health, 2016). However, a few students have the privilege to be accepted into summer internship programs. Nursing students will benefit tremendously if more hospitals join in to offer summer internships.

The size of the preceptorship institution was insignificant to students' self-reported readiness to practice. As long as they had good relationships with the preceptors with one or more of the prior mentioned relationships present, the size of the institution did not affect their perception. Working with one, two, or several preceptors through the preceptorship process did not affect respondents' perceptions of readiness to practice in this study either, possibly because most respondents worked with a maximum of three preceptors, and only a few had more than three preceptors. These findings are contrary to reports from Kramer (1974), Farnell & Dawson (2005), suggesting that working with multiple preceptors decreased the ability of students to attain competency, but are consistent with the strong negative correlations reported between satisfaction with orientation and working with more than four preceptors (Roche, Lamoureux, & Teehan, 2004). These results also complement Delaney's (2003) findings of new graduates who indicated that one to three preceptors gave them the opportunity to work with more than one practice pattern to well prepare them for transition.

Readiness to Work Model 2:

| PRECEPTOR-SHIP HOURS | SUMMER INTERNSHIP | AGE | PRECEPTOR ASSIGNMENT | JOB OFFER |

STATISTICALLY SIGNIFICANT WITH FINAL YEAR NURSING STUDENTS' READINESS TO WORK (22%)
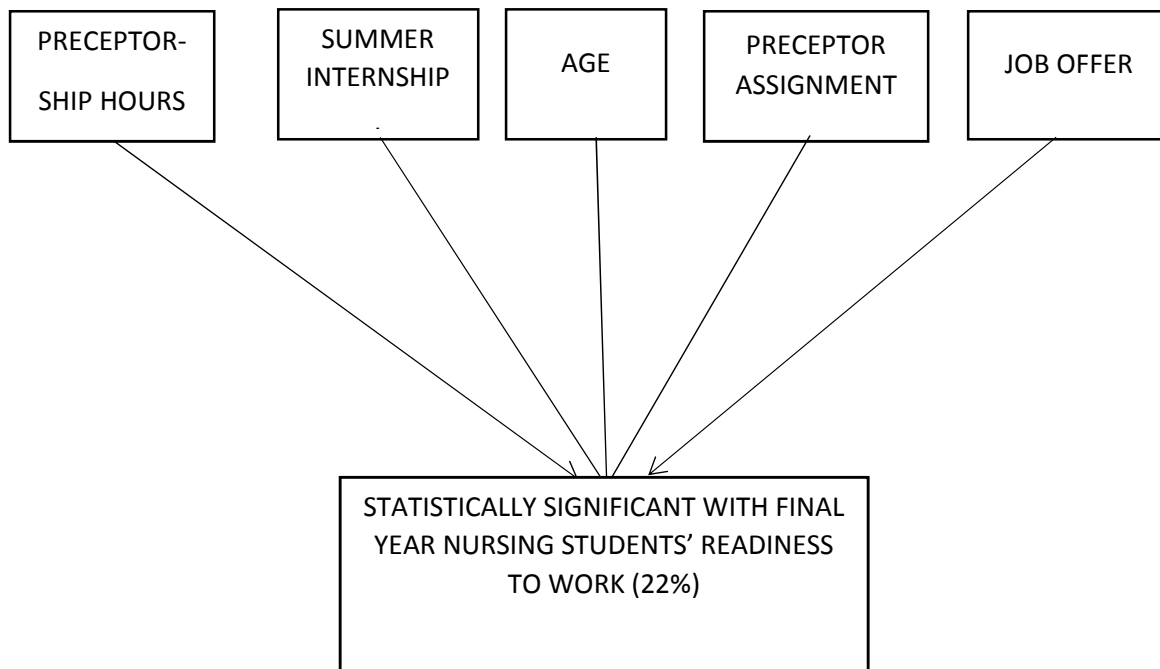
Preceptorship Descriptors

Participants responded to an open-ended question with comments regarding the nature of their preceptorship experience with their "significant" preceptors, n = 283 responded. Approximately 72% of the sample indicated positive experiences with their preceptor by using phrases such as

"It was an excellent learning experience."

"Fantastic learning experience in the busiest ED."

"Helpful experience, helped me gain confidence in my nursing skills."

"I felt that I grew the most during my preceptorship, I enjoyed working one-on-one with an RN and participated in all of the daily activities and tasks."

"An amazing experience. Of all things I felt like this experience best prepared me to be ready to go out and become a nurse with a full patient load."

Approximately 15% of the respondents indicated negative experiences with their preceptor by using phrases such as

"A very unpleasant experience."

"I will not recommend my preceptor to anyone."

"I felt like I was not learning what I needed to learn to take on direct patient care."

"I was disappointed that my preceptorship was done in a group setting instead of one-on-one due to lack of preceptors."

"It was a let-down. Neither the hospital, the specialty area, nor the preceptor were what I would have chosen for myself."

Finally, about 13% of the responses were not about the preceptorship experience but rather about the state board nursing examination and employment.

Limitations of Study

It is true that there are clear advantages to implementing surveys in a web-based format: such as the potential to reach participants around the globe very quickly, however, there were limitations associated with this method as well. Participants could not be monitored in terms of their answer choices, and there were challenges with assuring valid responses. There was no clear method to exclude occurrences of multiple responses from a single participant and the receipt of unsolicited responses. This study for example, offered a $100.00 incentive that could have led some participants to intentionally submit their responses multiple times to increase their chances of winning the incentive, or accidentally hitting the submit button more than once. Apart from a question on preceptor credentials, there was no information available regarding the

preceptor's length of nursing experience or on preceptor preparation and experience, all of which could have influenced how the preceptor related to the student, and how the preceptor's characteristics and interactions with other healthcare team members impacted the student. Finally, there was no information asked about students' preparation and their expectations of the preceptorship process which could influence the student's experience

Recommendations and Implications

Nursing Education

- To complement the already existing body of knowledge regarding the importance of preceptorship, this study recommends that the preceptorship program continues to be used as the bridge between theory and practice to make the transition process easier for registered nurses.

- The preceptorship program needs to be supported by all baccalaureate nursing programs and all hospital institutions because its success is outcome driven and effective in equipping final year nursing students with the tools they need to succeed as care givers in the real world.

- Appropriate time needed for a positive preceptorship should be determined by the educational governing body of nursing and standardized for all nursing programs.

- A standard name should be assigned to the final year preceptorship experience. It can solely be identified as 'preceptorship,' since the final year preceptorship experience in the final quarter of a student's curricula was the original idea seen as a solution to the dilemma of balancing theory with clinical competency, and a way to reduce stress in role transition and decrease reality shock for the new graduate (Davis & Barham, 1989).

- Verified benefits to students and preceptors from this and other studies suggest that every baccalaureate nursing program in the United States needs to include preceptorship in the final quarter of student curriculum to enhance transition.

- Part of the findings of this study leads to a strong recommendation particularly for nursing programs which have not yet included the preceptorship program to encourage their students to participate in summer internship programs if possible to prepare them for seamless transitions.

- Undergraduate nursing students need to be encouraged to make a list for themselves of potential preceptors the moment their clinical rotations commence. A list of nurses who worked well with them alongside their clinical instructors or perhaps of nurses they admired in the clinical setting who they can keep in touch with and request in the final year to become their preceptors.

- Student nurses who had no preceptorship or who had poor preceptorship experiences as reported by some students in this study, should be encouraged to participate in after nursing school residency programs to prepare them for seamless transitions.

- Students should be encouraged to promote and contribute to a positive interpersonal relationship between them and their preceptors to make the preceptorship experience beneficial for themselves, students should be taught that the success of the experience partly depends on their input.

Preceptors

- These results objectively verified that the student-preceptor relationship is paramount in a final year nursing student's transition process into becoming a proficient novice nurse and could be useful in preceptor preparation and development classes. Consequently, it will be beneficial for preceptors to know that their relationship with (1)the student, and (2) members of the health team, including patients and relatives in the preceptorship environment positively or negatively impacts students' perceptions of themselves and their practice in the future.

- Preceptors should be encouraged to practice Malcolm Knowle's Andragogical approach of teaching which is student-centered and within which the student is included in planning his or her own clinical learning experience.

- Preceptor preparation should include specifics from effective theories such as Albert Bandura's social learning theory and nursing oriented relationship theories to enhance proficient preparation of future nurses.

Nursing Associations and Accreditation Boards

- The American Association of Colleges of Nursing (AACN, 2008) which has defined accreditation standards should be included in reviewing the findings of this study to enhance critical evaluation, assistance, and possible reforms of nursing programs that lack the quality of expected preceptorship processes.

- Accreditation boards such as the Commission on Collegiate Nursing Education (CCNE,) which requires professional nursing standards and guidelines for nursing activities

including preceptorship, should address the lack of preceptorship programs in some nursing schools.

- Nursing associations and accreditation boards should hold all participating nursing programs accountable for under-performing preceptorship programs while at the same time, ensuring that the integrity of individual program missions and goals are respected and maintained.

- Nursing association's specific to nursing education should set a standard in all preceptor participating programs by choosing one term such as "preceptorship" to describe this particular experience together with a standardized time for the preceptorship process.

Healthcare

- Healthcare institutions should welcome students into their clinical settings to enhance clinical learning for nursing programs and nursing students, to ensure adequate preparation of future primary patient care-givers for ultimate assurance of patient safety.

- In accordance with previous study findings, healthcare institutions should reward preceptors for their work to foster motivation.

- Healthcare institutions should continue to collaborate with nursing schools through their institution's nursing educators to ensure adequate and consistent availability of resources to boost preceptorship programs.

- Healthcare institutions should continue to offer jobs to their student preceptees to boost their confidence in their preparation towards becoming practice novice nurses.

Future Research

- Further research is needed to determine why age had a statistically significant finding with final year baccalaureate nursing students' readiness to practice, to establish which particular age group(s) favors readiness to enter the nursing workforce.

- Additional research in the area of the number of preceptors each student had throughout the preceptorship process will be beneficial to clarify the inconsistencies in significance between this particular study and other studies.

- Different research designs such as a qualitative study on this topic will further explain students' perceptions of the student-preceptor relationship.

- Additional research, preferably qualitative methods done on any of the different aspects of this study will help clarify the importance of preceptorship and preceptor relationship to a more in-depth degree.

- A mixed methods research can be done on increasing confidence levels due to preceptor relationship and preceptorship, related to final year nursing students' readiness to practice as registered nurses.

- Mixed methods research can be done as a follow-up regarding how preceptor preparation carried the new graduate through novice nursing into becoming an expert in their field.

- Further research work is needed to include years of experience as a preceptor and years of experience in a particular preceptorship field.

- Finally, future follow-up research is needed to find out how many preceptees have become preceptors themselves and whether any strategies or cues were modeled after their former preceptors.

Table 17: Variance of Predictor Variables on Outcome Variables -What This Study Added

PRECEPTOR CHARACTERISTICS (PRECEPTORSHIP)	%s	STUDENT-PRECEPTOR RELATIONSHIP	%s
STUDENTS' PROFESSIONAL COMPETENCE	7.4%	STUDENTS' PROFESSIONAL COMPETENCE	9.5%
STUDENTS' SELF-ESTEEM	7.6%	STUDENTS' SELF-ESTEEM	12.4%
STUDENTS' READINESS TO WORK AS REGISTERED NURSES	10.4%	STUDENTS' READINESS TO WORK AS REGISTERED NURSES	16.4%

Conclusion

Teaching behaviors based on the theoretical frameworks used as the foundation for this study are necessary components for preparing proficient final year baccalaureate nursing students. Attributes such as positive role modeling, collaboration, facilitation, the ability to create a conducive learning environment which is relationship oriented are integral to nursing students' transitional trajectory of becoming graduate nurses, ready to face the complex challenges in today's healthcare system. Most of the students in this study perceived themselves as having had positive preceptorship experiences which enhanced their professional competence, self-esteem specific to the clinical learning process, and made them ready to join the nursing workforce.

Respondents in this study self-reported their perception of how the preceptor prepared them based on preceptorship (preceptor characteristics general, communication and interaction with others) and student-preceptor relationship (preceptor's interaction with student). Other factors such as age, job offering, prior participation in a summer internship, number of hours of preceptorship, and preceptor assignment were also found to influence final year baccalaureate nursing students' readiness to work. Among these influencers, student-preceptor relationship was the most dominant predictor in the final year student nurse's preparation as evidenced by reported percentages in chapters four, five and finally, in the percentage summary table before these concluding remarks.

Although relationship is not the singular predictor of final year baccalaureate nursing students' professional competence, self-esteem, and readiness to work, in this study, it is the most important element in the students' perception of satisfaction with their experience with preceptors. Preceptors' opinions were not sought for this study, students' perceptions were

paramount, and the main research question was how student-preceptor relationships impacted students. Findings reported in this study support the assumption that a good student preceptor relationship has a great impact on how students perceive themselves regarding their future nursing careers.

Considering the investment of human resources, time, and money involved in establishing a preceptor program, it is important that nursing educational institutions, clinical coordinators and clinical instructors, healthcare organizations, nurse educators and the healthcare team in the clinical setting, preceptors, and student nurses make clear determinations of the support systems, guidelines, policies, standards, benefits, and rewards to sustain all that is involved for the ultimate goal of patient safety. The initial step of achieving this goal according to findings of this study should be centered on efforts to nurture student-preceptor relationships by all stakeholders involved, for the continuous production of proficient future nurses.

Apart from confirming that the student-preceptor relationship is the most important factor in preceptorship, this study identified the importance of setting clear standards for the preceptorship program across all participating nursing schools. [Standards regarding a selected name to be used for the final year, final quarter one-on-one clinical experience of the nursing student should be established.] In addition, there should be a specific time frame for the experience that is uniform across the board. In addition, results from this study agreed with that of other research findings to reiterate the fact that up to three preceptors for a student during the preceptorship experience benefits students better than any number greater than three.

This study also identified the need for all baccalaureate nursing programs to incorporate preceptorship as part of the final year curriculum to enhance the transition process for nursing students. Participants expressed dissatisfaction with the entire nursing program if it did not have

an established preceptorship process as part of the curriculum. Students who had to share their preceptor with seven other students at a time, and throughout the entire experience felt like they had been deprived of their one-on-one student-preceptor relationship.

Summary

Preceptors in good relationships with their students in addition to precepting, share their experiences by talking about successes and difficulties they have encountered in their own nursing journeys, insights they have gained along the way, and most importantly pass on lessons they have learned by caring for patients in the many arenas of need they encounter each day (HCPro, Inc. 2007). Good student-preceptor relationships facilitate growth and development of nurses who will work alongside them in the future, who may become colleagues, peers, and leaders of the profession tomorrow. In connecting with preceptees, there is a building of responsibility and trust which translates into excellent patient care, job satisfaction, new nurse retention, less turnover rates, seamless novice to expert experiences, and ultimately patient safety. To build effective student-preceptor relationships, all stakeholders should understand and participate in the essential building blocks including the essential roles, responsibilities, and accountabilities of the preceptor and the preceptee within the context of the preceptorship environment.

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APPENDIX A

Research Instruments

Self-Esteem Scale (Rosenberg, 1965)

Instructions: Below is a list of statements with your general feelings about yourself. If you strongly agree, select **<u>SA</u>**. If you agree with the statement, select **<u>A</u>**. If you disagree with the statement, select **<u>D</u>**. If you strongly disagree with the statement, select **<u>SD</u>**.

On the whole, I am satisfied with myself.	SD	D	A	SA
*At times, I think I am no good at all.	SD	D	A	SA
I feel that I have a number of good qualities.	SD	D	A	SA
I am able to do things as well as most other people.	SD	D	A	SA
*I feel I do not have much to be proud of.	SD	D	A	SA
*I certainly feel useless at times.	SD	D	A	SA
I feel that I'm a person of worth, at least on an equal plane with others.	SD	D	A	SA
*I wish I could have more respect for myself.	SD	D	A	SA
*All in all, I am inclined to feel that I am a failure.	SD	D	A	SA
I take a positive attitude toward myself.	SD	D	A	SA

* Items are reversed.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton

    University Press

Preceptor Characteristics and Student-Preceptor Relationship

Please indicate the response that best describes the statements below related to your preceptor in the final clinical experience of your nursing program. Choose from the following:

1=Strongly Disagree
2=Disagree
3=Neutral
4=Agree
5=Strongly Agree

Preceptor General and Communication Skills					
My preceptor was competent.	SD	D	N	A	SA
My preceptor was creative and open to new ideas.	SD	D	N	A	SA
*My preceptor was unfriendly and inconsiderate.	SD	D	N	A	SA
My preceptor generated enthusiasm for her/his job.	SD	D	N	A	SA
My preceptor encouraged team spirit.	SD	D	N	A	SA
My preceptor was a good listener.	SD	D	N	A	SA
My preceptor was people-oriented.	SD	D	N	A	SA
*My preceptor was a gossip.	SD	D	N	A	SA
Preceptor Interactions with Others					
My preceptor confronted issues openly.	SD	D	N	A	SA
My preceptor had an open-door policy.	SD	D	N	A	SA
My preceptor maintained a close-knit group.	SD	D	N	A	SA
*My preceptor was not approachable by others.	SD	D	N	A	SA
My preceptor was fair in dealings with subordinates.	SD	D	N	A	SA
*My preceptor did not consider others' feelings.	SD	D	N	A	SA
*My preceptor seldom communicated with other staff.	SD	D	N	A	SA
Preceptor-Student Relationship (Interactions with Me)					
*My preceptor did not encourage my questions.	SD	D	N	A	SA
*My preceptor did not allow me to provide direct patient care.	SD	D	N	A	SA

My preceptor gave me constructive feedback.	SD	D	N	A	SA
My preceptor gave me frequent feedback regarding my progress.	SD	D	N	A	SA
*I was afraid to express my real views to my preceptor.	SD	D	N	A	SA
My preceptor helped me develop my skills.	SD	D	N	A	SA
My responsibilities were well-defined.	SD	D	N	A	SA
My preceptor answered my questions in a thoughtful manner.	SD	D	N	A	SA
My preceptor assisted me to find additional learning experiences.	SD	D	N	A	SA
*My preceptor would often get sidetracked.	SD	D	N	A	SA
My preceptor led me through decision-making.	SD	D	N	A	SA
*My preceptor was critical of me.	SD	D	N	A	SA
My preceptor clarified expectations of me.	SD	D	N	A	SA
*My preceptor made me anxious.	SD	D	N	A	SA
My preceptor helped me manage my anxiety.	SD	D	N	A	SA
My preceptor facilitated my independence.	SD	D	N	A	SA
I felt supported in my accomplishments by my preceptor.	SD	D	N	A	SA

* Reverse scored items.

This instrument combined and adapted specific items from several reported scales including:

- Salamonson, Bourgeois, Everett, Weaver, Peters & Jackson (2011) *Clinical Learning Environment Inventory (CLEI=19). Journal of Advanced Nursing, 67*(12), 2668-2676.
- Gessner &Feeg, (2003). Preceptorship Relationship Scale. *Humor in the Student-Preceptor Relationship. George Mason University Presentation.*
- Forchuk& Washington (2013), *Phases of the Preceptor-New Graduate Relationship, Journal for Nurses in ProfessionalDevelopment.*

Nursing Professional Behaviors/Competencies (Sub-scale [16 items] of the Self-Assessment Clinical Competence Questionnaire – CCQ–ChingYu & ShwuRu 2013)

INSTRUCTIONS: Please rate the following items using the following descriptors:
1=Do not know at all in theory or practice.
2=Know in theory but not confident at all in practice.
3=Know in theory; can perform some parts in practice independently; need supervision available.
4=Know in theory; competent in practice; need contactable sources for supervision.
5=Know in theory; competent in practice without supervision.
How competent do you believe you are to perform the following activities?

Rate each of the activities below:					
Following health and safety precautions.	1	2	3	4	5
Taking appropriate measures to prevent or minimize risk of injury to self.	1	2	3	4	5
Taking appropriate measures to prevent or minimize risk of injury to patients.	1	2	3	4	5
Preventing patients from problem occurrence.	1	2	3	4	5
Adhering to the regulation of patients' and families' confidentiality.	1	2	3	4	5
Demonstrating cultural competence.	1	2	3	4	5
Adhering to ethical and legal standards of practice.	1	2	3	4	5
Maintaining appropriate appearance, attire, and conduct.	1	2	3	4	5
Understanding patient rights.	1	2	3	4	5
Recognizing and maximizing opportunity for learning.	1	2	3	4	5
Applying appropriate measures and resources to solve problems.	1	2	3	4	5
Applying or accepting constructive criticism.	1	2	3	4	5
Applying critical thinking to patient care.	1	2	3	4	5
Communicating verbally with precise and appropriate terminology in a timely manner with patients and families.	1	2	3	4	5
Communicating verbally with precise and appropriate terminology in a timely manner with other healthcare professionals.	1	2	3	4	5
*Understanding communication from patients, staff and other health professionals.	1	2	3	4	5

*Modified from original to clarify question related to communication.

Student Readiness for Work (Working as a Registered Nurse)

Registered Nurse "readiness" for work questionnaire.

Please take a few minutes to fill out this registered nurse readiness questionnaire based on how you feel about working in your first Registered Nurse position. The scale being used ranges from "Strongly Disagree to Strongly Agree." Indicate your degree of agreement to the statements provided. Your feedback is important and your answers will be kept confidential. Thank you for your participation.

	ITEMS	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1	I am not sure of how to use best available evidence to begin and continuously improve quality of clinical practice. ®	SD	D	N	A	SA
2	I am ready for the workload demands awaiting me on my new job.	SD	D	N	A	SA
3	My ability to prioritize will help me manage my workload.	SD	D	N	A	SA
4	I am prepared to organize well to make my work easy on my new RN job.	SD	D	N	A	SA
5	I will find it difficult to interact with physicians. ®	SD	D	N	A	SA
6	I am ready to be fully accountable for all aspects of my delivery of nursing care.	SD	D	N	A	SA

	ITEMS	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
7	I am afraid that my new co-workers will judge me. ®	SD	D	N	A	SA
8	I am confident in my nursing skills.	SD	D	N	A	SA
9	I feel that I have been well prepared to work in my first RN position.	SD	D	N	A	SA
10	I will easily fit into the culture of my new working environment.	SD	D	N	A	SA
11	I do not feel ready for an RN leadership role to promote collaboration with other team members in my new position.	SD	D	N	A	SA
12	I feel confident in my ability to interact well with patients.	SD	D	N	A	SA
13	I am willing to commit to ongoing learning in my new position.	SD	D	N	A	SA
14	I am confident enough in myself to accept guidance from my new co-workers.	SD	D	N	A	SA
15	I find it intimidating to evaluate the impact of health care delivery on patients and their environment. ®	SD	D	N	A	SA

APPENDIX B

Instrument Use Permission Letters

Relationship Form Authorization Form

I agree to the following conditions pertaining to the use of the Relationship Form in my setting/study:

1. Recognition of the copyright of the Relationship Form, the following statement will be printed at the bottom of each page:

The information contained in this document is the property of Dr. Forchuk, and is protected by copyright. This document may not be reproduced, copied or redistributed in any form or by any means, in whole or in part, without the prior written permission of Dr. Cheryl Forchuk.

2. I will send the raw data from the Relationship Form and the demographic data to Cheryl Forchuk, RN, PhD, for further evaluation of the psychometric properties of the Relationship Form.

3. The complete Relationship Form will not be published or included in any project reports, theses or dissertation in either complete or abridged form without further permission. However, up to 3 sample items may be published, properly credited to their source.

4. At the completion of the study I will send two copies of the report to Cheryl Forchuk, RN PhD

5. I will not authorize the use of this Relationship Form by other individuals or transfer my permission to use and/or duplicate the Relationship Form to others.

_____Gotoo_____   __11/28/14_____

Signature   Date

Please type:

Name: ____Gloria Otoo_____

Address: _1089 Bay 32nd Street, far Rockaway, NY_11691_____

Clinical Affiliation: ____N/A_____

University Affiliation: ___Molloy College_____

Date to Begin: __12/01/14_____

Purpose: _To use as surveys to answer research questions_____

Research Use: ____Quantitative research_____

Clinical Use: ____N/A_____

Anticipated date of completion: ___May, 2016_____

Return 3 copies to:

Cheryl Forchuk, RN, PhD
Lawson Health Research Institute,
750 Base Line Road East, Suite 102
London, Ontario
Canada, N6C 2R6

Permission is granted for the above project to duplicate and use the Relationship Form as specified

_____

Cheryl Forchuk, RN, PhD
Distinguished University Professor, Associate Director of Nursing Research, Western University
Scientist & Assistant Director, Lawson Health Research Institute

Gloria, please let my previous email serve as my permission to use the revised preceptor-student version of the relationship form. I would request the acknowledgement as author of the revised version.

Blessings to you as you press on to completion of your dissertation.

Thank you. Georgita

Georgita T. Washington, PhD., RN-BC, MSN, CCNS

Director, Clinical Management

Integrated Solutions Health Network

509 Med Tech Parkway, Suite 100

Johnson City, TN 37604

423-952-2186 Office; 423-282-1657 Fax

Georgita.Washington@CrestPointHealth.com

Description: Description: ishnsignature

Thank you so much Dr. Forchuk,

 I emailed Dr. Washington earlier this afternoon and she gave me permission to use the instrument, but gave me your name and asked that I ask permission from you since the original instrument belongs to you. I apologize for not mentioning that in my email to you. I am so grateful for receiving permission from both of you. I cannot wait to hear from Sommer, and I will keep you posted. Enjoy your thanksgiving. Gloria.

Good afternoon Dr. Ching-yu,

I am writing to request the use of your Self-Assessment Clinical Competence instrument in my dissertation research work. It will be appropriate for measuring my stated variables. I will be grateful for your positive response because it will enable me to proceed in my dissertation writing. Hope to hear from you soon.

Gloria Otoo. PhDC, MS, RNC

Molloy College

Rockvilel Centre, NY

United States of America Hello Molloy,

I am not sure whether the instrument you mentioned is the Clinical Competence Questionnaire that we published in the Journal of Nursing Education and Practice. If it is, you are welcome to use the questionnaire. Please refer to the following link address for the published article that contains the scale. Please do remember to cite the article whenever you publish your studies. Items and categories of the CCQ are listed in Table 3. The score of the subscales and the entire scale is the sum of the item scores.

The CCQ is a five-point Likert type scale where:
score 1 means "do not have a clue,"
score 2 is "know in theory, but not confident at all in practice,"
score 3 is "know in theory, can perform some parts in practice independently, and needs supervision to be readily available,"
score 4 is "know in theory, competent in practice, need contactable sources of supervision," and
score 5 is "know in theory, competent in practice without supervision."

http://www.sciedu.ca/journal/index.php/jnep/article/viewFile/2862/1994

Good luck to your study. Chingyu

Ching-Yu Cheng, PhD, RN

Professor
Chang Gung University of Science and Technology
email: chingyuus@gmail.com

Thank you so much Dr. Ching-yu Cheng,

 I appreciate your work and your response. I will make sure I cite properly each time I use your scale. Can I use any of the scores only or two of them together without using the entire scale? Hope to hear from you soon on this question. I apologize for the inconvenience. Thanks again, Gloria.

Dear Gloria,
I am sorry for calling you Molloy, which is the name of your school,
in my previous email.
Since the Cronbach's alpha for each subscale was supported, I think
you can use any of the subscales independently. However, without
using the entire scale, you measure only the concepts that constitute
clinical competence (nursing professional behaviors, general skills
performance, core nursing skills performance, and advanced nursing
skills performance in this case) rather than clinical competence.
Please make your own choices.
Still, good luck to your study.
Regards, Chingyu

Hi Dr. Ching-yu,

Please don't worry about the name. Thanks for your reply. Gloria.

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School Juniors and Seniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

1.	On the whole, I am satisfied with myself.	SA	A	D	SD
2.*	At times, I think I am no good at all.	SA	A	D	SD
3.	I feel that I have a number of good qualities.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.*	I feel I do not have much to be proud of.	SA	A	D	SD
6.*	I certainly feel useless at times.	SA	A	D	SD
7.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8.*	I wish I could have more respect for myself.	SA	A	D	SD
9.*	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10.	I take a positive attitude toward myself.	SA	A	D	SD

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is, SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the self esteem.

The scale may be used without explicit permission. The author's family, however, would like to be kept informed of its use:

The Morris Rosenberg Foundation
c/o Department of Sociology
University of Maryland
2112 Art/Soc Building
College Park, MD 20742-1315

References

References with further characteristics of the scale:

Crandal, R. (1973). The measurement of self-esteem and related constructs, Pp. 80-82 in J.P. Robinson & P.R. Shaver (Eds), **Measures of social psychological attitudes. Revised edition**. Ann Arbor: ISR.

Gloria Otoo

1089 Bay 32nd Street

Far Rockaway, NY. 11691

February 12, 2015   The Morris Rosenberg Foundation

                                                                              c/o Department of Sociology

                                                                              University of Maryland

                                                                              2112 Art/Soc. Building

                                                                              College Park, MD 20742-1315

Hello Rosenberg Family,

This is a letter to notify you of the use of The Rosenberg Self-Esteem instrument in my doctoral dissertation study. My topic is on The Effects of Undergraduate Nursing Student-Preceptor Relationship on the Student's Self-Reported Clinical Competence, Self-Esteem, and Readiness to Work as a Registered Nurse (RN). I am a student at Molloy College in Rockville Centre, New York. I appreciate your generosity of giving students like me the opportunity to use this widely used instrument to enhance our ability to answer important research questions.

Thank you.

 Sincerely, Gloria Otoo

GotooNK..

718) 337-2660.

Gloria Otoo

1089 Bay 32nd Street

Far Rockaway, NY. 11691

March 16, 2016

The Morris Rosenberg Foundation

c/o Department of Sociology

University of Maryland

2112 Art/Soc. Building

College Park, MD 20742-1315

Hello Rosenberg Family,

This is to follow up on a letter I mailed last year (2015) February to notify you that I was using the Rosenberg Self-Esteem instrument as one of my doctoral dissertation surveys. I did not receive any acknowledgement of receipt from you and I was not sure if I had to expect one. I am sending this note as a follow-up for a possible instance where my original letter was never received. My email address is gotoo09@lions.molloy.edu and my telephone number is 718) 337-2660. Please let me know you received my notification.

Thank you,

GotooNK..

Sincerely, Gloria Otoo.

APPENDIX C

Study Introductory/Letter of Consent

Your Preceptorship Experience

Invitation to Participate

Dear Nursing Student:

You are invited to become a part of this very important study about preceptorship that took place in the final semester of your four-year nursing program. This study collects data from entry-level baccalaureate nursing students from different colleges and universities across the United States.

The purpose of this study is to determine whether there are any positive or negative effects of a student-preceptor relationship on the student's perceived levels of competence in performing clinical skills, their self esteem, and the confidence of feeling ready to step into the registered nurse role at the completion of the preceptorship experience. It is anticipated that the findings of this study will assist nurse educators in arranging effective preceptor placements.

There are no known risks associated with this confidential research study. There will be no identification of any school or student names in the responses in the publications resulting from this study. Please take some time to complete this survey and to answer each question honestly. Your participation is voluntary and indicates your consent. Of course, you may choose not to participate.

There is a $100 Amazon gift card drawing for those who complete the study. If you wish to participate in the drawing, please provide your email address when indicated at the end of the survey. Your email address can also be used to share the results of this study with you and for follow up if you so indicate on the last page.

Thank you for volunteering to participate and for your time. Your participation gives you the opportunity to have a "voice" in the future of nursing education.

If you have any questions, you can contact me directly at gotoo09@lions.molloy.edu.

Your participation is sincerely appreciated.

Gloria Otoo, PhD Candidate
Molloy College
Rockville Centre, NY

APPENDIX D

Molloy College Institutional Review Board Approval Form

Molloy College

1000 Hempstead Avenue
Rockville Centre, NY
11571   www.molloy.edu

Tel. 516.323.3653
Tel. 516.323.3801

Date: April 30, 2015
To: Gloria Otoo
From: Kathleen Maurer Smith, PhD
               Co-Chair, Molloy College Institutional Review Board
               Veronica D. Feeg, PhD, RN, FAAN
               Co-Chair, Molloy College Institutional Review Board

SUBJECT: **MOLLOY IRB REVIEW AND DETERMINATION OF EXEMPT STATUS**
Study Title: **THE EFFECTS OF UNDERGRADUATE NURSING STUDENT-PRECEPTOR RELATIONSHIP ON THE STUDENT'S SELF-REPORTED CLINICAL COMPETENCE SKILLS, SELF-ESTEEM, AND READINESS TO WORK AS A REGISTERED NURSE (RN)**
Approved: **April 30, 2015**

Dear Gloria:

The Institutional Review Board (IRB) of Molloy College has reviewed the above-mentioned research proposal and determined that this proposal is approved by the committee. It is EXEMPT from the requirements of Department of Health and Human Services (DHHS) regulations for the protection of human subjects as defined in 45CFR46.101(b). Please note that as Principal Investigator (PI), it is your responsibility to be CITI Certified and submit the evidence in order to conduct your research. You may proceed with your research. Please submit a report to the committee at the conclusion of your project. Changes to the Research: It is the responsibility of the Principal Investigator to inform the Molloy College IRB of any changes to this research. A change in the research may disqualify the project from exempt status.

Sincerely, *Kathleen Maurer Smith*
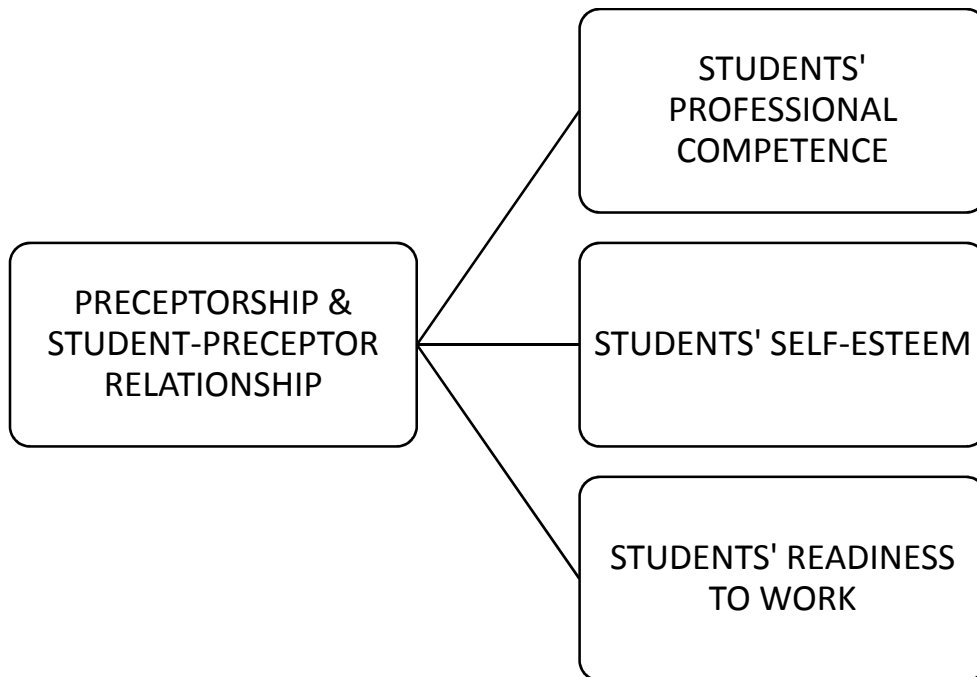
Kathleen Maurer Smith, PhD

Veronica D. Feeg
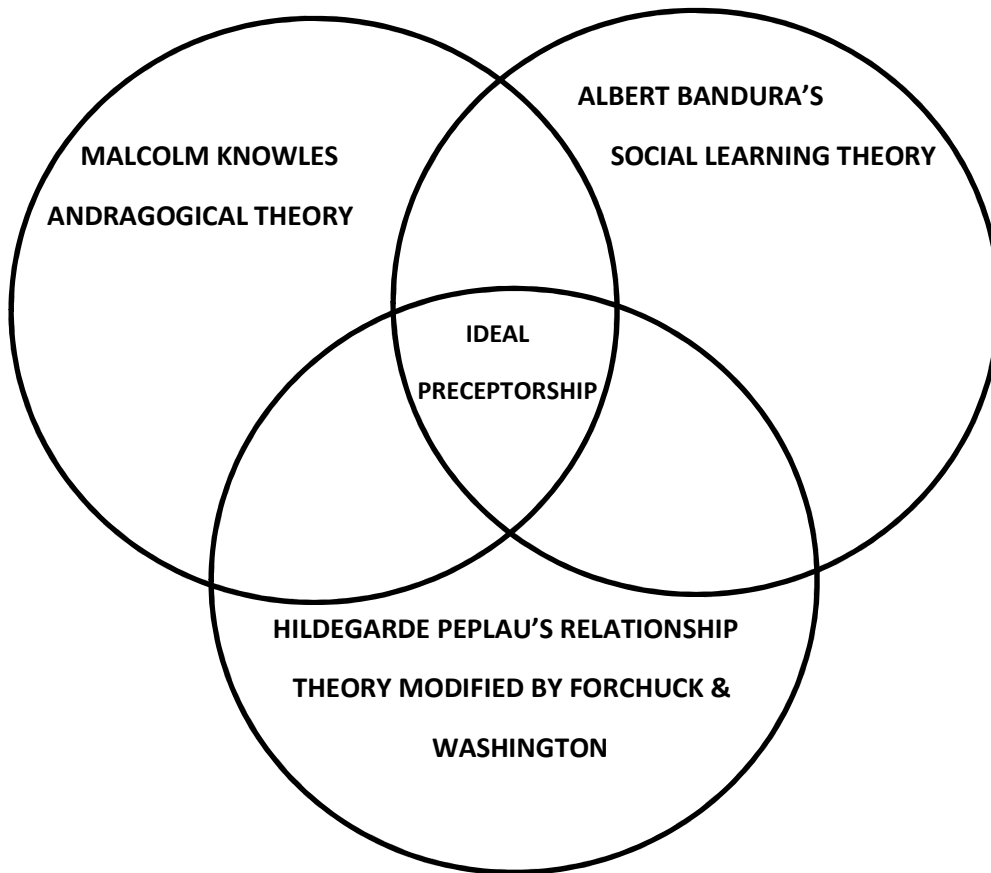
Veronica D. Feeg, PhD, RN, FAAN

APPENDIX E

Relationship and Readiness to Work Models/Diagrams

Relationship Model:

```
                                    ┌─────────────────────┐
                                    │     STUDENTS'       │
                                    │   PROFESSIONAL      │
                                    │    COMPETENCE       │
                                    └─────────────────────┘
┌──────────────────────┐           ┌─────────────────────┐
│   PRECEPTORSHIP &    │           │                     │
│  STUDENT-PRECEPTOR   ├───────────┤ STUDENTS' SELF-ESTEEM│
│    RELATIONSHIP      │           │                     │
└──────────────────────┘           └─────────────────────┘
                                    ┌─────────────────────┐
                                    │ STUDENTS' READINESS │
                                    │      TO WORK        │
                                    └─────────────────────┘
```

Merged Theoretical Framework:

Readiness to Work Model 1:

| PRECEPTOR-SHIP HOURS | SUMMER INTERNSHIP | AGE | PRECEPTOR ASSIGNMENT | JOB OFFER |

STATISTICALLY SIGNIFICANT WITH FINAL YEAR NURSING STUDENTS' READINESS TO WORK (22%)

Readiness to Work Model 2:

STUDENTS' SELF-ESTEEM

STUDENTS'PROFESSIONAL COMPETENCE

STUDENTS' READINESS TO WORK AS REGISTERED NURSES (48%)
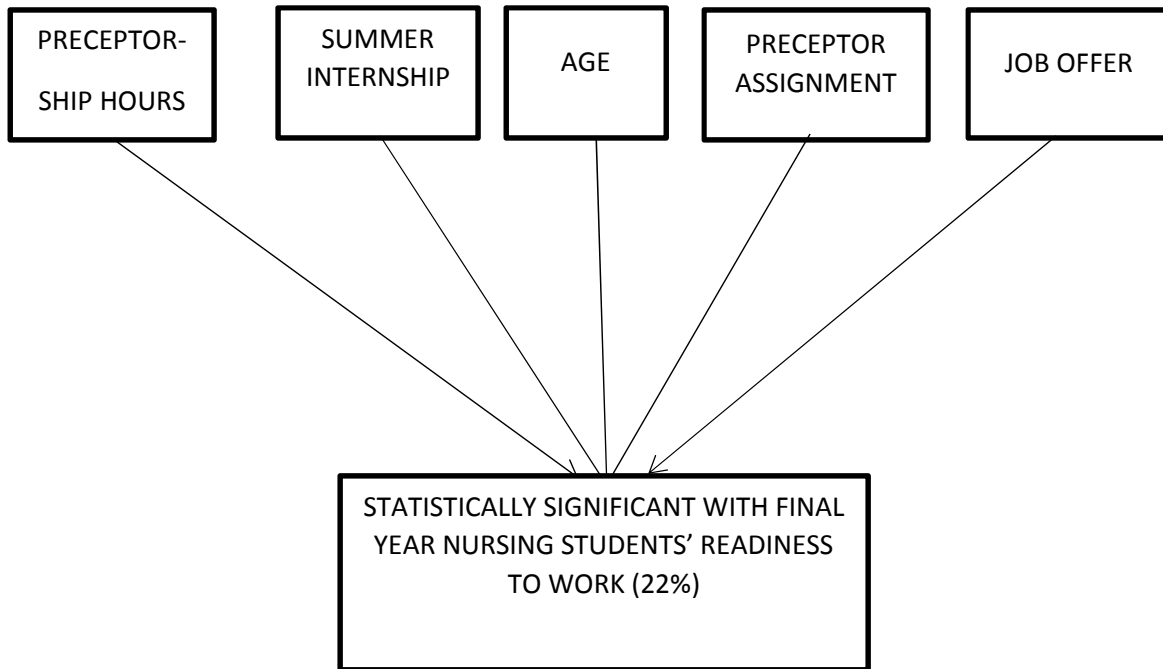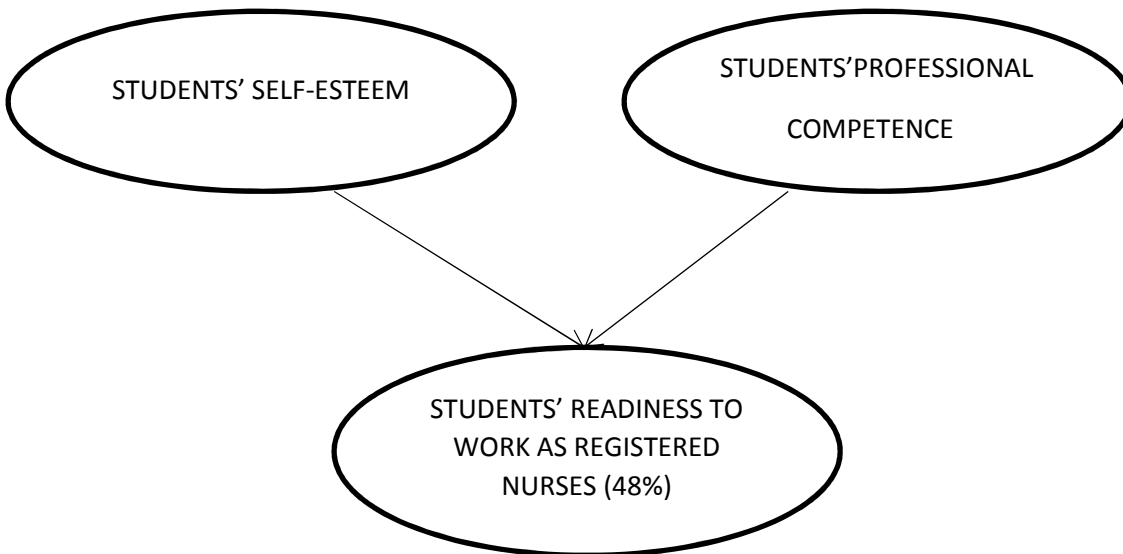
APPENDIX F

Variance of Predictor Variables on Outcome Variables.

What This Study Added:

Percentage Table 1:

PRECEPTOR CHARACTERISTICS (PRECEPTORSHIP)	%s	STUDENT-PRECEPTOR RELATIONSHIP	%s
STUDENTS' PROFESSIONAL COMPETENCE	7.4%	STUDENTS' PROFESSIONAL COMPETENCE	9.5%
STUDENTS' SELF-ESTEEM	7.6%	STUDENTS' SELF-ESTEEM	12.4%
STUDENTS' READINESS TOWORK AS REGISTERED NURSES	10.4%	STUDENTS' READINESS TO WORK AS REGISTERED NURSES	16.4%

Interesting Findings

Percentage Table 2:

STUDENTS' SELF-ESTEEM	%s	STUDENTS' PROFESSIONAL COMPETENCE	%s
STUDENTS' READINESS TOWORK AS REGISTERED NURSES	48%	STUDENTS' READINESS TO WORK ASREGISTERED NURSES	48%