2017

Associate Degree Nursing Graduates Perceptions of NCLEX Performance

Judy Pulito
Walden University

Walden University

College of Education

This is to certify that the doctoral study by

Judy Pulito

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Robert Hogan, Committee Chairperson, Education Faculty
Dr. Edward Garten, Committee Member, Education Faculty
Dr. Laura Onafowora, University Reviewer, Education Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2017

Abstract

Associate Degree Nursing Graduates Perceptions of NCLEX Performance

by

Judy Pulito

MSN, Medical College of Ohio, 1991

BSN, University of Akron, 1985

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Higher Education Leadership

Walden University

September 2017

Abstract

There has been a shortage of registered nurses in the United States for more than a decade, and an aging population is increasing this problem. This study was prompted by the number of associate degree nursing graduates at a Midwestern community college failing the NCLEX-RN licensure exam, which is required for employment. The purpose of this study was to explore associate degree graduate nurses' views of the effectiveness of classroom and clinical training on NCLEX –RN exam performance. Guided by the conceptual framework of Bigg's students' approaches to learning, which maintains deep learning is associated with achievement of learning outcomes, this qualitative case study investigated ways to improve success on the licensure exam. The central research questions examined the perceptions of what nursing school experiences contributed to NCLEX-RN success or failure. Semistructured interviews with 5 recent graduates who have been successful and 5 who failed the exam were conducted to gather the data. Triangulation and member checking were used to improve the quality of the data. The student perceptions were coded to identify emerging themes. The following themes that impact NCLEX performance were identified: extreme anxiety, fear of failure, faculty student relationships, and approach to learning. The findings revealed the need for additional faculty training in curriculum and instruction, reducing stress and building self-confidence. Based upon these findings, faculty were encouraged to participate in a 3-day professional development activity designed to improve their skills in preparing students to take the nursing examination. Possible social changes can benefit healthcare institutions, nursing graduates, and community by expanding the nursing workforce.

Associate Degree Nursing Graduates Perceptions of NCLEX Performance

by

Judy Pulito

MSN, Medical College of Ohio, 1991

BSN, University of Akron, 1985

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Higher Education Leadership

Walden University

September 2017

Table of Contents

iii

List of Tables

Section 1: The Problem

The excellence of a nursing program is evaluated through a number of indicators. The Accreditation Commission for Education in Nursing (ACEN) and state boards of nursing attest to this (ACEN, 2013; Ohio Board of Nursing [OBN], 2014). Although multiple criteria are evaluated, the pass rate of first time test takers on the National Council Licensure Examination-Registered Nurse (NCLEX-RN) is the most important indicator of program success. In support of this view Giddens (2009) posited that "first time NCLEX-RN pass rates have long acted as the gold standard signifying nursing program quality" (p. 123).

Annually, approximately 150,000 nursing graduates from across the country take the NCLEX-RN exam with associate degree nursing graduates comprising the largest percentage of first-time test takers (NCSBN Fact Sheet, 2011, 2012, 2013, 2014). Of that population, the number of associate degree graduates who have not passed the NCLEX-RN exam on their first attempt has grown from 13% (NCSBN Fact Sheet, 2011) to a 18% failure rate through the first three quarters in 2014 (NCSBN Fact Sheet, 2014). As a result of the increasing number of graduates who are not successful on the NCLEX-RN exam a question of having enough nurses to meet healthcare industry demands ought to be considered. For example, in order to fill vacancies being created by retiring nurses; the need for all nursing graduates being successful on the NCLEX-RN licensure exam becomes essential (Institute of Medicine [IOM], 2011). In fact, according to the Bureau of Labor Statistics (2014-2105) the employment of registered nurses (RN) is projected to

increase by 19% over the next eight years which is the highest growth rate among all other occupations.

Regionally, through an initiative known as the Northeast Ohio Nursing Initiative (NEONI) a workforce project has been completed by The Center for Health Affairs. Researchers reviewed supply and demand of RNs over the next 10 years and found that demand for RNs is estimated to climb 30-35% by 2020 (NEONI, 2011). As a result of the projected demand for nurses, it will be necessary for nursing leaders and educators to implement strategies designed to improve success on the NCLEX-RN licensure exam.

Passage of the NCLEX-RN exam is required to attain a professional nursing license for those seeking employment opportunities in the healthcare industry. Employment opportunities are stifled for those who are not successful. NCLEX-RN failure places many nursing graduates facing economic hardships in lieu of needing to repay student loans. Not only does NCLEX-RN exam failure impact a student financially it also can tarnish the program's reputation culminating in a possible decline in enrollment (Giddens, 2009; Trofino, 2013).

Another consideration is that acute care facilities often seek new graduates from fully approved and accredited nursing programs. If NCLEX success rates are consistently below a certain level a change in regulatory approval and /or accreditation status can be downgraded (ACEN, 2013; OBN, 2013). In other words, the program can be placed on warning or probation status. As a consequence, if such changes are not corrected or improved upon, the ability to secure grants, government funding, and even federal student financial aid could be eliminated (Trofino, 2013). Not only does NCLEX-RN

licensure exam failures negatively impact nursing graduates the effects can also influence future students from enrolling in the program and alert regulatory bodies and employers to a possible decline in program quality.

The Local Problem

The problem prompting this study is the increasing number of associate degree nursing graduates in a Midwestern community college failing the NCLEX-RN licensure exam. The average pass rate for the program's first time NCLEX-RN test takers has been 88% over the past three years. Specifically, in 2011 the pass rate was 90.6%; 2012 – 89.96%; & 2013 – 83%. As of 2014, the overall pass rate for the program is 74% which is below the national and state levels (███ ███ Community College, Institutional data, 2014; OBN, 2014). In fact, the national passage rate on the NCLEX-RN licensure exam is 82% (NCSBN, 2014) while the state average is 78% (OBN, 2014).

Nurse educators would suggest that one of the reasons for this decrease is related to a change in the test's format that occurred in April 2013 (NCSBN, 2013). While that may be a contributing variable, upon closer review of the literature it is noted there is a paucity of research exploring nursing graduates' perceptions of what the prescription is for success on the NCLEX-RN licensure exam. Hence, the purpose of this study was to explore associate degree nursing graduates perceptions of what factors contribute to NCLEX-RN success and failure. As a result, these findings can be used to augment nurse educators' knowledge and understanding of what students perceive to be a prescription of success in relation to NCLEX-RN exam performance. This could enhance current NCLEX success strategies being employed in nursing education. The local

problem of declining pass rates on the NCLEX-RN exam with rationale for the selection

of this problem is addressed in the following section. An outline of how the problem

impacts the student graduate and the program, as well as external stakeholders and

regulatory bodies is discussed with supporting evidence from the literature being

integrated. Additionally, key terminology is defined, research questions presented, and a

review of the literature is offered in the following sections.

Rationale

The projected shortage of more registered nurses being needed to fill job

vacancies along with increasing failure rates on the NCLEX-RN licensure exam is a

growing problem. As a result, nurse educators are being encouraged to reevaluate current

strategies being utilized in preparing nursing graduates to take and pass the NCLEX-RN

licensure exam. In the state of Ohio, NCLEX-RN passage rates are below national trends.

Overall pass rates through Q3 2014 are 78.3%, where total candidates taking the exam

numbered 7,574 and 1,643 were unsuccessful (OBN, 2014).

This same trend is being experienced locally. Specifically, the collective

performance of associate degree nurse (ADN) graduates from a Midwestern community

college has fallen to 74.76% passing while 25.24% of the graduates are failing the

licensure exam (OBN, 2014).

In order to gain employment as a registered nurse one must successfully complete

a nursing program and obtain a professional license. Because of the increase in the

number of nursing graduates failing the NCLEX it has become progressively more

difficult to fill the void in the workforce and has prolonged the period of time before

nursing graduates obtain a job. In 2012-2013, nursing graduates reported that they were able to obtain employment within 6 months of graduation. Program data has recently revealed the time frame has grown to 12-14 months (████ ████ Community College, Institutional Data, 2014). Additionally, this occurrence is not related to available job openings but rather being reported by graduates as the average time it is taking to remediate, retake the licensure exam, and find employment (████ ████ Community College, Institutional Data, 2014).

Repayment of student loans is expected 6 months post-graduation and many cannot sustain all their financial obligations while working toward successful NCLEX-RN results (Trofino, 2013). Another harmful consequence of declining NCLEX pass rates includes stakeholder's perceptions of program quality. In a conversation with the vice president of nursing in a local institution shared: "I must admit that I have had fleeting questions in my mind about what is going on with the program. Perhaps we have been spoiled by the consistent high performance on the NCLEX-RN exam, but I am a little concerned about the recent decline" (J. Cooksey, personal communication, October, 2014). These less than favorable program perceptions could lead to a decline in program enrollment. Additionally, regional healthcare human resource departments could take a more substantive view of the program's graduates who are seeking employment.

To help meet the needs of the workforce and improve perceptions of quality within a nursing school program, schools are increasingly turning to *packaged* remediation strategies for NCLEX success (Alamedia, Davis, & Renwanz-Boyle, 2011; Pennington & Spurlock, 2010). Some researchers have supported the effectiveness of this

approach (Giddens, 2009; Hermann & Nagorski-Johnson, 2009; Pennington & Spurlock, 2010). However, few researchers have explored recently graduated nurse's perceptions about lived experiences while completing their program of study and their impact on NCLEX-RN performance. By understanding the recent graduates' perceptions of what is advantageous and as well as detrimental to performance on the licensure exam, nurse educators can reevaluate current methods and consider redesigns to achieve optimal NCLEX-RN success for their students.

Evidence of the Problem at the Local Level

State boards of nursing are regulatory bodies that establish rules and laws related to safe practice standards. It is through the implementation of these standards that the public is protected and quality patient care maintained. According to the Ohio Administrative Code, rule 4723-5-23(b) (OBN, 2017):

> If a program's pass rate on the licensure exam is less than 95% of the national average for first time test takers in a calendar year the following shall apply: (1) After the first year, the program shall establish a plan indicating action steps to improve the NCLEX scores of the graduate, and submit the plan with the annual report.

The program where the study was conducted had a pass rate that had fallen to 74% which is less than 95% of the national rate. Or in other words, it did not meet the minimum 78% pass rate which was needed to satisfy the 95% mark. This resulted in a need to submit an action plan to the OBN that outlined steps to be taken to improve

NCLEX pass rates. If improvement is not seen the OBN could put the program on probation or warning status.

The decline in pass rates has been particularly troubling in the last 2 years. To further illustrate the downward trends seen in NCLEX-RN performance Table 1 compares national, state, and local data.

Table 1

Trends in National, State, and Local ADN NCLEX-RN Pass Rates

Year	National (%)		State (Ohio) (%)	ADN Program (%)
2011	86.5	86.5	90.6	
2012	89.2	89.8	89.9	
2013	81.4	80.1	83	
2014 (thru Q3)	82	78.3	74	

Note. Data retrieved from National Council of State Boards of Nursing (2014), and Ohio Board of Nursing (2014).

The nursing program where the study was conducted is regarded as being among the best in the state and struggles to achieve acceptable NCLEX-RN pass rates. At the present time preparation for the NCLEX-RN consists of a three-day Live Review session along with a remediation package that is meant to compliment individual student's exit exam results. In an effort to improve NCLEX performance, recently graduated nurses, who have been out of school no more than three years and have taken the NCLEX; will be interviewed about their experiences while in nursing school. By documenting their perceptions and looking for themes related to those experiences and NCLEX-RN exam performance, information can be obtained that will allow this nursing program and other

schools to examine approaches applicable to preparing graduate nurses for success on the NCLEX-RN licensure exam.

Evidence of the Problem from the Professional Literature

The number of graduate nurses nationally who are not successful on the licensure exam is on the rise (NCSBN, 2014). The NCSBN oversees the testing and certification of newly graduated nursing students. In the years between 2011 and 2014, the number of associate degree candidates who have been unsuccessful on the licensure exam has increased from 13% to 18%, or in other words of the 144,583 first time candidates in 2014 approximately 26,000 nurse graduates did not pass the NCLEX-RN exam (NCSBN, 2014). The cost of NCLEX-RN failure impacts recent nurse graduates, programs of nursing study and healthcare institutions who are seeking nurses for employment. Roa, Shipman, Hooten, and Carter (2011) stated that baby boomers, (born 1946-1964) make up the largest generation in the United States and are reaching an age where they will require competent nurses to help them meet essential healthcare needs (p. 373). The challenge for this aging population will be to find licensed skilled nurses to manage their physical and psychosocial care as overall health status declines.

Amid a nursing shortage that is estimated to continue into the next decade, the NCSBN (2009b) described the importance of practice standards established from evidence-based data and research. Through the development and implementation of these standards a strong foundation for nursing education as well as practice can be established. Similarly, where the demand for nurses outweighs the supply, the Nursing and Midwifery Council in the United Kingdom establishes educational standards. Prudence is exercised

to assure that current standards are not lowered which is viewed as a way to mitigate errors resulting in decreased costs to healthcare organizations (Nursing and Midwifery Council, 2010). Hence, the NCSBN will continue to make the NCLEX-RN more rigorous to assure that competent nurses are entering the healthcare workforce to meet the challenges of higher patient acuity and technological advances. As a consequence, programs of nursing study will be challenged to produce competent graduates who are able to pass the NCLEX-RN licensure exam as well as looking for strategies to diminish failure rates. Additionally, to make certain the challenge is being met, the Accreditation Commission for Evaluation in Nursing (ACEN), as well as state boards will closely monitor the quality of nursing education being offered and NCLEX-RN examination results.

The cost of NCLEX-RN failures is substantial and to better understand the real life reasons behind recent graduate nurses who are unsuccessful, a qualitative study was conducted. Through the findings nurse educators and programs can augment current approaches to NCLEX preparedness and impact quality patient care and outcomes.

Definition of Terms

The terms that were utilized throughout this study are defined in relation to the nursing profession.

Accreditation Commission for Education in Nursing (ACEN): A national organization that specializes in postsecondary and higher education nursing program accreditation. Through the evaluation of comprehensive standards and program outcomes the quality of nursing education being offered is determined. Not only does ACEN

support the interest of nursing education, it indirectly plays a role in protecting public

safety and nursing practice as a whole (ACEN, 2014).

Competence: The safe completion of skills required of nurses within their practice

role. These skills are grounded through the application of nursing principles such as

physiological/psychosocial knowledge, clinical reasoning skills, and an aptitude for

affective and psychomotor interventions (NCSBN, 1996).

National Council Licensure Exam (NCLEX) –RN licensure exam: An exam that is

developed by the National Council of State Boards of Nursing (NCSBN) to measure

minimum knowledge, skills and abilities required to deliver safe nursing care at the entry

level (NCSBN, 2014).

National Council of State Boards of Nursing (NCSBN): A nonprofit organization

that counsels together regarding safety, welfare and health of the public. They are also

tasked with developing national licensing exams. They are, "…the collective voice of

nursing regulation in the US and its territories" (NCSBN, 2014).

Nursing graduate: The Medical Dictionary for the Health Professions (2012),

defines a nursing graduate as, "…someone who has completed the course of study

(including hospital practice) at a nurses training school" (p. 543). For the purpose of this

study nursing graduate is determined by someone who has successfully completed the

didactic and clinical aspects of a five semester Associate Degree Nursing Program at a

Midwestern community college.

Ohio Board of Nursing: A governmental agency that is run by the state and is

primarily responsible for the establishment and regulation of rules that guide nursing

practice. Established over 100 years ago, Boards of Nursing protect the public's health and welfare by overseeing and ensuring the safe practice of nursing (OBN, 2017).

Significance of Study

In order to be employed, perform tasks, and manage the care of patients associated with the role of a RN one must possess a license (ACEN, 2014; OBN, 2014). Due to the decline of students successfully passing the NCLEX-RN licensure exam it has become increasing difficult for a number of nursing graduates to secure a nursing position in a reasonable timeframe and contribute to the workforce. By not being able to seek employment as a RN there is the potential for recent graduates to encounter financial hardships. For example, graduates may not be able to start repaying student loans secondary to being employed in a job of a lesser wage. Additionally, external stakeholders (employers) may question program quality resulting in recent graduates experiencing greater difficulty in acquiring a job.

Students who have been successful on the NCLEX-RN exam have indicated they have a greater sense of self-confidence when they begin their first nursing job, whereas, those who have not been successful experience self-doubt and heightened anxiety (Roa et al., 2011). Loss of self-confidence is closely tied to the grieving process. The nurse who is unsuccessful on the NCLEX-RN exam hopes to move through the stages of grief and arrive at a point of greater self-efficacy and confidence in their abilities to perform the work of a professional nurse resulting in favorable outcomes (Zulkosky, 2009). As a consequence, once they enter the workforce the need for their preceptor/manager to be patient and show greater sensitivity in regards to their level of confidence will become

crucial. It could also extend their orientation time costing the healthcare institution more time and dollars.

Giddens (2009) highlighted the reality that there is no clear prescription for NCLEX-RN success. Although available for years, "nursing programs have recently begun to rely on extensive assessment and remediation packages offered by commercial vendors to ensure NCLEX-RN success" (Giddens, 2009, p. 123). Hermann and Nagorski-Johnson (2009) determined that while there is evidence to support the claim that these commercialized packages have helped students to be better prepared to take the NCLEX-RN exam there is questions as to how helpful they have been. With all the emphasis being placed on preparation and performance, "anxiety and stress levels for some are rose which may result in poorer test-taking ability" (Hermann & Nagorski-Johnson, p. 384). Additionally, Giddens pointed out that these remediation packages represent a "significant expense to nursing programs and students....and are purported to benefit the students; however, one must question who is really benefiting – vendors or students" (p. 123). In lieu of escalating costs in higher education and mounting student debt efforts must be made to minimize expenses. This environment forces nursing educators to make decisions to defray student and program costs while at the same time offer the right tools to assure NCLEX success.

If the goal of nursing programs is to better prepare graduates for success on the NCLEX exam efforts not only need to be on remediation, predictor exams, and capstone courses, there also is the need to integrate the perceptions of students lived experiences into the formula. In this study I sought to determine which trends and emergent themes

shared by the students contributed to NCLEX-RN performance. As a consequence of addressing this question assistance can be offered to the program as it reevaluates NCLEX-RN preparation and review strategies for greater NCLEX success. By comparing the data gathered from graduates who have been successful and unsuccessful on the NCLEX-RN licensure exam, other approaches to improve licensure exam pass rates could be considered. When efforts are made to improve NCLEX success rates, the graduates, nursing program, and healthcare institutions all benefit.

Research Question(s)

More research needs to be conducted in relation to graduate nursing students perceptions and views of nursing school experiences in relation to NCLEX-RN performance. While there are several approaches utilized by nurse educators to ready graduates for the NCLEX exam, there is a paucity of literature addressing graduates' perceptions of what they deem to be helpful in passing the NCLEX-RN exam.

Hence, the purpose of this qualitative study was to acquire a greater understanding of the perceptions of nursing students in regard to program experiences that influence NCLEX-RN licensure exam performance. The central research questions for this study are:

RQ 1: What experiences do recent graduates of an associate degree nursing program view as contributing to NCLEX-RN licensure performance?

RQ 2: In what way do the perceptions differ of nursing school experiences between graduates who are successful and unsuccessful on the NCLEX-RN licensure exam?

In an effort to further refine the central questions the following subquestions are also included in this study: What classroom experiences contributed to NCLEX performance? What clinical experiences contributed to NCLEX performance? What other learning experiences contributed to NCLEX performance?

These research questions were explored by constructing a case study concentrating on recent graduates' viewpoints of what experiences are of benefit or have had a negative influence on NCLEX – RN exam performance.

Review of the Literature

A review of the literature relative to nursing graduate's perceptions of lived nursing school experiences and the influence of these experiences on NCLEX-RN exam performance was conducted. The key terms used in several combinations are *NCLEX-RN licensure exam, student learning, remediation strategies, predictors of NCLEX –RN success, NCLEX-RN failure, and associate degree nursing.* Also explored were *student's educational experience* in broad terms, and modified with the terms *real world* or *real life*. The intent of the articles generated by this phase of the search was to gain a broader perspective of nursing school experiences from a student's perspective. The recent graduates' perspective is minimally studied and therefore represents a gap in the literature that needed to be further investigated.

The data bases used for this literature search were, CINAHL, EBSCO, ERIC, Google Scholar, ProQuest, Education Research Complete, and Academic Research Complete. Walden University online library, various nursing websites and journals were utilized as well as the reference librarian at Lorain County Community College. After a

comprehensive search, saturation was reached when the entries amid the data bases became repetitious.

Conceptual Framework

For this study, Bigg's students approach to learning (SAL) was utilized. This conceptual framework was chosen to illustrate how a student's approach to learning may impact NCLEX-RN licensure exam performance. The framework considers both deep and surface learning.

Deep learning. Deep learning is seen as a way of exploring new information and ideas critically while connecting it to previous knowledge. It involves the development of one's own understanding or meaning of concepts which is linked to successful academic performance. (Entwistle, 2000). Additionally, successful academic performance is connected to positive educational experiences which builds confidence and creates a solid foundation for future achievements (Houghton, 2004). Hence, the idea of exploring graduate nurses' experiences while completing a program of study could offer insights regarding NCLEX-RN performance.

Surface learning. In a surface learning approach students accept new facts and ideas uncritically leading to rote learning and memorization. They often view assigned course readings and classroom lecture content as material to be learned for the "moment" or in other words, for the exam and experience high levels of anxiety (Houghton, 2004). With this approach to learning, retention of information is limited and could play a role in achieving academic goals.

Deep and surface approaches to learning provide a framework to determine student's depth of learning and understanding of hierarchal concepts. Of interest is the fact that nursing curriculums are designed from simple to more complex concepts and thus the need for deeper learning becomes essential. Through the exploration of learning approaches and performance on the NCLEX-RN licensure exam, new insight(s) relevant to this associate degree nursing program's outcomes and success will be offered via the study's project.

Review of the Broader Problem

This section is arranged into four main categories based on the problem that was studied. The categories include (a) history of nurse licensure, (b) predictors of NCLEX success, (c) barriers to NCLEX success, and (d) consequences of NCLEX failure. A detailed review of each category provided supporting evidence for this study.

History of nurse licensure. Nursing in America is considered to be a relatively young profession where some form of nursing licensure legislation has only been in existence since 1923. During the early days each state regulated their own licensure mandates leading to considerable variations (Benefiel, 2011). In an effort to mitigate the discrepancies in the practice of nursing and to assure better patient care and outcomes compulsory nurse licensure legislation was passed in 1938 in the state of New York where it was implemented after World War II in 1947. As a result of the Mandatory License Practice Act RNs could not deliver nursing care without a license and the first nurse practice acts were defined that outlined boundaries of practice. Nearly sixty years later Judd, Sitzman, and Davis (2010) pointed out that the need for practice acts remain

based on common and legal laws that parallel the RNs' expanded role. As a result the public's interest is protected while the standards of competency are maintained for licensed registered nurses.

In order to obtain a registered nurse license licensure exams were created. The earliest tests were designed to include essay and objective type questions. The grading of those exams proved to be labor intensive and led to the National League of Nursing Education's National Committee and American Nurses Association to step in and take over the licensure process. As a result individual test pools were created and topics such as anatomy and physiology, medical nursing, psychiatric nursing, and surgical nursing were content areas graduates were tested on and administered by each state (Benefiel, 2011).

In 1978, the NCSBN was created. Its membership consisted of a representative from each state board and was intended to give state boards "autonomous control over the entire licensure process" (Matassarin-Jacobs, 1989, p.32), so that public safety and practice standards could be better regulated. The NCSBN's primary aim was to develop psychometrically sound and legally defensible examinations that were reflective of entry-level practice for registered nurses (Benefiel, 2011) As NCSBN's role evolved in the oversight of the NCLEX-RN exam, changes reflective of the professional nurse's expanding role were considered.

Dating back to 1989 it was determined that the NCSBN would reevaluate its NCLEX-RN licensure exam every three years to maintain minimal competency of entry-level nurses. In 2015 the need for the NCSBN to continue making the exam more

rigorous and reflective of entry practice competencies and role expectations remains.

As pointed out by Benefiel (2011) adjustments have been made to the licensure exam every three years since 1989. However, the overall national NCLEX-RN pass rate since the last change in 2013 has resulted in the greatest decline ever experienced. In the early 2000s the pass rate consistently ran between 85-88% despite exam revisions and today, the overall national pass rate on the exam is hovering at 81% (NCSBN, 2014). The decline has created difficulties in filling RN positions in the work market. Additionally, it has added stress on graduate nurses who need to pay back student loans and are unable to seek higher paying RN positions to offset expenses. One solution to the declining pass rates on the NCLEX-RN exam is to examine graduate nurse perceptions of experiences encountered while in their program to determine how they have impacted NCLEX exam performance.

In a detailed publication dealing with American Nursing history D'Antonio (2010) did not address nursing licensure. Instead she explored the evolution of women becoming educated and the strife they had to overcome in acquiring professional identity and being seen as offering valuable contributions to the advancement of healthcare. Cognizant of the public's perception of the nursing profession and the role RN's play in providing safe competent care the inclusion of the history of licensure and the evolution of the NCLEX-RN exam would had been a welcomed addition to this work. Spetz (2014) adds that nursing practice today needs to have a solid understanding of its historical roots to assure a good understanding of current nursing policy and standard of care debates. In the final analysis as the nursing profession continues to grow and the registered nurse role

expands it is important that historical perspectives are understood. Acknowledgement of those perspectives helps to propel nursing into the future and meet the changing needs of the healthcare consumer in a safe competent manner.

Predictors of NCLEX success. NCLEX-RN pass rates have been perceived as a key indicator of faculty and nursing programs effectiveness. Student success on the licensure exam is expected by accrediting bodies as well as Boards of Nursing across the United States. Also of interest, is the perception of potential new students who may be looking at nursing programs based on their NCLEX-RN pass rates.

A review of the literature found several quantitative studies that explored variables associated with ADN graduates' performance on the NCLEX-RN licensure exam. Reported areas of investigation included demographic variables, academic performance, and student achievement on preadmission assessment exams taken prior to entering a nursing program. Of note minimum studies have been conducted with regards to factors contributing to associate degree nurse graduate's success on the NCLEX-RN exam (DeLima et al., 2011; Lengacher & Keller, 2003; Shirrell, 2008; Trofino, 2013; Yin & Burger, 2003). This is particularly troubling given that the associate degree nurse graduate is the largest student body in nursing education taking the NCLEX-RN examination (NCSBN, 2014; OBN, 2014). As a consequence, the need for more studies to be completed regarding predictors of success on the NCLEX-RN exam in associate degree nursing is warranted.

Studies investigating specific demographics such as age, gender, and race yielded contrasting results. For example, age was not considered to be a predictor of first-time

pass success (Alamedia et al., 2011; Beeson & Kissling, 2001; Giddens & Gloeckner,

2005). However, the role gender plays is not as clearly understood. McGahee, Gramling,

and Thomas (2010) reported that males failed the NCLEX-RN exam at a significantly

higher rate than females. Haas, Nugent, and Rule (2004) reported similar results.

Conversely, some researchers found that there was no significant difference between

males and females regarding performance on the NCLEX-RN exam (Beeman &

Waterhouse, 2001; Beeson & Kissling, 2001; Giddens & Gloceckner, 2005; Higgins,

2005; Locke, Van Lanen, & McGannon, 2013).

 As with gender there are different findings in relation to race and the role it may

play in NCLEX-RN success rates. For example, Sayles, Shelton, and Powell (2003) who

explored predictors of NCLEX-RN success reported that Caucasians had a significantly

higher success rate on the licensure exam as compared to African-American and Asian

students. Analogous to their findings Haas, Nugent, and Rule (2004) determined that

African-American and Asian graduate nursing students did have a more difficult time

passing the NCLEX-RN licensure exam on their first attempt. Contrary to these findings

Locke, Van Lanen, and McGannon (2013) reported that Asian students had similar

NCLEX-RN pass rates as did their Caucasian counterparts, but did convey that African-

American students were not as successful as others had found. With the push for diversity

within student populations along with research findings that reveal minority students are

not as successful on the NCLEX; nurse educators should consider ethnicity/race variables

when examining strategies to enhance NCLEX performance.

 In summary, a review of the literature revealed nursing student demographics and

their relationship to NCLEX success to be varied and is seen as an area that needs to be

further investigated. This could be particularly valuable given the changing demographics

and diversity seen in associate degree nurse student populations.

Another area that was investigated quantitatively in relation to predictors of

NCLEX-RN success is academic performance. There have been a number of studies

conducted that looked at academic performance prior to entrance into a nursing program

(GPA), as well as science course grades and nursing program GPA at the baccalaureate

level but few at the associate degree level (Trofino, 2013).

Of the studies that have been performed at the associate degree level inconsistent

findings have been reported. For example, Gilmore (2008) concluded that collectively all

variables (pre-nursing GPA, science grades, and nursing GPA) did impact NCLEX-RN

performance. However, the nursing GPA statistically revealed the greatest impact. In

fact, students who were successful on the NCLEX-RN exam had a 0.3 higher GPA than

those who were unsuccessful (Gilmore, 2008). Similarly, Kehm, 2013; Lengacher &

Keller, 2003; Romeo, 2013; and Shirrell, 2008 also reported nursing program GPA as

being a statistically significant variable in predicting NCLEX-RN success.

These investigators not only looked at nursing program GPA they also explored

specific courses having the greatest impact on NCLEX-RN performance. Their findings

revealed that grades received in science courses such as anatomy and physiology, along

with pharmacology and advanced medical surgical courses as having the greatest

correlation to NCLEX-RN performance. In contrast, Delima, London, and Manieri

(2011) reported that overall nursing course GPAs as a predictor of NCLEX-RN success

did not correlate with published research. They concluded that terminal grades received in specialty courses, e.g. behavioral health, pediatrics were greater predictors of success than advanced medical surgical courses.

In addition to looking at demographic variables and academic performance of nursing students as predictors of NCLEX success many nursing programs have mandated pre-program assessment readiness exams that are administered to incoming students. The intent is to assure that the student possesses prerequisite knowledge to be successful in the program and ultimately pass the NCLEX-RN licensure exam. In terms of which preadmission assessment exams are the best predictors of NCLEX performance, results are varied.

Two of the more widely used admission assessment tests include the TEAS (ATI) and HESI (A2). Most recently, Manieri, DeLima, and Ghosal, (2015) investigated the use of these exams with a group of students enrolled in an ADN program at an urban community college in the southeastern region of the United States. The results of the study revealed that both examinations were statistically significant in predicting successful completion of the nursing program but not necessarily first-time passage on the NCLEX-RN examination. Manieri and et al., further reported that preadmission tests should not be considered as the only predictor of NCLEX success and cautioned that other strategies need to be integrated as students progress through a nursing program. For example, the amalgamation of other standardized exams as well as remediation strategies for struggling students throughout the program may need to be considered in assuring first time taker success on the NCLEX-RN examination.

In another study conducted by Kehm (2013) who also looked at ADN students from a community college in southeastern United States, found that the higher the score was on the TEAS entrance exam (>80%) the greater the probability of NCLEX success. This would suggest that admission assessment tests are correlated with NCLEX performance but based on the literature reviewed more studies need to be conducted to assist other ADN programs making informed decisions based on empirical data.

In the final analysis, determining the best predictors for success on the NCLEX-RN examination is unclear and varied. The literature review uncovered the fact that there is a paucity of studies done at the associate degree level in relation to NCLEX- RN performance and is seen as a gap in the literature. Additionally, of the studies that have been conducted only quantitative findings are being reported. The inclusion of qualitative findings as a result of this study will enhance this ADN program's knowledge and understanding of variables that contribute to NCLEX performance culminating in higher NCLEX passage rates.

Barriers to NCLEX Performance. Despite the fact that a greater number of recent nurse graduates pass the NCLEX-RN exam on their first attempt a substantial number continue to be unsuccessful. In spite of wide-spread efforts by nurse educators to consider variables that contribute to success on the NCLEX identifying barriers and helping students overcome them remains a challenge (Carrick, 2011; DiBartolo & Seldomridge, 2008; Koestler, 2014; Taylor, Loftin, & Reyes, 2014).

In nursing education assessment of learning outcomes is essential. When it is determined that students are not meeting learning outcomes nursing faculty often employ

short term solutions seeking quick improvement. The consequence of such actions often has the opposite effects (Carrick, 2011). For example, nursing faculty determine that students are not meeting learning objectives and decide to make their exams more rigorous and include analysis and application level questions which are regarded as more difficult to answer and require higher level thinking skills. Knowing that the NCLEX-RN licensure exam also predominantly utilizes these types of questions a change would be warranted.

Here in lies the problem. Implementing higher level questions without adequately guiding and preparing the student to change his or her approach to answering test questions may well contribute to NCLEX exam failure (Carrick, 2011). Therefore, unless a student's approach to test taking and learning needs are addressed performance is likely to continue diminishing. As a consequence, other personal and situational factors, such as anxiety and frustration, can further impact their learning and ultimately effect NCLEX performance.

A number of variables contribute to associate degree nursing students concerns and level of anxiety. In addition to school responsibilities they are often trying to balance family and job commitments. This takes away from the time that can be devoted to studying and further augments their levels of anxiety and decreases opportunity for deeper learning. As reported by Poorman, Mastorovich, and Webb (2011) students who are struggling require many extra hours and effort to be successful.

As academic struggles continue students feel a sense of defeat and expect faculty to fix their academic struggles (Poorman & et al., 2011). While there is a sense of

wanting to support students, nurse educators cannot "fix" their problems. As a consequence, faculty student relationships become strained and learning is impacted. Based on the belief that strong faculty student relationships help students succeed one may question how faculty student discourse impacts NCLEX performance. While several studies mention that the benefits of strong student faculty relationships facilitate positive student learning outcomes (Eddy & Epeneter, 2002; Karsten & DiCiccio, 2014; Poorman & et al., 2011); a review of nursing education literature reveals that exploration of student faculty relationships is essentially non-existent.

In an earlier study, Poorman, Webb, and Mastorovich (2002) reported that "students wanted teachers to spend extra time with them and equated time spent with caring. They were disappointed when teachers did not have a solution to their problems, including help with financial worries, emotional problems, and family matters" (p. 371). For nurse educators these expectations have a tendency to become overwhelming and blur job expectations. Faculty grapple with how much time should be devoted to struggling students and because of other high priority job expectations, e.g. maintenance of clinical competence, keeping up with the dynamics of the healthcare environment, there is little time for being present and offering support. It has been suggested that the lack of presence also impacts student learning and outcomes (Carrick, 2011; Poorman et al., 2011). In the final analysis, strong student faculty relationships contribute to deeper learning and better outcomes but inherently pose challenges for faculty and students alike.

Another potential barrier to NCLEX success centers on the fact that a portion of NCLEX –RN preparation occurs beyond the structured classroom and clinical environments. Once a student has graduated from the nursing program the need to be self-disciplined and continue preparing for the NCLEX should remain a priority. Unfortunately, many associate degree nursing students have a multitude of other responsibilities such as work, family, and financial obligations. As a consequence, studying for the NLCEX exam often falls to the bottom of their to do lists. In a qualitative study conducted by Eddy and Epeneter (2002) the participants who were not successful on the NCLEX-RN exam shared that they prepared minimally and just *glanced* or did last minute *cramming* in preparation for the exam. The participants in this study also felt pressure from family members and employers to take the exam as quick as possible and knowingly were not as prepared as they should have been.

Given the importance of the need to pass the NCLEX-RN exam on the first attempt and students admitting to not having the time to prepare for the NCLEX exam while in school Eddy and Epeneter (2002) would suggest that nurse educators need to closely review curriculums and consider incorporating NCLEX-RN preparation course(s) while students are still in the program.

Finally, other barriers seen as impacting NCLEX performance deal with nursing students approach to learning and strategies employed by faculty in the classroom. For students, given the breadth and depth of the knowledge required to be successful in a nursing program as well as the NCLEX-RN exam, previous approaches to learning may not suffice. For example, a student may choose to learn a surface approach, such as

memorizing, learning facts, and last minute cramming. Unfortunately, this strategy will fall short when applying information to the clinical arena and developing clinical reasoning skills which is vital for nursing practice.

Additionally, the application of these clinical reasoning skills comprises a significant portion of the NCLEX-RN licensure exam. As noted by Carrick (2011) these gaps in knowledge will surface on outcome achievement exams, such as the NCLEX-RN, where *thinking like a nurse* and utilizing higher order thinking skills is key to successful performance.

Along with consideration of students approach to learning the role that a nurse educator plays in helping a student achieve a deeper understanding of concepts and essential material cannot be overlooked. According to Bligh (2000) the utilization of classroom lecture, which is predominantly practiced in nursing education, is one of the least effective teaching methods. Through the use of lecturing students are typically not inspired nor does it facilitate open engaged conversation about lived clinical experiences and associated complex concepts. To assure deeper learning teaching methods need to be more student-centered (Biggs & Tang, 2007; Cirmo, 2014; Haggis, 2003). Through the use of interactive teaching and formative assessments higher order thinking can be generated resulting in greater NCLEX success.

Barriers to successful NCLEX-RN exam performance are varied. The relevant research, albeit scarce, suggests that not only do associate degree nurse graduates play a major role in their NCLEX performance, but so do nurse educators and to a lesser degree family members and health care organizations. As the need for competent nurse

graduates grows identified barriers influencing NCLEX performance need to be revisited and new strategies considered to mitigate these obstacles.

Cost of NCLEX-RN failure. The cost of NCLEX failure is multifaceted and is seen as primarily impacting graduate nurses, nursing programs, and healthcare organizations. By recognizing the effects of NCLEX-RN failure nurse educators, nurse graduates and healthcare institutions can gain greater insight into the perils associated with poor NCLEX performance.

From the perspective of healthcare institutions new graduates are hired to fill vacant positions and are expected to pass the NCLEX-RN exam on their first attempt. Of importance and as noted by Greenspan (2009) the cost of orienting new graduate nurses has risen to $27,900 in the United States and when a new graduate is unsuccessful the cost escalates to approximately $87,000. This increase is a result of the need to still fill vacancies with other staff often at overtime rates or through the utilization of temporary agency staff that are paid at a substantially higher rate than a new graduate (Roa, Shipman, Hooten, & Carter, 2011). In the end, the healthcare agency labor dollar budget feels the strain when a newly hired graduate nurse is not successful on the licensure exam.

Nursing programs also experience negative consequences as a result of graduates not performing well on the NCLEX-RN licensure exam. For instance, potential new students often examine public records of NCLEX-RN pass rates and may chose not to attend a program secondary to below average exam pass rates (Roa & et al.). This could lead to a decline in enrollment and impact overall institutional budget. Another aspect of

poor program NCLEX performance is related to accreditation. When a program is consistently below the national benchmark for first time passing rates state boards as well as national accrediting bodies are alerted. In worst case scenarios if pass rates on the RN licensure exam do not improve closure of that program may be the result.

Lastly, nursing programs that are experiencing a decline in NCLEX-RN pass rates need to address the notion of ethical responsibility. Specifically, if the program is providing the knowledge necessary to ensure that the nurse graduate will be successful on the NLCEX-RN exam what role does the faculty play when the graduate is not successful? Applying the ethical principle of fidelity to this scenario would suggest that nursing programs and faculty have to be accountable and *make good* on this promise (Roa & et al.). As a result, nursing programs have the duty to regularly evaluate curriculums and make necessary changes to meet the dynamics of the changing healthcare milieu.

The last important component to be addressed when considering the costs of NCLEX failure involves the graduates. While the costs of NCLEX-RN failure for graduate nurses have been identified it remains an area that is minimally researched and is impacting graduate nurses both financially and emotionally. According to Griffiths, Papastrat, Czekanski, & Hagan, 2004; Poorman, Mastorovich & Webb, 2011; and Roa & et al., 2011, the emotional implications are significant. The lack of success on the NCLEX-RN exam has been correlated with feelings of loss and social stigma and is seen as having a consequential effect on future exam retakes. These feelings lead to a loss of self-confidence, heightened anxiety, and guilt.

In a qualitative study conducted by Poorman and Webb (2002) they found that graduates who were unsuccessful on the NCLEX-RN doubted their abilities and began to question whether they would be able to handle the rigors of being a RN and in some cases even questioned whether they had chosen the right career. In terms of guilt the theme that is noted dealt with the idea that graduates who were not successful on the licensure exam were letting down their families and employers. Additionally, many felt as though their newly found identity as a *real nurse* had been revoked.

The key to overcoming this emotional turmoil lies within the individual believing in him/her self to achieve success and put aside any obstacles that may have gotten in the way. Given the reality of increasing numbers of graduates who are not successful on the NCLEX-RN exam and the fact that these individuals feel anguish and a sense of loss; nurse educators should consider the inclusion of strategies to assist graduates prepare for the possibility of failure in a capstone course. Or perhaps a post-program course could be developed for graduates who have performed poorly on the NCLEX-RN exam to guide them through their emotional and financial hardships setting the stage for future success.

One of the most common themes noted in the literature secondary to NCLEX failure are financial burdens incurred by the graduates. Graduates are faced with escalating tuition and fees associated with nursing education and expect a return on their investment post completion of a program (Roa & et al.). In fact, the average cost of completing an associate degree nursing program in the United States ranges from $4,600-$20,000 (American Association of Community Colleges, 2009).

Failure of the NCLEX-RN exam results in a cascade of financial events. A reduction in salary commences along with the expectation of repaying student loans (Greenspan, 2009; Roa & et al., 2011). Other additional expenses that occur during this timeframe include on average $200 for re-taking the exam, and the costs associated with remediation courses. Remediation strategies range from $50 for a textbook to as high as $500 for a structured class and materials (Roa & et al.). As noted by Griffiths and et al., (2004) "with these mounting expenses weighing heavily on the graduate the fear of failure and anxiety heightens for the second time" (p. 323). Sadly, statistics from 2008 reveal that graduate nurses who were unsuccessful on the NCLEX-RN exam as a first time test-taker have a 46.7% chance of not being successful upon repeated attempt(s) (NCSBN, 2009a).

In a study conducted through the National Student Nurses' Association (NSNA), with the results being analyzed and reported by Feeg and Mancino (2014), debt incurred by the associate degree nurse graduate is less than those that attend public or private 4 year or for profit proprietary institutions. However, given the job market demands and region of the country that a graduate nurse resides an associate degree nurse graduate could be put at a disadvantage in finding employment (NSNA, 2014). Javine (2013) encourages all nursing students to get more education about borrowing money before attaining a degree. Through the accruement of student loan debt on top of the accumulating interest individual graduates as well as the overall economy is impacted. For example, if the new graduate has not been successful on the NCLEX-RN exam and misses or skips a student debt payment their credit rating and ability to borrow money in

the future for mortgages and additional education could be impacted.

The costs of NCLEX failure are far reaching and have the potential to have a bearing on graduate nurses well beyond the months of program completion. Recent data from the NSNA New Graduate Survey (2014) suggests that nurse graduates have greater debt than in the past which has set the stage for greater challenges when it comes to future borrowing and financial stability. Couple student loan debt with NCLEX-RN failure added costs, plus the emotional consequences; it becomes imperative for nurse educators along with policy-makers to create innovative strategies to support new nurse graduates. Lastly, by reducing the stress of financial burdens one could hypothesize that the success rates of those that needs to re-take the NCLEX-RN exam would improve and help fill the growing need for nurses in the job market.

Implications

This study investigated recent nurse graduates' perceptions of experiences that contributed to their performance on the NCLEX-RN licensure exam. Based on the findings, contemporary NCLEX-RN preparedness strategies will be presented to nursing program faculty via a professional development program. The goal is to provide nursing faculty new insights into approaches preparing graduates for NCLEX success. Additionally, since research has shown that there is a need for faculty to play a greater role in preparing students for the NCLEX-RN examination beyond the classroom Taylor and et al., (2014) this information could be the impetus for programmatic change.

The results will also be shared with appropriate stakeholders. Specifically, this includes the Dean of Allied Health and Nursing, Provost of Academic Learning, associate

degree program director, nursing advisory council, full-time faculty, and adjunct faculty

members. The intent is to inform these stakeholders of recent graduates' perceptions of

experiences while in the nursing program and what they viewed as having the greatest

impact on licensure exam performance. Ultimately, a review of current NCLEX-RN

preparation strategies within the program along with input from stakeholders can

generate an opportunity for the creation of new approaches unique to the program's

student population.

      Based on the findings of this study, a professional development program for full-

time and adjunct nursing faculty will be presented with the goal of offering new strategies

on NCLEX-RN preparation and success. Currently, there are no deliberate discussions

taking place relative to NCLEX-RN preparedness and performance enhancements. Rather

the focus has been on making program admission criteria more stringent, program

progression policy changes, and the incorporation of a mandatory standardized exit exam

and Live Review Session with no meaningful follow-up. It is important for recent

graduates to have the resources and guidance to take with them as they prepare to take the

NCLEX-RN licensure exam. A lack of a deeper understanding of their perceptions and

what contributes to NCLEX performance along with minimal resources stands to create

graduate anxiety and frustration potentially leading to diminished NCLEX performance.

Thus, a developed workshop that espouses the study's results along with the opportunity

to discuss and consider new approaches to NCLEX-RN preparedness will be presented to

the stakeholders. Although this is a small study at one Midwestern community college,

other institutions of learning may benefit from the findings and perform a similar study of their own.

Summary

The problem that is the impetus for this study is the increasing number of associate degree nursing graduates who are not successful on the NCLEX-RN licensure exam. The rationale for choosing this problem is embedded in the difficulties nursing graduates confront when failing the NCLEX-RN exam along with the impact that NCLEX failure rates have on a nursing program. On a national level as well as local, NCLEX-RN first time candidate failures are on the rise and yet there is a paucity of qualitative nursing graduate data to assist in determining the reasons behind this decline. The key-terms have been defined while the on-going local problem espouses the need for further investigation. Research evidence and the significance of this problem socially have been discussed along with research questions being identified. Additionally, a comprehensive literature review was performed, a conceptual framework outlined, and possible implications for this qualitative study presented. Section two outlines and discusses research design and approach, data collection, and analysis.

Section 2: The Methodology

The conceptual framework employed for this study utilized (SAL) as a way to show how knowledge is gained and applied to hierarchical learning which is essential in nursing education. Biggs (1987) and Barros, Monteiro, Nejedinne, and Moreira (2013) noted that deeper learning is not necessarily related to one's cognition capacity, but rather it is connected to various study processes and "approaches to learning" (Barros & et al., p. 792). The process of deeper learning is achievable when the student's intent is to acquire a thorough understanding of the concepts being studied. Through the utilization of processes such as synthesis and analysis attainment of in-depth knowledge can be accomplished creating a stage for transformative learning and eventual NCLEX success.

The two central research questions identified for this qualitative study are:

RQ1: What experiences do recent graduates of an associate degree nursing program view as contributing to NCLEX-RN licensure performance?

RQ2: In what way do the perceptions differ of nursing school experiences between graduates who are successful and unsuccessful on the NCLEX-RN licensure exam?

In lieu of the fact that there are no identified variables and further exploration is needed case study research was chosen as a feasible method for this study. Hancock and Algozzine (2011) suggested that case study research offers an "intensive analyses and descriptions of a single unit or system bounded by space and time" (p. 10). Or in this case, it offers a way to gain a more comprehensive understanding of student perceptions regarding nursing program experiences and how these experiences influence NCLEX-RN

exam performance. The data collection method in case study research is not limited to any one approach (Merriam, 2009). Hence, the data collection method that was utilized and viewed as being most appropriate for this study was one-on-one interviews. The participants in the study were recent nursing graduates willing to partake and not hesitant to share their perceptions of nursing program experiences. Of note, interviewing is a popular method employed in qualitative educational research (Creswell, 2012; Maxwell, 2013). Therefore, it was determined to implement this approach and 10 individuals were interviewed. Of the 10 participants interviewed, five were individuals that had been successful on the licensure exam and five who were not. The data collected was analyzed and coded to identify themes. The findings gathered from this study are intended to help identify other premises that need to be considered by nurse educators as they look to augment current strategies being employed in readying students to take the NCLEX exam.

The following section identifies the research design and its applicability to the research problem. The method of participant selection is discussed as well as the steps that were taken to protect the identities of the participants and information gathered. Additionally, a description of the role of the researcher, approach to data collection, analysis, and the concept of credibility are explored.

Research Design and Approach

Approach

A qualitative research approach has been employed for this study. The primary goal of qualitative research is for investigators to gain greater insight into how people interpret and make sense of their experiences within a particular setting. Qualitative research focuses on delineating the process and is driven by an emic view (Merriam, 2009.) Additionally, qualitative investigators assimilate data to construct concepts and add to existing theories (inductive process) instead of testing hypotheses. Lastly, the data that has been gathered is rich in description adding greater meaning to the phenomenon being studied. In summary, qualitative research espouses the following key characteristics: naturalistic, concern with process, inductive reasoning, descriptive data and enhanced meaning.

In this study, naturalistic is related to the natural setting and the source of data. The natural setting in this case will be either the classroom or clinical setting where application of the knowledge and experiences are garnered. As for the concern with process it will center on how recent nurse graduates perceived their experiences in the nursing program and the role those experiences played on NCLEX performance. Since qualitative research does not gather data to prove or disprove a hypothesis it becomes an inductive process. Or in other words, the researcher becomes the primary instrument for collecting and analyzing data to build concepts, tentative hypothesis and theories (Merriam, 2009). Given the fact that there is a paucity of literature on new graduate nurses' perceptions of nursing school experiences and the role they play on NCLEX-RN performance; a qualitative approach should help form a clearer picture of themes or

variables that contribute to NCLEX performance. The descriptive data will come from

the participant interviews while meaning will refer to how the graduates make sense of

the experiences being studied. Specifically, meaning will be ascertained through the

research question; what experiences do recent graduates of an associate degree nursing

program view as contributing to NCLEX-RN licensure performance? The study

proceeded with these five elements of qualitative research as a template.

Design

A case study was the chosen research design for the study. According to Creswell

(2012) case study research focuses "on an in-depth exploration of a bounded system (e. g.

activity, event, process, or individuals) based on extensive data collection" (p. 465). In

this study graduate nurses comprised the bounded system. Case study research can be

further divided into three types; intrinsic, instrumental and collective (Creswell, 2012).

The suitable type for this study is instrumental as insight into a concern is the objective of

the research.

Other qualitative approaches as described by Creswell (2012) and Merriam (2009)

were not seen as aligning with this study. For example, ethnography which has to do with

culture and knowledge embedded in a community is not the focus of this research.

Another form of qualitative research, phenomenology, which requires expanded periods

of observation, is also not the goal of this study.

Participants

In order to explore a specific central phenomenon, it is important to be purposeful

in the selection of participants. Simply, this type of sampling is referred to as purposeful

sampling and was utilized for this study. Creswell (2012) and Houghton, Casey, Shaw, & Murphy (2013) suggested that it is critical to select individuals that can provide useful and detailed information. Thus, participants were chosen from recent graduate nurses who were able to provide detailed information about the experiences they came across in nursing school and their views of the relevancy of those experiences to NCLEX-RN performance. Personal one-on-one interviews were conducted with each of the participants. Specifically, five recent graduates who had been successful on the NCLEX-RN exam and five that had not, made up the participant pool. Of the 10 individuals chosen there was enough detailed information shared leading to the point of saturation resulting in emergent themes. Working through the systematic program evaluation committee at the community college where the study took place; access to recent graduates' contact information and individual's NCLEX results were obtained. Of note, there are 5 or 6 groups that go through the program each year offering a way to retrieve data from a more diverse group of graduates.

Selection of Participants

In qualitative research a key characteristic is "to present multiple perspectives of individuals to represent the complexity of our world" (Creswell, 2012, p. 207). In an effort to present multiple views homogenous sampling, a type of purposeful sampling, was utilized in this research study. An important consideration when this sampling strategy was chosen was to assure that the study participants offered a snapshot of the greater population from which it is drawn (Lodico, Spaudling, & Voegtle, 2010). By employing homogenous sampling only recent graduates from the nursing program being

studied with similar attributes were utilized. This afforded the researcher the opportunity to identify similar and divergent perceptions of the participants and built the foundation for theme emergence and new insights into the phenomenon being studied.

The researcher forwarded an electronic invitation to partake in the research study to all graduates who had completed the program and taken the NCLEX-RN licensure exam within the past three years. The graduates that were willing to participate in the project study were instructed to contact the researcher directly via email. After a two-week time frame a reminder invitation was resent to potential participants that resulted in 31out of 401 recent nursing graduates affirming a willingness to participate. Those 31 potential participants were then assessed for suitability for the study and contacted via email to arrange a mutually agreed upon time to conduct an interview. Once the 10 participants were secured those who were not selected for the interview was notified by the researcher of the decision.

By conducting interviews of recent graduates that had not been out of school no longer than three years about their experiences in nursing school, and thoroughly documenting their perceptions about how those experiences impacted NCLEX-RN performance; information was acquired to help this nursing program gain greater insight into other factors that impact NCLEX performance. Ultimately, it should assist the nursing faculty to increase the applicability of classroom and clinical objectives to improve the program's overall NCLEX-RN licensure pass rates.

Gaining Access to the Participants

Once approval was obtained from Walden University's Institutional Review
Board (IRB) (approval number 04-25-16-0279546) and the home institution's IRB
(approval number 1231) an invitation to participate letter (Appendix B) was sent to all
graduates who had completed the program in the past three years. The invitation was sent
via e-mail to an account address voluntarily provided by the graduate at the conclusion of
the program. The correspondence delineated the nature and purpose of the research,
potential risks and benefits, the specific steps taken to maintain confidentiality, and the
right to opt out of the research study at any point. Additionally, it directed the graduates
who were willing to participate to make direct contact with the researcher via email
within a specific timeframe. Once the timeframe had passed the potential participant's
information was validated and demographic information collated. If the potential
participant met the study's selection criteria a mutually agreed upon interview date and
time was scheduled.

Ethical Protection of the Participants

The study was conducted at a Midwestern community college where the
researcher is employed. The invitation letter to potential participants included an
overview of the research study. The participants' identities were kept confidential and no
compensation was offered for taking part in the study. Identities were kept confidential
via a coding system and participation in the study was strictly voluntary. Additionally,
the participants were informed that they could drop out of the study at any time. They
were provided with a copy of the consent agreement (Appendix B) and informed that all

the information gathered from interviews would be kept confidential. There were no identified risks for participating in the study and the researcher has no connection, past or present to the recent graduates.

Data Collection

While there are several ways to collect data when conducting qualitative studies, interviews are one of the most common approaches (Creswell, 2012; Hancock & Algozzine, 2011; Merriam, 2009). Interviews afford the researcher and participant to be actively engaged in conversation and focus on specific questions germane to the study. Interviews also proffer insights into feelings, intentions, and behaviors of participants that could not otherwise be observed directly by the researcher. Or in other words, by conducting interviews with nurse graduates for this study, rich data about their perceptions of past nursing school experiences and the impact those events had on NCLEX performance was obtained. The research problem and central research questions guided the specific interview questions and resultant analysis. Selected participants were recent graduates who had completed the nursing program within the past 3 years. Five of the participants had passed the NCLEX-RN licensure exam on their first attempt, while the other five participants had not passed the exam. To elicit rich descriptions of classroom and clinical experiences open-ended questions were utilized. At the conclusion of ten one-on-one interviews it was determined saturation of data had been reached resulting in the emergence of several themes. Permission was sought for the use of a tape recorder prior to the interview and all audio files were transcribed verbatim within two weeks of the interview. A password protected personal computer houses the transcribed

data and an audio recorder containing the interviews will be kept in the researcher's home for the next 5 years.

One-On-One Interviews

One-on-one interviews are considered to be a valid option when conducting qualitative research (Creswell, 2012; Maxwell, 2013; Patton, 2005). While one-on-one interviews can be time-consuming they afford the interviewee the opportunity to describe detailed information about lived experiences. Additionally, the interviewer has better control over the type of information being collected secondary to specific questions that can be asked of the participants. Interviewing is a prime approach when the researcher is seeking a deeper understanding of lived experiences by exploring a participant's perceptions and feelings which aligns well with this qualitative study.

The interviews for this study were semi-structured or in other words, the questions were open-ended and flexible and lasted about 45 minutes to one hour. This researcher personally conducted interviews face-to face with the exception of one which was completed via the telephone. Participant's schedules were accommodated and all the interviews began with general conversation, which helped the participants feel at ease; the questions then began and moved from general to specific. In some instances, additional information was gathered by using elaborating or clarifying probes. A significant portion of the interview was guided by a specific list of questions found on an interview protocol sheet (Appendix C).

After the interview questions were developed, a pilot test was conducted. Specifically, a pilot group of two participants (nursing faculty) were selected, instructed

on their responsibilities, and told that their efforts were to help to establish study validity.

As noted by Lodico et al. (2010) validity is the ability of the instrument, in this case the

interview questions, to measure what is intended to be measured. To accomplish this

goal, test participants were asked the following:

- Was the title of the interview protocol guidelines aligned with the purpose of the study?

- Were the questions worded clearly? For example, if the researcher wanted the participant to reflect back on an experience, was the wordage specifically stated?

- Did the overall language and specificity of the interview questions reflect the general experiences of the group being interviewed?

- Requested participants to examine the interview questions to ensure no additional sections were needed to sufficiently address the phenomenon under investigation.

At the conclusion of the pilot the willing test participants did not identify any gaps

nor did they find it necessary to append any language that may have enhanced the breadth

and depth of the study. As a result, the researcher did not integrate any further

suggestions into the final interview protocol and validity was substantiated.

Managing Collected Data

Upon completion of each interview, the audio-taped data was transcribed

verbatim and a preliminary exploratory analysis conducted. In between the interviews

continued review and analysis of data was undertaken. As the amount of data grew,

computer files were made for each participant for organizational purposes.

Data Transcription

The data were transcribed verbatim by me. They were typed onto a matrix that was divided into three columns and had large margins for the purpose of adding observations that had been noted during the interviews. The specific columns that made up the matrix included text, codes (text segments), and themes.

At the conclusion of transcription, the data were read over in its entirety several times to get a general sense about the data and began the process for immersion of self into data details.

Data Coding

The coding of data was linked to text segments and then categorized. To continue refining data, codes were examined for redundancy and overlaps and then collapsed into themes. This inductive process resulted in the inclusion of specific data that contributed to the themes, while other data were disregarded.

The amount of data collected from the interviews was relatively small and thus the coding and analysis was completed utilizing a color coding system for organization. The data was reviewed as each interview was completed. This approach afforded the opportunity to record additional thoughts and insights that otherwise might have been lost if the transcription had been conducted by a third party or at a later time (Merriam, 2009).

Once themes were determined, they were applied to the study's research questions as well as aligned to the conceptual framework. Student's approach to learning (SAL) upholds the premise that how a student learns and studies will impact learning

outcomes. Or in other words, the approach to clinical or classroom learning and experiences can be applied to NCLEX-RN performance.

Role of the Researcher

I am a full-time, tenured professor at a Midwestern community college. I have been employed by this institution for more than 25 years and currently teach students in the Associate Degree Nursing Program. I am considered a lead faculty in the primary course I teach and recently moved away from the Program Director's position. Prior to being selected for a tenure track in the nursing division I worked as an adjunct faculty member for four years which collectively has given me substantial experience in nursing education. Educationally, I began my nursing career as a diploma graduate and continued on to acquire my Bachelor and Master of Science nursing degrees.

One of the ongoing challenges for me in nursing education has been related to student success on the NCLEX-RN licensure exam. I am concerned and question how students can successfully complete a rigorous program of study culminating in some graduates successfully passing the NCLEX exam and others not. This research will provide information about recent graduates' perceptions of their lived classroom and clinical experiences while they were in the program and the role those experiences played on their NCLEX-RN performance. The value of these findings will allow the associate degree program of nursing I am affiliated with and potentially other nursing programs to re-assess and modify strategies for NCLEX preparation and graduate success on the licensure exam. In the end, the information gleaned from this research study should result in social change in my current work environment and potentially nursing education.

Data Analysis

Upon completion of the interviews a matrix was developed to organize the data (Cohen, Manion, & Morrison, 2013; Creswell, 2012). The data were stored on a password-protected personal computer and backed up on an external thumb drive. The transcription of data was ongoing and finished as soon as possible after each interview was completed. As suggested by Glesne (2011), the document containing the transcribed data was formatted with wide margins for note taking along with the ability to highlight interview questions when appropriate.

Each transcribed document was read through in its entirety several times as soon as it was completed, which helped me become engrossed in the data before breaking it down for the purpose of coding. As the transcript data was read and reread, word or phrases emerged that became the coding categories. The aim of this step was to identify new codes that could be added to assure that nothing had been missed or coded incorrectly. The progression of coding resulted in the development of categories and eventually emergent themes. As pointed out by Merriam (2009) data collection should be done in conjunction with data analysis which becomes more significant as the research evolves. Following thorough data analysis and identification of emergent themes developing a research report and an interpretation of what the data means encompassed the final results of this study. Finally, it was this information that formed the basis of the study project to be shared with stakeholders.

Within qualitative research, data analysis is an inductive process where researchers look to gain greater insight into a phenomenon by integrating observations

from one-on-one interviews, to gain a deeper understanding of phenomena (Lodico, 2010; Taylor, Bogdan, & DeVault, 2015). Inductive processes were used in this study to assimilate and code segments from interviews resulting in the emergence of themes relevant to NCLEX-RN exam performance. The identified problem at this Midwestern community college with resultant central research questions provided the framework for this study.

Results.

After concluding the interviews, the recorded data was transcribed verbatim and reviewed extensively to assure the researcher's understanding before breaking the findings into codes/categories. Codes were built from the extrapolation of text segments and resulted in several primary themes. Table 2 shows the codes and themes developed from interviews with participants who were successful on the NCLEX-RN exam.

While the group of participants who had been successful on the NCLEX-RN exam was small, all of the participants agreed on several themes. One theme that emerged was the onset of significant anxiety while completing the nursing program. As the analysis developed, I became acutely aware of the degree and how far-reaching stress was for these former students by verbalizations such as "I was totally overwhelmed and consumed by the program" and "I was so stressed and drained I wondered if I even wanted to be a nurse." Even when interviewees were redirected to share perceptions about clinical or classroom experiences the conversation often circumvented right back to how their stress was "overwhelming."

Table 2

Perceptions of Program Experiences on NCLEX Performance (Successful Candidates)

Text segments	Codes/categories	Theme
• Overall experience in program		
• Overall experience was good but VERY stressful!	• Emotional distress	
• Good but hard to balance everything.	• Scared of failure	
• Extremely stressful and challenging.	• Lacked confidence	**Anxiety**
• Made me feel overwhelmed.	• Stressed	
• Didn't know if I was going to make it.	• Balance of work/family/school commitments	
• Needed more confidence when taking tests		
NCLEX Performance Variables		
• Took lots of practice tests. Those that had rationale for why an answer was correct were the best.	• Practice questions/tests with rationale	
• Having confidence and just realizing you can't get stressed over what you don't know.	• NCLEX reviews	
• Independent NCLEX review (online) was really helpful to me.	• Discipline to study	**NCLEX preparation is key**
• I tried to study at least a couple of hours every day.	• Decision to study beyond program	
• Did lots of practice questions. Probably thousands.		
• I would guess I studied about 150-200 hours before I took the exam.		

Another perception shared by the participant pool that was seen as contributing to NCLEX performance dealt with the connection they had with their theory and clinical faculty. 80% of the interviewees imparted that the nursing faculty made all the difference. Comments such as "being there", "offering encouragement", "explaining things one on one", and finally "believing in me when I didn't believe in myself" were repeated throughout the interviews. While several studies mention that the benefits of strong faculty student relationships facilitate positive student learning outcomes (Eddy & Epeneter, 2002; Karsten & DiCicco, 2014; Poorman et al., 2011), a review of nursing education literature reveals that the examination of student/nursing faculty relationships is essentially nonexistent. This suggests that further research is needed in the area of nursing student/faculty relationships. It also insinuates that nurse educators need to be more cognizant of the impact they have on student success while enrolled in a nursing program and beyond.

Finally, the approaches taken by nursing graduates who have been successful on the NCLEX exam reveals that preparation beyond the program is essential. It was conveyed by 100% of the successful NCLEX participants that 75–150 hours were spent on doing practice questions, taking practice exams, and participating in NCLEX review courses once they had completed the nursing program. To a lesser extent (60%) reported utilizing HESI exit exam results in guiding their preparation for the NCLEX. This is a somewhat disappointing finding considering that the HESI exit exam is one of the only

tools employed by the program in this study related to preparing their graduates for the NCLEX exam.

Also of note, is the fact that many associate degree nursing students face significant challenges balancing responsibilities associated with school, family, financial obligations and work commitments. These duties impact studying time and the reality of only being able to prepare for current assignments and exams leaves little room for NCLEX preparation. Thus, once a student has graduated from a nursing program the need to be self-disciplined and continue preparing oneself for NCLEX success is paramount (Eddy & Epeneter, 2002). The results of this research parallel the aforementioned study but the impact of more structured approaches and insights from nursing graduates regarding NCLEX preparation is minimally noted in nursing education literature indicating a need for further investigative studies to be conducted.

In contrast, participants who were not successful on the NCLEX-RN licensure examination revealed that while anxiety had an effect on their NCLEX performance and that support systems were important, the fear of failure permeated into 80% of the interview discussions. Additionally, all of the participants who were not successful on the NCLEX exam shared that the time spent preparing was not sufficient. To exemplify the variables that influenced this group's perceptions of nursing program experiences and variables that impacted their NCLEX performance refer to Table 3.

Table 3

Perceptions of Program Experiences on NCLEX Performance (unsuccessful graduates)

Text Segments	Codes/categories	Themes
Overall experience		
Overall a positive experience. I had wonderful supportful instructors.	Student's expectations of faculty	
Program was terrific! As an older adult learner the help I received on test taking tips was so valuable.	• Offer support	
	• Shared words of encouragement	Faculty connectedness
Instructors played such an important role in my positive experience. Offered many words of encouragement and had a desire for me to graduate.	• Conveyed that they wanted me to be successful	
Mostly great experience. About 80-85% of my teachers were good. They were caring genuine and wanted you to succeed. Some though (15%) were just paycheck collectors and seemed worn out.	• Caring genuine	
Challenges in the program		
For sure theory (classroom).	• Approached learning the material in a black & white manner	
I kept hearing I needed to think critically and I now know that meant learning about the gray.		
Critical thinking was really hard for me especially as an older student.	• Struggled with critical thinking	Deficit of in-depth learning strategies
I would memorize all my notes. Knew them inside and out and even make note cards. Didn't understand the gray or why. Learning to think like a nurse.	• Test taking skills	
Taking the knowledge you get in class and applying it to clinical like test questions. Didn't make enough time to study like I should		

Text Segments	Codes/categories	Themes

have. Would fail a couple of exams and then really struggle to pass. Very stressful.

Variables that contributed to NCLEX performance

Anxiety killed me.

I had a previous failure in the program and even though I told myself I could do this I was very scared!

I didn't study a lot before taking the exam.

Had to work and was on my own.

I simply did not prepare and that's why I failed. Things outside school did me in.

Didn't take advantage of resources available to me, like the HESI exit exam.

I had failed while in the program and didn't know how to deal with it. Depression set in and I wasn't thinking like a winner.

Personal stressors, e. g. having a baby. My life was going in a different direction. Couldn't concentrate.

- Personal life stressors

- Under utilization of NCLEX preparation resources

- Limited skills in dealing with failure

Lack of NCLEX preparedness

Fear of failure

Analysis

The results of this case study research have addressed the central questions of:

RQ1: What experiences do recent graduates of an associate degree nursing

program view as contributing to NCLEX-RN licensure performance?

RQ2: What way do the perceptions of nursing school experiences differ between

graduates who are successful and unsuccessful on the NCLEX-RN licensure exam?

Specifically, both groups cited the overall experience was good, but also shared it was very stressful and may have impacted their experiences subtly. Despite the heightened anxiety levels some graduates were still able to succeed on the NCLEX-RN exam. I question whether this was related to the possession of better coping skills or perhaps they employed a more comprehensive approach (despite their anxiety) to comprehending curricular content resulting in successful passage of the NCLEX. While these ideas could serve as the foundation for future studies the relevance and impact of anxiety on nursing students needs to be recognized and minimized by today's nurse educators.

Additionally, the importance of support, especially by nursing faculty was conveyed to be an important component of their experiences in both participant pools. As noted in several prior studies (Eddy & Epenteur, 2002; Karsten & Dicicco, 2014; Poorman et al., 2011) the importance of strong faculty/student relationships parallels student success. Based on this study's findings, I would concur that strong faculty/student relationships help to reduce student anxiety resulting in deeper learning and student success. However, on a cautionary note, what a student views as a strong faculty presence does not necessarily align with a nurse educator's view. For example, (participant C) shared that she needed "quality, private" time with her professor to review each exam and understand the reason(s) behind correct responses. Contrary to that need, nursing faculty is frequently confronted by severe time constraints and opts to conduct general test reviews thus reducing individual faculty/student time. For students who view faculty connectedness as being one-on-one time, different approaches need employed by faculty. And likewise, what faculty perceives as being available to meet the student's needs

revisited. Additionally, (participants C & Y) shared that words of encouragement and

show of support were equally important. It is my belief that the creation of a professional

caring relationship between the faculty member and student, would stand to serve the

student in a beneficial manner. Or in other words, when the student is empowered, self-

confidence improves and a *can do* attitude takes over. Despite the identified need for

strong faculty/student relationships there is a paucity of nursing education literature that

explores this concept suggesting that additional studies need conducted.

In regard to differences between the two participant pools, NCLEX exam

preparedness was a distinct finding. Those that had been successful on the exam took

advantage of program resources as well as external offerings and had a plan in place

resulting in many hours being spent on studying and completing numerous practice tests.

For example, (participant C) shared that she "probably spent an additional 75-100 hours"

beyond the review session. Another successful graduate (participant B) stated that she

"studied lots…at least 10 hours a week for three months". She went on to say that "one of

her most useful resources was the use of NCLEX review texts that offered rationale for

the correct answers."

In contrast, those that were not successful spent considerable less time studying

and did not take full advantage of resources prior to taking the exam. The same group

also shared that they had a number of personal stressors taking place that impacted their

success on the licensure exam. Several stressors identified included family

responsibilities, work obligations, and to a greater degree overcoming the prospect of

failing. To illustrate the impact of personal stressors (participant Z) shared "I simply had

to work…nearly fulltime. As a result I just didn't have enough to study and when I did I was so tired I couldn't concentrate."

Of the students who had not been successful on the NCLEX exam, 80% reported having failed somewhere along the way while in the program. The idea of failing again was described as being "crippling". Or in one case (participant Y) shared that it led to "some depression" culminating in putting off taking the exam for months. The fear of failing along with anxiety has been shown to have impact on test taking or in this case NCLEX-RN performance. In matter of fact, according to the Anxiety and Depression Association of America (n. d.), the fear of failure which is closely tied to anxiety can be devastating when taking exams especially for individuals who connect their self-worth to the outcome(s) of academic performance.

As noted in the analysis of this study's data, participants who had not been successful on the NCLEX exam not only shared that they suffered from extreme anxiety but also had previous failures in their nursing coursework. As a result, behavioral and cognitive discourse occurs, e. g. difficulty concentrating, thinking negatively about oneself, which effects NCLEX-RN performance. In order to help graduates be more successful nursing educators need to acquire a greater understanding of how anxiety and fear of failure play a role in NCLEX performance. This could be accomplished by acknowledging and then integrating strategies to minimize anxiety-laden behavioral/cognitive symptoms throughout the course of the nursing program.

Lastly, the results of this study revealed that the graduate nurse participants who were not successful had difficulty in implementing various strategies to achieve deeper

learning. For example, "I would memorize all my notes." Or "I made note cards of key

points and knew them by heart" (participant X). Unfortunately, by accepting new facts

and concepts without linking them together and examining them critically leads to

superficial learning making it difficult to apply course content and knowledge

comprehensively when answering NCLEX style questions (Biggs, 1987, 1993; Entwistle,

2000; Houghton, 2004). Without looking for meaning and relating this new information

to previous knowledge NCLEX licensure exam failure becomes a distinct possibility.

Taking into consideration that this study's conceptual framework espouses students

approaches to learning (SAL theory) the conclusion that a student's approach, or in this a

case, a graduate nurse's approach to learning can impact NCLEX performance is valid.

In the final analysis, this qualitative study's findings reveal that acute anxiety, fear

of failure, faculty/student relationships and approach to learning impacts NCLEX

performance. In an effort to address these outcomes a three-day professional development

program will be implemented for nursing faculty. The plan is to support the faculty in

attaining a greater appreciation of how "real" these detrimental emotions are in the

nursing student population as well as proffer some methods to reduce student anxiety and

fear of failure. Additionally, the importance of faculty/student connectedness and

strategies of how to get students to think more deeply will be explored. It is through this

approach and faculty's heightened awareness of the *graduates' voices* that pass rates on

the NCLEX-RN can be improved at this Midwestern community college.

Evidence of Quality. Another important aspect of any research is to integrate

strategies to minimize researcher bias. Member checking as described by Creswell (2012)

is one such method utilized to help ensure credibility. The steps taken to enhance the

integrity of this study included several participants receiving transcripts of their audio

taped interviews with a request to offer feedback on the emerging findings. As noted by

Maxwell (2005) member checking "is a way of ruling out the possibility of

misinterpreting the meaning of what participants say and do" (p.111). Additionally, it

helps to mitigate investigator bias. In this study if the participant had not been able to

recognize his/her experience(s) in the analysis of data, editing would have been

performed to better capture the participant's perspectives. Once the interviews were

concluded, and the process of member checking was completed no discrepancies were

found resulting in validation of the study's credibility.

Discrepant cases. In conducting this qualitative study, I adhered to a detailed

procedure of inquiry and inductive processes. Or in other words, all interview data was

carefully reviewed with attention given to all participants' responses. As categories

emerged from the data empathetic neutrality was employed in considering whether

discrepant findings contributed to primary themes. Particular to this study, a recent

graduate who had been successful on the NCLEX-RN exam, as well as one who had not,

shared that because of their anxiety they purposefully delayed seeking a nursing position

secondary to not having the confidence to be successful. While this finding does not

directly relate to NCLEX performance it does depict what continued anxiety can do

beyond a nursing program of study and could be the impetus for future studies.

Summary

In Section 2, I described and justified the research design and methodology. I described my role and responsibility as a researcher. I also reviewed the data collection and analyses procedures, process for randomly selecting and gaining access to research participants, and ethical protection. I presented the findings and data analysis, explaining how they align with the peer-reviewed literature and the conceptual framework of the study. Section 3 will contain a detailed description of the project that resulted from the findings of the study. Appendix A will provide the details of the project that has been approved by committee members.

Section 3: The Project

Introduction

The purpose of the descriptive case study was to acquire a greater understanding of nursing graduates' perceptions of program experiences that influenced NCLEX-RN licensure exam performance. I interviewed graduate nurses, who were both successful and unsuccessful on the NCLEX-RN to gain insights into the experiences that impacted NCLEX performance. My research built upon the findings of Biggs (1987) and Barros et al., (2013) who found that a student's approach to learning will contribute significantly to successful student learning outcomes.

My objective in conducting the study was to enhance the understanding of what perceptions had the greatest impact on NCLEX performance and as a result look at strategies that could be utilized by nurse educators to improve NCLEX-RN performance. Ultimately, this will lead to more graduates entering the job market and help diminish the nursing shortage.

To meet this objective, I designed a 3-day professional development program to assist nursing faculty to better understand nursing graduates' perceptions of the role their experiences play in NCLEX licensure exam performance. Specifically, and based on the findings of this study, the program will address contemporary strategies to moderate student's anxiety and fear of failure. It also will include the importance of student-faculty relationships and the integration of critical thinking strategies faculty could employ in the classroom/clinical settings to encourage deeper thinking. The workshop will lay a foundation to aid nurse educators develop new strategies to better prepare students for

NCLEX success. When nursing faculty acknowledges student experiences, not only can negative experiences be addressed, but positive ones can be built upon.

Description and Goals

According to the Bureau of Labor Statistics (2015), the projected need for registered nurses will continue to grow substantially through 2024 with the demand outpacing the supply. Thus, nurse educators need to focus on ways to foster NCLEX-RN success in an effort to thwart diminished numbers of registered nurses entering the profession and help offset the growing shortage. Based on the findings of this study and in lieu of new graduate nurse success, this proposed professional development program will address; the importance of integrating critical thinking strategies into nursing curricula, reduction of anxiety and fear of failure, and the significance of faculty connectedness.

To achieve my study's purpose, a professional development program was chosen to guide nurse educators on the advancement and deepening of theoretical knowledge and practical relevance to teaching activities in the classroom. In nursing education, many faculty are hired based on their nursing expertise and have little if any pedagogical knowledge. Hence, professional development and continuing education programs become essential (de Lima Ferreira & Bertotti, 2016; Kennedy, 2016). It is through such efforts that conceptual, informational, and relational paradigms can be explored in an effort for nurse educators to meet the challenges presented by a diverse student population. Additionally, greater gains can be realized when information is shared among peers (Vaillant & Marcelo, 2012). Or in this case, by attending a professional development

program with other colleagues, there is a greater likelihood of being motivated to make changes in one's approach to teaching resulting in a greater alignment to the values and attitudes of contemporary nursing students.

I used a set of goals to guide my project. These goals were aligned to my study's findings and included the following: (a) heighten the awareness of nurse educators to graduates' insights of program experiences and the impact these perceptions have on NCLEX performance; (b) present strategies to nursing educators to counter the impactful perceptions shared by recent nurse graduates; and (c) deepen nurse educators knowledge of pedagogy and contemporary classroom techniques.

The title of this project is "Strategies to Improve NCLEX Performance". The program is a three day professional development workshop designed so that nurse educators at the college can interact with one another as well as with clinical liaisons, nursing advisory council members, dean of Allied Health and Nursing, and the provost of Academic and Student Learner Services. The intent of the workshop sessions is to provide time for nurse educators and other stakeholders to reflect on their ideas, beliefs, and practices related to the perceptions shared by recent nurse graduates. Additionally, it is intended to encourage nursing faculty to reassess current approaches in the classroom and consider more contemporary strategies for implementation that better align with the promotion of student success.

The success of the professional development workshop will be assessed by surveying the participants at the end of each day's activities in regards to whether goals were met or not. During each session, participants will have the opportunity to ask

questions and in some instances practice techniques that could be considered for use in their courses and classrooms. I will now describe the agenda for each day of the program.

Day 1 – The primary target audience for my project will be nurse educators from the institution where the study was conducted. Invitations will also be extended to the provost of Academic and Student Learner services, dean of Allied Health & Nursing, clinical liaisons, and nursing advisory council members. The first session includes an overview of the findings related to the study as well as a panel discussion made up of recent nurse graduates who will share their stories and perceptions of experiences they had while in the program. The day will afford workshop participants to ask the panelists questions and reflect on how the graduate's responses could possibly impact their overall learning and professional transition. The day is designed to offer networking opportunities and discuss how to help nursing students better manage anxiety and the role it plays in regards to the fear of failing and learning. At the conclusion of the session, a formative evaluation tool (Appendix A) will be distributed to all participants for feedback.

Day 2 – The target audience for the second day will be the same as the first day. This session continues to focus on the concepts of anxiety and fear of failing, but from the perspective of what nurse educators can do to minimize these negative emotions. The sessions will be presented not only by me but will also draw upon the expertise of a wellness coach. Of interest, consideration of student concerns will not be the only topic presented. There will also be the opportunity for nurse educators to share with one another their own personal challenges and difficulties experienced being a nurse

educator. In part, it affords the nursing faculty to reflect on their own perceptions and gain a deeper understanding of the role they play in facilitating NCLEX success. Day 2 concludes with a discussion about the importance of faculty connectedness to the student and how that relationship impacts learning. At the end of the day, an evaluation tool (Appendix A) will be distributed to all participants for feedback.

Day 3 – The design for the final day of the professional development workshop will be primarily aimed at nurse educators. The session will concentrate on pedagogic strategies to promote deeper learning and critical thinking skills in nursing students and held at the simulation center. Discussion and best practice techniques being utilized in nursing education will be explored concluding with hands-on simulation exercises. Day 3 will close with consideration of next steps to be taken in lieu of promoting greater NCLEX-RN success. After the session completes, a formative evaluation, with the inclusion of several summative type questions, will be distributed and collected from all workshop participants (Appendix A).

Rationale

Once faculty have been informed of nurse graduates' perceptions of experiences that impact NCLEX performance, they can contemplate and possibly develop different strategies to help students achieve greater success on the licensure exam. As a result, greater numbers of nurses can enter the workforce to help offset the growing nursing shortage. Additionally, healthcare institutions will be able to minimize the utilization of temporary agency staff to fill vacancies saving significant dollars and schools of nursing

NCLEX pass rates are preserved allaying concerns of future enrollees and accrediting

bodies.

Also, nurse graduates who are successful on the NCLEX-RN licensure exam will

experience less emotional turmoil and financial burden because they will begin their RN

careers sooner. As noted by Strauss, Ovnat, Gonene, Levi-Ari, and Mizrahi (2016), new

graduates must have a strong skill set along with confidence as they enter the work place.

Without it, new graduates can impact patient safety and outcomes, bolster institution's

financial costs, and in worst case scenarios leave the profession all together because of

heightened anxieties and frustration (Strauss & et al., p. 194). And finally, poor

performance on the NCLEX-RN exam has been tied to feelings of loss, diminished self-

confidence, heightened anxiety, and guilt which often remain as the new graduate nurse

transitions into the workplace. Such a cycle of such harmful sentiments needs to be

broken to foster the success of graduate nurses whose journeys did not always go as

planned.

The findings and analysis of data in Section 2 revealed that graduates who did

not perform well on the licensure exam experienced heightened anxiety, fears of failing,

and cited their connectedness to nursing faculty as being significant. Additionally, the

graduates lamented that their approach to how they studied during the program and then

prepared for the NCLEX – RN licensure exam should have been more comprehensive.

Identification of these themes and the fact that the current curriculum offers little if any

support to these at risk students led me to the conclusion that a professional development

program for the nursing faculty could be beneficial. Or in other words, by heightening the

awareness of nursing faculty to the perceptions of students and what they feel impacts NCLEX performance, along with a presentation of strategies to minimize these stressors, better NCLEX performance and improved pass rates should be realized. Additionally, the project is designed to provide techniques and strategies on how the nursing faculty could enhance critical thinking and clinical reasoning skills in their students. Unfortunately, the current curriculum is primarily delivered by nursing faculty via power point presentations resulting in students taking copious notes with minimal engagement. This does not bode well for deeper learning or the acquisition of critical thinking skills which could be contributing to declining NCLEX passage rates. By attending a professional development program designed to impart strategies to improve NCLEX performance, nursing faculty stand to gain new pedagogic knowledge and skills. Accordingly, graduates should be better prepared to take the NCLEX-RN licensure exam.

As a result of the program and implementation of small or perhaps, large scale changes, a positive impact on the ADN program could occur at this Midwestern community college. These changes may not only lead to improved performance on the NCLEX licensure exam, but nursing faculty will be given the tools to integrate contemporary strategies in their classes creating a more student-centered learning environment. Finally, these changes should lead to the development of a more competent confident graduate capable of providing safe quality care and help fill the growing number of nursing vacancies.

Review of the Literature

In this literature review, I present a scholarly review of the literature related to professional development and the outcomes of my study. The review begins with a rationale for the professional development program (PDP) as an appropriate way to increase performance on the NCLEX-RN licensure exam. A well-designed PDP should provide time for reflection on ideas, beliefs and practices (di Lima Ferreira & Bertotti, 2016; Kennedy, 2016; Powers, Carlston, & Hughey, 2014). Through the sharing of ideas and beliefs a common vision of how to assist nursing students achieve greater success on the licensure exam can be realized. The qualitative data analysis suggests that what graduates perceive to impact NCLEX performance would lend itself for an interactive PDP to engage nurse educators in gaining insights into factors that impact performance on the licensure exam as well as acquiring new skills for classroom/clinical settings.

The literature review focused on the suggested PDP and design of this project as well as solutions to the themes that emerged from data the analysis in Section 2. In regards to the themes, the literature review focused on four key components: anxiety and strategies to minimize fear of failure, faculty/student relationships, and integration of critical thinking skills in nursing education. The information provided in the review of the literature offers evidence to support innovative ways to improve NCLEX-RN performance. I searched Walden's online library, CINAHL, ProQuest, Academic Research, EBSCO, and Google Scholar for this literature review. The key words and Boolean phrases utilized included: *impact of NCLEX failure, anxiety's impact on student learning, anxiety reduction techniques, fear of academic failure, faculty connectedness,*

critical thinking in nursing education, and strategies to promote critical thinking in nursing education. Peer reviewed and secondary research articles were retrieved from the years of 2010 to 2017. Additionally, several published dissertations were reviewed along with seminal literature relative to the study.

Impact of Anxiety

Nursing faculty is mostly prone to conduct their classes and clinical experiences in the way they were taught and are comfortable in. If no change has been encouraged and program outcomes are satisfactory current approaches and strategies to the presentation of curricular material will unlikely be altered. Unfortunately, at this Midwestern community college program outcomes (NCLEX passage rates) have been on the decline prompting the need to determine what factors are contributing to waning performance on the licensure exam.

Providing the essential concepts and clinical experience to support nursing students in achieving success on the licensure exam and ease their transition into the professional nurse role, is the goal of nursing education. However, the findings of this study would suggest factors other than classroom clinical activities impact NCLEX performance. One such theme identified by the interviewees was extreme anxiety. The concept of anxiety in nursing students, in any type of program, is well documented in the literature (Bass & Bradford, 2015; Black, Curzio, & Terry, 2014; Crary, 2013; Gibson, 2014; Kuo, Landon, Connor, & Chen, 2016; Moscaritolo, 2009). In part, the anxiety is not only due to the rigors of a robust curriculum and high stakes testing, but also related to clinical experiences that occur concurrently (Turner & McCarthy, 2015). Being a

novice and not familiar with the a hospital environment, plus being afraid of making a mistake, witnessing pain and suffering, and uneasy interpersonal relationships with clinical faculty all contribute to a nursing student's anxiety (Chernomas & Shapiro, 2013). To make matters worse, anxiety interferes with students' "academic performance by impeding concentration, memory, and problem-solving ability, which in turn, adversely effects…learning" (Hughes, 2005, p. 22). Knowing that anxiety is present and learning is impacted, the idea of changing current or traditional models within the nursing education environment and empowering students' coping, persistence, and self-efficacy is warranted (Del Prato, Bankert, Grust, & Joseph, 2011). In an attempt to transform the current nursing education model(s), nursing professors play a crucial role and need to generate helpful and considerate learning atmospheres. As a result, moderation of students' anxieties and greater academic success will be accomplished.

Strategies to Reduce Anxiety

When viewed from the lens of nurse graduates, the need to minimize stressors in an effort to achieve success becomes crucial. One such approach that has been highlighted in nursing education literature includes the creation of healthy learning environments (Barrow, 2015; Del Prato & et. al., 2011). Dating back several decades (Hughes, 1992) believed that a kind environment was generated when an educator acknowledged and reacted sensitively to the emotions of a student when dealing with stress and anxiety (p. 62). Hughes's work was further expanded on by Bankert and Kozel (2005) where they noted that a caring environment helps to demonstrate respect, value,

and supports a collaborative milieu that fosters learning in a non-stressful way. Such an environment is based on genuine dialog, engagement, and reflection.

Promotion of a supportive learning can readily be incorporated into nursing education experiences (Del Prato & et al., 2016; Turner & McCarthy, 2017). Several strategies may include; learn students' names and correct pronunciations, share a little bit about yourself, make everyone feel like they belong (ask the class what has worked and has not worked in previous classes), dispel any rumors about your class, and role model respectful behavior.

Another approach that has been cited in the nursing education literature as having a positive impact on reducing nursing student's anxiety is reflective journaling (Bass & Bradford, 2015; Rees, 2013). Through the utilization of reflective journaling perceptions can be changed resulting in increased coping skills to deal with the inherent stressors and emotional challenges associated with nursing school (Rees, 2013). This type of experiential learning helps the nursing student to seriously think about his or hers practice by reflecting on interactions and interventions taken to achieve optimal patient outcomes and leads to the acquisition of new knowledge.

A third technique recognized in nursing education as being helpful in diminishing anxiety is the design and integration of social support networks (Austria, Baraki, & Doig, 2013; Bloomfield, Diment, & O'Meara, 2014; Del Prato & et al., 2016; Zentz, Kurtz, & Alverson, 2014). For example, the implementation of a "big sis – little sis" program where upper level students mentor and guide new students. Such an approach has been correlated with reduction of anxiety and improved confidence (Austria & et al., 2013;

Zentz & et al., 2014). This strategy also offers the newer nursing student a source of

support and helps them prepare better for the reality of nursing school experiences and

expectations reducing stressors. In another study conducted by Kim, Oliveri, Riingen,

Taylor, and Rankin (2013) the idea of connecting recent RN graduates as mentors to

students revealed that academic performance and career choice satisfaction increased. In

the end, provision of social support and networks are seen as being effective in reducing

distress and preventing unhealthy levels of stress.

And finally, a newer approach being widely recognized as reducing anxiety in

students who are studying nursing, is mindfulness based stress reduction (MBSR)(Del

Prato, 2016; Pare, 2014; Malinski & Todaro-Franceschi, 2011). MBSR is a combination

of yoga, meditation, and body-awareness exercises and is seen as being highly effective

in helping nursing students reduce anxiety (Malinski & Todaro-Franceschi, 2011;

Moscaritolo, 2009; Schwarze, 2012). Mindfulness assists an individual to think about

their conscious experiences with an unbiased, disengaged, and receptive attitude (Del

Prato et al., p. 114) allowing students to gain insights into the type and occurrence of

their beliefs and thoughts. As a result, a composed emotional state is generated guiding

the way to lessened stress and anxiety. I would also suggest it helps to empower students

by assisting them to have better control of their emotions creating a learning environment

better suited for success. While there have been only a sparse number of studies on

mindfulness conducted with nursing students, the research that has been conducted,

indicates there is value integrating mindfulness training into a nursing program and thus,

worthy of integration into this PDP (Hensel & Stoelting, 2012; Prato & Yucha, 2013; Schwarze, 2012).

The need for nursing education to be transformed is well-documented and summons nursing educators to initiate modern and caring learning environments (Benner & et al., 2010). One area identified in the research as well as this study, anxiety, invites faculty to aid nursing students control their tension and apprehension. This will require deliberate and meaningful approaches to how nursing students are being taught. As faculty members embrace these concepts, a new skill set is acquired that will result in the promotion of collaborative and collegial environments centered on caring relationships. These evolving relationships will help to minimize stress levels resulting in the reduction of incapacitating anxiety. These relationships will also afford teachable moments setting the stage for student-centered learning, promotion of success, and modeling of professional expectations.

Combating Fear of Failure

A second theme that surfaced from the study's analysis of data included the fear of failing. This was particularly true for the nurse graduates who had failed a course while in the program**.** Of interest is the connection of fearing failure to anxiety. To illustrate the correlation of anxiety and the fear of failure consider the following. Stress is considered to be part of everyday life and in many situations even healthy. For example, a deadline to finish a paper can be stressful yet it typically motivates one to finish the assignment on time and results in a sense of accomplishment. On the other hand, if stress becomes extreme, a complex cascade of interactions between hormones and

neurotransmitters is triggered (Levy, 2014). Once anxiety has occurred over a period of time, the stress hormones that are released will activate a portion of the brain known as the amygdale which in turn triggers a fearful response (Levy, 2014). Unfortunately, unless this sense of fear is acknowledged and dealt with the brain repeats the same responses again and again adding to a vicious cycle of factors resulting in even more anxiety. Additionally, significant challenges are encountered in relation to learning.

In an effort to counter the effects connected to the fear of failing the literature would suggest that educators need to aid those who may be experiencing this psychological upheaval (Haber, 2013; Karsten, & DiCiccio-Bloom, 2014; Sherman, 2013).

Of the strategies employed, nursing education literature offers little mention of integrating intervention programs to help the nursing students overcome negative mental states (Ratanasiripong, Park, Ratanasiripong, & Kathalae, 2015; Spurlock, 2013). Of the scant research that has been completed it has been suggested that biofeedback and mindfulness meditation programs could be beneficial (Ratanasiripong & et al., 2015; Song & Linquidst, 2015). In another study Foureur, Besley, Burton, Yu, and Crisp (2013) put forth that educators could help students reduce the fear of failing by integrating and discussing the concepts of resilience and grit. Lastly, Karsten and DiCicclo-Bloom (2014) recommend that nurse educators help students who have failed, acknowledge the unexpected and instill a "learning orientation" by focusing on learning goals as opposed to focusing on performance goals. Again, despite these proposed approaches there is lack of evidence that nurse educators have utilized these to techniques (Ratanasiripong & et

al., 2015). This would suggest that other studies need to be conducted to determine the impact of such strategies decreasing the fear of failing in nursing students.

Faculty/Student Connectedness

Another theme that came forward was the fact that faculty/student relationships play a significant role in the overall nurse graduates' experiences. The idea that humans need to belong is not a new concept. In fact, it is widely recognized that interpersonal relationships between students and faculty is significant (Berstein-Yamashiro & Noam, 2013; Roorda, Koomen, Spilt, & Oort, 2011; Streib, 2013). Of the studies that have been conducted on teacher student relationships (TSR) much of the focus has been on the degree of interaction rather than the quality and is seen as being under-researched in higher education (Hagenauer & Volet, 2014; Toshalis, 2016). This perspective is true in nursing education where the literature review revealed that research on the topic of TSR is essentially non-existent. Despite the paucity of research related to TSR and possible approaches that nursing faculty may employ to promote student/faculty connectedness Micari and Pazos (2012) concluded the following: (a) faculty need to create an environment where they are seen as being approachable; (b) are respected; and (c) are empathetic and encouraging. They further suggest that faculty avail themselves beyond their *traditional office hours*, and offer group or virtual office hours. Anecdotally, I have found that by sharing a little bit about personal clinical experiences and talking with students about my professional journey seems to make them more comfortable in seeking out help when they are struggling academically. Such activities along with frequent reminders of my availability helps create a connection to students and conveys a genuine

interest in the students as people and their success. To complicate TSR in nursing education, it has been noted by Thiele (2016) that students who are from lower and middle class backgrounds tend to opt out faculty/student relational opportunities. Unfortunately, a typical cohort of ADN students is comprised of lower and middle class students tasking faculty to overcome difficult scenarios.

Given the fact that exploration of student/faculty connectedness in nursing education is essentially non-existent, I would suggest that future studies need to be conducted. Additionally, exploring student/faculty connectedness and the impact it has on learning, could prove to be a missing component when considering NCLEX performance (Gholami & Tirri, 2012; Hagenauer & Volet, 2014). In the final analysis, traditional classrooms are distracting, noisy, crowded, and seen as not being nurturing. So, if we want our students to connect with us, we have to show them – not just tell them, that we care. By showing authentic gestures, such as sitting among students in the classroom, talking with them, or listening attentively conveys a caring attitude and goes beyond lofty rhetoric. In one's rush to get through all the material, dialogue is often stifled and student's become disengaged. To establish strong student faculty relationships, and the potential for greater learning, nursing faculty need to *correct their connecting*.

Need for Better Critical Thinking Skills

Finally, and perhaps most importantly, the findings of this study revealed that the students who were not successful on the NCLEX-RN cited their overall approach to learning and preparation for the NCLEX-RN exam as not being thorough. The need to become a better critical thinker or as put forth by one of the interviewees, "think more

like a nurse" was shared by the graduate nurses who did not perform well on the licensure exam. Nursing education literature has ample studies to illustrate the importance of integrating critical thinking skills into nursing programs for the sake of academic success and transition into nursing practice. And yet, critical thinking skills are lacking in new nurse graduates (Michigan Works, 2014; Missen, McKenna, Beauchamp, & Larkins, 2015; Theisen & Sandau, 2013). Of interest, the framework for this study (SAL), connects critical thinking skills to deeper learning which is seen as being necessary for academic success (NCLEX-RN passage)(Carrick, 2011; Romeo, 2013; Weimer, 2012).

For students who have not exercised critical thinking skills and instead have chosen to memorize material versus analyzing content and questioning the inter-relatedness of concepts are considered to be surface learners and cognitively are exercising passive learning behaviors. Couple passive learning behaviors with anxiety and a fear of failure which also impact learning (Claudette, 2014; Del Prato & et al., 2011; Turner & McCarthy, 2017), NCLEX performance will be influenced.

These pronouncements would suggest that nurse educators need to revisit how critical thinking tactics are being integrated throughout nursing curricula and employ strategies (solutions) to promote deeper learning. Additionally, by exploring methods to minimize anxiety and fear of failure, greater NLCEX performance can be the outcome.

Based on the findings in this study and declining NCLEX performance, a PDP offers nursing faculty an opportunity to gain new insights and approaches to classroom clinical design and activities. As a result, nursing faculty should be better equipped to meet the needs of their students culminating in improved NCLEX performance.

As Henry Ford shared, "thinking is the hardest work there is, which is probably the reason why so few engage in it" (Andersen, 2013). Believing this statement to be true and the fact that nursing students need to possess critical thinking skills in order to "think like a nurse", brings to the forefront - what approaches should nurse educators employ to achieve this target? While nursing education literature has a substantial number of references made to what critical thinking is and the important role it plays in promoting graduate nurse success (Chan, 2013; Lee, Chiang, Liao, Lee, Chen & Liang, 2013; and Roller & Zori, 2017), the focus on how to promote critical thinking skills by nursing educators to meet the dynamic needs of more acutely ill patients is evolving. For example, a more contemporary technique that is purported to aid in the development of critical thinking skills is *the art of noticing*. Watson and Rebair (2014) believe that clinical judgment, which is born from critical thinking skills, begins with noticing (p. 515). When failing to notice occurs in nursing serious consequences can result. For instance, when a patient is unable to communicate his or her needs and is experiencing increased pain nursing actions are likely required. If noticing is absent patient care can be compromised. Thus, the integration of noticing as a concept along with related clinical exercises to improve a student's observation power could be seen as a prudent technique for nurse educators to implement early on in a nursing program.

Roller and Zori (2017) developed a strategy to develop critical thinking skills in nursing is guided-inquiry learning (POGIL). POGIL is a pedagogical approach that employs active learning using small groups of students to analyze problem based case studies (p. 72). Early evidence suggests that the utilization of this technique has been

correlated with higher standardized (ATI) test scores and student satisfaction (Roller, 2015).

Also of consideration is the millennial student (which comprises the largest number of nursing school enrollees) and presents nurse educators with unique challenges when it comes to keeping this generation of learners engaged and oriented toward gaining greater critical thinking skills. It has been substantiated that the millennial develops critical thinking through experimentation, active participation and the utilization of technology (Montenery, Walker, Sorensen, Thompson, Kirklin, White, & Ross, 2013). Several contemporary approaches utilizing technology include the use of audience response systems (clickers) and human patient simulators (Ganzer & Zauderer, 2013; Montenery & et al., 2013; Smith, 2014). It is noted that these techniques help the learner gain instant feedback reinforcing learning resulting in greater confidence and clinical judgment (Lindsey & Jenkins, 2013; Yuan, Williams, & Fang, 2011). As for simulation experiences it has been reported that students improve knowledge acquisition and it offers a lower-stress learning environment which in turns leads to deeper learning. Despite the growing popularity of technological strategies being utilized to augment critical thinking skills, Montenery & et al. (2013), cautions that additional research needs conducted to determine the impact on technology driven learning on quality health care outcomes (p. 408).

In summary, nurse graduates must possess critical thinking skills. In a time when nursing education is being closely scrutinized by Boards of Nursing and national accrediting bodies nurse educators must assume the responsibility of integrating

contemporary techniques into their classrooms that augment nursing students' critical thinking skills. Not only will these skills help nursing students reap the benefits of program completion, it will also facilitate a greater chance of NCLEX success and role transition.

Project Description

The design of this professional development program emanated from the findings of the project study. Consideration of the design was based on the primary themes that emerged from data analysis. These themes played a pivotal role in the development of instructional approach and resultant evaluation of program attendee's learning. The primary objective of this program was to present material to nursing faculty, PPC's and clinical adjuncts, as well as primary external stakeholders with the hope of them gaining new knowledge and skills to integrate into their approach when working with nursing students and new graduates. The design of the program included lecture, group/panel discussions, case study analysis, and intervention demonstrations engaging participants and providing a medium for integration into practice. Power Points augmented lecture content and also provided an outline of concepts for participants to follow along with and take notes, thus appealing to visual learners. Cost and availability of instructors and students for the panel discussion did not place any restrictions on the design. The lecture instructors, behavioral health specialists, and wellness coaches were recruited from the faculty who possess expertise in the topic and thus no compensation for services will be necessary. To foster learning and active collaboration among the presenters and program attendees, an environment of respect and openness was encouraged.

Resources

The human resources necessary to implement this professional development program include nurse educators who have taught nursing students, behavioral health specialists, and wellness coaches. The academicians will facilitate case study evaluations, outline and present concept content as well as lead round table panel discussions. The behavioral health specialists and wellness coaches will build upon foundational content and demonstrate techniques to diminish anxiety and fear of failure. Lastly, a group of recent graduates will serve as a panel to share their experiences with the program's participants. As pointed out by Creswell (2012) when presenting qualitative data, strategies to confirm the accuracy of the study adds to the overall quality and aids in the believability of the findings. Therefore, by having graduates make up a panel and share their perceptions the *realism* of their lived experiences and the role those experiences played on NCLEX performance has a greater chance of being embodied by conference participants.

Existing Supports

The existing supports for this professional development program include fulltime faculty, professional practice clinicians (PPC's), and clinical adjuncts which collectively number 71 and are employed by the program where the study was conducted. Other supports consist of nursing program administration and clinical agency liaisons that represent 27 different clinical facilities (long-term and acute care). Geographically, these healthcare institutions are located in close proximity to a major metropolitan region that is home to premiere facilities and competition for graduate nurses is pronounced.

Therefore, understanding a new nurse graduate's needs and the impact of previous experiences becomes essential. As noted by Strauss and et al. (2015) a customized orientation plan helps the new graduate transition into their professional role and contributes to retention. Thus, by bringing attention to nursing school experiences and the lasting impact they can have on new graduates, prompts the need for external stakeholders to be part of the discussion. As a result, institutions can create individualized transitional plans with the hope of reducing overall orientation costs and more importantly, help keep the growing number of vacancies filled.

Potential Barriers

The first potential barrier is getting internal and external stakeholders together for a three day professional development program. Work schedules in healthcare are diverse and getting coverage for an individual in an already constrained resource pool could be a challenge. Additionally, per the Ohio Board of Nursing missed clinical time must be made up. Or in other words, if PPC's and clinical adjuncts miss three days of clinical hours to attend the professional development program, the academic calendar is likely not to have room for that time to be recouped. The last barrier may be lack of interest. Nurse educators as well as other healthcare workers often are confronted with competing priorities. It's easier and more convenient to complete an on-line educational offering than sit in a class for several days.

Solutions to Potential Barriers

Sensitivity needs to be exercised in relation to time constraints. Breaking the three day program down and offering it in one day increments over the course of several

months may be more doable. Additionally, the idea of presenting the program at the

beginning, mid-term, and end-of-semester may be more palatable for educators. This

would also eliminate clinical conflicts. Another strategy to counter potential barriers

would be to grant continuing education units (CEU's). All nurses in the state of Ohio

renew their licenses biennially and need 24 CEU's. Such a program would go far in

meeting that need. Finally, in an effort to stimulate interest a marketing approach

highlighting the benefits of such a program would be warranted. For example, nurse

educators would stand to gain insights into NCLEX performance and help guide students

who are at risk to licensure exam success. As a result the program's reputation is elevated

as NCLEX passage rates climb.

Proposal for Implementation

The three-day professional development program materials, which included

course outline, objectives, specific concepts and related group activities, plus the

biographies of presenters will be submitted to the continuing education committee for

approval. Once approval for the program has been granted by the college's continuing

education committee, that paperwork with a sample certificate of completion, evaluation

tool, and advertising fliers will be submitted to the Ohio League of Nursing (OLN) for

CE approval. Upon approval from the OLN, program fliers will be distributed throughout

the Allied Health Division and sent electronically to clinical liaisons and nurse managers

in clinical sites utilized by the program. Other invitees include: Dean of Allied Health

and Nursing; Provost of Academic and Learner Services and members of the nursing

advisory council. The flyers will include dates for the three days and the fact that CE's

will be awarded upon the completion of all three sessions. The advertising material will be sent 6-8 weeks ahead of the beginning of a semester so participants can plan accordingly. An e-mail blast will be sent to all program nurse educators, PPC's and clinical adjuncts informing them of the professional development activity. Finally, former nurse graduates will be recruited to participate on the panel. Their participation will be voluntary and without compensation. Upon agreement to partake, open-ended questions related to their perceptions of experiences will be shared with them prior to the panel discussion.

Roles and Responsibilities of Participants and Presenters

Participants should begin the professional development program with an open mind and a schedule that will accommodate the time frame for each of the day's planned content delivery and activities. Participants will need to plan on attending all three days in order to receive CEU's. Participation in case study analysis and round table discussions will be strongly encouraged. The responsibility of the nurse educator will be to overview the objectives and describe the sequence of events on a day-to-day basis. Specifically, the nurse educator will deliver the content, guide the student panel discussion, and facilitate round table dialogue and case study analysis. The role of the behavioral health specialist and wellness coach will be to speak about strategies that reduce anxiety and minimize feelings of failure. They will demonstrate relevant techniques and encourage return demonstrations and discussion.

Project Evaluation Plan

Paramount to any professional development program is the evaluation plan. Evaluation is an important element in determining the effectiveness of meeting program outcomes and helps to establish a basis for program improvement (Edmonstone, 2015 & Kealy, 2010). In this instance, the evaluation was utilized to establish program quality and usefulness in providing nursing faculty with necessary knowledge and strategies to help nursing graduates achieve success on the licensure exam. Both formative and summative evaluation tools were employed for this program.

The type of program drives the evaluation method utilized. For this professional development program, the primary aim was on participant learning as measured through the acquisition of prescribed objectives. In addition to assimilating data to determine mastery of outcomes, evaluation was also used to collect data for future program improvement decisions. Evaluation should be dynamic and on-going throughout a program and hence, the evaluation instruments contained sections for each session and a cumulative evaluation of the entire program.

Formative Evaluation

Formative evaluation will be used to evaluate each of the project sessions. The formative evaluation will include assessment of the facilitator's delivery of content and feedback on the various activities. . The purpose of this reflective teaching process is to assist the instructor to better meet the participant learning needs in subsequent exercises. This approach affords the instructor the opportunity to modify the program while it is in progress assuring outcome achievement (Edmonstone, 2015; Dixson & Worrell, 2016).

Summative Evaluation

The summative evaluation at the conclusion of the 3-day program will be used to measure the program and program outcomes in their entirety to better assess the worth of the program. This evaluation will provide a means to determine if program objectives were met and also provide feedback for future programming (Glazer, 2014).

Implications Including Social Change

Local Community

The professional development program can help nurse educators as well as external stakeholders gain greater insight into what experiences and factors played a part in NCLEX-RN performance. As a result nurse educators can begin to reevaluate current methods utilized in readying nursing students for the NCLEX-RN licensure exam and entertain strategies aimed at easing the anxiety and fear of failure that is experienced by many nursing students. Additionally, the exploration of deeper learning strategies and the importance of strong student faculty relationships all can contribute to student success and enhanced NCLEX passage rates. In a bigger context, this would result in more graduate nurses entering the workforce to soften the nursing shortage and increase the overall quality of healthcare offered to consumers in the local setting.

Far-Reaching

Although this study was designed to address the concern of falling NCLEX-RN licensure exam passage rates at a Midwestern community college, the idea of sharing the findings with other regional schools of nursing may be a viable consideration. While the results of this study are not transferable, schools of nursing are looking to improve

NCLEX performance and the perceptions shared by the graduates in this study may mimic students in other regional nursing programs. The growing need for nurses is not just a local issue, but rather one that is becoming a regional concern. In fact, Crain's Cleveland Business (2017) released a report titled *Nursing in Northeast Ohio is in critical condition*. It is estimated that by 2020 the region will be challenged to fill 3500 registered nurse positions. Again, it becomes imperative for nurse educators to gain a greater understanding of key issues facing nursing students so that student success and NCLEX passage rates can be improved. Through these efforts more vacancies will be filled not only at a local level but also regionally affording a greater number of consumers access to quality healthcare.

Conclusion

Section 3 provides a portrayal and scientific rationale for the proposed project. A comprehensive review of the literature was conducted to illustrate how the project genre and professional development program aided as a suitable opportunity to address the research problem and findings. A discussion of the project itself described needed resources and current support systems that will make implementation possible. Potential barriers to implementation, as well as an evaluation plan were also explained. Section 3 concluded by making connections between the project and social change that could impact stakeholders in the local community and nursing faculty at this Midwestern community college. In Section 4, closing reflections about the project, as well as the scholarly practice of the researcher will be discussed.

Section 4: Reflections and Conclusions

Introduction

The aim of this project study is for nursing faculty to gain insight into factors that impact NCLEX performance as perceived by recent graduates from a Midwestern community college. Based on the results of this case study, I developed a 3-day professional development training to heighten the awareness of nursing faculty and offer skills to help counter the findings. Professional development will allow the nursing faculty to implement proven strategies into the classroom and beyond to garner optimal student learning and outcomes. As a result, NCLEX performance and pass rates will increase in this associate degree nursing program.

The following section will address the project's strengths and limitations and speak to my personal reflections about the research process. This section will also spotlight my doctoral journey with a focal point on scholarship, leadership, and change. Lastly, I will address the potential for social change arising from my study as well as implications for future research.

Project Strengths

Recent nurse graduates from this associate degree program were able to voice their perceptions of what experiences impacted NCLEX performance. To date the approach to NCLEX-RN exam preparation has been the administration of an exit exam and a LiveReview session that occurred at the end of the program. Based on the findings of this study, other factors impacting NCLEX performance, such as anxiety, fear of failure, faculty connectedness, and approach to learning are not being addressed within

the program and could be contributing to faltering NCLEX-RN pass rates. These voices will now afford the program the opportunity to integrate different strategies to improve licensure exam passage rates. The literature, albeit scant, discussed how anxiety, fear of failure, and faculty student relationships impact student learning in nursing programs. It is my belief that these aspects need to recognized and interventions integrated to set the stage for optimal student achievement or in this case, NCLEX success. In order for graduates to feel less anxious and fearful of failure nursing faculty need to become more sensitive and can no longer make comments such as "this student is just so anxious no wonder she can't pass". By becoming more focused on how *real* these emotions are and what can be done to minimize them nursing students have the opportunity to achieve greater confidence and success.

An additional key finding from this study that needs to be explored is the importance of promoting deep learning in the classroom. The strategy of making note cards and reviewing notes from class does not foster deep learning. To counteract this approach there are a number of methods faculty could employ. Through the implementation of this project suggestions to minimize the aforementioned detrimental emotions and enhance deeper learning were proffered with the intent to create a win-win for all.

A strength I identified with this project is that nursing faculty were given the opportunity to learn about new techniques and strategies that can promote student success. There were a number of methods presented allowing for faculty to pick and chose what works for them supporting an environment that is free of mandates and offers

a chance for faculty to enhance their own repertoire of skills. Additionally, the professional development program offered engaging exercises for attendees to practice some of the suggested methods resulting in greater ease of transition into the classroom. Another positive aspect of this program is the fact that the information presented will not only be from me but from several other experts. For example, a wellness coach or a behavioral health specialist will be utilized, giving breadth and diversity to the content. Finally, the design of the program will be arranged around faculty professional development days resulting in no one missing class or clinical time and thus, eliminating the need for students to makeup those missed experiences.

With every qualitative study, limitations are a factor in adjusting plans for a project. In this case, by designing the program around faculty professional days rather than on three consecutive days, some of the momentum and enthusiasm for the material and engaging exercises may be lost from session to session. A second limitation of this project is related to the fact that all the planning was undertaken by me without seeking input from any outside resources and could be viewed as being a somewhat biased presentation.

Recommendations for Remediation of Limitations

The problem related to declining NCLEX-RN pass rates could have been investigated through a different data gathering approach. For example, quantitative research utilizing a descriptive survey approach could have been utilized. The goal of descriptive survey research is to describe behaviors and collect people's views, beliefs, and feelings about an issue or problem and typically reported as a percentage of

participants. This approach and presentation of results may have seemed more real or conclusive to the participants. In an attempt to dispel any questions of this study's results a group of recent graduates will comprise a discussion panel for the purpose of sharing their experiences openly and honestly with conference participants. The discussion will be guided by interview questions employed for the study. As a result, attendees will have a chance to hear firsthand about the experiences former students had and the impact of those experiences on NCLEX-RN performance. The tactic of a panel discussion should also help to dispel the concern of project bias.

As noted, another limitation of the project is the timeframe in which the material will be presented. Ideally, three consecutive days for the delivery of content is viewed as being optimal and helps the participant achieve mastery of the subject matter. In order to keep nursing faculty and other attendees engaged between gatherings, a summary of key concepts from the previous session will be posted on the college's course management system prior to the next meeting time. Additionally, time will be allotted for a refresher session at the onset of the next time together.

Scholarship

My doctoral journey indicated to me the significance of scholarship and how it can contribute to professional and personal growth. This passage has been the most challenging and yet, rewarding process I have ever experienced in pursuit of my educational goals. For me the idea of scholarship is founded on the principals of human capability and a thirst for life-long learning. Through this voyage I have come to appreciate that one cannot know everything. However, because of this realization my

spirit of inquiry has grown and as a result, created a need for me to connect with others to encourage continued growth within the academic community.

Initially, and quite frankly, I was overwhelmed by the idea of writing and conducting a research study. While I felt that I had a strong foundation from previous educational endeavors, such as undergraduate and graduate work, I struggled with the expectations of this undertaking, admittedly lacked confidence, and had so many questions. For example, should I conduct a quantitative, qualitative, or mixed-methods study. How could I assure that my problem, research questions were all aligned? I quickly learned that by collaborating with colleagues and my committee chair, as well as remaining engaged in the process, questions were answered, confidence grew, and steady progress was made. Retrospectively, other scholar's insights and suggestions proved to be invaluable resources as my journey went along.

To further enhance scholarly growth, the role of being a researcher helped me to develop a greater appreciation towards the importance of academic articles and the impact of peer-reviewed works on my study. As a novice researcher, my study was supported by examining the literature critically and with an analytical mindset. As a result various thoughts and concepts germane to the study were seen through multiple lenses helping to support and validate my research. This approach has also aided me in my professional role. I remain proactive in seeking answers to problems but avoid being reactive to situations that could result in snap judgments and poor outcomes.

Along the way, not only did my scholarly aptitude grow, but also my emotional and personal intelligence expanded. First and foremost, quality research takes time,

dedication and perseverance. In order to keep these aspects in perspective, I learned to set realistic goals and the importance of staying as positive as possible. The doctoral journey is an ongoing process and will garner frustration, anger, tears and yes, at times, elation. During the troubling times I learned to take a step back, reevaluate and modify my goal(s) and remind myself that the revisions and stylistic writing changes would only make my study stronger. In fact, the feedback enhanced my study by making it more robust and complete. Additionally, the idea of collaborating with other scholars helped to drive my spirit of inquiry and kept me motivated throughout.

In the final analysis, I became a scholarly writer and thinker. I grew into a better critical thinker and delved into challenges through inductive processes. These difficulties forced me to problem solve and critically analyze data to formulate conclusions. It is through these efforts and a yearning for new knowledge that will set the stage for future changes and improvement in nursing education.

Project Development and Evaluation

Project development and evaluation occurs when a researcher identifies a research question, and a review of the literature provides a compass on past investigative studies and recommendations. Once a problem is recognized and understood, then a plan can be generated to focus on the problem. As part of the plan realistic goals and outcomes of the project need to be established (Bernard & Bernard, 2013). Another important aspect of project planning is to contemplate the needs of the stakeholders partaking in the project's deliverable.

The evaluation process utilized aligned with a traditional style. In part, the decision to employ this method evolved from familiarity of use. I had a goal of wanting comprehensive evaluation data and did not want to make it a cumbersome process for the recipients. Specifically, the evaluation procedure assessed if attainment of program outcomes were met and if the information presented could be integrated by nursing faculty into classroom strategies in an effort to promote NCLEX success. The evaluation tool also included sections where participants could provide written feedback in regards to the quality and worth of the program. The ultimate evaluation will be realized once the program's concepts have been applied and NCLEX performance improves.

Developing my project fostered an appreciation for the role that literature reviews play and what best practices may be applicable in resolving the local problem. I also gained a greater sense of how crucial evaluative processes are in education. Evaluation should be a dynamic process affording on-going changes and opportunity for continued improvements. Lastly, I more fully recognized the importance of stakeholder buy-in. If primary stakeholders are not in unison with the project, the goals of the venture will be nearly impossible to attain.

Leadership and Change

As a result of undertaking this doctoral journey, I have learned that a leader is not just someone who has a title. Leaders in nursing education are the voices for those that may not feel they can make an impact or in this case, the nursing graduates and their viewpoints of what impacted NCLEX performance. Through my review of the literature, research, and perceptions of what graduates perceived as being germane to NCLEX

performance, I was able to offer new knowledge and strategies for nursing faculty to utilize in their classes with the primary aim being improved NCLEX performance. I acknowledged a disconnect between what was being employed in the program to promote NCLEX success and the fact that passage rates were declining. I was perplexed by the fact that all graduates were exposed to and learned the same curricular content but outcomes varied. I wanted to learn more from graduates as to why this was occurring and share these findings with fellow nursing educators. I made this my mission and now can see more clearly that my hard work has the potential to usher in change for the good of the nursing program and student success on the NCLEX-RN licensure exam.

By reevaluating the current strategies being employed in the nursing program and stepping out to search for opportunities to improve graduate success on the NCLEX exam is seen as being *exemplary* leadership (Kouzes & Posner, 2003). However, by challenging the current process change will inevitably result. I firmly believe that change is not about change just for the sake of change. Rather, it's about examining the status quo and not settling on making it simply different, but making it better. To paraphrase Einstein, it would be foolish and fool-hardy to expect things to be better simply by doing the same things over and over again. I believe that leaders and change go hand in hand. Or in other words, leaders are out in front of change and look to create new opportunities to move an organization, or in this case a nursing program, forward. It is through these efforts that not only can a journey dedicated to change lead to successful outcomes, but also create a climate and culture for turning their constituents into leaders themselves.

Analysis of Self as Scholar

My journey as a nurse and scholar began at a young age. I grew up on a large farm in Northeast Ohio and had opportunities to care for and learn about livestock as far back as I can remember. As I reflect back, this helped to set the stage for wanting to take care of animals (later people) and learn as much as I could about *why* a baby lamb or pig needed medication. Or why some ewes wanted to nurture their babies and others did not. The many *why's* grew into a thirst for knowledge and a love for learning. Today, some 35 years later, I still embrace the concept of lifelong learning and work daily on enhancing the breadth of my knowledge as a nurse leader and educator.

According to the National League for Nursing (NLN) (2012), scholarship entails activities that promote education, research, and the practice of nursing. I believe I employ at least one of these ideas daily. For example, I disseminate nursing and teaching knowledge to a variety of audiences such as, faculty colleagues, students, and patients in the clinical setting. At the same time I demonstrate integrity, perseverance, high energy, positivity, and creativity. I believe I am making an impact and difference in the profession of nursing, one student at a time, one colleague at a time, and one patient at a time.

I have grown as a scholar as a result of this doctoral journey and the rigors posed by this project study. This process has provided me with chances to develop my research skills and knowledge, to explore educational problems and identify potential solutions, and to develop better writing skills. I feel as though I have the ability to impart different perspectives with my nursing colleagues in relation to graduate NCLEX performance and

ultimately impact graduate success on the licensure exam. My eyes have been opened and my personal perspectives on why graduates may or may not be successful on the NCLEX-RN licensure exam have been altered. Current NCLEX preparation strategies being employed in this program do not meet the needs of all graduates. Additionally, the concept of promoting deeper learning in the classroom needs to be revisited. In the end, I remain committed to helping faculty recognize what our graduate voices are saying and at the same time, advocate for, educate, and support the graduates as they complete the nursing program and prepare to take the licensure exam.

Analysis of Self as Practitioner

As a practitioner and nurse leader, my confidence has grown substantially. I now realize and am fulfilled that by taking my intuitive thoughts through an orderly process and creating a scholarly project study my professional skills and capacity have grown. The knowledge I have acquired through my experience while completing this project study has encouraged me to further develop my attributes so that I can be self-assured in encouraging nursing program change resulting in graduates achieving greater success on the licensure exam. Throughout this experience I have reminded myself of my short-term and long-term goals which have compelled me to refine my work repeatedly until it grasped a level of specificity that would yield findings that could help guide a project that had worth. I was dumbfounded by the length of time this research took to complete and yet, at the same time, amazed with my level of satisfaction while collecting the qualitative data. It was an eye opening experience as I facilitated one-on-one interview sessions with former graduates and listened carefully to what they were sharing. I

honestly was flummoxed by the degree of their honesty and emotional turmoil they experienced as they went through the nursing program.

As a practitioner, I will continue to infuse values of lifelong learning with my students and colleagues. This will be accomplished by leading by example and being an innovative role model. I will continue to make decisions utilizing evidence based principles and advance the profession of nursing and education. And finally, my drive and commitment as a practitioner, will lead to the implementation of a professional development program for my nursing colleagues that originated from the results of my study.

Analysis of Self as Project Developer

As a project developer, I learned a great deal about the steps in the planning process. For example, what would work best for the participants in terms of presenting the material? Should the content be shared over 3 consecutive days or offered incrementally over the course of a semester on faculty development days? While I did not follow any particular model per say, I have had experience with Ohio League of Nursing's continuing education template and referred to that as an example. I gained an appreciation for the amount of time it takes to develop a cogent program. The *devil is in the detail* and requires consideration of multiple components including identification of the problem, goals, primary stakeholders, resources, budgetary considerations, and evaluation procedures that substantiate outcome achievement. As a result of this experience, I feel confident and could successfully develop other projects. Not only have

I gained knowledge about project development I also see this as enhancing my leadership capacity.

The Project's Potential Impact on Social Change

The acknowledgement of graduate perceptions related to NCLEX performance and the consideration of different strategies to garner greater success could create positive social change. First, it could positively influence graduates' performance on the licensure exam. Secondly, by being successful on the exam the graduate would be able to obtain a job in a more expeditious manner and contribute to the growing demand for nurses helping to offset the supply issue. As a result, patients and healthcare institutions benefit at the local level and beyond secondary to the fact that competent licensed nurses can fill a growing number of vacancies and deliver quality care.

Overall, while the study has the potential to help increase the number of licensed registered nurses to fill the growing number of positions available, it also has the promise of helping nurse educators examine graduate's program experiences and NCLEX preparedness strategies through a different lens. Benner et al., (2010) has called for a transformation in the way nurses are educated. In short, she purports that nurse educators need to get their students thinking more like nurses and move away from traditional lecture/power point lectures. Thus, nurse educators need to integrate strategies into their classrooms to instill better critical thinking skills and as indicated by the results of this study, graduates' reflective perceptions echo the same sentiment. Hence, by faculty acknowledging variables that impact deeper thinking skills, such as anxiety, fear of failure, and employing tactics to diminish the influence of these variables, the result can

lead to graduates who have better problem solving skills and more apt to be successful on the NCLEX-RN licensure exam.

And finally, many potential future student nurse enrollees pick a nursing program to attend based on their NCLEX-RN passage rates. Based on the findings of this study, along with the goal of improved NCLEX passage rates, not only will the college benefit in terms of continued strong enrollment trends in nursing, but the local healthcare community also stands to be a benefactor. A consistent pool of qualified, competent, licensed graduate nurses seeking employment opportunities will go a long way in filling growing job vacancies.

Implications, Applications, and Directions for Future Research

The creation of a professional development program has implications, applications, and directions for future research. The literature review revealed that there is a paucity of research relevant to NCLEX-RN performance and particularly true in the community college setting. Of the research that has been conducted much of the focus was on what tests or resources correlated with NCLEX success. Sadly, the graduates' voices and their perceptions of what experiences and factors impacted NCLEX performance are essentially nonexistent. Developing a program to share what graduates are saying and strategies to address graduates' greatest concerns will be the focus moving forward. The design of completing the study at this community college does not promote generalizability. However, the dissemination of the results from this study and the proposal for addressing NCLEX performance in nursing education journals could enable

other community colleges that have a nursing program to replicate the study and potentially enhance their NCLEX passage rates.

These findings could also be applied to other allied health care programs, including licensed practical nurse (LPN) programs, where a licensure exam is required. The focus of this program is to provide the resources and support to students so that success can be achieved on the licensure exam. Content may need to be customized to meet the particular needs and challenges of other healthcare programs, but the underlying principles germane to student success and self-reflection will dominate.

Future research on other factors affecting graduate performance on the NCLEX-RN licensure exam should be considered. I would also suggest that more qualitative studies need to be conducted so that the voices of graduates are heard and licensure success strategies are not just designed and implemented by faculty and outside testing vendors. And finally, future research is needed to analyze the effectiveness of new strategies that are implemented to promote greater student achievement on the NCLEX-RN licensure exam. In the final analysis, through faculty recognition of student perceptions and implementation of transformational strategies; graduates, nurse educators, healthcare institutions, and the community as a whole all win.

Conclusion

Section 4 provided a synopsis of the project study's strengths and limitations and explored alternative approaches to moderate shortcomings. A self-reflective dialogue offered insights on the notion of scholarship and what it means to be a scholar. Other perceptions were shared about being a creator and going through the evolution of project

development. Another consideration brought forth in this section included my growth as a leader and possessing a mindset to deal with change. While deliberating and reflecting on the significance of my study, implications for social change became clear and are included in this section. Lastly, recommendations concerning future directions for research were noted.

References

Accreditation Commission for Education in Nursing. (2013). Accreditation manual with interpretive guidelines by program type for postsecondary and higher degree programs in nursing. New York, NY: Author.

Alamedia, M., Davis, H., & Renwanz-Boyle, A. (2011). Predicting NCLEX-RN in a diverse student population. *Journal of Nursing Education*, *50*(5), 261-267.

American Anxiety and Depression Association of America. (n. d.). Live and thrive: Living-with-anxiety: Test anxiety. Retrieved from https://www.adaa.org/node/2608.

American Association of Community Colleges. (2009). AACC statement of trends in college pricing and aid. Retrieved from www.aacc.nche.edu/newsevents/news/articles/pages/102020091.aspx.

Andersen, E. (2013). 21 quotes from Henry Ford on business, leadership and life. Retrieved from www.forbes.com/

Austria, M. J., Baraki, K., & Doig, A. K. (2013). Collaborative learning using nursing student dyads in the clinical setting. *International Journal of Nursing Scholarship,* *10*(1), 73-80.

Barros, R., Monteiro, A., Nejmedinne, F. & Moreira, J. (2013). The relationship between students' approach to learning and lifelong learning. *Psychology, 4*(11), 792-797.

Barrow, M. (2015). Caring in teaching: A complicated relationship. *Journal of Effective Teaching, 15*(2), 45-59.

Bass, A., & Bradford, S. (2015). Exploring experiences of first semester nursing students: Journaling as a means to reduce stress and anxiety. The National Conference on Undergraduate Research (NCUR).

Beeman, P. B. & Waterhouse, J. K. (2001). NCLEX-RN performance: Predicting success on the computerized examination. *Journal of Professional Nursing, 17*(4), 158-165.

Beeson, S. & Kissling, G. (2001). Predicting success for baccalaureate graduates on the NCLEX-RN. *Journal of Professional Nursing, 17*(3), 121-127.

Benefiel, D. (2011). The story of nurse licensure. *Nurse Educator, 36*(1), 16-20.

Benner, P., Sutphen, M., Leonard, V., & Day, L. (2010). *Educating nurses: A call for radical transformation*. San Francisco, CA: Jossey-Bass.

Bernard, H. R. & Bernard, H. R. (2013). *Social research methods: Qualitative and quantitative approaches* (2nd ed.). Los Angeles, CA: Sage Publications, Inc.

Bernstein-Yamashiro, B., & Noam, G. G. (2013). Special issue: Teacher-student relationships: Toward personalized education. *New Directions for Youth Development, 137*.

Biggs, J. B. (1987). *Student approaches to learning and studying: Australian council for educational research.* Hawthorn: Victoria.

Biggs, J. (1993). From theory to practice: A cognitive systems approach. Retrieved from http://exchange.ac.uk/learning-and-teaching-theory-guide/deep-and-surface-approaches-learning.html

Biggs, J. & Tang, C. (2007). *Teaching for quality learning at university* (3rd ed.). New York, NY: McGraw Hill.

Black, S., Curzio, J., & Terry, L. (2014). Failing a student nurse: A new horizon of moral courage. *Nursing Ethics, 21*(2), 224-238.

Bligh, D. A. (2003). *What's the use of lectures*? San Francisco, CA: Jossey Bass.

Bloomfield, K., Diment, W., & O'Meara, K. (2014). Nursing success: A faculty intervention to help students realize their goals. *Journal of the Virginia Community Colleges, 19*(1), 56-62.

Bureau of Labor Statistics, U. S. Department of Labor, *Occupational Outlook Handbook*, (2014-2015), Registered Nurses. Retrieved from http://www.bls.gov/ooh/healthcare/registered-nurses-html

Carrick, J. (2011). Student achievement and NCLEX-RN success: Problems that persist. *Nursing Education Perspective, 32*(2), 78-83.

Chan, Z. (2013). A systematic review of critical thinking in nursing education. *Nurse Education Today, 33*, 236-240.

Chernomas, W. M. & Shapiro, C. (2013). Stress, depression, and anxiety among undergraduate nursing students. *International Journal Nursing Education Scholarship 10*(1), 255-266.

Cirmo, R. (2014). Getting our students to own their educational experience. Independent School, 73(2), 12-14.

Cohen, L. & Morrison, K. (2013). *Research methods in education* (7th ed.). New York, NY: Routledge.

Crain's Cleveland Business (2017). *Nursing in Northeast Ohio is in critical condition*.

Retrieved from

http://www.crainscleveland.com/article/20170128/NEWS/170129849/nursing-in-

northeast-ohio-is-in-critical-condition#utm_medium=email&utm_source=ccl-

morningroundup&utm_campaign=cclmorningroundup-

20170128&email_realestate

Crary, P. (2013). Beliefs, behaviors, and health of undergraduate nursing students.

Holistic Nurse Practitioner, 27(2), 74-88.

doi.org/10.1097/HNP.0b013e318280f75e

Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating*

quantitative and qualitative research (4th ed.). Boston, MA: Pearson.

D'Antonio, P. (2010). *American nursing: A history of knowledge, authority, and the*

meaning of work. Baltimore, MD: The John Hopkins University Press.

Del Prato, D., Bankert, E., Grust, P., & Joseph, J. (2016). Transforming nursing

education: A review of stressors and strategies that support students' professional

socialization. *Advances in Medical Education and Practice, 11*(2), 109-116.

de Lima Ferreira, J. & Bertotti, G. R. (2016). Continuing education for professional

development in higher education teaching. *Creative Education, 7*, 1425-1435.

DiBartolo, M. C. & Seldomridge, L.A. (2008). A review of intervention studies to

promote NCLEX-RN success. *Computers, Informatics, Nursing, 33*(5), 78S-83S.

DiLima, M., London, L., & Manieri, E. (2011). Looking at the past to change the future: A retrospective study of associate degree in nursing graduates' National Council Licensure Examination scores. *Teaching and Learning in Nursing. 6*, 119-123. doi: 10.1016/j.teln.2011.01.001.

Dixson, D. & Worrell, F. (2016). Formative and summative assessment in the classroom. *Theory into Practice, 55*(2), 153-159.

Eddy, L. & Epeneter, B. (2002). The NCLEX-RN experience: Qualitative interviews with graduates of a baccalaureate nursing program. *Journal of Nursing Education, 41*(6), 273-278.

Edmonstone, J. (2015). The challenge of evaluating action learning. *Journal of Action Learning: Research and Practice, 12*(2), 131-145.

Entwistle, N. (2000). Approaches to studying and levels of understanding: The influences of teaching and assessment. In J. C. Smart (Ed.), *Higher Education: Handbook of Theory and Research (Vol. XV)* (pp. 156-218). New York: Agathon Press.

Feeg, V., & Mancino, D. (2014). Nursing student loan debt: A secondary analysis of the national student nurses' association annual survey of new graduates. *Nursing Economics, 32*(5), 231-239.

Foureur, M., Besley, K., Burton, G., Yu, N., & Crisp, J. (2013). Enhancing the resilience of nurses and midwives: Pilot of mindfulness-based program for increased health, sense of coherence and decreased depression, anxiety and stress. *Contemporary Nurse, 45*(1), 114-125.

Ganzer, C. A. & Zauderer, C. (2013). Structured learning and self-reflection: Strategies to

decrease anxiety in the psychiatric mental health clinical nursing experience. *Nursing Education Perspective, 34*(4), 244-247. doi.org/10.5480/1536-5026-34.4.244

Gholami, K. & Tirri, K. (2012). Caring teaching as a moral practice: An exploratory study on perceived dimensions on caring teaching. *Education Research International*. doi: 10.1155/2012/954274.

Gibson, H. (2014). A conceptual view of test anxiety. *Nursing Forum, 49* (4), 267-277.

Giddens, J. & Gloeckner, G. W. (2005). The relationship of critical thinking to performance on the NCLEX-RN. *Journal of Nursing Education, 44*, 85-89.

Giddens, J. (2009). Changing paradigms and challenging assumptions: Redefining quality and NCLEX-RN pass rates. *Journal of Nursing Education*, *48*(3), 123-124.

Gilmore, M. (2008). Predictors of success in associate degree nursing programs. *Teaching and Learning in Nursing, 3*(4), 121-124.

Glazer, N. (2014). Formative plus summative assessment in large undergraduate courses: Why both? *International Journal of Teaching and Learning in Higher Education, 26*(2), 276-286.

Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th ed.). Boston, MA: Pearson.

Greenspan, V., Springer, P., & Ray, K. (2009). *A tri-nodal model for NCLEX-RN success. Nursing Education 34*(3), 101-102.

Griffiths, M., Papastrat, K., Czekanski, K., & Hagen, K. (2004). The lived experience of NCLEX failure. *Journal of Nursing Education 43*(7), 322-325.

Haas, R., Nugent, K. & Rule, R. (2004). The use of discriminant function analysis to predict student success on the NCLEX-RN. *Journal of Nursing Education, 43*, 440-446.

Haber, F. (2013). Helping students overcome their fear of failure. *European Association for International Education*, 1-8. Retrieved from http://www.eaie.org/blog/helping-students-overcome-fear-of-failure/

Hageauer, G. & Volet, S. (2014). Teacher-student relationship at university: An important yet under-researched field. *Oxford Review of Education, 40* (3), 370-388.

Haggis, T. (2003). Constructing images of ourselves: A critical investigation into approaches to learning research in higher education. *British Educational Research Journal, 29*(1), 89-104.

Hancock, D., & Algozzine, B. (2011). *Doing case study research: A practical guide for beginning researchers* (2nd ed.). New York, NY: Teachers College Press.

Hensel, D., & Stoelting-Gettelfinger, W. (2011). Changes in stress and nurse self-concept among baccalaureate nursing students. *Journal of Nursing Education 50*(5), 290-293.

Herman, J., & Johnson, N. (2009). From beta-blockers to boot camp: Preparing students for the NCLEX-RN. *Nursing Education Perspectives, 30*(6), 384-388.

Higgins, B. (2005). Strategies for lowering attrition rates and raising NCLEX-RN pass rates. *Journal of Nursing Education, 44*(12), 541-547.

Houghton, C., Casey, D. Shaw, D., & Murphy, K. (2013). Rigour in qualitative case

    study research. *Nurse Research, 20* (4), 112-17.

Houghton, W. (2004). Deep and surface approaches to learning. *Engineering subject*

    centre guide: Learning and teaching theory for engineering academics.

    Loughborough: HEA Engineering Subject Centre.

Hughes, B. M. (2005). Study, examinations, and stress: Blood pressure assessments in

    college students. *Educational Review, 57*, 21-36.

Hyland, J. R. (2012). Building on the evidence: Interventions promoting NCLEX success.

    Open Journal of Nursing 2, 231-238.

Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*.

    Washington, DC: The National Academies Press.

Javine, V. (2013). Financial knowledge and student loan usage in college students.

    Financial Services Review, 22, 367-387.

Judd, D., Sitzman, K., & Davis, G. (2010). *A history of American nursing: Trends and*

    eras. Sudbury, MA: Jones and Bartlett Publishers.

Karsten, K., & DiCiccio-Bloom, B. (2014). Acknowledging the academic rigor of

    associate degree: A grounded theory study of overcoming failure. *Teaching &*

    Learning in Nursing, (4)*,* 153-163.

Kealy, E. (2010). Assessment and Evaluation in Social Work Education: Formative and

    Summative Approaches. *Journal of Teaching in Social Work, 30*, 64-74.

Kehm, B. (2013). *Predictors of NCLEX-RN success of associate degree graduates: A*

    correlational study (Doctoral dissertation). Retrieved from

http://web.a.ebscohost.com.ezp.waldenulibrary.org/ehost/detail...gr4003&hid=41

01&bdata=JnNjb3BIPXNpdGU%3d#db=rzh&AN=2012360961

Kennedy, M. (2016). How does professional development improve teaching? *Review of*

Educational Research, 86(4), 945-980.

Kim, S. C., Oliveri, D., Riingen, M., Taylor, B., & Rankin, L. (2013). Randomized

controlled trial of graduate-to-undergraduate student mentoring program. *Journal*

of Professional Nursing, 29(6), e43-e49.

Koestler, D. (2015). Improving NCLEX-RN first-time pass rates with a balanced

curriculum. *Nursing Education Perspectives, 36*(1), 55-57.

Kouzes, J., & Posner, B. (2003). *Academic administrator's guide to: Exemplary*

leadership. San Francisco, CA: Jossey-Bass

Kuo, H., Landon, T., Connor, A., & Chen, R. (2016). Managing anxiety in clinical

supervision. *Journal of Rehabilitation 82* (3), 18-27.

Landry, L., Davis, H., Alameida, M., Prive, A., & Remwanz-Boyle, A. (2010). Predictors

of NCLEX-RN success across 3 prelicensure program types. *Nurse Educator,*

35(6), 259-263.

Lee, W., Chiang, C., Liao, I., Lee, M., Chen, S. & Liang, T. (2013). The longitudinal

effect of concept map teaching on critical thinking of nursing students. *Nurse*

Education Today, 33, 1219-1223.

Lengacher, C. & Keller, R. (2003). Academic predictors of success on the NCLEX-RN

examination for associate degree nursing students: National council licensing

examination for registered nurses. *Journal of Nursing Education*, (4), 163-169.

Levy, L. (2014). How stress affects the brain during learning. *Edudemic connecting education and technology*. Retrieved from http://www.edudemic.com/stress-affects-brain-learning

Lindsey, P. L., & Jenkins, S. (2013). Nursing students' clinical judgment regarding rapid response: The influence of a clinical simulation intervention. *Nursing Forum, 48*(1), 61-70.

Locke, N., VanLanen, R., & McGannon, T. (2013). Educational implications of nursing students' learning styles, success in chemistry, and supplemental instruction participation on national council licensure examination-registered nurses' performance. Journal of Professional Nursing, 29(1), 49-58.

Lodico, M., Spaudling, D., & Voegtle, K. (2010). *Methods in educational research: From theory to practice*. San Francisco, CA: Jossey-Bass.

███ ███ Community College. (2014). *Institutional data*. Retrieved from http://www.███ccc.edu

Malinski, V. M., & Todaro-Franceschi, V. (2011). Exploring co-meditation as a means of reducing anxiety and facilitating relaxation in a nursing school setting. *Journal of Holistic Nursing 29*(4), 242-248.

McGahee, T., Gramling, L., & Reid, T. (2010). NCLEX-RN (R) success: Are there predictors. *Southern Online Journal of Research, 10*(4), 208-221.

Manieri, E., DeLima, M. & Ghosal, N. (2015). Testing for success: A logistic regression analysis to determine which pre-admission exam best predicts success in an associate degree nursing program. *Teaching and Learning, 10*, 25-29.

Matassarin-Jacobs, E. (1989). The nursing licensure process and the NCLEX-RN.

  Nursing Education, 14(6), 32-35.

Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd ed.).

  Thousand Oaks, CA: Sage.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.).

  Thousand Oaks, CA: Sage.

McFarquhar, C. (2014). Lived experiences of failure on the national council licensure

  examination – registered nurse (nclex-rn): Perceptions of registered nurses.

  International Journal of Nursing Education, 6(1), 10-14. doi: 10.5958/j.0974-

  9357.6.1.1.003.

Medical Dictionary for the Health Professions and Nursing (2012). Nursing education

  program. Retrieved November 17th, 2014 from http://medical-

  dictionary.thefreedictionary.com/nursing+education+program

Merriam, S. (2009). *Qualitative Research: A guide to design and implementation*. San

  Francisco, CA. Jossey-Bass.

Micari, M. & Pazos, P. (2012). Connecting to the professor: Impact of the student-faculty

  relationship in a highly challenging course. *College Teaching, 60*, 41-47. doi:

  10.1080/875675555.2011.627576

Michigan Works! (2014). Critical thinking and problem solving. Retrieved from:

  http://www.slideshare.net/MIWorksMO/critical-thinking-and-problem-solving-

  41823850

Missen, K., McKenna, L., Beauchamp, A. & Larkins, J. A. (2016). Qualified nurses' rate new nursing graduates as lacking skills in key clinical areas. *Journal of Clinical Nursing, 25*, doi: 10.1111/jocn.13316

Montenery, S., Walker, M., Sorensen, E., Thompson, R., Kirklin, D., White, R., & Ross, C. (2013). Millennial generation student nurses'perceptions of the impact of multiple technologies on learning. *Nursing Education Perspectives, 34*(6), p.405-409.

Moscaritolo, L. (2009). Interventional strategies to decrease nursing student anxiety in the clinical learning environment. *Journal of Nursing Education, 48*(1), 17-23. doi.org/10.3928/01484834-20090101-08

National Council State Boards of Nursing, (2009b). Policy position statement. Retrieved from https://www.ncsbn.org/Nurse_Shortage_July_2009.pdf

National Council of State Boards of Nursing (2011). NCLEX examination rates. Retrieved from https://www.ncsbn.org

National Council of State Boards of Nursing (2012). NCLEX examination rates. Retrieved from https://www.ncsbn.org

National Council of State Boards of Nursing (2013). NCLEX examination rates. Retrieved from https://www.ncsbn.org

National Council of State Boards of Nursing (2014). NCLEX examination rates. Retrieved from https://www.ncsbn.org

National League for Nursing (2012). *The scope of practice for academic nurse educators*. Washington, DC: National League for Nursing.

National Student Nurses" Association (NSNA). (2014). *NSNA one-minute survey.*

Retrieved from http:// www.nsna.org/

Nursing and Midwifery Council (2010). Retrieved December 15, 2014, from

http://www.nmc-uk.org/General-public/

Ohio Board of Nursing (2017). *Rules and regulation for nursing education programs*.

Retrieved from the Ohio Board of Nursing website: http://www.nursing.ohio.gov/

Pare, J. (2014). Effects of guided imagery on the level of stress experienced by pre-

licensure baccalaureate nursing students engaged in clinical learning experiences.

Doctoral dissertation. Retrieved from ProQuest LLC, UMI 3614362.

Patton, M. Q. (2005). *Qualitative Research.* Wiley Online Library.

Pennington, T. & Spurlock, D. (2010). A systematic review of the effectiveness of

remediation interventions to improve NCLEX-RN pass rates. *Journal o*f Nursing

Education, *49*(9), 485-492.

Poorman, S., Mastorovich, M., & Webb, C. (2002) Students' stories: How faculty help

and hinder students at risk. *Nurse Educator, 27* (3), 126-131.

Poorman, S., Mastorovich, M. & Webb, C. (2011). Helping students who struggle

academically: Finding the right level of involvement and living with our

judgments. *Nursing Education Perspective, 32* (6), 369-374.

Powers, K. L., Carlstrom, A. H. & Hughey, K. F. (2014). Academic assessment practices:

Results of a national study. *NACADA Journal, 34*(1), 64-77.

doi:10.1230/NACADA-13-003

Prato, C. & Yucha, C. (2013). Bio-feedback assisted relaxation training to decrease test anxiety in nursing students. *Nursing Education Perspective, 34*(2), 76-81. doi.org/10.5402/2012/827972

Ratanasiripong, P., Park, J., Ratanasiripong, N., & Kathalae, D. (2015). Stress and anxiety management in nursing students: Biofeedback and mindfulness meditation. *Journal of Nursing Education, 54* (9), 520-524.

Rathnavake, S. & Ekanayaka, J. (2016). Depression, anxiety, and stress among undergraduate nursing students in a public university in Sri Lanka. *International Journal of Caring Sciences, 9* (3), 1020-1032.

Rees, K. (2013). The role of reflective practices in enabling final year nursing students to respond to the distressing emotional challenges of nursing work. *Nurse Education Practice, 13*(1), 48-52. doi.org/10.1016/j.nepr.2012.07.003.

Roa, M., Shipman, D., Hooten, J., & Carter, M. (2011). The costs of NCLEX-RN failure. *Nurse Education Today, 31*(4), 373-377.

Roller, M. (2015). Fundamental nursing: Process-oriented guided-inquiry learning (POGIL). *Journal of Leadership Instruction, 1*(14), 20-23.

Roller, M. & Zori, S. (2017). The impact of instituting process-oriented guided-inquiry learning (POGIL) in a fundamental nursing course. *Nurse Education Today, 50*, p.72-76.

Romeo, E. (2013). The predictive ability of critical thinking, nursing GPA, and SAT scores on first-time NCLEX-RN performance. *Nursing Education Perspectives, 34*(4), 248-253.

Roorda, D. L., Koomen, H. M., Spilt, J. L., & Oort, F. J. (2011). The influence of

    affective teacher-student relationships on students' school engagement and

    achievement: A meta-analytic approach. *Review of Educational Research, 81*,

    493-529.

Sayles, S., Shelton, D., & Powell, H. (2003). Predictors of success in nursing education.

    ABNF Journal, 14(6), 116-120.

Schwarze, M. (2012). Assessing the effectiveness of mindfulness-based cognitive therapy

    in individual sessions in reducing self-reported stress and increasing self-reported

    mindfulness levels of a nursing student. Doctoral dissertation, Retrieved from

    ProQuest, LLC, UMI 3463727.

Sherman, R. (2012). What we can learn from failure. *American Nurse Today, 7*(7), 1-3.

Shirrell, D. (2008). Critical thinking as a predictor of success in an associate degree

    nursing program. *Teaching and Learning in Nursing, 3*, 131-136.

Smith, J. (2014). Impact of human simulation experience on the anxiety level of

    preclinical nursing students. Doctoral dissertation. Retrieved from ProQuest,

    LLC, UMI 3614810.

Song, Y. & Lindquist, R. (2015). Effects of mindfulness-based stress reduction on

    depression, anxiety, stress and mindfulness in Korean nursing students. *Nurse

    Education Today, 35*, 86-90.

Spetz, J. (2014) Using the lens of history to understand nursing practice and policy: An

    interview with Julie Fairman. *Nursing Economics 32*(3) 166-169.

Spurlock, D. (2013). The promise and peril of high-stakes tests in nursing education. *Journal of Nursing Regulation, 4*(1), 4-8.

Strauss, E., Ovnat, C., Gonen, A., Lev-Ari., & Mizrahi, A. (2016). Do orientation programs help new graduates? *Nurse Education Today*. 422-426. doi: 10.1016/j.nedt.2015.09.002

Streib, J. (2013). "Class origin and college graduates' parenting beliefs." *The Sociological Quarterly, 54*(4), 670-693.

Taylor, H., Loftin, C., & Reyes, H. (2014). First-time NCLEX-RN pass rate: Measure of program quality or something else? *Journal of Nursing Education, 53*(6), 333-341.

Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource.* Hoboken: NJ. John Wiley and Sons.

The Center for Health Affairs (2011). NEONI workforce initiative. Retrieved from http://www.chanet.org/WorkforceNEONI/SupplyAndDemandData/Nursing.aspx

Theisen, J. L., & Sandau, K. E. (2013). Competency of new graduate nurses: A review of their weaknesses and strategies for success. *The Journal of Continuing Education in Nursing, 44*(9), 406-414.

Thiele, M. (2016). Resource or obstacle?: Classed reports of student-faculty relations. The Sociological Quarterly, 57, 333-355. doi: 10.1111/tsq.12117.

Toshalis, E. (2016). Correcting our connecting. *Educational Leadership, 74*(1), 16-20.

Trofino, R. (2013). Relationship of associate degree nursing program criteria with

    NCLEX-RN success: What are the best predictors in a nursing program of passing

    the NCLEX-RN the first time? *Teaching & Learning in Nursing, 8*(1), 4-12.

Turner, K. & McCarthy, V. (2017). Stress and anxiety among nursing students: A review

    of intervention strategies in literature between 2009 and 2015. *Nurse Education in*

    Practice. 22, 21-29.doi.org//10.1016/j.nepr.2016.11.002

Vaillant, D. & Marcelo, C. (2012). *Teaching how to teach: The four steps of learning*.

    Curitiba: Ed. UTFPR.

Waterhouse, J. & Beeman, P. (2003). Predicting NCLEX-RN success: Can it be

    simplified? *Nursing Education Perspectives, 24*(1), 35-39.

Watson, F., & Rebair, A. (2014). The art of noticing: Essential to nursing practice. *British*

    Journal of Nursing, 23(10), 514-517.

Yin, T. & Burger, C. (2003). Predictors of NCLEX-RN success of associate degree

    nursing graduates. *Nurse Educator, 28*(5), 232-236.

Yuan, H. B., Williams, B. A., & Fang, J. B. (2011). The contribution of high fidelity

    simulation to nursing students' confidence and competence: A systematic review.

    International Nursing Review, 59, 26-33.

Zentz, S., Kurtz, C. & Alverson, E. (2014). Undergraduate peer-assisted learning in the

    clinical setting. *Journal of Nursing Education, 53*(3S), S4-S10.

    doi.org/10.3928/01484834-20140211-01.

Zulkosky, K. (2009). Self-efficacy: A concept analysis. *Nursing Forum, 44*(2), 93-101.

Appendix A: Professional Development Program

Title: Strategies to Improve NCLEX Performance

Purpose: The purpose of the project is to provide nursing educators with insights into graduate nurses perceptions of what experiences contributed to or daunted their NCLEX performance.

Goals: The goals are to explore contemporary strategies related to these perceptions to augment NCLEX success by (a) heighten awareness of nurse educators/professors to graduates' insights of program experiences and the impact these perceptions have on NCLEX performance; (b) present strategies to nursing professors to counter the impactful perceptions shared by recent nurse graduates; and (c) deepen nurse educators' knowledge of pedagogy and contemporary classroom techniques.

Desired Outcomes: The desired outcome is for nursing educators to integrate the strategies discussed and activities demonstrated during the development program into their classroom/clinical settings to improve NCLEX performance.

Target Audience: The target audience is nursing professors, dean of Allied Health and Nursing, Provost of Academic and Student Learner Services, clinical liaisons, and nursing advisory council members.

Timeline: A 3 day professional development program. Details provided in agenda.

Training Activities and Presentations: Detailed presentations and related activities include the importance of promoting deep learning, e. g. critical thinking and case study analysis, impact of anxiety and fear of failure on learning, and the importance of faculty connectedness. To augment this content other activities include the how-to and active

participation in mindfulness exercises, processes for implementing process-oriented

guided inquiry learning, and hi-fidelity simulation activities. The presentations and

activities are delineated in the agendas for each day.

Professional Development Training Agenda

Day 1

Time	Activity	Facilitator
9 - 9:15 a.m.	Welcome	J. Pulito, EdD, RN
9:15 - 10 a.m.	Overview of Study Results	J. Pulito, EdD, RN
10 -10:45 a.m.	Graduate Panel Discussion	J. Pulito, EdD, RN
10.45 - 11 a.m.	Break	
11 a.m. - 11:30 a.m.	Faculty Reflections of Panel Discussion	J. Pulito, EdD, RN
11:30 – 12:15 p.m.	Anxiety	J. Pulito, EdD, RN
12:15 - 1:15 p.m.	Lunch	
1:15 – 2:30 p.m.	Strategies to Minimize Anxiety	J. Pulito, EdD, RN & Wellness Coach
2:30 – 2:45 p.m.	Break	
2:45 – 3:10 p.m.	Meditation Exercise	Wellness Coach
3:10 – 3:30 p.m.	Questions and Answers	
	Evaluation	
	Closing	

Day 2 Agenda

Time	Activity	Facilitator
9 - 9:10 a.m.	Questions from day 1	J. Pulito, EdD, RN
9:10 – 9:45 a.m.	Yoga session	Wellness Coach
9:45 -10:15 a.m.	Discussion re: wellness course	J. Pulito, EdD, RN
10.15 – 10:30 a.m.	Break	
10:30 a.m. - 11:30 a.m.	Combating Fear of Failure	J. Pulito, EdD, RN Behavioral Health Specialist
11:30 – 12:30 p.m.	Lunch	
12:30 – 2:00 p.m.	Faculty Connectedness	J. Pulito, EdD, RN
2:00 – 2:15 p.m.	Break	
2:15 – 2:45 p.m.	Faculty break out session	J. Pulito, EdD, RN
2:45 – 3:10 p.m.	Group report out on action strategies	J. Pulito, EdD, RN
3:10 – 3:20 p.m.	Question and answer session	J. Pulito, EdD, RN
3:20 – 3:30 p.m.	Evaluation Closing	J. Pulito, EdD, RN

Day 3 Agenda

Time	Activity	Facilitator
9 - 9:10 a.m.	Questions from day 2	J. Pulito, EdD, RN
9:10 – 9:30 a.m.	Superficial vs. deep learning	J. Pulito, EdD, RN
9:30 -10:00 a.m.	Critical Thinking	J. Pulito, EdD, RN
10.00 – 10:15 a.m.	Impact on NCLEX Performance	
10:15 a.m. - 10:30 a.m.	Break	J. Pulito, EdD, RN
10:30 – 12 p.m.	Improving critical thinking skills in our students	
12 – 1:15 p.m.	Lunch and road-trip to simulation center	J. Pulito, EdD, RN & Wellness Coach
1:15 – 2:15 p.m.	Hands-on simulation case studies and debriefing	
2:15 – 2:30 p.m.	Biggest take-away(s) from program	J. Pulito, EdD, RN
2:30 – 2:45 p.m.	Break	J. Pulito, EdD, RN
2:45 – 3:10 p.m.	Next steps	J. Pulito, EdD, RN
3:10 – 3:30 p.m.	Question and answer session Evaluation Safe travels!	

Training Activities and Presentations

Day 1

Ice Breaker: After welcoming and thanking all participants for attending I will share with the attendees the overall objective of the 3-day professional development workshop. Specifically, the goal is for nurse educators and other stakeholders to come away with insights into factors that impact NCLEX-RN performance as perceived by recent graduates. Additionally, strategies will be presented and hands-on techniques demonstrated in alignment with the findings of the study. The first activity will commence by all participants turning to the person next to them and taking one minute to answer the following: what are three variables that impact NCLEX performance? Participants will be expected to share responses.

Overview of study: The researcher will discuss the results of the study and identify the primary four themes that emerged. These themes will be compared to what the workshop participants see as factors impacting NCLEX performance with an eye on similarities and differences between the two groups.

Panel Discussion: To validate the study's findings a group of 4 recent graduates will be assembled for a panel discussion. They will have the opportunity to answer the same questions that the study's participants did. The researcher will oversee the panel discussion while a volunteer from the workshop's audience will be asked to record their responses on a flip chart. At the conclusion of the panel discussion workshop participants will have the opportunity to ask additional questions. Once the panel is thanked and dismissed break-out sessions will ensue. The attendees will be broke into groups of 4-5 to

reflect on what was shared. They will be asked to determine the biggest surprise (new insight gained) and what was the least.

Anxiety explored and strategies to diminish: The researcher will discuss how anxiety evolves and the impact it has on learning. The discussion will include both physiological and psychological implications and participants will be asked to share stories related to some of their experiences dealing with students who demonstrated extreme anxiety. After lunch, participants will receive information on reflective journaling, importance of social support networks, and mindfulness based stress reduction (MBSR) techniques. These anxiety reducing techniques are being offered in an effort to provide strategies for the participants to utilize with students and lay a foundation for greater student success and NCLEX performance. At the conclusion of day 1, all participants will be invited to a meditation session, conducted by a wellness coach. The presenter(s) will briefly overview the benefits of meditation and suggest that this component of (MBSR) may not only be advantageous for students, but also to the participants.

Power Points (Day 1)

Strategies to Improve NCLEX Performance

Presented by;
Judy Pulito, EdD, RN
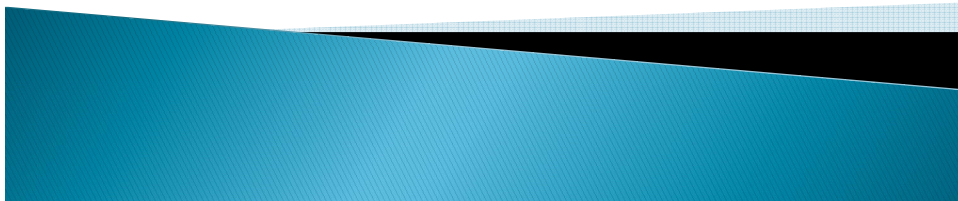
Overview of Results

‣ Extreme anxiety

‣ Fear of Failure

‣ Faculty Connectedness

‣ Approach to Learning (Critical Thinking Skills)
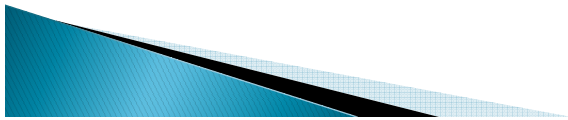
Graduate Panel Discussion

‣ *Questions*
‣ What was your overall experience of being in an associate degree program? What were the more challenging/easier aspects?
‣ What experiences contributed to your success in the nursing program?
‣ What experiences contributed to your performance on the NCLEX?
‣ Some classmates were more/less successful. What made the difference?
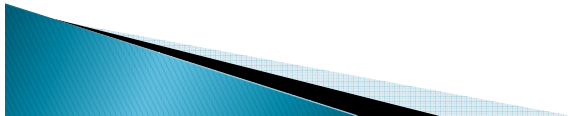
Is this one of your students prior to an exam? »

What can be done?

Stress → Anxiety

Stress – "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering their well-being".

Anxiety– prolonged stress can lead to anxiety. Defined as a state of "being uneasy, apprehensive, and worried about what may happen in the future".
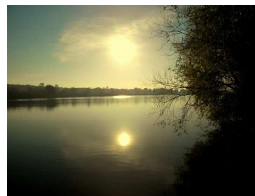
Lazarus & Folkman, 1984

Strategies to Diminish Anxiety

》》 Healthy learning environments

Reflective journaling

Social support networks

Mindfulness based stress reduction (MBSR)

Healthy Learning Environments

▸ Promotes learning in a less stressful environment.
▸ Increases self-esteem.
▸ Promotes success and greater satisfaction.

▸ Viewed as experiential learning.

▸ Allows the student to critically examine one's practice by reflecting on interactions and interventions.

▸ Fosters interpersonal relationships and creates new knowledge.

Reflective Journaling

A strategy for nursing students to approach stressful situations in a healthy manner!

Social Support Networks
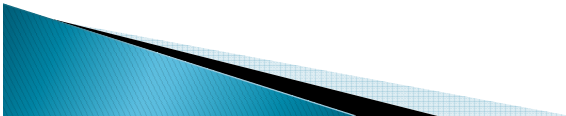
Mindfulness based stress reduction (MBSR)

▸ What is MBSR?
  ◦ requires an individual to attend to his/her conscious experience with a detached, objective, and open attitude.

  ◦ Accomplished via meditation or yoga (body awareness exercises)

  ◦ Benefit – individual gains insight into the nature and frequency of their thoughts and feelings which enables them to separate the thought from the feeling and/or behavior, leading to a more balanced emotional state (less stress/anxiety). Del Prato, et al (2011)
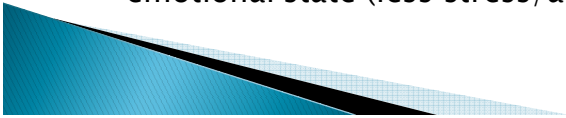
Day 2

Starting the day in a "mindful" manner: Today's session will begin with a yoga session conducted by a wellness coach. Seen as an anxiety reducing technique, this exercise will proffer workshop attendees a first-hand experience of what yoga is and set the tone for relaxing engaging day. At the conclusion of the yoga session participants will be asked to share their thoughts about the possibility of integrating a wellness course for our students in the future. Thoughts will be recorded and summarized in a pro/con fashion. It is the intent to re-visit these comments day 3 when conversing about next steps the program may consider.

Fearing Failure: This portion of the program will be presented by a behavioral health specialist. Her background includes 20+ years in nursing education in addition to the work she has accomplished in private practice. Neuro-physiological changes related to the fear of failing will be presented as well as psychological implications. This segment of the program will conclude by relating these physiological and psychological changes to student learning and success.

What Can Educators Do?

Practical suggestions on how to teach grit and build resilience will be presented by the researcher. Ample time is built into the agenda for an open engaging dialogue and will conclude by integrating the idea of implementing learning oriented environments vs. performance based. At the conclusion of this segment, participants will be asked to share one thing they would entertain changing in their current approach to foster a more learning oriented environment (clinical and/or classroom).

Combating Fear of Failure

Day 2
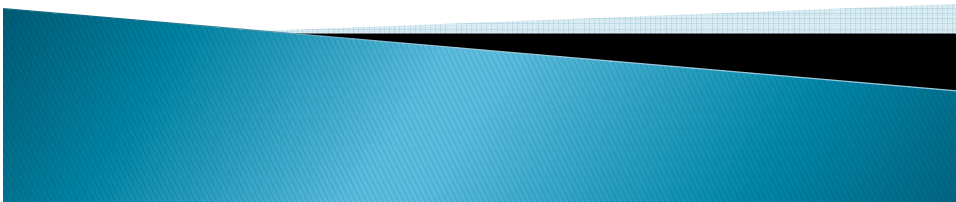
Impact of fearing failure on learning

▸ Success leads to more success; failure leads to more failure

▸ Anxiety associated with fear of failing leads inability to concentrate, recall information, or clearly think and problem solve.

▸ Stimulated senses when experiencing stress/anxiety are not associated with deep learning.

What can Educators do?

▸ Teach grit and build resilience

▸ Create a learning orientation vs. performance orientation

Day 2 - Activities and Presentations (cont'd)

Reconnecting with our Students: The researcher will engage the workshop attendees in a discussion about the importance of faculty connecting to their students and what students, based on the findings of this study, are sharing about faculty/student relationships. Students in this study emphasized the importance of faculty being present, open and honest with timely feedback, and showing that they care. The question of: what are you doing personally to connect with your students, will be asked. A flip-chart will be utilized to record answers and shared with all to gain a more comprehensive view of what is currently being employed. To conclude this session, practical suggestions will be offered by the researcher in regards to how nurse educators can "correct their connecting" to students. An opportunity will also be given to for participants to share their concerns about establishing closer student/faculty relationships concluding with feedback and suggestions from the group of how one may quell trepidations.

Faculty Connectedness

Day 2 – Presentations and Activities
(continued)

Through the Lens of Faculty and Students

What are faculty saying?

- "With all my responsibilities finding extra time beyond office hrs. is difficult."
- "I can't fix their problems."
- "Where do you draw the line?"

Toshalis, 2016

What are students saying?

- "Faculty who show that they care really make a difference."
- "Faculty availability, approachability, and fairness is key."
- "I wanted to do my best for a faculty member that I respected."

Hagenauer & Volet, 2014,

Strategies to improve student/faculty relationships

▸ Earn their trust

▸ Anger is an emotion, not a threat

▸ Lecturing is not connecting

▸ Words are cheap

▸ Employ actions that show you care
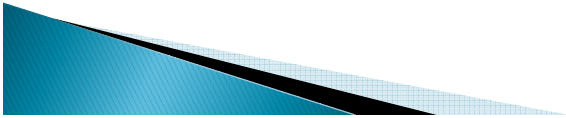
Day 3

How can we get our students thinking more like nurses?

The 3rd day of the professional development program will begin by the researcher briefly

re-capping material presented to date and answering any lingering questions. Next, the

group will be transitioned into the content area of deeper learning and critical thinking

skills. Based on a the findings of this study, graduates shared that their approach to

learning throughout the program and how they prepared to take the NCLEX impacted

their performance on the licensure exam and is the genesis for today's activities and

materials presented. To assure that all participants are on the same page, critical thinking

will be defined and the concepts of superficial versus deeper learning will be explored.

Participants will then watch a short video clip on a patient/nurse interaction with a focus

on the "art of noticing" as they observe. Discussion will ensue regarding the art of

noticing and how this technique can help a student think at a deeper level. Another

strategy, aimed at promoting greater thinking skills and is gaining popularity in nursing

education, is process-oriented guided inquiry learning (POGIL). This approach will be

described with a hands-on exercise to follow. Specifically, participants will be broke into

groups of three and given a role assignment along with a problem based case study. The

roles will include a *reflector,* who will keep the group focused on the learning process; a

manager who assigns the tasks within the group and manages the time limit; and finally a

leader/presenter who will report the groups' findings to the class. Of note, and in a "real"

classroom environment it is the professor that acts as facilitator and poses questions to

lead the team toward the answers but limits answering questions in the group scenario.

Once this exercise is completed several of the groups will be asked to report out and share their experience regarding the exercise.

What do millennials want?

Simply put…technological resources to assist their learning. To that end, simulation is the current contemporary trend being widely employed in nursing education. Not only is it viewed as a way to enhance deeper thinking, it is also seen as a strategy that allows for learning in a less stressful environment. To illustrate the value of simulation all participants will be invited to the simulation lab for hands-on demonstrations and case study analysis exercises. This session will be led by the simulation lab coordinator and designed in the following manner. The participants will be broke into groups 4-5. Under the direction of the Sim-Center coordinator case scenarios will be presented and the groups will problem solve the situation and related nursing concerns. At the conclusion a de-briefing conference will be held to ascertain key points and apply them to a theoretical basis for the purpose of deeper learning and connectivity of concepts.

Next Steps

Participants will be gathered for one last time for the purpose of discussing what steps the program should consider to help nursing students achieve greater success on the NCLEX-RN licensure exam. Participants will be invited to engage in an open dialogue about what could be seen as being useful, what could be implemented in the short term, and what would need additional consideration and processing. The ideas and suggestions shared will be noted and further discussed with the Program Director with follow-up items being placed on future ADN meeting agendas.

Power Point Slides Day 3

Critical Thinking and Approaches to Learning

Day 3 Presentations and Activities

Superficial vs. Deep Learning

▸ Last minute cramming

▸ Memorize material

▸ Utilize note cards

▸ Lacks understanding of concepts and their connectivity

▸ Adhere to structured study strategies

▸ Analyzes content and understands "why".

▸ Connects concepts

▸ Builds knowledge and applies it to clinical scenarios

Superficial learning	Deep learning

What is critical thinking?

▸ Critical thinking is defined as clear and rational thinking, which consists of clarification, simplification, and organization of thoughts (Chan, 2013).

▸ Rational thinking includes scientific reasoning, strategic thinking, and logic that enables the learner to predict, explain, and influence empirical phenomena.
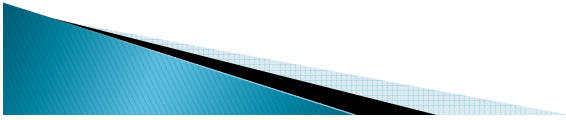
How to improve critical thinking skills in students

▸ Art of noticing

▸ Guided-inquiry learning (POGIL)

▸ Technology for the millennial
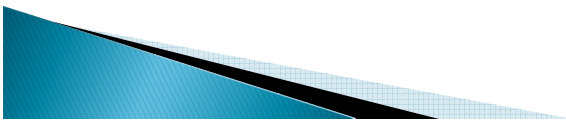
Biggest take-away(s) from program »

Next steps??

Evaluation (Days 1 & 2)

Strategies to Improve NCLEX Performance
Please check the box that best describes your answer:

1. The facilitator(s) had expert knowledge of content presented.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

2. The facilitator(s) provided adequate opportunities for discussion and questions.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

3. Activities were relevant to my needs.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

4. The information presented was useful.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

5. Time allotted was adequate.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

6. The strengths of this workshop session were:

7. Suggestions for improvement:

Evaluation (Day 3)

Strategies to Improve NCLEX Performance
Please check the box that best corresponds to your answer:

1. This professional development program will help students improve performance on the NCLEX-RN licensure exam.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

2. "Strategies to Improve NCLEX Performance" will assist in increasing my effectiveness as a nursing educator.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

3. I have deepened my knowledge of pedagogy and contemporary classroom/clinical techniques being utilized in nursing education today.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

4. The strengths of this workshop were:
5. Suggestions for overall improvement:

Appendix B: Participant Letters

Appendix B: Invitation to Participate in a 1:1 Interview

Dear {participant's name},

I am excited to invite you to participate in a doctoral research study. The purpose of this study is to acquire a greater understanding of the perceptions of recent ███ ███ Community College nursing graduates in regard to program experiences that influenced NCLEX-RN licensure exam performance. If you choose to participate in this research, I am asking that you notify me via my e-mail address provided below. You then will be contacted to arrange a 1:1 recorded interview at a time that is convenient for you. The interview should take about 45 minutes to complete.

Once participation is confirmed and a date/time is agreed upon for meeting, you will be given an informed consent to review. Participation in the study will be validated via signature on the informed consent form. All of the information exchanged will be recorded and kept anonymous and confidential. No retribution will occur related to your decision to participate, answers received, or decision to withdraw from the study

I look forward to hearing from you and hope you will consider participating in the study. Please feel free to contact me if you have any additional questions.

Sincerely,
Judy Pulito, MSN, RN
Walden University Doctoral Candidate
E-mail: judy.pulito@waldenu.edu

Appendix B: Two week Follow-up Reminder

Dear {participant's name},

I am sending this e-mail correspondence as a follow-up to a request sent two weeks ago to participate in a doctoral research study. The purpose of this study is to acquire a greater understanding of the perceptions of recent ████ ████ Community College nursing graduates in regard to program experiences that influenced NCLEX-RN licensure exam performance. If you choose to participate in this research, I am asking that you notify me via my e-mail address provided below. You then will be contacted to arrange a 1:1 recorded interview at a time that is convenient for you. The interview should take about 45 minutes to complete.

If you have already replied to my initial invitation or have chosen not to participate, please disregard this e-mail and I thank you for your cooperation and consideration to participate.

If you have not yet had the opportunity to reply to my invitation and would like to participate, there is still time. Once you have notified me via the e-mail address noted below of your intent to be included in the study, a 1:1 interview will be scheduled and an informed consent will be offered at that juncture for review and signature. All of the answers received from the interview session will be kept anonymous and confidential. No retribution will occur related your decision to participate, answers received, or decision to withdraw from the study.

I look forward to hearing from you and hope you will participate in the study. Please do not hesitate should you have any questions.

Sincerely,
Judy Pulito, MSN, RN
Walden University Doctoral Candidate
E-mail: judy.pulito@waldenu.edu

Appendix C: Graduate Interview Questions

1. What was your overall experience of being in an associate degree nursing

   program?

   a. Were there any aspects that were easy?

   b. What was the most challenging?

2. From your perspective, what experiences contributed to your success in the

   nursing program?

3. What experiences do you believe contributed to your success/failure on the

   NCLEX-RN licensure exam?

4. Some of your classmates were more/less successful, on the licensure exam. What

   do you think made the difference?