

2017

Factors Related to Nursing Student Persistence in an Associate Degree Program

Patricia Ann Farley
Walden University

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Patricia Farley

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Dr. Mary Batiuk, Committee Member, Education Faculty
Dr. Irene McAfee, University Reviewer, Education Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University
2016

Abstract

Factors Related to Nursing Student Persistence in an Associate Degree Program

by

Patricia A. Farley, MS, RN, CNE

MS, St John Fisher College 2009

BS, Nazareth College 2006

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

January 2017

Abstract

The retention of nursing students remains a challenge in higher education, and the need for nurses in the United States is projected to increase. The purpose of this study was to investigate nursing student persistence in an associate degree program by examining differences in the presence of key social, environmental, and academic factors across 2 types of students: completers and non-completers of the 1st course in a registered nursing program. The study framework was based on Tinto's Student Integration Model and the Nursing Undergraduate Retention and Success Model, which identify key social, environmental, and academic factors as critical to student success. The Student Perception Appraisal survey, which consists of 27 items arranged into 5 subscales—personal academic, environmental, institutional interaction, college facilities, and friend support—was administered to students enrolled in the 1st semester of a registered nursing program who were later assigned to a group based on course completion ($n = 90$ completers; $n = 22$ non-completers). An independent-samples t test revealed no statistically significant differences between the groups on the instrument subscale scores. Recommendations include further study with larger and more equivalent group sizes. Implications for social change include providing initial research findings and recommendations to the study site that may ultimately increase the number of nursing graduates to meet the ever-increasing demand for healthcare professionals.

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Dedication

I wish to dedicate this to my mother and my maternal grandmother and grandfather. You inspired me to never give up on a dream.

Acknowledgments

I would like to thank my family and friends for all their support during this doctoral journey. Special thanks to my husband, Ted and my sons, Jake and Justin. You have been my motivation and supported me to continue this project. I want to thank Dr. Thomas Hadley for his patience and support during this journey.

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Section 1: The Problem

Introduction

The retention rates of college students remain a perennial problem in higher education (Healthcare Association of New York State [HANYYS], 2010). The purpose of this project study was to identify factors that support or inhibit the retention of college students enrolled in the nursing program at two associate degree colleges in New York State. The study used a paper survey; it was given to nursing students during the first semester of their program. The responses came from students who left prematurely or continued to the second semester. The data identified factors related to attrition rates. Based on these findings, I developed a program to improve first-year student retention at both colleges. In this section, I present the problem, rationale for the study, my research questions, and the key terms, and a review of the literature.

Definition of the Problem

Nurse educators are confronted with the challenge of retaining students in nursing programs. Access to higher education has increased over the past 40 years, but not the success rate of college students nor student persistence (Brock, 2010). Community colleges and online programs have made it easier for all kinds of learners to pursue degrees. However, access does not directly translate to degree completion. Brock (2010) recognized that easy access to college does not matter if the students are not academically prepared. This ease of access may not guarantee a surge in the number of students completing college-level degrees. Wray, Barrett, Aspland, and Gardiner (2012) noted that studies in retention focused on why students left programs rather than considering the

reasons for students' success. Since most research is conducted as autopsy studies, and wanted to learn what contributes to keeping them enrolled in these nursing programs. Wray et al. (2012) discussed the fact that students might be angry about leaving the program and blame the school or faculty. Many students who drop out prematurely cannot understand their decision-making process, sometimes because they have not developed reasons. When surveyed, their responses may be socially desirable, but they may not be the real reasons for leaving. Future research should concentrate on issues that correspond with student progression rather than students who drop out of school (Wray et al., 2012).

At a private 2-year college in New York State, "Eastern College," where I have been a faculty member, helping students achieve their academic goals remains a priority and a challenge, particularly in the nursing program. Graduation rates for registered nursing (RN) students were 63% for years 2010- 2011. Graduation rates for RN students at Western Community College (Western CC) were 53% for years 2014-2015. According to the National League for Nursing (NLN, 2010), the average graduation rate for nurses enrolled in 2-year, associate degree nursing programs from 2002–2008 was only 57% during the six years.

At first glance, this may be interpreted as higher than the national average. Nevertheless, I believe that nursing programs could improve its graduation rates if there were more dedicated resources. The NLN data is from a 2002-2008 study, whereas the college data is from 2010-2012. The 2 years of Eastern College data could be interpreted as a higher graduation rate even with a smaller number of students. The NLN data do not

compare the same time frame nor the same number of years as the Eastern College data.

The NLN recommends attrition rates for all nursing programs to be 20% or lower (Brown & Marshall, 2008), whether voluntary or involuntary.

Eastern College is in a small, rural community in upstate New York. Since the educational experience is designed for adult learners, most of the classes are scheduled in the evening and on weekends. The clinical experiences are composed of one 12-hour-day per week, as compared to some nursing schools that have 2 or more days of clinical but shorter hours on each day. The clinical experience consists of students in a setting providing care for patients under the supervision of a nursing instructor. The nursing program is hospital-based and most the clinical experiences are at this hospital.

An advantage of this program is the varied experience of the faculty, from lecture to lab to clinical practice; this provides a unique experience for every student. As students attempt to maintain a balance between family, work, and school, they are often forced to make difficult choices. Many of the students are both employed and enrolled in school full-time, in addition to their regular family obligations, which can be a detriment to their success in nursing school.

The second college is a public community college located in upstate New York, “Western Community College” (WCC). The students’ clinical experiences are comprised of 2 days a week in the acute care hospital setting. They complete their clinical rotation experiences at different area hospitals. The lead faculty teaches the fundamental nursing class in the first semester. Graduation rates for RN students at WCC were 59% for the years 2010-2011.

I would like to develop retention strategies that would benefit both schools. Although there are two sets of students attending different nursing programs at two different schools, I suggest that their academic issues and challenges are similar according to the professional literature and to retention studies.

Nursing Shortage

Nursing is one of the largest health care professions in the country with more than 3.1 million RNs licensed to practice (HANYS, 2010). The profession has three levels of entry to practice: diploma, A. A. degree, and B. A. degree. According to Viterito and Teich, (2002), community colleges play a crucial role in educating nurses.

In the year 2000, 60% of nurses who graduated with a nursing degree attended a community college (HANYS, 2010). In numerous states, efforts are being discussed to make the baccalaureate degree the entry to practice for the RN. Community colleges are an attractive option for older students because they can attend part-time and/or in the evening while working full time. According to HANYS (2010), 48% of nurses in New York State have their associate degree, 11% are diploma graduates, 38% have their Baccalaureate degree, 5% have their Master's degree, and less than 1% has doctoral degrees.

The nursing shortage is a major problem complicating the future of the world's health care system. According to American Association of Colleges of Nursing (2014) there is a projected job growth from 2.7 million in 2012 to 3.4 million in 2022. This increased demand for RNs reflects an aging population. Nursing programs are currently

losing nearly 40% of their graduates. If this continues, then the number of nursing graduates will decrease and exacerbate the global nursing shortage.

To meet the demands of RN job growth, nursing programs will need to retain more students. Fewer nurses will be available to meet the demands of an aging population. In 2010, the Institute of Medicine (IOM) indicated that Americans, aged 65 years and older, would comprise nearly 20% of the population by 2030. The recent reforms in health care are providing millions of people with access to affordable healthcare but more nurses are needed to provide this care. Quality patient care is compromised by a shortage of nurses as well as the work environment for the current nurses.

Local Problem

A shortage of nurses is not just a national issue; not retaining nursing students threatens the university's professional reputation the local economy. Eastern College's initial accreditation was granted for 5 years by the National League for Nursing Accrediting Committee (NLNAC). To be re-accredited, the college will need to show positive outcomes in graduation and state board pass rates. Unsuccessful students burden college resources and the local economy; they incur debt and waste college resources that other students could use. The college, state, and federal government absorb high costs for students not completing the program, including loss of income and a decrease in both federal and state taxes (Schneider & Yin, 2011). In a 2010 report, the American Institute for Research stated that the federal government spends \$300 million per year on students

who leave during their first year of college and that state governments allocate more than \$1.3 billion dollars annually (Schneider and Yin, 2011).

Leaving college can damage students' self-esteem; It can also reduce the tax revenues to state and federal government. Apparently, nursing student retention continues to be a challenge for college administrators, faculty members, and the students themselves.

The average graduation rate for nurses enrolled in two-year associate degree nursing programs from 2002-2008, was only 57% during the six years of this study. Nurses are a critical member of the healthcare profession (NLN, 2010). The average age of nurses nationally in 2008 was 46 years old (US Department of Health and Human Services, Health Resources and Services Administration., 2010). The need for healthcare and nursing care in the United States is projected to be on the increase because the percentage of the population that is elderly is steadily rising. Nursing schools are struggling to retain students in the nursing program. Research confirms that care provided by a Registered Nurse is the key to patient safety, lower fatality rates, impeding medical errors, and securing quality outcomes for patients and families (Raines & Taglaireni, 2008).

Locally, Healthcare Association of New York State (2010) identified ways the economic system has impacted health care systems in New York State. Smaller hospitals are joining larger health systems and combining resources and services to survive in healthcare today. These economic difficulties have led to wage freezes, position elimination, and reduction of services. The number of new nurses will not keep pace with

the staffing demands of nurses due to the aging population, the average age of current nurses increasing, and the increasing number of nurses expected to retire within the next 10 years. The growth of enrollment and increased graduation rates from nursing programs will help meet the projected demand for nurses.

The New York State Department of Education (2009) identified that in 2005, 57% of first-time students continued to their second year. In 2006, 57.5% of students continued, and in the year 2007, 55.7% of the students continued to their second year. The graduation rate for all associate degree programs in New York State was 23% within a three years' period (NYSED, 2009). Even though these numbers include all types of associate degree programs, the statistics are sobering because HANYS (2010) identified the mean age of an RN in New York State as 47.3 years old. Also 31% of nurses are over age 50 years old, and 75.5% are over the age of 40. This statistic indicates that there is an expected nursing shortage in New York State due to an aging workforce in the nursing profession. The Bulletin of the State-Wide Plan for Higher Education (2012-2020) noted one of their goals is to improve access to, quality of, and performance in higher education by identifying how institutions could improve student retention and graduation rates (NYSED, 2011). The fact that New York State has a goal to find ways schools could improve graduation and retention rates marks retention as a priority on a state and local level. I attended a faculty meeting at the college where my research was conducted, and graduation rates benchmarked at 65-70%. This College graduated its first class of nursing students in 2010 and to remain viable; they must increase graduation rates and increase enrollment numbers.

As previously stated, the economic system has affected health care in New York State. The requirement for nurses will increase with the aging population and increasing nursing graduation rates will be conducive to developing qualified nurses. I feel that patient safety and quality of patient care will improve as more nurses enter the workforce.

Rationale

This study could identify what the students perceive as contributions to their success; strategies or interventions could be suggested to make the learning environment better for the students. These factors identified in the Student Perception Appraisal (SPA-R2) survey will help to identify what contributes to student success. The Student Perception Appraisal-Revised (SPA-R2) is a questionnaire used to evaluate students' perception of how specific factors influenced their ability to remain in the nursing program (Jeffreys, 2012).

According to Jeffreys (1998), the greatest numbers of nursing students are unsuccessful during the first semester in a nursing program. To increase retention, educators must learn more about what factors help students remain in nursing programs (Jeffreys, 1998). With the administration of a survey, Student Perception Appraisal-Revised (SPA-R2) in the student's first semester, I may learn more about the differences between students who have persisted through their first semester into the second semester and those who have not.

Ryan (2004) identified that one-fifth to one-quarter of students at four-year institutions do not continue after their freshman year. The research suggests multiple reasons for retention problems among college freshman. Although access to higher

education has improved with online learning, student persistence has not increased (Brock, 2010). Lower than expected retention rates of college students remain a perennial problem in higher education. Chen (2011) discovered that students who are involved in both the social and academic experiences at the university are successful. The first year of college continues to be a high-risk time for students to drop out (Chen, 2011). This study examined perceptions of nursing students in two local colleges-one with traditional and one with nontraditional curriculum and operations. A previously developed survey, SPA-R2 was administered to identify which of the five factors measured (i.e. personal academic factors, environmental factors, institutional interaction and integration factors, college facilities factors, and friend support factors) were the primary indicators of possible retention behavior and if the scores for those subscales were different for students who stayed and those who dropped out of the program after one semester.

Literature Review Search Strategies

The literature review was completed using multiple research databases. The following databases were used: Academic Search Complete, eBook Collection, Education Research Complete, Education Resources Information Center, Nursing & Allied Health, PsycInfo, PsycArticles, and the Networked Digital Library of Theses and Dissertations (NDLTD). The following words were used to search: *nursing retention, academic success, ADN, integration, perception of nursing students, nursing student retention, attrition in nursing students, student nurse, persistence, and retention in community colleges.*

Theoretical Framework

The conceptual framework for my study focused on both Tinto's student integration model and the nursing undergraduate retention and success model. Tinto (1998) discussed student retention before the 1970s and identified students who dropped out or failed out of college as having poor academic skills or lack of motivation. As research and examination of retention evolved, the role of the environment or institutional culture began to be considered as affecting student decisions to remain in college or leave. Tinto's Student Integration Model (SIM) is familiar with research studies in higher education and student attrition. Tinto's research focused on the importance of how the integration of students academically and socially led to student success (Tinto, 2005).

According to Jeffreys (2004), nursing undergraduate retention and success (NURS) model is a framework, which examines factors that impact undergraduate student nurse retention. The NURS model focuses on student success rather than student attrition. The goal of this model is to promote nursing school retention and success (Jeffreys, 2004). This retention model was developed with the following eight components: characteristics of students, student affective factors, academic factors, environmental factors, professional integration factors, academic outcomes, psychological outcomes, and outside surrounding factors (Jeffreys, 2004). These components from the NURS model were addressed using assessment tools and questionnaires that are included in a toolkit (Jeffreys, 2004). The NURS model has been applied to traditional and nontraditional undergraduate nursing students.

Retention in Nursing

Urwin (2010) concluded that student nurses differ from university students by background, method of study, program requirements, longer academic calendar, and grade requirements to be successful in their program. For this research study, the NURS model is unique to nontraditional nursing student retention rather than attrition.

Williams (2010) discussed the importance of increasing the retention of nursing students to meet the threat of the ongoing nursing shortage. In her study, four themes identified as affecting persistence among nursing students during the interviews: keeping up, not giving up, doing it, and connecting. Time management was an important concept in the theme “keeping up.” Self-determination and focusing on a vision would prevent students from giving up on school. The third theme “doing it” is consistent with the act of being persistent. The last idea involved students connecting with others for support, including peers, family, and friends (Williams, 2010).

Nursing student attrition has become a major concern in the United States, United Kingdom, and Europe. Prymachuk, Easton, & Littlewood (2008) identified a retrospective cohort study conducted in 2007 concluded that older students were more likely to finish the nursing program as compared to younger students. The results of the study recommended that institutions target mature applicants, and increase the qualifications to enter the program to increase retention rates. Student support and the flexibility of the program were both identified for institutions to review regarding the retention of students (Prymachuk, Easton, & Littlewood, 2008).

Mulholland, Anionwu, Atkins, Tappen, and Franks (2008) considered the relationship between diversity factors, progression, and attrition of nursing students. The data from this longitudinal cohort study, collected from 2003-2005, revealed that both males and younger students had a decreased chance of completing the program compared to women. There was no significant difference between students born in the United Kingdom and students born overseas in non-English speaking countries.

Shelton (2003) supervised a study to explore the relationship between nursing students' anticipated faculty support and student retention. The results of the study asserted that students who perceived greater faculty support were more likely to continue in the nursing program than those students who withdrew intentionally or left due to academic issues. Shelton (2003) discussed the importance of faculty providing a caring atmosphere with students. The mentoring relationship and assistance from faculty can facilitate student learning.

Fowler and Norrie (2009) identified eight significant predictors to aid in identifying students at risk of not finishing nursing school. The positive predictors include a commitment to nursing, students' understanding of course load from admission process, excellent preparation skills from the previous college experience, and assistance with travel costs. The four negative predictors include students overwhelmed with the volume of work, financial hardships, uninformed students about the expectations of nursing careers and increased responsibilities at home. An attrition risk prediction tool was developed based on the findings of this study, which can be used to identify students at risk.

Baker (2010) conducted a study to investigate the effectiveness of retention strategies used by nursing programs specifically for minority nurses. The strategy that was noted to be highly effective was the direct interaction between faculty and student. The study identified that faculty availability, timely feedback on tests and clinical performance were used as indicators for retention.

Popkess and McDaniel (2011) identified a need to study student engagement and educational best practices among college students in nursing education. The National Survey of Student Engagement (NSSE), is a self-reporting survey that measured level of academic challenge, student interactions with faculty, supportiveness of college environment, participation in active and collaborative learning, and enriching educational experiences. The results of the survey revealed that first-year students were less engaged in their related academic activities than the senior nursing students. Popkess and McDaniel (2011) confirmed that further research should be conducted into what nursing students perceive as hurdles to their learning.

Karp, Hughes, and O’Gara (2010-2011) discussed the use of Tinto’s framework for an exploratory study in two urban community colleges in the Northeast. Tinto’s integration model has been the foundational research for students that leave college. The Tinto model identified that student integration is a major factor in college student retention. The purpose of this study was to examine the way that first-year college students engage with their institutions. The results of the study showed that the majority of them do develop some attachment to the organization, which is positively related to their persistence into their second year of college. Karp et al. (2010-2011) discussed that

in contrast with many studies that used Tinto's framework, both academic and social integration are necessary for a college student's success.

Jeffreys (2007) identified that the attrition of nursing students is an extensive problem globally and has become more complicated due to the increase in nontraditional students entering nursing programs. Jeffreys (2007) discussed that these nontraditional students often enroll in school part-time, which may lead to attending school longer before graduating, or not completing the program. Jeffreys (2007) defined the nontraditional nursing student as a student who meets at least one of the following criteria: age 25 years or older, a commuter, enrolled part time, a male, a member of an ethnic or racial minority group, speaks English as a second language, has dependent children, has a general equivalency diploma (GED), or requires remedial classes.

Hopkins (2008) explored an early identification model to support identifying the at-risk students as they entered associate degree nursing programs. The student identified as at-risk would be able to utilize existing support services to be successful in the fundamentals course. Examples of support services include peer tutoring, review sessions, study skills workshops, and academic or personal counseling. Hopkins (2008) concluded that colleges should assume greater responsibility for identifying students at-risk, monitoring students' progress, and providing interventions to help the students achieve their educational goals.

Robinson and Niemer (2010) discussed the benefit of having at-risk nursing students supported by their peers. This study involved a peer-mentoring program that improved academic performance among nursing students. The activities that occurred in

the mentoring program were valuable for the students to foster their professional behaviors and attitudes. The results of the study revealed an increase in the nursing student's summative and final grades.

George, Stansal, Gelb, and Pheri (2008) used three success measures in a research study at a private university in Canada. The three steps were grade point average, personal success, and overall total success. The results of the study identified that time management was the greater predictor of grade point average among students. The predictor of personal success was defined goals, and the predictor of total success was time management and defined personal goals.

Hadenfeldt (2012) discussed a retrospective study that researched the use of an intervention plan in an associate degree nursing (ADN) program concerning retention. The intervention plan was used for students in the practical nursing program and associate degree nursing programs. The results in the ADN program showed a 6% decrease in involuntary withdrawal due to academic reasons with an intervention plan. The use of an intervention plan allowed 86% of the ADN students to complete the program.

Cameron, Roxburgh, Taylor, & Lauder (2011) identified some student characteristics and strategies used in research studies that affect retention of nursing and midwifery students in programs. The integrative literature review revealed two broad themes: program and personal. The program theme was broken into two subthemes: profession and support. Cameron et al. (2011) identified students who remained in the program as being able to internalize their nursing experiences. The importance of

academic support was a common theme enabling the student to finish the program. The personal theme was divided into two subthemes: student characteristics and family. Cameron et al. (2011) identified personal characteristics successful students utilized in nursing programs as higher self-efficacy beliefs, higher academic qualifications, and students from English speaking countries. Family support was noted to be a major factor enabling students to continue in the program (Cameron et al., 2011).

Rankin, Katsinas, & Hardy (2010-2011) discussed a study from a national sample of community college chief executive officers and chief academic officers regarding barriers facing institutions and students. The organizations need to change the ways that they look at traditional theories and methods of retention as the student population becomes more diverse. The nontraditional college student attending community college may have vastly different needs than that of a student present at a 4-year institution. Child care, transportation, and funding for college were identified as recurrent themes in the discussion of community college retention.

Rogers (2010) verified that many published studies have pointed to different factors that lead to student success, and some contradict previous studies. Rogers (2010) interviewed three faculty members and six senior nursing students in an ADN program. Three common themes were identified: student characteristics/skill sets, teamwork, and nursing curriculum. Some examples of student qualities were academic abilities, personal well-being, critical thinking, and healthcare experience. Faculty involvement and support for students were factors involving collaboration with others. An example of the nursing curriculum included the use of innovative teaching strategies and practice tests. The

interviews revealed that student success was due to a combination of factors, not just one element guarantees success.

Oseguera and Rhee, (2009) identified that researchers have found that students possessing the following characteristics were less likely to continue in college: lacking academic skills, socially disadvantaged, and lacking support or resources. Issues that often arise with job responsibilities, family responsibilities and course workload can lead to students dropping out of college. Often adult learners are working full time and attending school full time while trying to manage a household.

The literature revealed that many studies examined factors that influence student retention. One of the common themes identified was the lack of support for students. The lack of academic support from faculty, family, and peers were all identified as important impediments to the retention of students (Baker, 2010; Cameron et al., 2011; Hopkins, 2008; Oseguera & Rhee, 2009; Prymachuk et al., 2008; Robinson & Neimer, 2010; Shelton, 2003; Urwin et al., 2010). Students' lack of effective time management skills was also identified a key deterrent to student success (Fowler & Norrie, 2009; George et al., 2008; Williams, 2010). Rogers (2010) asserted that student success is dependent on a combination of several skills and factors. No one skill or personal attribute guarantees student success.

I believe that conducting the survey will identify factors that student perceive as leading to their success. Popkess and McDaniel (2011) confirmed that further research should include what nursing students perceive as obstacles to their learning. Once barriers that impede student retention or attributes that lead to success are identified,

nursing programs can develop meaningful and constructive interventions to improve the overall success of their enrolled students.

Definitions

The following terms are defined to clarify the research question and details of the study.

Attrition: is identified as a student not continuing in the nursing program (Jeffreys, 2007).

First-semester attrition: refers to attrition from students failing a first nursing course and they do not reapply for readmission or reapply and are not readmitted to program (Jeffreys, 2007).

Involuntary attrition is considered when a student no longer attends classes due to academic reasons (Jeffreys, 2007).

Program retention is identified as interminable enrollment in a program, even if classes are being redone due to a failure or withdrawal (Jeffreys, 2007).

Student success refers to a student completing the first semester of the nursing program and returning to the second semester of the program.

Voluntary attrition is when a student's drops out for reasons not related to academics, but may be for personal reasons (Jeffreys, 2007).

Significance

This study may improve first to second semester retention rates for first-year nursing students enrolled at two-year colleges. By learning what factors either contribute to student success or lead to student attrition, this study will enable me to devise

strategies to improve student success in their first year of the nursing program. This study and subsequent retention programs will improve graduation rates at the college's and meet their long-term graduation goals. I also believe my findings from this study may be beneficial to other nursing programs by identifying specific strategies to improve the retention of first-year nursing students.

The expected outcome from higher graduation rates could lead to more nurses available in the workforce. According to the United States Department of Education (2011), individuals with college degrees will have increased opportunities for employment and higher career earnings than individuals that do not have college degrees. The student that graduates from college generates more tax revenue for the local, state, and federal government than a graduate from high school. It is critical to the economics of the nation to increase the number of college graduates over the next 10 years (United States Department of Education, 2011). More specifically, students who complete nursing programs can become registered nurses after passing the state board licensure exam. The cost of a student not completing the program affects the student, the college, and the community. Mullholland et al. (2008) noted that high attrition in nursing schools increase the cost of college as the resources are utilized on preparing students who are not successful. The results of this study may positively affect the overall learning environment in associate degree nursing programs by leading to better classroom learning strategies, student engagement, pedagogies, and retention solutions.

Guiding/Research Question

Research on retention has occurred in both nursing and higher education. Most of the research focused on traditional students in 4-year baccalaureate programs, with a few studies in associate degree programs (Jeffreys, 2012). This study will utilize a survey administered to current nursing students during their first semester in the nursing program. The research question is:

What are the differences between students that persist and those who drop out before the end of the first semester or before the second semester in the nursing program at two selected associate degree colleges?

The null hypothesis: There is no difference in perception of the importance of factors that lead to retention between students who persisted and those who dropped out before the end of the first semester of the nursing program.

The alternative hypothesis: There are differences in perception of the importance of factors that lead to retention between students who persisted and those who dropped out before the end of the first semester of the nursing program.

Implications

This proposed project study will attempt to identify factors that support or inhibit a nursing student's success in the nursing program. Cameron et al., (2010) noted that there are no standard way institutions collect and analyze attrition data; research studies are needed to examine why students stay in the nursing program. A variety of factors influence the complex phenomenon of retention of college students. The literature identifies faculty support and self-determination to be important factors that lead to

student success. In this study, the SPA-R2 survey was used in two local colleges to identify the factors that students perceive as important to their completing the first semester in the nursing program. The survey contains 27 items grouped into five sub-categories that include Personal academic factors, Environmental factors, Institutional interaction and integration factors, College facilities factors, and Friend support factors. The personal academic factors include the following: personal study skills, personal study hours, class schedule, and academic performance. The following environmental factors include financial status, family financial support for the school, family emotional support, family responsibilities, financial aid/scholarship, child care arrangements, family crisis, hours of employment, living arrangements, employment responsibilities, and transportation arrangements. The institutional interaction and integration factors include faculty advisement and helpfulness, membership in nursing clubs or professional organizations, nursing professional events, nursing student peer mentoring and tutoring, and nursing student support services. The college facilities factors include the following: nursing skills laboratory, college computer laboratory services, college tutoring services, college library services, and college counseling services. The friend support factors include the following: encouragement by outside friends, and encouragement by friends within classes. After analyzing the data from the survey, the factors identified as supporting the student success in the nursing program may be used to enhance the curriculum and my proposed retention program. As part of the study, revisions to the curriculum may be suggested to meet students' needs and increase graduation rates. My research may lead to an enhanced retention program and changes to the nursing program

curriculum. Typically, students that are unsuccessful in college end up with lower paying jobs and fewer opportunities than college graduates. The results of the survey can be used in a useful way so that other nursing programs can evaluate their curricula and identify some possible retention strategies.

The SPA-R2 survey was used by both schools to identify factors that students perceive as leading to their completing the first semester in the nursing program. Although Eastern and Western CC are 2 different schools, their academic issues and challenges are similar. One challenge that is similar is the retention rate of students. Western CC had 53 % retention rate and Eastern College had a 60 % retention rate in 2014-2015. The local study sites were selected to represent two different types of nursing programs. The sites represent a sample of convenience because of prior relationships with the schools (i.e., my previous employment as a faculty member). The SPA-R2 survey could be used by other researchers at colleges to identify the factors that students perceive as leading to their completing the first semester in the nursing program. A governing body accredits both colleges, and all the students graduate with an Associate in Applied Science (A.A.S) in Nursing upon graduation. The demographic data will be reviewed at the time of analysis and differences addressed at the date of review.

Summary

The issue of retention is not a new problem in higher education. Most of the research focuses on why students leave college, and few research studies focus on why students stay. This research project will concentrate on identifying what factors help nursing students to complete their first semester in the nursing program. Two-year

colleges are the means of entry into higher education for many students; finding out why some students succeed and others fail will eventually lead to more college graduates.

Section 2: The Methodology

Introduction

According to Jeffreys (2004), the Nursing Undergraduate Retention and Success (NURS) model explored factors that impact undergraduate student nurse retention.

Jeffreys (2007) defined student success as passing a nursing course. Attrition refers to students not continuing in the program (Jeffreys, 2007). The goal of this model is to promote nursing school retention, and the model proposes that a variety of items affect student retention. Some of these identified items are student profiles, affective factors, academic and environmental factors, professional integration factors, psychological and academic outcomes, and outside surrounding factors (Jeffreys, 2004). The NURS model applies to traditional and nontraditional undergraduate nursing students. Jeffreys (2007) concluded that professional integration factors are at the center of the NURS model, and are considered the crossroads for students' decisions whether to persist or drop out.

According to Jeffreys (2007), the NURS model was established on previous research studies of nontraditional nursing students and a review of the literature.

The use of the Student Perception Appraisal-Revised 2 (SPA-R2) tool for this research project was intended to identify factors that students perceive lead them to the pathway of success. The SPA-R2 (27 items) was derived from the Student Perception Appraisal (SPA-R) tool and is related to the NURS model as discussed above. I obtained permission to use the instrument from the author and paid a fee for a license that is good for a year. The SPA-R is a short questionnaire (22 items) used to determine how participants perceived the identified factors contributed to being successful in the nursing

course. The SPA-R2 contained all the 22 items that the SPA-R contained and the five additional items related to -nursing skills laboratory, nursing student peer mentoring/tutoring, living arrangements, nursing professional events, and membership in nursing clubs or organizations. Jeffreys (2007) developed the questionnaire after conducting a literature review and was unable to find an instrument to measure students' perceptions of factors that lead to their success. The SPA-R was then revised into SPA-1 (pretest) and SPA-2 (posttest) to determine how the participants felt about the factors that affected their performance at the beginning of the semester and the end of the semester. The SPA-2 can be used alone or with SPA-1 as described above (Jeffreys, 2007). I used the SPA-R2 only to identify factors that students perceived as leading to their success in passing their nursing course. Kern (2014) utilized the SPA-R2 survey in a non-experimental descriptive study with nursing students. This study was similar to Jeffreys' (2007) except the sample consisted of student nurses in a baccalaureate program instead of associate degree nursing students, and the sample was from only one educational setting.

Research Design and Approach

I employed a quantitative research study to identify if students' responses to the SPA-R2 are positively linked to their success in an entry-level nursing course. Cross-sectional survey research is often used in education as it can determine trends, beliefs, and characteristics of the population (Creswell, 2012). In cross-sectional research, the researcher collects data at one point in time unlike longitudinal studies, which is collected over a period. The demographic characteristics of the selected population were obtained

prior to administering the survey included: age, gender, grade point average, educational background, heritage, marital status, children, the number of hours employed, and current course load. A comparative cross-sectional survey design was administered to identify the students' opinions of what factors led to their success in the first semester. I administered the SPA-R2 during week 10 of the semester after students have had an opportunity to be integrated into their first nursing course. The survey was conducted during week 10 out of 15 weeks for Eastern College and week 10 out of 16 weeks for Western CC so that the study could be completed before the end of the semester when the student population remained intact and most students would continue in the first semester course. The survey was administered at two associate degree colleges to enhance the size of overall population for the study. The survey design was relevant because the goal for this study was to identify which factors are predictors of student retention. The data analysis will include the use of independent sample t tests to determine whether there was statistically significant difference between the means of the group of students who persisted and the group of students who dropped out of the program.

The primary research question was: What are the differences in perceptions of importance of factors that led to retention between students who persisted and those who dropped out before the end of the first-semester or before the second-semester in the nursing program?

The mean scores of the sum of responses on the five subsets of factors were calculated and compared across students who persisted and completed their first semester

and enrolled in their second semester course and students who dropped out before the end of the first semester and or did not enroll in the second semester of their nursing program.

Setting and Sample

The sample for the research study included nursing students enrolled in associate degree nursing programs and included students in their first semester of the nursing program at Eastern Community College and Western Community College. These two nursing programs are in upstate New York and were discussed previously. I used convenience sampling as the first-year students were already in a determined group. Creswell (2012) revealed that convenience samples can be suitable for a researcher. The overall sample size for Eastern College started with 60 students and Western CC started with 80 students.

Creswell (2012) discussed that low generalizability is recognized as a limitation to convenience sampling. The larger the sample in a quantitative study, the smaller chance for sampling error to occur and the more representative of the population (Polit, 2004). The eligibility criteria for participating in the study consisted of nursing students in their first semester of the nursing program. The background characteristics of the selected population were analyzed after the survey questionnaires were all completed and displayed in Table 1.

Table 1

Total Sample Demographics Characteristics

| Category | | Frequency | Percent |
|---|--------------------------------|-----------|---------|
| Ethnicity (<i>N</i> =111) | American Indian/Alaskan Native | 1 | 0.9 |
| | Black or African American | 9 | 8 |
| | Hispanic or Latino | 3 | 2.7 |
| | White | 95 | 84.8 |
| | Multiracial | 1 | 0.9 |
| | Other | 2 | 1.8 |
| Sex (<i>N</i> =111) | Female | 101 | 90.2 |
| | Male | 10 | 8.9 |
| Age (<i>N</i> =112) | Under 25 | 35 | 31.3 |
| | 25 to 29 | 26 | 23.2 |
| | 30 to 34 | 23 | 20.5 |
| | 35 to 39 | 10 | 8.9 |
| | 40 to 44 | 10 | 8.9 |
| | 45 to 49 | 4 | 3.6 |
| | 50 to 59 | 3 | 2.7 |
| | 60 and over | 1 | 0.9 |
| Marital Status (<i>N</i> =112) | Single | 53 | 47.3 |
| | Single/partner | 14 | 12.5 |
| | Married | 34 | 30.4 |
| | Divorced/Separated | 11 | 9.8 |
| Dependent Children at Home (<i>N</i> =112) | None | 56 | 50 |
| | 1 | 24 | 21.4 |
| | 2 | 19 | 17 |
| | 3 | 9 | 8 |
| | 4 | 1 | 0.9 |
| | 5 or more | 3 | 2.7 |
| Employment Hours (<i>N</i> =112) | None | 14 | 12.5 |
| | 1 to 10 | 10 | 8.9 |
| | 11 to 20 | 25 | 22.3 |
| | 21 to 30 | 27 | 24.1 |
| | 31 to 40 | 31 | 27.7 |
| | Over 40 | 5 | 4.5 |

| | | | |
|---------------------------|----------|----|------|
| GPA this Semester (N=111) | 90-100 | 12 | 10.7 |
| | 85-89 | 30 | 26.8 |
| | 80-84 | 26 | 23.2 |
| | 75-79 | 17 | 15.2 |
| | 70-74 | 15 | 13.4 |
| | Below 70 | 11 | 9.8 |

The sample consisted of 112 students whose ages ranged from 18 years old to 60 and older. Seventy-five percent of the sample ranged from 18-34 years old. Females were the majority of the gender from the sample, identifying at 90.2% of the sample. The ethnic background of the sample identified as 84.8% white. Both cohorts of first-time nursing students were very similar in their demographic backgrounds and were comparable in age, ethnicity, and gender as seen in Table 2 below. For this study, I made every effort to ensure that the findings after administering SPA-R2 were due to the students' experiences during their first semester in the nursing program and not due to variability of their backgrounds.

Instrumentation and Materials

The survey tool used in this study was the Student Perception Appraisal-Revised (SPA-R2). It is a 27-item questionnaire that addresses students' perception of how restrictive or supportive a select group of factors were to influence their ability to complete the nursing course. The factors included are: personal academic, environmental, institutional integration, college facilities, and friend support (Jeffreys, 2012). The questionnaire contains a Likert scale which includes the following replies: 1 (did not apply), 2 (severely restricted), 3 (moderately restricted), 4 (did not restrict or support), 5(moderately supported), and 6 (greatly supported).

The 27 questions of the survey were grouped into the following five categories: personal academic factors, environmental factors, institutional interaction and integration factors, college facilities factors, and friend support factors. The personal academic

Table 2

Demographic Comparison for Western CC and Eastern CC

| Category | <u>Western CC</u> Frequency | Percent | <u>Eastern CC</u> Frequency | Percent |
|---------------------------|--------------------------------|---------|--------------------------------|---------|
| Ethnicity (N=111) | N=60 | | N=51 | |
| American Indian/Alaskan | 1 | 1.67 | 0 | 0 |
| Black or African American | 1 | 1.67 | 8 | 15.69 |
| Hispanic or Latino | 0 | 0 | 3 | 5.88 |
| White | 58 | 96.66 | 37 | 72.55 |
| Multiracial | 0 | 0 | 1 | 1.96 |
| Other | 0 | 0 | 2 | 3.92 |
| Gender (N=111) | N=60 | | N=51 | |
| Female | 55 | 91.67 | 46 | 90.20 |
| Male | 5 | 8.33 | 5 | 9.80 |
| Age (N=112) | N=61 | | N=51 | |
| Under 25 | 21 | 4.43 | 14 | 27.45 |
| 25-29 | 11 | 18.03 | 15 | 29.41 |
| 30-34 | 11 | 18.03 | 12 | 23.53 |
| 35-39 | 5 | 8.19 | 5 | 9.81 |
| 40-44 | 7 | 11.48 | 3 | 5.88 |
| 45-49 | 3 | 4.92 | 1 | 1.96 |
| 50-59 | 3 | 4.92 | 0 | 0 |
| 60 and over | 0 | 0 | 1 | 1.96 |

factors that were investigated included the following: personal study skills, personal study hours, class schedule, and academic performance. The following environmental factors that were investigated were financial status, family financial support for school, family emotional support, family responsibilities, financial aid/scholarship, child care arrangements, family crisis, hours of employment, living arrangements, employment responsibilities, and transportation arrangements. The institutional interaction and integration factors included faculty advisement and helpfulness, membership in nursing

clubs or professional organizations, nursing professional events, nursing student peer mentoring and tutoring, and nursing student support services. The college facilities factors included the following: nursing skills laboratory, college computer laboratory services, college tutoring services, college library services, and college counseling services. The friend support factors investigated included encouragement by outside friends and encouragement by friends within classes.

Jeffreys (2007) developed the original SPA instrument which contained 22 items. This SPA instrument revised into SPA-1 pretest and SPA-2 posttest. The reliability of the SPA-2 was noted to be .89. The content validity for SPA-R was determined by two experts, with doctoral degrees, who had experience with nontraditional students, academic support and student retention in associate degree programs. Jeffreys (2007) revised the SPA-2 and added five items. The additional items created the 27-item SPA-R2. The Cronbach alpha for internal consistency was .82 for the SPA-R2 (Jeffreys, 2007).

Kern (2014) conducted a descriptive comparison study design at a private university in the Midwest. The SPA-R was administered to senior and junior nursing students to measure the difference between the factors within these groups. The student population was RN's that were going back to school to pursue their BSN. Kern (2014) discovered from the survey that the support from family and friends was most supportive of the students and environmental factors were the least supportive of the students. The SPA-R2 27 item scale was evaluated for reliability and internal consistency and was calculated to be an overall Cronbach's alpha of 0.77 (Kern, 2014). The five subsets were

noted to have Cronbach's alpha ranging from 0.35-0.61. This low level of alpha revealed a poor correlation with other components on the scale, and limitations were observed on the confidence of the results (Kern, 2014).

As mentioned earlier, research has revealed that the first semester of nursing school is when the largest number of students are unsuccessful (Jeffreys, 1998). I chose week 10 so that I could survey students before they left at the end of the semester. After the nursing class finished, the paper survey was handed out. Each survey included a demographic section for the participants to answer prior to the survey, which included: age, gender, grade point average, education background, heritage, marital status, children, the number of hours employed, and current course load. This data will be available in a table within this report.

There are advantages and disadvantages to the survey method of research. Creswell (2012) identified that a web-based survey is a quick and economical way to collect data. However, a web-based survey may have a low response rate and the information from the survey is self-reported (Creswell, 2012). The participants may also be influenced by lack of time, mood, timeliness of survey, and whether they feel the survey is important to them. Permission to use this instrument can be found in Appendix B and a copy of the demographic section can be viewed in Appendix C.

Data Collection and Analysis

After obtaining Institutional Review Board approval, I conducted my study using the pre-established SPA-R2 with students enrolled in their first semester of their nursing program. (Walden University approval no.11-11-14-0227535) Creswell (2012) discusses

that after obtaining the data, the next step is to prepare the data for analysis, then select a computer program, and input the data into a software program. The SPSS computer program was utilized to analyze the data from the survey. The first step in analyzing data is preparing and organizing the data, which may involve coding or assigning numeric values to the data. The hypothesis is tested using statistical analysis and calculating the p value. Creswell (2012) identified that descriptive statistics enable researchers to summarize and synthesize quantitative data. These statistics are used to describe aspects of the population like general tendencies of the data, and measures of variability. The independent two tailed t tests compared scores between those students that persisted through the first semester into the second semester and those who either left prematurely during their first semester or did not reenroll for the second semester between Western CC and Eastern College. The purpose of the survey was reviewed with the participant, and they were asked to read the letter of informed consent. The participants were advised that their participation in the survey was confidential and voluntary. Participants were instructed to take a survey as they were leaving class and return the survey in an enclosed envelope. A locked box was left in the student laboratory area for one week for participants to leave their anonymous survey.

Data Analysis

The primary research question was: What are the differences in perceptions of importance of factors that led to retention between students who persisted and those who dropped out before the end of the first-semester or before the second-semester in the nursing program?

Data were analyzed using SPSS and included descriptive and inferential statistics.

Descriptive statistics are summarized in Table 3 to show the mean of the five subsets of factors compared to students who were successful in their first semester and for students who were not successful in the nursing program.

Table 3

Mean of Subsets for Student Groups (N=112)

| Subset | Student group | Mean | Standard deviation | N |
|--------|---------------|------|--------------------|----|
| PA | Unsuccessful | 4.60 | .90 | 20 |
| | Successful | 4.58 | .95 | 92 |
| ENV | Unsuccessful | 3.61 | .79 | 20 |
| | Successful | 3.66 | .86 | 92 |
| INST | Unsuccessful | 3.57 | .98 | 20 |
| | Successful | 3.42 | 1.05 | 92 |
| CF | Unsuccessful | 3.84 | .87 | 20 |
| | Successful | 3.79 | .98 | 92 |
| FS | Unsuccessful | 5.50 | .85 | 20 |
| | Successful | 5.06 | 1.17 | 92 |

Note: PA=Personal Academic; ENV=Environmental;
 INST= Institutional; CF=College Facilities; FS=Friend Support.
 Successful=Student persisted to second semester.
 Unsuccessful= Student that did not persist to second semester

Inferential statistics displayed in Table 4 compares the results from *t* test with the 5 subsets from the survey.

Table 4

Comparison of successful and unsuccessful students with 5 subsets

| Subset | <i>t</i> | <i>df</i> | <i>p</i> | 95% Confidence Interval |
|--------|----------|-----------|----------|-------------------------------|
| FS | 1.57 | 110 | 0.12 | -0.11-0.98 |
| CF | 0.17 | 110 | 0.86 | -0.43-0.52 |
| INST | 0.55 | 110 | 0.58 | -0.37-0.65 |
| ENV | - 0.20 | 110 | 0.84 | -0.46-0.37 |
| PA | 0.04 | 110 | 0.96 | -0.45-0.47 |

Note: PA=Personal Academic; ENV=Environmental; INST= Institutional; CF=College Facilities; FS=Friend Support. SUCC= Successful student; UNSUC=unsuccessful student

The results of the independent samples *t* test revealed no significant difference in the mean for perceptions concerning friend support (FS) that impacts persistence in an associate degree colleges. The mean for successful students ($M=5.07$, $SD = 1.17$) and for unsuccessful students ($M =5.50$, $SD = .86$). There is no significant difference in the mean between the two groups $t(110) =1.57$, $p = 0.12$, 95% *CI* -0.11, 0.98, and the hypothesis was not rejected.

The results of the independent samples *t* test revealed no significant difference in the mean for perceptions concerning personal academics (PA) that impacts persistence in an associate degree colleges. The mean for successful students ($M=4.59$, $SD = .96$) and for unsuccessful students ($M =4.60$, $SD = .91$). There is no significant difference in the

mean between the two groups, $t(110) = 0.04$, $p = .0.96$, 95% CI -0.45, 0.47, and the hypothesis was not rejected.

The results of the independent samples t test revealed no significant difference in the mean for perceptions concerning environmental factors (ENV) that impact persistence in an associate degree colleges. The mean for successful students ($M = 3.66$, $SD = .86$) and for unsuccessful students ($M = 3.62$, $SD = .79$). There is no significant difference in the mean between the two groups, $t(110) = -0.02$, $p = 0.84$, 95% CI -0.46, 0.37, and the hypothesis was not rejected.

The results of the independent samples t test revealed no significant difference in the mean for perceptions concerning institutional support (INST) that impacts persistence in an associate degree colleges. The mean for successful students ($M = 3.43$, $SD = 1.05$) and for unsuccessful students ($M = 3.57$, $SD = .98$). There is no significant difference in the mean between the two groups, $t(110) = 0.55$, $p = 0.58$, 95% CI -0.37, 0.65, and the hypothesis was not rejected.

The results of the independent samples t test revealed no significant difference in the mean for perceptions concerning college facilities (CF) that impacts persistence in an associate degree colleges. The mean for successful students ($M = 3.80$, $SD = .99$) and for unsuccessful students ($M = 3.84$, $SD = .87$). There is no significant difference in the mean between the two groups, $t(110) = 0.17$, $p = 0.86$, 95% CI -0.43, 0.51, and the hypothesis was not rejected.

The primary research question was: What are the differences in perceptions of importance of factors that led to retention between students who persisted and those who

dropped out before the end of the first-semester or before the second-semester in the nursing program?

The null hypothesis: There is no difference in perception of the importance of factors that lead to retention between students who persisted and those who dropped out before the end of the first semester of the nursing program.

The alternative hypothesis: There are differences in perception of the importance of factors that lead to retention between students who persisted and those who dropped out before the end of the first semester of the nursing program

The null hypothesis was accepted as there were no statistically significant mean factor differences between students who persisted and those who dropped out. In summary, none of the means of the five factors were statistically significant between the two groups of students. There are numerous factors that affect student nurse success, and this survey tool did not identify any one factor.

Assumptions, Limitations, Scope and Delimitations

The first assumption for this study is that all participants answered all of the survey questions honestly and accurately. Another assumption is that all members used their self-perception when answering the survey regarding the restrictive and supportive factors. The participants of the study entered their first semester of the nursing program in fall (August) of 2015. The study was limited to two associate degree colleges programs in New York State, so results will not be generalizable to all associate-degree nursing programs. Western College is a private associate-degree nursing program that is based at a local hospital. Eastern CC is a community college that offers an associate-degree

nursing program. The focus was to investigate what factors will help improve retention at these two specific colleges. The sample for the study consisted of 140 students that are pursuing associate degrees in nursing. Another drawback of this study is that the use of convenience sampling restricts the generalizability and the size of the population. This study focused on two colleges and is limited in its generalizability to other nursing programs.

Protection of Participant's Rights

I received approval from both Western CC and Eastern universities institutional review boards and Walden IRB prior to administering the survey. All participants in the study received a letter of informed consent attached to the front of the survey that was read prior to their participation in the study. I also explained the survey to all participants. The student data was coded to protect the identity of the students and to maintain confidentiality. The identified person at Eastern College and Western CC reported which students persisted and did not persist and shared the information with me so that could complete the study. All the data is password protected in a spreadsheet that will be stored for 5 years and then it will be destroyed.

Conclusion

The purpose of this study was to identify factors that restrict and promote retention among college students enrolled in the associate degree nursing program at two colleges in New York State in first semester courses. The survey results did not show any statistically significant difference between the 5 subcategories: personal academic factors, environmental factors, institutional interaction and integration factors, college facilities

factors, and friend support factors. The survey did not identify factors that restrict or promote retention among the nursing students enrolled in the associate-degree programs. Student success is multifaceted and is dependent on multiple factors identified in the literature. I recommend putting together a summary of the findings from my survey to share with the Deans of the programs. I would suggest investigating other tools to further research retention among first semester nursing student in an associate degree program.

Section 3: The Project

Introduction

The purpose of this project study was to identify factors that support or inhibit the retention among college students enrolled in the nursing program at two selected associate degree colleges in New York State. The results of my research did not identify any statistically significant differences of student nurse perception about personal, academic factors, environmental factors, institutional interaction and integration factors, college facilities factors, and friend support factors. The project study that I propose will consist of a comprehensive report to present to the deans of the two-year colleges with my findings and how to address this complicated situation. There has been an increasing number of nontraditional students that attend nursing school, with other responsibilities and a variety of backgrounds and experiences. Nursing student success is a multidimensional problem. No one specific intervention in my study has been identified to lead to student nurse retention. I believe that a combination of faculty support and student motivation could lead to student retention.

Rationale

I have chosen to present my findings in a comprehensive report to the schools involved in my research. My research did not identify one issue using SPA-R2 survey instrument that related to retention of first semester nursing students. I have investigated additional research articles and resources that are more recent about the possible factors that could contribute to student progress in first year nursing programs. This comprehensive report will include the factors that the literature has identified.

Review of Literature

The literature review was completed using multiple research databases. The following databases were used: Academic Search Complete, eBook Collection, Education Research Complete, Education Resources Information Center, Nursing & Allied Health, PsycInfo, PsycArticles, and the Networked Digital Library of Theses and Dissertations (NDLTD). The following words were used to search: *nursing retention, academic success, ADN, integration, perception of nursing students, nursing student retention, attrition in nursing students, student nurse, persistence, and retention in community colleges*. As I reviewed the recent literature, there were a few common themes that I identified relating to nursing school success: early intervention programs or supplemental instruction, faculty support/mentoring, and student motivation.

Early Intervention

The early intervention programs or supplemental instruction discussed in the research varied in content among the research. Dapremont (2014) emphasized the value of daily study routine, engaging in varied study groups, reading the material and reviewing the material by making note cards as part of program content. Merkley (2016) identified that introducing study modules on test taking skills early in the program could improve student success.

Fontaine (2014) discussed that adding an early intervention program for nursing students can improve retention, but none of the specific interventions used in her research were identified to correlate with the retention of students. The identification of at-risk students at the time of entrance to the nursing program could help improve retention at a

higher rate (Fontaine, 2014). Learning styles identified by using the VARK Questionnaire may help nursing student identify early in the program how they should study and how they can be successful in nursing school (Marek, 2013) The VARK Questionnaire should be given to students early in the program so that they have time to modify their study skills.

Harding (2012) suggested there is little evidence that targeting at-risk students with specific remediation programs lead to academic success. Harding (2012) proposed that having the student participate in a 1-hour supplemental instruction course would result in academic success. This additional instruction consisted of critical thinking activities that help students to apply the nursing process and facilitate critical thinking in the students. This Application to Nursing Concept course was elective and was accessible to all students registered for the foundation nursing course. This course included activities designed to stimulate critical thinking in student nurses.

Faculty Support

Raman (2013) asserted that a major motivational factor for nursing student academic success was faculty support. In this study, students reported a variety of support from faculty members. Nursing is a caring profession and faculty should display a caring attitude toward nursing students to promote their success (McEnroe-Petite, 2011). Faculty can facilitate caring while educating students about nursing. This caring can help retain students in the program and lead to their success. McEnroe-Petite (2011) explained that faculty needs to get to know the students and they will be able to identify the weak or at-risk students. The faculty can portray caring in different ways such as

through mentoring, instilling self-confidence and building a trusting, respectful relationship between faculty and nursing student (McEnroe-Petitte, 2011).

Student dissatisfaction with a nursing program and clinical environment may contribute to students leaving the program (Decker and Shellenbarger, 2012). Creating a healthy environment or clinical setting could lead to a successful student nurse. The healthy environment starts with effective communication between the faculty member and student. As students perform in a clinical setting, they can be intimidated by staff nurses as they fear asking questions will make them look unintelligent. Both the staff nurse and faculty member must provide a supportive environment so that the students can learn. The communication between the staff nurse and faculty member is necessary for the staff nurse to know the level of competence and degree of independence of the students on the unit. A hostile environment could result in a student dissatisfaction and the student leaving the program. Decker and Shellenbarger (2012) identified that students see themselves as possessing no professional value as a student nurse. Students have observed behaviors from staff members while in the clinical setting that is unprofessional. Some of the behaviors include the following: blaming, gossip, sarcasm, eye rolling, refusal to work with an individual, exclusion of staff, and intimidation. These examples of the unhealthy environment can be reduced if all parties involved have a clear expectation and understanding of their responsibilities. The collaboration between the unit manager, clinical staff, and faculty member is vital to the success of the clinical experience for all involved.

Seago, Keane, Chen, Spetz, and Grumnach (2012) reported that besides preceding academic achievement, as measured by pre-nursing and science GPA, the nursing school environment is a positive indicator of graduation achievement. The environment of the educational institution includes funding for academic support at the college, which would point to successful graduates. Beauvais, Stewart, DeNisco, and Beauvais (2014) explored in a correlational research study that emotional intelligence, empowerment, flexibility, and spiritual well-being may play a major role in persistence in nursing school. The relationship between faculty and students should focus on an active and empowering relationship.

Shelton (2012) discussed that nursing students are older and less prepared than students enrolled in the past. These nontraditional students have more family and employment responsibilities that can hinder their success. Students that are struggling need faculty support to be successful. The students that are motivated may seek the faculty support on their own. Faculty needs to approach students and offer encouragement and help to provide the necessary support.

Schrum (2015) explored utilizing a retention specialist to endorse academic factors that lead to retention of nursing students. This retention specialist is a full-time faculty member whose focus is retention and remediation. The students may be required to attend additional classes for remediation or tutoring. This mentoring relationship with faculty can lead to student success, as it is different than evaluating students based on grades. This relationship is collaborative and faculty help to develop professional behaviors and attitudes among these students.

Dapremont (2011) concluded that it takes a community to shape a nurse. Nurse educators can be confident role models for students, especially when they are struggling to be successful. Students validated faculty support as important to their success. The diverse cultures within nursing schools can sometimes be overwhelming and educator's participation in cultural awareness workshops could benefit both the student and the professor. Abele, Penprase, and Ternes (2013) explored nursing students on academic probation. The study revealed that schools need to offer to tutor and to mentor to provide support to these students to facilitate student success. Crombie, Brindley, Harris, Marks-Maran, and Thompson (2013) identified the mentors and clinical placements as having the greatest influence on nursing students staying in the program. The clinical support and the clinical experience has been designated as the most important factor contributing to retention. Leducq, Walsh, Hensliff-Smith and McGarry (2012) found that the experience of the first clinical placement for students in a nursing program was identified as contributing to the decision to leave. The clinical instructor should support this experience as the transition to nursing practice can be overwhelming to some student.

Chen and Lo (2015) found that nursing student satisfaction in an ADN program was predicted by the following: nursing faculty, the nursing curriculum, environment and social interactions. In higher education, student gratification has been a marker of student success (Chen and Lo, 2015). Nursing faculty is the essential element found in this study. Student satisfaction is important to consider when decisions are being made about curriculum changes and evaluating the effectiveness of the program outcomes.

Wray, Aspland and Barrett (2014) established that over half of the students in a nursing program have considered leaving the program at one point during the program. The decision not to complete the nursing program is not just limited to the high risk or at risk students. Wray et al. (2014) explained that some attrition is necessary to ensure high quality, motivated nurses introduced into the profession. Faculty, family or peer support have been identified as factors that contribute to a student's choice to stay in the academic setting. The other factor identified was the determination from the student to be successful in nursing school, which can be referred to a student motivation.

Murray (2015) reviewed that academic support, mentoring and integration have been identified as promoting success. The students who were supported by faculty and faculty provided mentoring were more inclined to be successful in the curriculum. Murray (2015) identified that nursing faculty needs to provide opportunities to increase student's confidence and a sense of belonging to the college.

Several researchers concentrated on the value of mentoring as an effective support structure to lead to student nurse success (Peltz and Raymond, 2015). The mentoring relationship can be either formal or informal. The identified person that is the mentor could be a faculty member, family member, or a friend. Peltz & Raymond (2015) reviewed that there is a growing field of research focused on mentoring programs having an increase in student retention.

Student Motivation

In Rose's research (2011) nursing students with high levels of motivation who are in engaging learning settings have higher levels of academic success. Many factors

motivate a student to attend a nursing program, complete the program and pursue their intention to be a nurse. Nurse educators will need to determine the motivational factors and facilitate the factors to lead to positive student outcomes. McKendry, Wright, & Stevenson (2014) explored the need for schools to nurture a sense of association to nursing school and profession of nursing to student nurses. Students need to be made aware of the expectations of the program in the beginning, and this new explanation could lead to a positive learning experience.

Khalaila (2015) believed that the more confident a student feels about his/her abilities, the higher the student will achieve. Students who view themselves as academically competent achieve higher grades and perform better overall. Khalaila (2015) concluded that students possessing higher levels of intrinsic motivation are more inclined to succeed in nursing programs. Students will achieve higher grades if they are motivated to do the academic work involved to be successful. Faculty need to provide emotional and educational support to encourage a positive self-concept for students (Khalaila, 2015).

Jeffreys (2014) discussed that nursing student retention is a multidimensional problem and educators should shift the focus on enrichment and optimization from remediation. She proposes that a student must meet minimal requirements to be successful in a nursing program. In order for educators to prepare nurses to meet the future demands of the profession, the students must be creative and innovative. As teachers, we need to motivate learners to discover themselves and optimize outcomes. Every nurse educator knows that the essence of nursing is caring, so caring, in an

educational role should be displayed by nurse educators. This caring or helpfulness leads to the motivation of students which in turn can lead to the completion of the program.

Harris, Rosenberg, and O'Rourke (2014) concluded that interventions for student nurse retention should be a multidimensional approach. Their strategies focused on early intervention, not waiting until a student arrives in the program as it may not allow enough time to implement the strategies. This complex problem of retention will help to address the nursing workforce challenges. These problems include the increase in the aging population and growing number of nurses near retirement age. The Affordable Care Act has implications on the nursing workforce, as it mandates all US Citizens access to health care. With more people having access to healthcare, the need for more health professionals will increase, thus increasing the demand for nurses.

The most recent professional literature and research does not focus on one factor that leads to student nurse success. Many interventions and approaches seem to improve student success. One common factor identified is faculty support or mentor. Student motivation can be encouraged and backed by a supportive, caring faculty member. Although many researchers focused on the importance of motivation that leads to nursing student success, several other studies emphasized the value of mentoring. The two factors that are the core of my project presentation are faculty mentoring and enhancing student motivation.

Project Description

A comprehensive report will be presented to the Deans of the nursing school from my research study via PowerPoint presentation. My findings from my survey will be

discussed, and my recommendations of providing faculty support to the students from the start of the program. With the right faculty support/mentoring student's nurses will be able to gain the motivation and be successful in the healthy academic environment.

Project Evaluation Plan

There is a considerable amount of resources spent on recruiting and admitting students into any college program. It is not enough to recruit qualified applicants; this does not naturally lead to the success of the student. Once these students are admitted into the nursing program, they need to be provided with the resources and support to successfully complete the program. An objective-oriented approach will evaluate the program the program successfully. This evaluation is based on action and is defined by the whether the goal was met not whether it is appropriate. McKenzie, Neiger & Smeltzer, (2005) identified a strength to objective-oriented evaluation approach is its objectivity and that the goal is predetermined. The key stakeholders for the PowerPoint presentation will be the Deans of the nursing programs. The project goal is to present the recent research from the literature review to the Deans regarding student nurse success. This study will identify three main areas that educators can focus on to facilitate student nurse success.

Project Implications

Pitt, Powis, Levett-Jones, and Hunter (2012) explained that as universities are attempting to raise nursing student numbers to meet the call for more nurses in the workforce, it is crucial to determine factors that can lead to persistence of these student nurses. Exploring attrition within a nursing program can provide beneficial information to

the stakeholders and the rest of the academic community. The implications of a student not completing the first semester of nursing school affect many stakeholders. The financial cost of attrition affects the student, college, and the economy. As the health care system in the United States become more complex, nurses will continue to face a challenging healthcare environment. The Affordable Care Act mandates all US Citizens access to health care. The demand for more healthcare professionals, including nurses, will increase as more people access healthcare. The inability to maintain competent health care professionals will have an adverse impact on society.

Section 4: Reflections and Conclusions

The final part of this project study speaks to the strengths and weaknesses of the project, and suggestions for alternative approaches. I will also reflect on the importance of my work, and what I accomplished as a scholar throughout this process. Finally, I will present implications and need for future research.

Project Strengths and Limitations

This project was based on the findings of the research study and a comprehensive literature review on strategies that lead to nursing student success. The survey results did not show any statistically significant difference between the 5 subcategories: personal academic factors, environmental factors, institutional interaction and integration factors, college facilities factors, and friend support factors. The survey did not identify factors that restrict or promote retention among the nursing students enrolled in the associate-degree programs.

The comprehensive report that will be presented to the Deans of the schools consists of recent literature findings. The report has identifiable strengths and limitations in addressing the problem of student success in associate degree programs. One strength of the project is that the literature review includes recent articles within the past 5 years. The research identified that the solution to student success involves multiple factors, not just one factor. As I reviewed the recent publications, there were a few common themes that I identified relating to nursing school success: early intervention programs or supplemental instruction, faculty support/mentoring, and student motivation.

The comprehensive report was developed as part of my project study due to my realization thru research that the retention formula is complicated and cannot be measured with one single tool. Collaboration with other nurse educators would allow different ideas to be brainstormed that would facilitate a discussion that would lead to a better set of recommendations. Student success is multifaceted and fluid, and even the minor differences can affect the student success,

The project presentation will be limited to two nursing school Deans and their critical faculty and support staff. The presentation is grounded in the most current research and my goal would be that the two programs will use this information to improve student success in their respective programs. The three top factors identified in the project as contributing to success (early intervention, student motivation and faculty support) may not apply to all students.

Recommendations for Alternative Approaches

The project findings will be discussed with the main stakeholders and discussing their ideas on how to implement the findings in their particular programs would be part of this discussion. Nursing student success could be investigated differently by incorporating a different survey tool to use with associate degree nursing students.

An alternative problem with student nurse success could be that students are being admitted without the requisite academic preparation to be successful. It is critical for nursing students to be prepared for the rigorous academic program typically found in an Associate degree program. Students coming from high school typically do not have the experience with college level courses, and often need support and guidance. Identifying

students at risk may be helpful instead of waiting until they are in the first semester of the program. A solution to identifying students at risk could be the use of a placement exam. This placement exam can be useful in determining the at-risk students before they begin their classes. These same students' progress can then be monitored. Besides increasing the admission standards or the use of an entrance test could be a recommendation for an alternative approach.

Scholarship

A scholarship is learned through gaining knowledge and then applying the knowledge to practice. While working on the doctoral research and project study, I have grown as a scholar in nursing education. During this research journey, I have learned to evaluate credible sources, work on literature reviews being precise, and developed my writing skills. During this process, I often reflected on my nursing program that I attended 23 years ago, when I learned that failure can lead to success.

As a former instructor at a community college, it was difficult for me to observe students not being successful. I often would wonder what the difference was between those who were successful and those who were not. On the personal side, I attended a community college in 1990 and was unsuccessful in the nursing program during the first year. I ended up within a tenth of the grade point average needed to move on in the program. I continued with my other classes and rejoined the nursing program the following year. After I had graduated from the community college, I remember telling myself that someday I was going to help student nurses be successful. In 2006, I started teaching career as a nursing instructor in a licensed practical nursing program. In 2008, I

was one of four faculty members to assist in developing the curriculum for a new community college RN program. During this intense curriculum development, I reflected about student success and what the nurse educator could do to be supportive to the students. This is where my passion started to resurface for student success and my desire to continue my education to earn my doctoral degree. After completing my doctorate, I will continue to work in higher education and pursue advancement to a leadership role. The knowledge and experience that I have gained along the way will benefit students and faculty as the information is shared.

Project Development and Leadership and Change

The process of researching and project development was challenging. To implement a plan clearly, articulated steps need to be written. The evaluation of the project will provide guidance to alter the information within the project based on the feedback received during the evaluation process. Throughout this dissertation process, I have learned to accept constructive criticism to make the improvements within my study. The sharing of my project can positively impact student nurse retention, which can benefit the students, faculty, educational institutions, and the healthcare systems.

Reflection on Importance of the Work

As I reflect on this journey that has been going on for six years, I realize that any goal can be achieved with persistence and support. Although my journey through my doctoral journey presented with time constraints, family commitments, work obligations, these did not stop me from completing my goal. The importance of recognizing student nurse success starts with the leadership of the organizations. The leadership has to be

supportive of the faculty and provide them with the resources to understand and identify what support services students. I believe that team work and collaboration will facilitate the process of student success.

Implications, Applications, and Directions for Future Research

The dissemination of this information that I have learned from my research can positively impact nurses and inspire a positive social change in health care. The local economy would have an increase in the number of nurses available for local jobs. Students who are unsuccessful place a tremendous burden on the college resources and the local economy. These students who drop out incur debt and use college resources that other students could utilize. The university, state and federal government absorb high costs for students not completing the program. This high cost is identified in terms of loss of income and a decrease in taxes for both federal and state governments (Schneider and Yin, 2011).

The SPAR-2 survey did not identify factors that restrict or promote retention among the nursing students enrolled in the associate-degree programs. Student success is multifaceted and is dependent on many factors that have been identified in the literature that are linked to student retention. I would suggest investigating other survey tools to further research success among first-semester nursing student in an associate degree program.

Conclusion

This section included personal reflection on what was learned, implications, strengths and weaknesses of the project and recommendations for future research. I

reflected on the importance of my work, and what I found out as a scholar throughout my doctoral journey. This research project has inspired me to continue studying nursing school success. I also want to empower other nurse educators to continue their education and become scholarly researchers. Helping students in nursing programs succeed is multifaceted and requires collaboration between faculty and students.

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Appendix A: Doctoral Study Project

Nursing Student Success PowerPoint Comprehensive Overview Patricia Farley MS RN CNE Walden University

By the end of this presentation the audience will be able to:

- ▶ Identify the latest research on Nursing student success
- ▶ Identify the role of faculty members in supporting student nurses
- ▶ State examples of faculty support from presentation that could be implemented into their program

▶ My Research

Research question: What are the differences between students that persist and those who drop out before the end of the first-semester or before the second-semester in the nursing program at two selected Associate degree colleges?

- ▶ The use of the Student Perception Appraisal-Revised 2 (SPA-R2) tool, which was created by Marian Jeffreys, was intended to identify factors that students perceive as to lead them to the pathway of success.
- ▶ A quantitative research study was conducted to identify if students' responses to the SPA-R2 are positively linked to their success in an entry-level nursing course.

▶ My Research

Research question: What are the differences between students that persist and those who drop out before the end of the first-semester or before the second-semester in the nursing program at two selected Associate degree colleges?

- ▶ The use of the Student Perception Appraisal-Revised 2 (SPA-R2) tool, which was created by Marian Jeffreys, was intended to identify factors that students perceive as to lead them to the pathway of success.
- ▶ A quantitative research study was conducted to identify if students' responses to the SPA-R2 are positively linked to their success in an entry-level nursing course.

▶ My Research

- ▶ The population for the study included students in their first semester of the nursing program at Eastern Community College and Western Community College. These two nursing programs are in upstate New York (N=112)

- ▶ Convenience sampling was utilized as the first-year students are already in a determined group.
- ▶ After the nursing class finished, the paper survey SPA-R2 was handed out. Each survey included a demographic section for the participants to answer prior to the survey, which included: age, gender, grade point average, education background, heritage, marital status, children, the number of hours employed, and current course load.
- ▶ The SPA-R2 survey was administered during week 10 of the semester after students have had an opportunity to be integrated into their first nursing course and before they left for the end of the semester.

▶ Student Perception Appraisal-Revised 2 (SPA-R2) Tool

- ▶ It is a 27-item questionnaire that addresses students' perception of how restrictive or supportive a select group of factors is to influence their ability to complete the nursing course.
- ▶ The five factors included are: personal academic, environmental, institutional integration, college facilities, and friend support (Jeffreys, 2012).
- ▶ The questionnaire contains a Likert scale which includes the following replies: did not apply, severely restricted, moderately restricted, did not restrict or support, moderately supported, and greatly supported. Items will be scored on a four-point scale as the choices "does not apply" and "does not restrict or support" will not hold a point value.

▶ The Five Factors categories identified in SPA-R2 and the sub categories

1. The **personal academic factors** that were investigated included the following: personal study skills, personal study hours, class schedule, and academic performance.
2. The **environmental factors** that were investigated are financial status, family financial support for school, family emotional support, family responsibilities, financial aid/scholarship, child care arrangements, family crisis, hours of employment, living arrangements, employment responsibilities, and transportation arrangements.
3. The **institutional interaction and integration factors** included: faculty advisement and helpfulness, membership in nursing clubs or professional organizations, nursing professional events, nursing student peer mentoring and tutoring, and nursing student support services.
4. The **college facilities factors** included the following: nursing skills laboratory, college computer laboratory services, college tutoring services, college library services, and college counseling services.
5. The **friend support factors** investigated included: encouragement by outside friends and encouragement by friends within classes.

▶ Results

- ▶ The survey results did not show any statistically significant difference between the 5 subcategories: personal academic factors, environmental factors,

institutional interaction and integration factors, college facilities factors, and friend support factors.

- ▶ The survey did not identify factors that restrict or promote retention among the nursing students enrolled in the associate-degree programs.
- ▶ The null hypothesis was accepted as there was no significant difference between students that persisted and those who dropped out before the end of the semester or before the second semester in the nursing program.
- ▶ In summary, none of the 5 subsets were statistically significant between the two groups of students.
- ▶ There are numerous factors that affect student nurse success, and this survey tool did not identify any one factor.

▶ Student Success

- ▶ Student success is multifaceted and is dependent on multiple factors identified in the literature.
- ▶ Summary of the findings from my survey to share with the Deans of the programs.
- ▶ Suggest investigating other tools to further research retention among first semester nursing student in an associate degree program.
- ▶ Literature Review most recent research conducted

▶ Literature Review

- ▶ Early Intervention Programs
- ▶ Faculty Support
- ▶ Student Motivation

▶ Early Intervention Programs

The early intervention programs or supplemental instruction discussed in the research varied in content among the research.

- ▶ Program included the following: daily study routine, engaging in varied study groups, reading the material and reviewing the material by making note cards. (Dapremont, 2014)
- ▶ Merkley (2016) identified that introducing study modules on test taking skills early in the program could improve student success.
- ▶ Fontaine (2014) discussed that adding an early intervention program for nursing student can improve retention, but none of the specific interventions used in her research were identified to correlate with the retention of students.
- ▶ The identification of at risk students at the time of entrance to the nursing program could help improve retention at a higher rate (Fontaine, 2014).

▶ Early Intervention Programs

- ▶ The VARK (Visual, Aural, Read/Write, Kinesthetic) Learning Style Questionnaire should be given to students early in the program so that they have time to modify their study skills. Learning styles identified by using the VARK Questionnaire may help nursing student identify early in the program how they should study and how they can be successful in nursing school (Marek, 2013)
- ▶ Harding (2012) proposed that having student participate in a 1-hour supplemental instruction course would lead to academic success. This additional instruction consisted of critical thinking activities that help students to apply the nursing process and facilitate critical thinking in the students. This Application to Nursing Concept course, was an elective, and was accessible to all students registered for the foundation nursing course. This course included activities designed to stimulate critical thinking in student nurses.
- ▶ Harding (2012) suggested there is little evidence that targeting at-risk students with specific remediation programs leads to academic success.

▶ Faculty Support

- ▶ Nursing is a caring profession and faculty should display a caring attitude toward nursing students to promote their success (McEnroe-Petitte, 2011). Faculty can facilitate caring while educating students about nursing. This caring can help retain students in the program and lead to their success.
- ▶ McEnroe-Petitte (2011) explained that faculty need to get to know the students and they will be able to identify the weak or at-risk students. The faculty can portray caring in different ways such as through mentoring, instilling self-confidence and building a trusting respectful relationship between faculty and nursing student (McEnroe-Petitte, 2011).
- ▶ Raman (2013) asserted that a major motivational factor for nursing student academic success was faculty support. In this study students reported a variety of support from faculty members.

▶ Faculty Support

- ▶ Student dissatisfaction with a nursing program and clinical environment may contribute to students leaving the program (Decker and Shellenbarger, 2012). Creating a healthy environment or clinical setting could lead to a successful student nurse. A hostile environment could result in a student dissatisfaction and the student leaving the program. The collaboration between unit manager, clinical staff, and faculty member is vital to the success of the clinical experience for all involved.

- ▶ Seago, Keane, Chen, Spetz, and Grumnach (2012) reported that besides preceding academic achievement, as measured by pre-nursing and science GPA, the nursing school environment is a positive indicator of graduation achievement. The environment of the educational institution includes funding for academic support at the college, which would point to successful graduates.
- ▶ Beauvais, Stewart, DeNisco, and Beauvais (2014) explored in a correlational research study that emotional intelligence, empowerment, resilience, and spiritual well-being may play an important role in persistence in nursing school. The relationship between faculty and students should be focused on a positive and empowering relationship.

▶ Faculty Support

- ▶ Shelton (2012) discussed that nursing students are older and less prepared than students enrolled in the past. These nontraditional students have more family and employment responsibilities that can hinder their success. Students that are struggling need faculty support to be successful. The students that are motivated may seek the faculty support on their own. Faculty need to approach students and offer encouragement and help to provide the needed support.
- ▶ Schrum (2015) explored utilizing a retention specialist to endorse academic factors that lead to retention of nursing students. This retention specialist is a full-time faculty member whose focus is retention and remediation. The students may be required to attend additional classes for remediation or tutoring. This mentoring relationship with faculty can lead to student success, as it is different than evaluating students based on grades. This relationship is collaborative and faculty help to develop professional behaviors and attitudes among these students.

▶ Faculty Support

- ▶ Chen and Lo (2015) found that nursing student satisfaction in an ADN program was predicted by the following: nursing faculty, the nursing curriculum, environment and social interactions. In higher education, student gratification has been a marker of student success (Chen and Lo, 2015). Nursing faculty is the essential element found in this study. Student satisfaction is important to consider when decisions are being made about curriculum changes and evaluating the effectiveness of the program outcomes.
- ▶ Murray (2015) reviewed that academic support, mentoring and integration have been identified as promoting success. The students who were supported by faculty and faculty provided mentoring were more inclined to be successful in the curriculum. Murray (2015) identified that nursing faculty needs to provide opportunities to increase student's confidence and a sense of belonging to the college.

▶ Faculty Support

- ▶ Several researchers concentrated on the value of mentoring as an effective support structure to lead to student nurse success (Peltz, Raymond, 2015). The mentoring relationship can be either formal or informal. The identified person that is the mentor could be a faculty member, family member, or a friend. Paltz & Raymond (2015) reviewed that there is a growing number of research noted on mentoring programs having an increase on student retention.
- ▶ Wray, Aspland and Barrett (2014) established that over half of the students in a nursing program have considered leaving the program at one point during the program. The decision not to complete the nursing program is not just limited to the high risk or at risk students. Wray et al. (2014) explained that some attrition is necessary to ensure high quality, motivated nurses introduced into the profession. Faculty, family or peer support have been identified as factors that contribute to student's decision to stay in the academic setting. The other factor identified was the determination from the student to be successful in nursing school, which can be referred to a student motivation.

▶ Student Motivation

- ▶ In Rose's research (2011) nursing students with high levels of motivation who are in engaging learning settings have higher levels of academic success. Many factors motivate a student to attend a nursing program, complete the program and pursue their intention to be a nurse. Nurse educators will need to determine the motivational factors and facilitate the factors to lead to positive student outcomes.
- ▶ Mckendry, Wright, & Stevenson (2014) explored the need for schools to nurture a sense of association to the nursing school and profession of nursing to student nurses. Students need to be made aware of the expectations of the program in the beginning and this new explanation could lead to a positive learning experience.
- ▶ Khalaila (2015) believed that more confident a student feels about his/her abilities, the higher the student will achieve. Students who view themselves as academically competent achieve higher grades and perform better overall. Khalaila (2015) concluded that students possessing higher levels of intrinsic motivation was more inclined to succeed in nursing programs. Students will achieve higher grades if they are motivated to do the academic work involved to be successful. Faculty need to provide emotional and academic support to encourage a positive self-concept for students (Khalaila, 2015).

▶ Student Motivation

- ▶ Jeffreys (2014) discussed that nursing student retention is a multidimensional problem and educators should shift the focus on enrichment and optimization from remediation. She proposes that a student must meet minimal requirements to be

successful in a nursing program. In order for educators to prepare nurses to meet the future demands of the profession, the students must be creative and innovative. As teachers, we need to motivate learners to discover themselves and optimize outcomes. Every nurse educator knows that the essence of nursing is caring, so caring, in an educational role should be displayed by nurse educators. This caring or helpfulness leads to motivation of students which in turn can lead to completion of the program.

- ▶ Harris, Rosenberg, O'Rourke (2014) concluded that interventions for student nurse retention should be a multidimensional approach. Their strategies focused on early intervention, not waiting until a student arrives in the program as it may not allow sufficient time to implement the strategies. This complex problem of retention will help to address the nursing workforce challenges.

▶ Student Success is Affected by Multiple Factors

- ▶ Multiple factors and no one factor has been identified as the one factor affect student nurse success.
- ▶ One common factor identified is faculty support or mentor.
- ▶ Student motivation can be encouraged and backed by a supportive, caring faculty member.
- ▶ Although many researchers focused on the importance of motivation that leads to nursing student success, several other studies emphasized the value of mentoring.

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Appendix B: Permission to Use Instrument

Walden University Mail - Re: research

Page 1 of 1



Patricia Farley <patricia.farley@waldenu.edu>

Re: research

1 message

marianne jeffreys <marianne.jeffreys@gmail.com>
 Reply-To: marianne jeffreys <marianne.jeffreys@gmail.com>
 To: Patricia Farley <patricia.farley@waldenu.edu>

Mon, Sep 2, 2013 at 9:30 AM

Dear Patricia,

Thank you for your interest in the SPA instruments, the NURS model, and other nursing student retention resources. You will need to purchase the license. Please visit the Springer Publishing website link concerning purchase of the license to reproduce and/or administer materials in a research study, project, or other related project. All materials are copyrighted by Springer. The toolkit information and license for permission may be found at the link

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Nursing Student Retention and Success book
<http://www.springerpub.com/product/9780826109491>

Please visit my website at <http://www.mariannejeffreys.com> for other resources and information.

Your research purpose and questions should guide your decision whether to select the SPA or SPA-R questionnaire and whether to use a pretest and post-test approach or only post-test (as you described). The NURS model can be used to guide your study and fits with both versions of the questionnaire.

The questionnaires have been used by other researchers; however I don't have a complete list or study details. I suggest that you conduct a literature search that includes masters and doctoral projects, published journal articles, conference titles/proceedings (such as from NLN and associate degree meetings), google, and googlescholar.

Best wishes in your research and educational endeavors. Please feel free to contact me again for any questions.
 Marianne

On 8/29/13, Patricia Farley <patricia.farley@waldenu.edu> wrote:

> Dr Jeffreys,

>

> I am interested in using the SPA survey tool in my research project as well
 > as the NURS conceptual model. I am undecided at this time whether I will use
 > SPA-2 or SPA-R2. I have purchased your latest book and received the toolkit.
 > Do I need to purchase a license and pay 250.00 to use with my research
 > study? I also was wondering if you have information on what other studies
 > this these tools were used for in research?

>

>

> Thank you

>

>

> Patricia Farley

<https://mail.google.com/mail/u/1/?ui=2&ik=68d8e06ade&view=pt&search=starred&th=14...> 5/29/2016

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Appendix C: Demographic Questions of the Survey

Welcome Nursing Students

Thank you for taking the time to participate in the survey. Your feedback is important to the nursing profession.

1. What is your student ID number?

2. How many college credits are you taking this semester:

- 3 or 4
- 5 to 8
- 9 to 11
- 12 or 13
- over 13

3. What is your current grade point average in your nursing courses this semester.

- 90-100
- 85-89
- 80-84
- 75-79
- 70-74
- Below 70

4. Select all the activities that you participated in during the last 6 months:

- Nursing student club
- Nursing conference, meeting or event
- College counseling
- College tutoring (non-nursing)
- College tutoring (nursing)
- Nursing student orientation
- other college-sponsored activity for nursing students

5. What is your prior educational background?

- General equivalency diploma (GED)
- U.S. high school diploma
- Foreign high school diploma
- Non-nursing college degree

6. Are you the first member of your family to attend college?

Yes

No

7. What is your gender?

Female

Male

8. What is your age?

Under 25 years old

25-29 years old

30-34 years old

35-39 years old

40-44 years old

45-49 years old

50-54 years old

55-59 years old

60 years old and over

9. Which of the following categories best describes you?

American Indian or Alaskan Native

Asian (Chinese, Filipino, Japanese, Korean, Asian Indian, or Thai)

Other Asian

Black or African American

Hispanic or Latino

Native Hawaiian or Other Pacific Islander

White

Multiracial

Other

10. Is English your first language?

Yes

No

11. Do you speak a language other than English fluently?

Yes

No

12. Were you born in the United States?

Yes

No

13. Do you have any previous health care experience?

None

LPN

Other

14. What is your marital status?

Single

Single living with partner

Married

Divorced/Separated

Widowed

15. How many children live with you?

None

1

2

3

4

5 or more

16. How many hours a week do you work?

None

1 to 10 hours

11-20 hours

21-30 hours

31-40 hours

Over 40 hours

17. Where do you currently live?

Campus apartment

Off-campus housing with family

Off-campus housing with other students

Live alone off-campus

18. How long does it take you to commute to campus?

Less than 15 minutes

15 to 30 minutes

31 to 60 minutes

61 to 90 minutes

91 minutes to 2 hours

Over 2 hours

Does not apply

19. Do you use child-care services?

No, I do not need child-care services

On-campus daycare

Private daycare

Private babysitter

Family member provides child care

20. What is your family's total yearly income?

Under \$20,000

\$20,000 to \$50,000

\$51,000 to \$75,000

\$76,000 to \$100,000

\$101,000 to \$150,000

Over \$150,000

21. How many people in your family are included for above income question?

1

2

3

4

5

6 or more