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NONTRADITIONAL NURSING STUDENTS

NONTRADITIONAL COMMUNITY COLLEGE STUDENTS IN NURSING:  
PERCEPTIONS PERSONIFIED

BY

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DISSERTATION

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**ABSTRACT**

Nontraditional students in nursing have been the topic of multiple research studies to gain insight into their perceptions regarding retention. This mixed methods study, using Jeffreys' Student Perception Appraisal-Revised (SPA-R, 2007a) takes the quantitative findings a step further by using a qualitative approach to generate findings that extend the value of that instrument by exploring the details pertaining to each of the environmental items using focus groups and individual interviews with community college nursing students, just prior to graduation. One hundred seven associate degree nursing students in their last semester at three Midwestern community colleges were surveyed with the SPA-R tool to determine that the tool is applicable to this population. The results confirmed the original findings, yet differences based on location of each of these institutions, one rural, one suburban, and one urban location are presented. The second qualitative phase was conducted with two focus groups and two individual interviews with students over the age of 25, just before graduation. The students articulated their perceptions regarding the relationship of the environmental factors that promoted their success and shared their recommendations for solutions to the challenge of retention. Using grounded theory strategies of data analysis, these findings emerged into two categories, Internal and External Factors, that evolved into the Bridge of Support model of factors required for successful navigation of the nontraditional student nurse to the registered nurse. Implications for practice and suggestions for further research are included.

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## Nontraditional Community College Students in Nursing: Perceptions Personified

**CHAPTER ONE****Introduction**

This study explores how nontraditional nursing students in community colleges perceive their experiences. Quantitative data exist about the challenges this group of students must overcome to be successful, but there are few subjective studies about the support they need to overcome those challenges or indeed, what they would recommend to help others navigate this difficult course of study as mature learners. This mixed method study, using a normed tool (Jeffreys, Student Perception Appraisal-Revised [SPA-R], 2007a) of student perceptions developed nearly a decade ago, takes the next step to produce findings that are grounded in the life experiences of several participants who successfully earned their associate degree in nursing (ADN). These nontraditional student nurses were willing to describe their responses to the SPA-R data collection tool, extending the value of that instrument as well as providing rich details about what it means to pursue their goal of graduation from a community college nursing program and become registered nurses.

This topic is important because, as the Institute of Medicine of the National Academies' (IOM, 2015) study on *The Future of Nursing* found, “accessible, high-quality care cannot be achieved without exceptional nursing care and leadership” (p. ix). The role of community colleges in this pursuit is essential because it provides access opportunities for those who would study nursing, who might otherwise be deterred due to cost, distance, or program capacity limitations. Associate degree nursing programs prepare students for entry level nursing positions in a high quality, affordable



environment, especially well-suited to nontraditional students who are often working, raising a family, and taking care of responsibilities that usually do not challenge traditional students who transition directly from high school to college (IOM, 2011).

According to the American Association of Colleges of Nursing (AACN, 2014), nearly 80,000 qualified applicants were turned away from nursing programs for the 2012-2013 enrollment year due to budget constraints, faculty and preceptor shortages, and lack of clinical sites and classroom space. But there is rising demand for healthcare, now that the Affordable Care Act (ACA) is the law, while at the same time many baby boomers are nearing retirement age and in need additional health care support. Life expectancy continues to climb, on average 78.4 years (women 81, men 76) according to the Centers for Disease Control (CDC, 2015). Many of these oldest of the old have chronic diseases that require support to manage, and nurses will increasingly serve in this capacity in their communities and extended care facilities. This study provides findings indicating that a Bridge of Support could help nontraditional students successfully navigate from laypeople into registered nurses.

### **Background**

The perfect storm is building in health care in America. As Americans age and the baby boomers enter retirement, their health care needs are increasing at exactly the same time as the nursing shortage becomes critical. In 2014, the United States (US) had 10,000 people per day celebrating their 65th birthday (Alliance for Aging Research, 2011). The US population of those over 65 years of age in 2008 was 12.7 percent, and the US Census Bureau estimates that percentage will increase to 19.3 by the year 2030 (2008).

Repeatedly we hear the growing nursing shortage looms, with more than a million registered nurse (RN) positions projected to be vacant by 2020 (Health Resources and Services Administration [HRSA], 2010). The building storm clouds may have a silver lining, if state and federal governments are successful at attracting more students into the health professions, and if a significant portion of the swelling numbers of nontraditional students choose to study and succeed at nursing as a second career.

### **The Problem and Domain of Inquiry**

Unless innovative solutions to the nursing shortage problem are implemented, there will be a significant and prolonged shortage of nurses in the US in the latter half of the next decade, according to Buerhaus, Auerbach, and Staiger (2009). “Despite the recent swell in RN workforce entry, our projections indicate a shortfall of RNs developing around 2018 and growing to about 260,000 by 2025” (Buerhaus, Auerbach, & Staiger, 2009, p. 663).

The problem is complicated by the aging of the nursing workforce, with one quarter of working RN’s in their 50’s and the average age of the nursing population at 47 (HRSA, 2010). Add to the mix the number of nurses leaving the profession to work in other fields and the attrition of student nurses; the situation appears critical.

The issue of educating tomorrow’s nurses is a critical factor in the literature of both theory and practice (Institute of Medicine [IOM], 2011; American Association of Colleges of Nursing [AACN], 2014; US Department of Health and Human Services [DHHS], 2008; US Bureau of Labor [BOL] Statistics, 2012). The Tri-Council for Nursing, four autonomous nursing organizations (the AACN, the American Nurses Association [ANA], the American Organization of Nurse Executives [AONE], and the

National League of Nursing [NLN]) released a statement on *Recent Registered Nurse Supply and Demand Projections*, cautioning stakeholders about declaring an end to the nursing shortage (2010). Although the latest downturn in the economy has led to an easing of the shortage, this is a recent development most analysts believe to be temporary. Serious concerns about slowing the production of RNs were voiced, given the projected demand for nursing services, particularly in light of healthcare reform.

The relatively new Affordable Care Act (ACA or Obamacare, as it is commonly known) was modeled after the state of Massachusetts's Health Insurance Reform (Chapter 58) from 2006 that mandated health insurance or imposed a penalty to citizens who refused. As a result, 97.4% of residents of MA are insured, but it costs 54% of the state's budget to administer (Shindul-Rothschild & Gregas, 2014). Their study looked at trends in RN employment from 2000- 2011, before the implementation of Chapter 58, and over the five years hence. By comparing the findings with two other states with similar demographics and hospital systems, New York and California, they hoped to forecast what might happen to the country, now that the ACA is the law of the land. Of particular interest was that although the rate of hospitalizations went up dramatically in Massachusetts, the level of staffing of nurses was flat. "These findings are a reminder that the cost-containment provisions that also accompany health insurance reform may restrain hospitals from increasing RN staffing even in the face of rising admissions" (Shindul-Rothschild & Gregas , 2014).

In terms of nursing, the dominant theme has been the national nurse shortage, particularly in acute care environments, and the increasingly persuasive research demonstrating that patient outcomes are compromised when there are too few nurses,

their work hours are too long, or they are under educated (Kohn, Corrigan, & Donaldson, eds., 1999). Patient safety resonates with the public and is an important standard for nurses as well. Nurses have emerged as important advocates for safety and systems thinking, partly because of their mindset and the trust the public places in the profession (Aiken, 2002; Aiken et al., 2003; Needleman, 2002; Rogers, et al., 2004).

However, employment forecasts suggest more opportunities for nurses in the provision of care to chronically ill individuals, as an affordable option to acute care management of complications that arise from lack of compliance with control of diseases like diabetes or heart failure (Auerback, et al., 2013; Juraschek, et al., 2012). In addition, according to the Institute of Medicine's committee on the *Future of Nursing* (2011):

Producing a health care system that delivers the right care—quality care that is patient centered, accessible, evidence based, and sustainable—at the right time will require transforming the work environment, scope of practice, education, and numbers of America's nurses. (p. 4)

As a registered nurse for over 30 years, and a nurse educator for 15, the researcher has concern for quality healthcare provision both personally and professionally. Many of the students the researcher teaches are nontraditional and their voices compel her to encourage others interested in nursing to pursue that calling. These students, who often have had other careers, bring many life lessons and experiences about caring to the classroom and clinical situations. However, due to multiple other demands in their life, they may not be successful in their quest for their RN license. This raises the question of whether better support for retention and success might be achieved by listening to the students' perceptions of how to mitigate environmental factors, such as family

responsibilities and financial constraints that compete for their time. Could these nontraditional students help to fill the gap between health care needs and the looming nursing shortage if provided a menu of relevant support structures?

### **Purpose and Research Questions**

The purpose of this study was to seek the perceptions of nontraditional students who have experienced nursing school in community colleges and how they were influenced to persist by considering a continuum of environmental factors. The study also explores potential solutions to challenges affecting persistence, as perceived by the students themselves. This purpose guided the development of the following research questions:

What is the perceived relationship regarding environmental factors and their success in nursing school of nontraditional students?

What proposed solutions are identified by the nontraditional nursing student to address environmental factors that are problematic?

These questions were explored using a mixed methods study. Utilizing a statistically analyzed survey (SPA-R) of the factors that influence retention or attrition of nontraditional nursing students to obtain the quantitative results and to identify potential nontraditional students in Phase I, Phase II established focus groups and semi-structured one-to-one interviews of new graduates who had completed the quantitative tool. This qualitative data was analyzed to examine how the factors of (a) learning environment, (b) institutional factors, (c) college support facilities, (d) financial and employment responsibilities, (e) personal academic issues, and (f) support of friends and family

affected the students' success and ultimately, how students perceived potential barriers as being overcome.

### **Theoretical Framework**

Theories are also important to the process of research studies, serving as a framework to guide the study, much like a road map guides travel. Initially, the author considered the self-determination theory developed by Deci and Ryan (1985) to place this work in the context of intrinsic motivation. This theory states that individuals are highly motivated when they perceive they can control their actions and thereby affect the outcome of their behaviors. This perception serves as the basis for intrinsic motivation. When helped to fulfill the need for autonomy and competence, the learner integrates intrinsic motivation. Deci and Ryan contend that a strong source of motivation, negative or positive, comes from the learner's perception of self-determination and control. Identified as an organismic, or active theory that provides energy to the organism based on experience, internal development of the person motivates the learner to proactively engage with their environment (Deci & Ryan, 1985).

However, during the proposal defense, the committee for this author's dissertation suggested consideration of Bandura's self-efficacy theory (1977). During the process of analysis and interpretation of the qualitative data, this theory proved very helpful, serving as a useful resource in explaining the concept of social cognition that in this context allows laypersons to persist and become nurses. According to Bandura, self-efficacy is the belief in one's ability to reach a goal or take on a challenge, with the optimal level for success slightly above the student's ability to promote motivation and persistence towards outcome attainment (Bandura, 1977).

### **Significance of the Study**

This data could impact the future of nursing education, suggesting innovative solutions to the nursing shortage problem. If the goal is to produce well-prepared nurses, perhaps bringing people into the nursing profession who have real world experience could achieve that outcome for the national healthcare system. At the very least, this research will give a voice to those who will soon be nurses describing their journey through their nursing education, and hopefully capture some of the complex phenomena that influenced their success or challenged them in ways that suggest creative changes to incorporate into higher education.

### **Limitations/Assumptions**

The sample for this study involves students who are nearly finished with their associate degree in nursing, having completed the majority of their coursework and within one semester of graduation. The data were collected during that timeframe, right before completion of their program of study. Although all students at this level were surveyed, only data from those who self-identified as over the age of 25 were included.

This study does not cover the students who enter the nursing profession by traditional routes, directly out of high school and into college, perhaps being supported financially by parents, and living on campus. It does not include the perceptions of those who chose to follow the route of bachelor's degree (BSN) attainment as the entry level into nursing practice. However, the findings may be helpful in supporting these traditional students as well, but further research into this area may be done by others.

Assuming that nursing students over the age of 25 have a unique perspective to offer in terms of persistence, this study does proceed with the belief that their voices can

assist nurse educators to support them in their goal of becoming registered nurses. This study gave voice to this population of nontraditional students, allowing them to discuss the challenges they faced and offer suggestions for those like them to be successful, as they pursue their goal of attainment of their associate degree in nursing (ADN) at community colleges nationwide.

### **Key Terms**

#### **Nursing**

According to the American Nurses Association (2010), “nursing is the protection, promotion, and optimization of health and abilities; prevention of illness and injury; alleviation of suffering through the diagnosis and treatment of human responses; and advocacy in health care for individuals, families, communities, and populations.” (p.13).

#### **Nontraditional Student**

For purposes of this study, the nontraditional student will be defined as one who is over the age of 25, has not been in college continuously since high school graduation, and is trying to balance school, family, employment, and finances (Kim, 2002). Also implied is that these students are adult learners, who are self-directed, and motivated to learn as described by Malcolm Knowles in his seminal work, *The Adult Learner: A Neglected Species* (Knowles, 1973).

#### **Associate Degree in Nursing**

An associate of science in nursing degree (ADN) is a nursing degree that typically takes two to three years to complete. This type of degree is usually awarded by community colleges. Students awarded an associate of science in nursing are qualified to



sit for the National Council Licensure Examination (NCLEX-RN) and apply for licensure as a registered nurse (RN) (AACN, 2012).

### **Attrition**

Attrition will be characterized as the departure from or delay in successful completion of program requirements. Tinto (1975) is credited with developing one of the first models for studying student attrition and persistence in higher education. He defined student attrition as “a longitudinal process of interactions between the individual and the academic and social systems of the college during which a person’s experiences in those systems continually modify his goals and institutional commitments in ways that lead to persistence and/or to varying forms of dropout” (1975, p. 94). Tinto’s definition demonstrates how student attrition can involve many interrelated factors and studying those factors that lead to attrition can be a complex process.

### **Persistence**

Persistence defines students who decide to continue toward their goal of graduation from an associate degree program, in spite of obstacles and factors that could serve as barriers to completion. The act of adult students continuing to enroll in classes in pursuit of a degree was studied by McGivney (2004) in an attempt to understand how to keep them in college.

### **Summary**

This introductory chapter touched on the problem of the nursing shortage, explaining how this researcher’s study could be beneficial to the future of nursing education by retaining students with the special strengths that come from life experiences. However, these nontraditional students could also provide a rich description

of potential support systems to improve their success, if their perceptions were analyzed for themes that educators might employ to encourage retention of these future nurses.

Chapter Two will review the literature that deals with the trends in educating nontraditional college students. The theoretical framework, variables, and concepts will be developed, building a case for the proposed study. Solid rationale will be provided for undertaking this study.

In Chapter Three, the methodology will be developed. Details regarding the proposed mixed method study and why it was selected, the population of interest will be described, and the instrument and data collection procedures employed will all be covered in depth. The role of this researcher will also be discussed, with acknowledgement of limitations. Finally the procedures for data analysis and methods for verification and trustworthiness will be reviewed.

Chapter Four will summarize the collected data, both quantitative and qualitative. Statistical analysis of the quantitative data will be done, while the qualitative data will describe categories and concepts that answer the research questions, with quality criteria to generate helpful properties grounded in the data.

Finally, in Chapter Five, the researcher will share findings regarding the perceptions of nontraditional nursing students that will have implications for educators, especially in community college associate degree programs. Suggestions for further research will be included.

## CHAPTER TWO

### Review of Literature

The need for change in the United States (US) health care system is a topic that is being hotly debated by many voices. This issue will become even more challenging as the population ages, and as more chronic health problems occur with a maturing society. Compounding the issue is the acute shortage of health care providers to deliver the care to those older adults, in both the hospital and community settings. Nurses have been the backbone of the health care system; yet, they are also aging, with nearly 55% of working professional RNs older than age 50 (AACN, 2014). In the next 10 to 15 years, more than one million registered nurses will reach the age of retirement (HRSA, 2010).

This chapter reviews the literature that describes this emerging health crisis, the changes in supply and demand for nurses in the United States (US). Also covered will be the non-traditional college student population in the US who may be a reasonable source of future nurses, risk factors that are common to this student group, and the role of associate degree nursing (ADN) programs in America's community colleges, as well as the historical contribution these colleges have made to higher education. The origins and development of the instrument used in this study to assess challenges faced by nontraditional ADN nursing students, and the background and development of Bandura's self-efficacy theory will also be reviewed (1977), as well as more information about Deci and Ryan's self-determination theory (2000) and how it informed this study.

The purpose of this review is two-fold. First, this literature review provides background for the study and describes what has already been reported concerning key areas of this research. Second, reviewing how much is known about what impedes the

progress of nontraditional students through the ADN nursing education process, while identifying the gaps in the support for this student nursing population provides further insight into this problem.

### **Self-Determination Theory**

Initially, this study seemed to be about what motivated nontraditional students to consider nursing as a career. Nursing students were found by Dockery and Barns (2005) to be motivated by extrinsic rewards such as travel opportunities, employment security, flexible hours, and autonomy. But the studies often were conducted with traditional students, and the motivations of nontraditional students were not often examined independently. However Bye, Pushkar, and Conway (2007) compared the differences in motivation of students under 21 years of age and those over 28 years old and found that “the nontraditional students report higher levels of intrinsic motivation to learn than do traditional students” (p. 156). They included examples of intrinsic motivation to be “challenge, curiosity, and mastery” (p. 143). While the affinity for caring seems to be a motivator for students who choose nursing, “greater emphasis on balancing family and work rather than on career success” was found to be important to nursing students (Dockery & Barns, 2005, p. 350).

According to the *Encyclopedia of Educational Theory and Philosophy* (2014), the self-determination theory is actually a continuum of control. Students’ motivation for learning ranges from extrinsic goals that are accomplished to please others, avoid punishment, or for external rewards as mentioned in the previous paragraph (which is often the primary purpose for adults returning to school) to more internal reasons that are intrinsically self-motivating. While the initial attraction of job security that a nursing

career provides might have externally motivated these student to return to college for their ADN, the intrinsic motivators of growth and fulfillment that are realized from gaining knowledge and independence must be acknowledged as well.

Since Deci and Ryan (1971, 1985, 1991, 1999, & 2000) have written so extensively together and separately on the topic of intrinsic motivation and self-determination, the theory developed as it applies to education initially seemed to fit this study. While “engagement with an intrinsic goal, such as learning for the sake of self-development” is exactly what nontraditional college students seem to be pursuing, there is another facet to their persistence. The self-determination perspective must be considered with regard to the student’s motivation to learn, and the nurse educator must nurture this “confidence in their own capacities and attributes” if the layperson is to become successful in the nursing profession (Deci et al., 1991, p. 325). But the difficulty of measuring the constructs of ability beliefs, expectancy beliefs, and efficacy beliefs leads to the conviction that one has the ability to accomplish a challenge, a core assumption of the following theory by Bandura, which proved a better ‘fit’ to examining the problem.

### **Self-Efficacy Theory**

After suggestions about how Bandura’s theory of self-efficacy (1977) might be even more appropriate as it applies to the proposed study, extensive review convinced this author that the behavioral change that must occur to transition a layperson into a registered nurse did indeed fit. Bandura (1997) defined self efficacy as “the beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 3), which could be applied to the ability to succeed in a particular

situation like nursing school. This “integrative theoretical framework” (Bandura, 1977, p. 191) helped explain why people might choose to study a difficult discipline like nursing, how they might cope, as well as how their effort will be expended and sustained in the face of barriers and difficult experiences. Why people persist, mastering the skills needed to be a professional nurse, even in the face of challenges, both internal and external to their goal attainment is covered by this “unifying theory of behavioral change” (p. 191).

Bandura’s influential theory of learning and development evolved from his early studies in psychology during the mid-20<sup>th</sup> century, when the dominant theory of learning (Behaviorism) focused on direct reinforcement for behavior, as posited by scientists like Watson and Skinner. While environmental feedbacks like rewards or punishments can directly change behavior, Bandura wondered about the internal motivations of thoughts and feelings that caused certain behaviors that had not been reinforced, but simply observed by the learner. Social learning theory, now known as social cognitive theory has two core assumptions:

1. People have a constrained, yet potentially influential capability to self-determine their actions.
2. Although learning requires the experience of behavior and its consequences (either directly or vicariously), learning cannot be reduced to behavioral change (may not be immediately evident). (Phillips, 2014, p.759-760).

Bandura’s social cognitive theory of self-efficacy is based on the model of “triadic reciprocal causation” (Bandura, 1986, p. 24), which can be visualized as a triangle. The three points of this model are the Personal (P), Environmental (E), and

Behavioral (B) aspects that need to be present for learning to occur. The points are interactive and the boundaries between the points are permeable, showing the mutual importance of three areas that have influence on a person's self-efficacy. The focus is on the interaction between the person's personal intentions and motives (P), external factors that impact learning, feedback for example (E), and observations and consequences of behavior (B). Ultimately, an individual's belief about their personal capability is linked to the interaction of these three determining factors (Bandura, 1997). The perceptions of the learner can influence their ability to succeed as proactive participants, determining how they behave, feel, and think. Ultimately this can provide the intrinsic motivation to master challenges and change their circumstances.

According to Bandura (1997) there are four major sources of self-efficacy: mastery experiences with successful performance of desired behavior; social modeling from witnessing other people's success; social persuasion where the person believes they have the ability to succeed, based on support from those with influence; and psychological responses that impact how a person feels about the task. A strong belief in one's ability can turn challenging problems into tasks to be mastered or cause them to avoid challenges, if they have a weak sense of self-efficacy. Witnessing others that accomplish something challenging can either form a stronger sense of commitment to accomplish a goal, or cause them to believe that is beyond their capability, if their sense of self-efficacy is deficient. The student can focus on personal failings and negative outcomes if self-efficacy is weak, or recover quickly from setbacks and use them as learning opportunities if supported by influential people in their lives. The intrinsic reinforcement and sense of accomplishment is the ultimate motivator for those with a

strong self-efficacy trait, as compared to those who lose confidence in their ability to accomplish the action required to succeed.

Most convincingly, the theory of self-efficacy explains how perceptions of one's ability to accomplish a goal, like becoming a registered nurse, through observational learning, performance accomplishments, vicarious persuasion, and physiological states of emotional arousal can lead to persistence and mastery. As a student progresses through the nursing curriculum, efficacy expectations are met with the accomplishments of successful grades, fulfilling clinical experiences, and observing nurses in practice. Along the way, teaching the students how to deal with setbacks and less than perfect outcomes can increase their self-efficacy and encourage persistence, even if there is an occasional failure. It takes regular practice in this new endeavor, with constructive feedback and remediation when needed, to reinforce their growing self-efficacy. Authentic assignments to challenge their mastery of critical concepts and appropriate responses to their patients can help them process the new behavior of professional caregiving.

### **Emerging Health Care Crisis**

Health care in America is changing from a reactive, medical intervention model to a more proactive, preventative model, where “nurses are being called upon to fill primary care roles and to help patients manage chronic illnesses, thereby preventing acute care episodes and disease progression” (IOM, 2011, p. 6). Over three million practicing nurses in the US strive to provide quality care safely and compassionately to their patients, especially to those made the most vulnerable. With the passage of the 2010 Affordable Care Act (ACA), 32 million more Americans qualify for health care (IOM, 2011). Nurses will serve an important role in this transformation of the healthcare system



in the various environments where it will be provided. From the birth of new babies and care and guidance of their families, throughout childhood illnesses and health maintenance, supporting their patients through adulthood and to end of life, nurses are poised to provide accessible, high quality care.

The Institute of Medicine (IOM), whose mission is to improve health by contributing “unbiased, evidence-based and authoritative information and advice concerning health and science policy to policy makers, professionals, leaders in every aspect of society, and the public at large” was established in 1970 as the health arm of the National Academy of Sciences (IOM, 2015, para 1). This institute focuses on goals to improve the US healthcare system, specifically the triad of “access, quality, and cost of care” (Finkleman & Kenner, 2009, p. 28). Nurses can make significant contributions in these areas, and can serve important roles in public health, policy, business, education, and research, if more of those interested in the profession can be moved into the pipeline, starting with people in the community who may not be the “traditional” college student.

Health care reforms focusing on cost containment and keeping patients out of the hospital will significantly impact the bottom line, since many readmissions after hospitalizations that occur within 30 days are not reimbursed by Medicare or Medicaid. Demand for care will shift from acute care provided in hospitals to chronic care management, especially given that the population demographics are shifting to care for those with increased life expectancy and development of diseases common to aging. Nurses in community care settings, such as home health care organizations, can contribute to the solution to this problem by providing care in the place where most patients prefer to receive it -- their home.

According to the Bureau of Labor Statistics (2012), home health care is the fastest growing segment of nursing employment, increasing 55% from 2010-2015. Skilled nursing facilities are also in need of nurses. While hospitals seem to prefer to hire the bachelor prepared nurses, the experience new graduates can obtain in geriatrics, wound care, chronic illness, and dementia in a nursing home could prove attractive as a career entry position. It could also provide motivation to pursue more education at the professional level.

As an aging population and healthcare reforms drive the demand for more prevention, care coordination, and primary care, nurses can be the answer to the impending crisis. Three issues in the United States are identified as affecting the primary workforce supply:

- (a) lack of sustainable health care workforce caused by decades of poor workforce planning
- (b) poorly constructed payment incentives (many health promotion, disease prevention, and patient education services are not reimbursable), which drive potential physician and nursing candidates away from primary care
- (c) geographic maldistribution exacerbating shortages in rural and disadvantaged urban areas (MacLean, Hasmilller, Shaffer, Rohrbaugh, Collier, & Fairman, 2014, p. 448).

According to MacLean, et al. (2014), “services and payments within the US health care system will remain fragmented” and the need for primary care providers will fall short of the demand for them (p. 448). Access to care will be especially difficult for those who live outside urban areas.

For this reason, the problems imposed by geographic issues will be exacerbated. “More than 20% of the US population, 64 million people, live in regions the government has labeled health professional shortage areas” (MacLean, et al., 2014, p.448). Since most nursing education takes place in urban areas, those students learn to practice in teaching hospitals. But those who train in community-based, underserved areas often stay and practice there, which is one of the reasons community college based programs are so popular with nontraditional students. The roughly 1000 community college nursing programs (NLN, 2015), provide access to education in underserved and rural communities and educate 57.3 % of all nursing graduates each year (AACC, 2011).

### **Nursing Education**

How do these services get delivered when there are not enough providers?

Obviously, more people must be prepared to partner with the health care system to meet these demands. Currently, nearly half of the practicing nurse workforce is over 50 years old, with the majority of them retiring in the next 10 to 15 years (MacKusick & Minick, 2010). An estimated 30% to 54% of new graduate nurses change jobs or leave the profession during their first year of practice, and 25% of new graduates would adamantly discourage anyone from pursuing a career in nursing (Harrison, Stewart, Ball, & Bratt, 2007). Further complicating and contributing to the nursing shortage is the increase of nontraditional students, who enter the nursing profession after rearing children or after working in a chosen career other than nursing. The delay of their education prevents earlier entry into practice, as well as timely entry into advanced educational programs.

To practice as a registered nurse, students must graduate from an accredited nursing program (either with an associates or bachelors degree) and pass the National

Council Licensure Exam for RN's (NCLEX-RN). This is the standardized board exam that must be passed for a registered nurse to be licensed to practice, testing the minimum competency required to practice nursing safely. In 2011, over 140,000 candidates took this exam after completing their nursing degree. It is interesting to note that associate degree graduates provided the majority of new registered nurses in the US (57.3 %), while 40.3 % held a BSN (bachelors of science in nursing) and only 2.4% graduated from a diploma program (AACN, 2014). Why the fragmentation? That question is best answered by nursing history.

The history of nursing explains why current nursing practice is experiencing such a shift in educational preparation. Originally, nurses were trained in hospitals using the Nightingale model, where service was seen as the first role of nursing, and education second. This apprenticeship program initially lasted two years, and was increased to three, with graduates of the programs obtaining a diploma. This is relevant to current practice, and indeed, a few diploma schools still exist; but today the emphasis is on a “curriculum that allows us to educate rather than ‘train’ our students,...to provide students with the cognitive flexibility that will be required for the formation and navigation of tomorrow’s health care environment” (Borsay, 2009, p. 15).

From hospital based training, the profession of nursing evolved into collegiate education, and the Department of Medicine at the University of Minnesota offered a BS degree with a diploma in nursing in 1919. This consisted of a three year program at the university plus two years and four months in the school of nursing. The Rockefeller Foundation funded a report, published in 1923, that studied nursing education in the US. Known as the Goldmark Report (for the lead investigator, Josephine Goldmark, a social

worker). An experimental project resulted in the Yale School of Nursing that became the first autonomous educational institution where education took precedence over service to a hospital. (Kalish & Kalish, 1995).

Then the world went to war, and nurses made a difference, answering the call to military service, or leaving nursing to work in wartime industries. This created an extreme shortage of nurses, leaving hospitals to use the student nurses in the diploma programs to provide the majority of patient care, using the few RN's left as supervisory matrons, increasing their hours to overload. In 1943, the problem of this acute shortage resulted in the Bolton Act, creating the US Cadet Nurse Corps, mandating the education of nurses be cut from three years to 30 months, while authorizing federal funds for nurses' training. This change showed that nursing education could be successfully completed in less time, and dovetailed nicely with the quickly growing community college movement (Haase, 1990).

In 1948, a doctoral student at Columbia University, Mildred Montag, wrote a dissertation "The Education of Nursing Technicians" proposing a plan for a two year program located in a community/junior college. She envisioned this program preparing new nurses at the intermediate level "in an educational institution whose mission included the preparation of other technical workers – namely a junior or community college" (Haase, 1990, pp. 27 – 28). This broke with the traditional way of educating nurses in the first part of the 20<sup>th</sup> century, which was work and hospital centered, and emphasized the need for the education of nurses to be in a collegiate environment, where they would have "courses in general education, courses dealing with specialized content in nursing, and such courses which are related to and support for specialized content, as

the biological, physical, and behavioral sciences” (Montag, 1963, p. 101). She also acknowledged that these nursing technicians were semi-professional and that “the professional nurse must have a truly professional education” that “can be achieved in no less than the baccalaureate degree program” but that “for every professional worker there needs to be several technical workers” and that “the nursing technician is needed in large numbers if the professional nurse is to make the contribution expected and demanded of her” (Montag, 1963, p. 101). While most of the students who signed up for this new program came directly from high school, significant numbers were over 35 years of age, married, or male. Montag concluded that the associate degree in nursing seemed to attract students who might not have chosen nursing as a career otherwise (Montag, 1963).

So the debate continues. Associate degree nursing programs are appealing to those who worry about accessibility and costs, while growing evidence suggests that changing minimal educational level for entry into practice to the professional baccalaureate degree is necessary to foster improved quality and safety in healthcare. While the goal may be to have all registered nurses prepared at the BSN level, the reality of the nursing shortage and cost of educating students into this important profession means that innovative models will be needed for affordable and accessible pathways to practice.

Some of the potential solutions noted in the literature include:

- Creating a smooth articulation between ADN programs at community colleges and BSN programs at four year institutions, establishing credits that transfer seamlessly across schools (AONE, 2010).

- Standardization of nursing schools' admission requirements and curriculum as done by the Oregon Consortium for Nursing Education, a fully articulated statewide agreement where students are co-admitted to both their local community college and the Oregon Health Sciences University. After completing their first year of standardized prerequisites, their first two years of nursing education are completed at the community college, then they can transfer to the university for their fourth and final year, either as a resident or online. All credits and financial aid transfer with the student, allowing completion of the BSN, if desired (OCNE, 2015).
- Allowing community colleges to offer the bachelor's degree (CCB). Nineteen states have changed their regulations to offer this option as an affordable, accessible alternative for those students who could not do a four year full time education at a university. Data from Florida, the state with the most CCB programs, suggests that almost three quarters of the students served are over the age of 24, and would not be able to be residential students, being place-bound due to employment and/or family responsibilities (Floyd, 2006).

Recruitment into nursing education programs does not seem to be the problem. More applicants than ever are received into a field where virtually all graduates will find positions. In fact, over 79,000 qualified applicants to schools of nursing were turned away in 2012-2013 due to problems with shortages of faculty and clinical sites, few

willing preceptors, and lack of classroom space because of budgetary constraints. But how do we get more faculty to teach more students if we do not get more students into the pipeline? About 34 percent of schools surveyed by the American Association of Colleges of Nursing (AACN) stated that insufficient faculty was the primary reason they did not accept all applicants that were otherwise qualified to enter their program (AACN, 2014).

The Bureau of Labor Statistics predicted “thousands of job openings also will result from the need to replace experienced nurses who leave the occupation, especially as the median age of the registered nurse population continues to rise” (US Department of Labor, 2012-1, para.5). However, attrition (defined as the loss of students from a nursing program for reasons that were either voluntary, or nonacademic in nature, or involuntary losses, for academic reasons such as failure or dismissal) of those accepted into programs is a major problem globally (Braxton, 2000).

### **Role of Community Colleges**

At the present time, the largest single trainer of nursing students in the United States is the American Community College (ACC) system, training over 50% of the current registered nurse population (HRSA, 2013). The ACC is the fastest growing sector of public higher education, with more than 800 ADN programs in the nation over fifty years after their introduction in 1945. Associate degree education is appealing to policy makers because it seems to offer upward mobility and it is less expensive and more geographically accessible to more diverse student populations, such as the nontraditional college student, than more traditional university programs. How can community colleges train this population to be successful registered nurses (RNs),



“potentially meeting the needs of diverse healthcare consumers”? (Jeffreys, 2007a, p.164).

The concept of a college degree for general citizens was envisioned in the 1940's by the President's Commission on Higher Education, commonly known as the Truman Commission, which initiated an unprecedented expansion in post-secondary education in America (Kim & Rury, 2007). Fortuitously, it came at the same time as many soldiers from World War II came home and took advantage of the Serviceman's Readjustment Act of 1944, also known as the GI Bill, signed into law by Franklin D. Roosevelt to help soldiers readjust to civilian life. According to Folger and Nam (1976), it “was in effect the largest scholarship program in the Nation's history” (p.27). Although originally designed as preparation for upper division enrollment in universities, community or “junior” colleges evolved to serve specific needs in the communities they were part of, providing access to students who otherwise might not have pursued higher education (Cohen & Brower, 2003). By the mid 1970's, these institutions had “enrolled 34% of all students in U.S. higher education” (p. 31).

Women and minority students, who were not the typical college students of the early 20<sup>th</sup> century, swelled the enrollments of postsecondary education as well (Davis & Bauman, 2013). From less than 1.5 million students enrolled in postsecondary education of all types in 1940, there was nearly an 800 percent increase to 11 million in 1980, and according to the Current Population Survey (CPS) data from 2011, 20.4 million people were enrolled in college. Forty percent of this increase is due to two year college attendance, 6.1 million of all those students attending college. (US census, 2013).

In a Pew Research Center brief (Fry, 2009), the all - time high enrollment numbers in fall of 2008 of “18 to 24-year-olds attending college in the United States was driven by a recession-era surge in enrollments at community colleges” (p. 1). Due to a high unemployment rate of 46.1% of 16 to 24-year olds, many decided to return to college for a certificate or degree that would help obtain a job, retool or enhance their skill sets, and save costs, as a viable alternative to four year institutions which had set enrollment caps. These record enrollments made it challenging for colleges that obtained a significant portion of their funding from state and federal sources due to reductions during the economic downturn (Mullin & Phillippe, 2009). In fact, according to Juskiewicz (2014) in an American Association of Community Colleges report, as the economy began to improve in the fall of 2011, “enrollment at community colleges nationwide declined by more than 3 %” (p. 3). This drop off is the result of people going back to work.

Demographics of this population of community college students are interesting to consider, too. From the 2014 *Fact Sheet* (AACC, 2014):

- The average age of a community college student is 28, with the median age being 24 and percentage of those less than or equal to 21 only 30%.
- Fifty seven percent of students are women.
- A little over half are Caucasian (51 %), 19 % identify as Hispanic, and 14 % are Black. Another six percent are Asian/Pacific Islander, one percent are Native American, two percent are two or more races and the remaining six percent are unknown/other or nonresident alien students.

Community colleges are known to be an affordable alternative for students to access higher education. Especially in rural and underserved communities, the distance to attend a larger university would prohibit many from attending college. The number of jobs available to those with minimal education is shrinking as blue collar workers, those who are unemployed or underemployed, and those who are on public assistance become our underserved students (Freeman, 2007). Whether the goal is flexibility, allowing part time enrollment for students with jobs and family obligations, affordability to reduce the amount of student loan funds needed to prepare for transfer to four year institutions, or to gain employment, community colleges can be the gateway for many students who would not have access to higher education any other way.

According to Levin (2001), community colleges provide most of the postsecondary education for the underserved population, especially for the nontraditional student. Traditional students, defined as those between 18 and 24 years of age who are usually enrolled full time in postsecondary education directly following high school, are often not working, or only working part time while being financially supported by their parents.

But the community college population is composed of about 89% of students who do not meet the traditional definition. The nature of the nontraditional student makes community colleges a high quality, affordable option for access to higher education, based on program capacity, distance, and opportunities for employment and advancement (Freeman, 2007).

### **Nontraditional Students**

Nontraditional students, defined by the US Department of Education, have one or more of the following characteristics, according to Freeman:

delayed postsecondary enrollment following high school, enrolled in a postsecondary program on a part-time basis, employed full time, classified as financially independent for financial aid purposes, has dependents other than a spouse, is a single parent, and /or does not have a high school diploma or GED (2008, p. 57).

Note how many of the risk factors for non-completion match those defined in the nontraditional student population:

- Delayed entry – not enrolling within the same year as completion of high school
- Part-time student status – attending less than 12 hours/ semester
- Financial independence – no financial support from parents
- Working full time – 40 hours or more per week
- Dependents other than spouse
- Single parent status
- No high school diploma – dropped out or GED completion (National Center for Education Statistics [NCES], 2008).

Labeled as nontraditional if over the age of 25, students at community colleges have complex reasons for pursuing higher education. They often struggle with risk factors that inhibit their ability to complete their degrees. Since many nontraditional students have postponed their college experience to work or start a family, delaying their

entry into a more traditional university environment means that the community college better fits their needs for “easy access, low cost, and part-time attendance possibilities” (Cohen & Brawer, 2003, p. 407). In fact, it can be argued that the mature student in the community college population is the norm, rather than the exception, and that if all definitions of nontraditional are considered collectively, they are the majority of students in that environment (Kim, 2002).

Kim, as a doctoral student in the Graduate School of Education and Information Studies at UCLA, completed a review of literature that explored the ERIC database for the meaning of the label, “nontraditional” and concluded that there were at least three definitions of that term. She also concluded that those definitions, if taken collectively, included the majority of community college students. According to Kim’s literature review, the standard definition of nontraditional student is by age, placing those over 25 years old in this category. But background characteristics such as ethnicity and socioeconomic status, as well as financial independence from family of origin and single parenthood, can be more telling than age. The NCES focused on behaviors that put students at increased risk for attrition, and seven characteristics were present in at least one instance for 75% of community college students. Kim’s conclusion after reviewing the ERIC database highlighted the need for “research that focuses on ways to better understand the community college population far beyond the nontraditional paradigm” (Kim, 2002, p. 86) and explained how that research was critical to promoting their success. Paradigm, as interpreted in this study is a set of beliefs, values, and assumptions that a group has in common, rather similar to a culture.

Marion Bowl, project director for a grant funded project to increase levels of entry to higher education entitled REACHOUT, studied mature student access to higher education, and explored the transition for these students from their point of view. Bowl was specifically interested in moving away from “institutional perspectives and to gain insight into the experiences of learners” (Bowl, 2001, p. 143). The research process was critical educational or action research, to inform policy makers about the stories of the nontraditional students who were primarily women from minority, ethnic, and working class backgrounds. Bowl made no generalizability claims, but hoped to provide a rich account of the participants’ experiences, to perhaps encourage change. The data collected indicated “that financial, institutional, and class-based barriers impede the progress of nontraditional students” (Bowl, 2001, p. 157) and that “the picture of the nontraditional student which emerged was that of a highly motivated but frustrated participant unable to gain access to support and constructive advice” (Bowl, 2001, p. 157). Also noted were the themes mentioned in previous citations from the literature regarding how nontraditional students’ responsibilities conflict with study, work, family, and community expectations competing for their limited time. This participatory research study illustrated how committed these nontraditional students are to their education in hopes of improving their own learning and financial prospects (Bowl, 2001).

According to Stone (2008), adults are driven into the college environment by some form of catalyst, such as divorce, unemployment, or career change. These are the most common reasons given for re-entry into college, but the pursuit of lifelong learning and the dream of doing what has been postponed due to life challenges is certainly part of the decision for many. Blue collar jobs that provide enough income for living are not as

prevalent, as evidenced by Detroit's financial woes, and unless the minimum wage is increased as some advocate, people with education that ends with high school commencement will have difficulty supporting themselves financially. No matter what the impetus to return to school, be it technical skill or professional education for career advancement, most people realize it will be difficult to advance in life without higher levels of education.

However, life challenges for nontraditional students must be factored into the equation of persistence if these students are to be successful. Tinto's integration framework (1993) is important to consider with all student populations, and a study that explored this construct for community college students was done by the Community College Research Center that indicated "information networks that students develop in the classroom" could lead to academic and social integration (Karp, Hughes, and O'Gara, 2008, p. 1). Social integration could lead to retention and promote successful degree completion for these students.

Milem and Berger (1997) created a modified model of college student persistence by showing a relationship between Astin's theory of involvement (1984) and Tinto's theory of student departure (1975, 1993) that indicates both student behaviors and perceptions of academic and social interactions determine whether they integrate into the college environment and choose to persist. The behavioral component appeared to a stronger indicator, and involvement with peers and faculty plus the quality of student effort lead to learning and persistence, and ultimately what Tinto would have called longitudinal integration.

But how do commuter students get involved and separate from their old way of life, transition into the college environment, and ultimately integrate into new behavior patterns required for success in the higher education world? If there is incongruence or lack of fit with their institution, integration will be prevented and departure or drop-out can occur. So involvement appears to be the key, as evidenced by constructs measured in the Tinto model tested by Milem and Berger (1997) that showed “students who reported higher levels of involvement with faculty were much more likely to report higher levels of academic integration” and “higher levels of involvement with peers...were likely to report higher levels of academic integration” (p. 397).

According to Karp et al. (2008), at the Community College Research Center (CCRC), community college students can develop integration in the classroom, if they develop a sense of belonging, and would be more likely to persist in enrollment. This study identified “student participation in information networks as an important mechanism in encouraging integration” (p. 8). Defined as “social ties that facilitate the transfer of institutional knowledge and procedures” (Karp, et al., 2008, p. 8), information networks helped students in both social ways, making connections with the campus community, as well as academic ways, providing them tools for success in degree completion.

The unique qualities of the nontraditional student, and roles they often identify with, make the challenges of higher education even more difficult. According to the National Center for Educational Statistics (2008), they identify their primary role as employees or parents, rather than students, as more traditional learners do. Obligations of work and family create risk factors that challenge their persistence to graduation, and



often add to the stress of maintaining academic requirements of deadlines, testing, and course objectives being achieved. Assistance in navigating these obstacles can support their objectives to graduate and provide a better lifestyle for themselves and their families, as well as to improve their communities with the skills and knowledge they obtain from pursuing higher education.

There are multiple criteria by which to classify the nontraditional student, but this study focuses on those over the age of 25. An attempt to include a range of ages, ethnicities, and backgrounds for this study was accomplished by surveying a rural community college, another located in a suburban area near a military base, as well as an urban program in a Midwestern metropolitan area.

### **Nontraditional Students in Nursing Education**

Nontraditional students in nursing programs bring experience and maturity to the classroom, enthusiastically pursuing a career that can make a difference to them professionally and personally, affecting their families' health, both physically and economically. Multiple studies by Jeffreys (1993, 1998, 2001, 2002, 2003, 2007a & 2007b) regarding retention of nursing students reported strategies to “positively influence student retention through the design, implementation, and evaluation of conceptually and empirically based strategies” (Jeffreys, 2007a, p. 161).

Retention would be defined as the continuing enrollment of students who remained in college and met graduation requirements, while persistence will meet the definition of the process of students continuing their education, leading to graduation (Tinto, 1975). Years later, Tinto noted that retention improved by a socially inclusive and supportive environment (1993). As noted in the previous section, if students can

successfully navigate through the integration steps described by Tinto of *separation* from old norms, *transition* into the new college environment, and *incorporation* of the new behavior patterns required for success, their chances of persistence are improved.

Integration does not necessarily ensure persistence, if inhibited by incongruence or isolation, but the roles of faculty and staff are significant and important to success and student investment of energy into the academic and social aspects of the campus can be influential in the decision to depart or persist.

An interesting mixed methods study that explored the nontraditional male student in a nursing program was conducted by Smith (2006) at the Indiana-Purdue University at Indianapolis. He explored challenges faced by men in nursing school, first identified by survey (a pre-matriculation tool, validated for freshman in 1999), then sampled with purposeful criteria, by semi-structured interviews. Smith completed a calculation of descriptive statistics of the participants' perceived challenges, and then qualitatively analyzed interview data with the "help of a team of undergraduate and graduate students, led by the author" (Smith, 2006, p. 265). The results indicated the pressures these students felt included trying to balance the academic demands of college, family, and work responsibilities. The concept of time poverty, defined as "not giving as much time to their studies as they would have liked...snatching time to study wherever they could" (Bowl, 2001, p. 156), was supported as well. This was a study that was, by the author's admission, "limited in scope" (Smith, 2006, p. 268), and could be expanded to include all nontraditional students in nursing in a public college, identified by an instrument that is more recent, and normed for that population.

There is considerable research related to retention in pre-licensure programs, including those with diploma, associate, and baccalaureate degrees. For instance, Eddy and Epeneter (2002) looked for qualitative, nonacademic variables such as employment, children, and financial concerns that impacted nursing student success and noted 30 % of student nurses do not graduate. The factors that helped or hindered NCLEX success (passing the state board licensure exam) were discussed in their qualitative study of BSN students, but were not necessarily generalizable to the community college nursing student population.

Many studies related to retention focus on generic associate degree in nursing (ADN) or bachelor degree in nursing (BSN) nursing programs (Barbee & Gibson, 2001; Bessent, 1997; Courage & Godbey, 1992; Dowell, 1996; Harvey & McMurray, 1994; Jeffreys, 1993, 1998, 2001, 2002, 2003; Kelly, 1997; Manifold & Rambur, 2001; Villaruel, Canales, & Torres, 2001; Yoder, 2001; and Yurdovich, 2001). These studies focused on different student populations including minorities and nontraditional students from a faculty perspective, but the student perspective about why they persisted until the end of their nursing program is limited.

Some studies addressed the qualifications for acceptance, including Belcheir, Michener, and Gray's study (1998) that found family support and encouragement were critical to the success of older, nontraditional students, but did not specifically address nursing students. Other studies discussed procedures to improve study skills and grades, a topic studied by Dickerson & O'Connell (1990), Jeffreys (1993, 2001), Lehna, Jackonen, & Wilson (1996), Nurmi & Aunola (2001), Ryan & Glenn (2002), and Strage, Baba, Millner, Scharberg, Walker, Williamson, & Yoder (2002). Academic factors

included personal study skills, study hours, attendance and schedules, and use of academic services, but most of these early studies were quantitative in nature, assessing perceptions of these topics, but not asking for recommendations from the students on how to mitigate their academic challenges.

An excellent quantitative study, guided by the Nursing Undergraduate Retention and Success model (NURS), was completed at multiple sites (Jeffreys, 2007a). Jeffreys' purpose was to revise the Student Perception Appraisal (SPA), the tool used to evaluate nursing students' perceptions of successful goal achievement using a six point Likert scale to evaluate 27 items. The items measured were related to retention, and were assessed to gain further knowledge about nontraditional students' perceptions regarding retention and factors that restricted or supported their degree pursuit. The research focused on nontraditional students as a population that could potentially meet the above mentioned nursing shortage, if retained. She defined nontraditional students as those who met one or more of these criteria:

1. age of 25 years or older;
2. commuter;
3. enrolled part-time;
4. male;
5. member of an ethnic and/or racial minority group;
6. spoke English as a second (other) language;
7. had dependent children;
8. had a general equivalency diploma; and
9. required remedial classes (Jeffreys, 2007a, p. 161).

The study identified five environmental factors after analysis with Varimax Rotation. Factor 1, identified as “Environmental Factors”, explained almost 26% of the variance, and “incorporated seven items pertaining to the student outside the academic role,” including questions about financial aid, living arrangements, financial status, transportation arrangements, family emotional and financial support, and responsibilities within their family (Jeffreys, 2007a, p. 164). A matrix of correlation coefficients was constructed and the findings stimulated this study by recommending that “qualitative studies, focus groups, and /or a SPA comment section in which students are invited to describe item responses” would be a valuable next step (Jeffreys, 2007a, p. 166). It was one of the purposes of this researcher’s dissertation to obtain that information to extend the value of this instrument. Based on written consent from Dr. M. Jeffreys (see Appendix E), permission to use this tool has been granted to this researcher.

### **Origins and Development of the SPA-R**

Jeffreys (1998, 2002, 2007a, 2007b) completed numerous studies on retention in pre-licensure nursing programs, using her Student Perception Appraisal tool. With revisions, that instrument is now known as the SPA-R. These studies identified factors that supported or restricted retention that were found to be related to environmental issues, institutional interaction and integration issues, personal academic issues, college facilities, and friend support. Since the literature defined the problems facing nontraditional students, the focus of this research was to collect subjective data from the participants identified as nontraditional by the SPA-R tool, to address their viewpoints on how to help deal with those issues, as well as to increase the value of that tool. With ongoing analysis, the data obtained from these students could potentially be utilized to

develop supportive policies and practices at institutions of higher education to provide what students need to be successful.

Assumptions of the NURS model (Jeffreys, 2003) included: (1) nursing student retention is a priority for nurse educators; (2) student retention is multidimensional and influenced by various factors; (3) for nursing students in particular, the factors of professional integration and environment greatly influence retention, professional socialization, and enrichment throughout education that is beneficial for all students; and (4) persistence may be influenced by academic and psychological outcomes. Kern (2012) created a visual representation of this model, and has given this author permission to include it here for clarification:

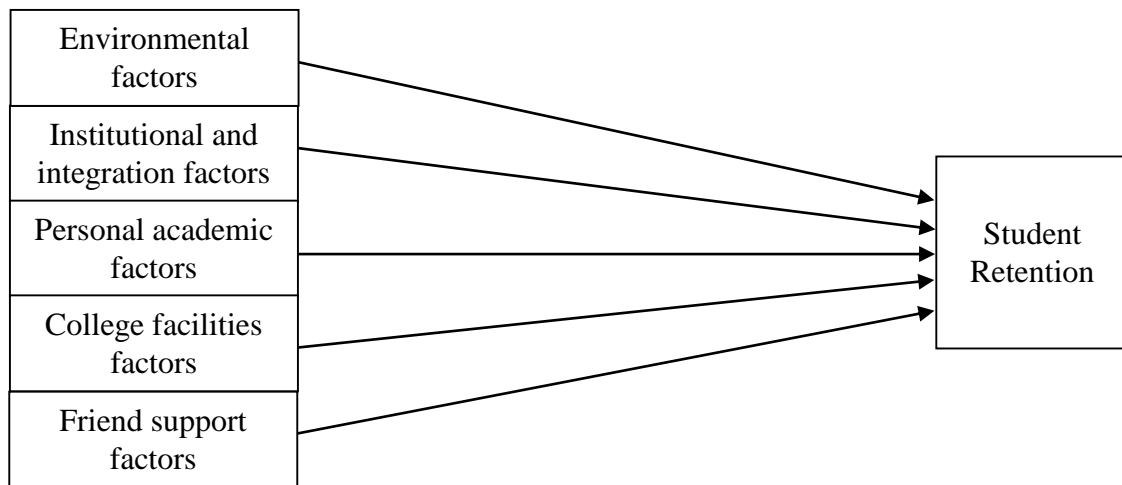


Figure 2.1 NURS model retention scale diagram developed by Kern (2012).

So it is apparent that considerable information on nontraditional students, including nursing students who are nontraditional, has been studied objectively with regards to their persistence and retention. What is missing is their explanation of the challenges that they have faced in their journey to be successful. This study gives them a

voice to tell educators about potential barriers they have experienced along the way to their ADN, and to explore potential solutions to those challenges as they perceive them.

### **Summary**

This chapter reviewed the literature that deals with the trends in educating nontraditional college students. The theoretical framework of self-efficacy and self-determination that underpins this study, variables, and concepts were discussed, building a case for the proposed study. Rationale provided for undertaking this study noted gaps in the literature from the students' perspective with regards to nontraditional nursing students and the challenges they face regarding persistence. Tinto's research in the area of persistence and integration is seminal work that applies to this student population, and evidence of applicability to community college students appears to support persistence if information networks are cultivated in the classroom.

The health care crisis and the nursing shortage, as well as the aging population of America was covered in an attempt to illustrate how important research that addresses nursing education is to the future of our health and well-being. Acknowledging the debate about how to best accomplish that education in the context of the history of nursing in this nation was addressed, and several models of programs that have solutions in place were identified. Realistic incentives to practicing nurses to return to school for their professional degree should include increased opportunities and salaries commensurate with more education.

Community colleges can help by getting interested students into the pipeline, since their programs are often more accessible to working adults who must deal with other responsibilities in addition to their course work. In reviewing the research about

nontraditional students regarding the factors that compete with their ability to pursue higher education, the same environmental issues of multiple demands and the difficulty of balancing the responsibilities of their lives repeatedly emerge from the data. What is not clear is how to support nontraditional students in their educational pursuit to improve retention and success. This study addresses that problem with a mixed methods design to explore the question of meeting the needs facing nontraditional students entering community colleges to study nursing, from the student's perspective.



## **CHAPTER THREE**

### **Methodology**

With the rapidly aging population in the United States and with the critical nursing shortage, schools of nursing must find more creative and effective ways to attract qualified candidates into nursing programs, and retain them at a higher rate. Nearly half of today's registered nurses (RNs) begin their professional education at community colleges, but an increasing number of community college students are now nontraditional; older in age, supporting dependents, working full or part-time, or entering from economically challenged socio-economic groups. This study explores the challenges facing this important group of potential nurses and how their perceptions about the experiences they had as community college nursing students impacted their success.

Detailed explanation of methods utilized to design this mixed methods study, select participants, collect data (both quantitative and qualitative), and analyze the findings will be covered in this chapter. Strategies and decisions are outlined, with an explanation of how the quantitative data produced potential participants who were then approached to participate in either focus groups or one-to-one interviews. Data transcription and analysis is covered, with the construction of the theory about how laypeople who are nontraditional students can successfully become registered nurses.

### **Purpose**

The purpose of this study was to explore the perceived relationship between nontraditional community college nursing students and environmental factors characteristic of nontraditional students, as well as their influence on persistence or

attrition in the students' nursing education program. The study also explores potential solutions to challenges affecting persistence, as perceived by the students themselves. The barriers faced by nontraditional students have been frequently noted in the literature, but have not been clarified by the people most able to give voice to those perceptions.

To reiterate the research questions, the study explores the following:

1. The perception of nontraditional students regarding environmental factors related to their success in nursing school.
2. The proposed solutions identified by the nontraditional nursing student to address environmental factors that are problematic.

## **Research Design**

### **Mixed Method Studies**

Mixed methods research is also known as mixed research or integrative research because it combines the quantitative or deductive approach of cause and effect studies with qualitative or inductive methods of obtaining the perspectives, beliefs, and opinions of the participants for improved clarity of findings (Johnson & Onwuegbuzie, 2004). The result can play to the strengths of each method, minimizing the weaknesses and improving the findings in a way that can be useful to practice. Both methods describe the data that are collected; one in a rhetorically neutral way that has been obtained objectively, reported in an impersonal, passive voice while the other is obtained in a more subjective way giving rich and detailed description of reality from personal involvement of the researcher with the participants.

One is not superior to the other. In fact, explanations from the research participants can explain and clarify choices made in a way that is otherwise difficult for the researcher to discern. The findings can be complimentary and give a more detailed picture of the results obtained. Mixing the methods in the research design can often answer the questions more thoroughly than either method by itself. Objective data without explanation can be misleading, while providing only subjective results can lead to questions of bias and speculation. Therefore, mixed methods research “uses a method and philosophy that attempts to fit together the insights provided by qualitative and quantitative research into a workable solution” (Johnson & Onwuegbuzie, 2004, p. 16).

With the goal of expanding the understanding of nontraditional students who chose to study nursing at the community college, a mixed method study transpired, where all consenting students in their last semester of nursing education at three midwestern community colleges, (one rural, one suburban, one urban) were surveyed with the Student Perception Appraisal-Revised (SPA-R) in stage 1, the quantitative phase. This instrument, along with student demographic characteristics, identified students who met the criteria of nontraditional, and assessed their perceptions of factors that influenced their nursing school success. After identifying the factors that motivate nontraditional students to pursue their education at a community college, students over 25 who could articulate their perspectives as “rich” informants were asked to participate in focus group interviews to discuss their responses to the SPA-R instrument, as stage 2A, the qualitative portion of this study.

The focus groups also identified articulate individuals for stage 2B of the study that included semi-structured one-to-one interviews of participants willing to discuss their

perceptions with the researcher. It was anticipated that these individuals would be able to explain the choices they made on the SPA-R, increasing the potential value of that tool, while providing rich information about the research question regarding support that might improve success in their nursing program.

### **Data Analysis of Mixed Method Results**

Analysis generated data, both a quantitative set to be analyzed with statistical methods, as well as a qualitative portion to be analyzed with an inductive approach, based on content from student interviews, both collectively in focus groups and individually during interviews. With purposeful selection of nontraditional nursing students just prior to their graduation, theoretical coding yielded categories representing their perceptions of both bridges and barriers they have encountered. By coding and examining linkages between the data, significant findings may provide insight into how to support future nontraditional students be successful in their quest for graduation and licensure as registered nurses.

This mixed method study documents these voices to inform educators about the challenges of nontraditional students to ADN completion, and how best to support student success. Additionally, the study provides external validity for the Jeffreys' (2002) Student Perception Appraisal-Revised (SPA-R) instrument, a survey designed to identify nursing student perceptions and appraisal of their abilities to remain in nursing courses and successfully achieve their degree.

Mixed method studies are defined and described in Tashakkori and Teddlie's *Handbook of Mixed Methods*, where the editors invited Creswell, Clark, Gutmann, and Hanson to write a chapter about advanced mixed methods research designs (2003). This

information served as the basis of the design for this study. The intention was to move from the quantitative findings as useful information that is available from multiple studies into the reasons behind *why* the nontraditional student continues to be challenged to persist, as well as *how* they would suggest those challenges be overcome.

To collect quantitative data, survey results from the aforementioned tool, the SPA-R, provided an opportunity to screen for nontraditional students and to reaffirm that the variables identified by the original research do indeed apply in the Midwest. The quantitative part of the study was helpful in reinforcing those findings, while exploring any unexpected results, also testing the variables of interest explored in more depth during the qualitative phase of this study. These quantitative results helped identify participants to purposefully sample for the qualitative portion of this study, specifically those self-identified as nontraditional nursing students. Implementing the quantitative portion first then progressing to the priority area of interest, specifically the dual qualitative piece, makes this a sequential explanatory design.

According to Cresswell, et al. (2003), “the sequential explanatory design is characterized by the collection and analysis of quantitative data followed by the collection and analysis of qualitative data” (p. 223). According to Morse (1991), this design can be especially useful if results obtained from the quantitative phase of the study are unexpected. More detail can be obtained and examined during the subsequent qualitative data collection phases. Data are integrated during the interpretation phase, using an instrument like the quantitative tool described above, to inform the open-ended questions explored during the focus group sessions. Further exploring identified themes with the individuals who consent to one-to-one interviews, the convergence of findings

can provide richer, more detailed observations and categories, bringing results together in the final analysis.

As described previously, this study then, is a sequential explanatory design (Creswell et. al, 2003); beginning with quantitative data collection and analysis, then adding qualitative data collection and analysis to an interpretation that integrates both methods, increasing the strength and trustworthiness of findings provided by each. By clarifying the relationships among the phenomena of environmental factors and persistence, while identifying the reasons why these students perceived they were successful, perhaps an increased understanding and ability to support nontraditional students will create more nursing graduates.

Table 3.1: **Research Design**

Overview of Study Plan	Participants
<p><b>Quantitative Data Collection</b>  <b>Stage 1-</b> Administered SPA-R survey</p> <ul style="list-style-type: none"> <li>• Analyzed demographics</li> <li>• Invited nontraditional students to participate in next stage</li> </ul>	<p>All consenting final semester ADN students in each of three community colleges (one rural, one urban, &amp; one suburban).</p>
<p><b>Qualitative Data Collection</b>  <b>Stage 2A-</b> Conducted focus groups</p> <ul style="list-style-type: none"> <li>• Audio &amp; videotaped groups</li> <li>• Explored variables from responses</li> <li>• Coded responses and asked for suggestions to improve success based on identified areas of concern from the literature</li> </ul>	<p>Focus groups conducted at convenient times and locations for self-identified nontraditional students (N= 2-3) at each college who agreed to participate after the initial survey (in each of the colleges identified above). Offered multiple alternative times to meet, including evening and weekend options.</p>
<p><b>Stage 2B-</b> Requested semi-structured interviews from articulate individuals</p> <ul style="list-style-type: none"> <li>• Audio taped, transcribed, and coded their qualitative responses</li> </ul>	<p>Students from each program, with an attempt to include mixed genders, ethnicities, ages, and socioeconomic representation. Obtained email addresses for member checking coded responses.</p>

### **Data Sources**

Data collection initially began with administration of the SPA-R tool to all undergraduate nursing students who consented. All participants were in their last semester of the nursing program in one of three Midwestern community colleges, one in an urban area, one in a more suburban locale, and one in a rural area. After approval from each institution, in an attempt to capture diverse perspectives, students were surveyed during one of their last classes. Consent forms (see Appendix A) were completed by those who wished to participate. Consenting students completed the instrument (SPA-R) and the demographic data sheet anonymously (Appendix B).

This instrument (SPA-R), along with demographic student characteristics identified students who met the criteria of nontraditional; then focus groups and focused interviews, using the tools of video and audio recording of purposefully sampled student nurses were conducted by the researcher in an attempt to explore their perceptions regarding the tool itself and to identify factors that challenged their persistence in completion of their associate degree in nursing.

### **Quantitative First Phase of Study**

**Setting and participants.** Participants for the study were drawn from nursing programs that offer the ADN at three community colleges in two Midwestern states. By selecting the mix of urban, suburban, and rural colleges, the researcher hoped to note any differences in response to the survey tool, as well as increase the diversity of students from different ethnicities and socioeconomic groups. The urban college is situated in a

large metropolitan area; the suburban college exists in a moderate middle to upper class locality; and the rural college, in an area that is not heavily developed, consisting mainly of agricultural businesses and farmland in the surrounding community. Each program admits between 80 and 100 students each year. The ethnic mix and gender of the students in each program varies by location, and was self-identified by the participants on the demographic tool (second page, Appendix B).

**Instrument.** These students in nursing education were surveyed with the Student Perception Appraisal-Revised (SPA-R) (Jeffreys, 2007a). The survey is a 27 item list (Appendix B) that asks the students to evaluate each item “in terms of how it may affect YOUR ability to remain in nursing courses this semester” (Jeffreys, 2007a, p. 162). Cronbach’s alpha for internal consistency of this tool is 0.82. Her population included participants from five associate degree programs and two generic baccalaureate programs in the northeastern US with a total of 1,156 participants. Before the factor analysis, a matrix of correlation coefficients between items was performed with five items having a correlation below 0.30, indicating the items were not significantly related (hours of employment, family crisis, and employment responsibilities, membership in a nursing club or organization, and childcare arrangements). These five items, along with the item related to professional nursing events (because the majority of participants marked the item as not applicable), were not included in the factor analysis.

Jeffreys (2007a) found the most supportive variables were those of nonacademic issues ( $p < .01$ ), and included emotional support from family and friends. The next most supportive factors were related to academic issues such as faculty advisement and helpfulness, college facilities, and individual academic performance. The most cited



restrictive issues for Jeffreys' study included environmental factors, such as number of hours worked weekly, family responsibilities, financial status, and family crisis.

Environmental factors included seven items from the SPA-R (living arrangements, financial status, financial aid and/or scholarships, and family responsibilities) and accounted for about 26% of the variance. Institutional interaction and integration factors included five items (interaction with faculty, counselors, and advisors) and accounted for nearly 10% of variance. Personal academic factors included four items (personal study hours, skills, and academic performance) and explained just over 6% of the variance. College academic facilities factors included three items (library, computer lab, skills lab) and yielded approximately another 6% of the variance. Finally, friend support factors included two items (friends within and outside of the program) from the SPA-R and accounted for slightly more than 5% of the variance.

Demographic variables were explored through a multiple regression analysis with no statistical significance noted with any of the factors. Independent samples *t-tests* were performed to determine if demographic variables affected any of the composite factor scores, and that revealed significance only for English as a First Language (EFL), with  $p$  value  $< .000$ . Several analyses of variance (ANOVA) were conducted to determine if composite factor scores varied based on previous healthcare experience or educational background. Means found to have significant *F* ratios were calculated using Scheffe' tests for pairwise comparison with no significance found. However, the analyses of variance revealed significant results ( $p < .01$ ) using hours of employment from the demographic data sheets as the independent variable (Jeffreys, 2007a).

Finally, Pearson correlation analysis found three significant relationships between self-reported course grade and composite factor scores for institutional interaction and integration factors (IIIF with  $p = .005$ ), personal academic factors (PAF with  $p = .000$ ), and friend support (FS with  $p = .038$ ) with the strongest relationship being an inverse relationship between course grade and personal academic factors ( $r = -0.206$ ), representing a moderate negative correlation. Jeffreys (2007a) explained that this inverse relationship meant that students who overestimated their academic strengths had significantly lower course grades.

These results indicated that “nontraditional nursing students perceive environmental variables as more influential for retention than other variables”, and the significance was not elucidated by demographic or student characteristics such as “age, gender, ethnicity, educational background, previous healthcare experience, primary language, enrollment status, marital status, dependent children, or first generation college student experience” (Jeffreys, 2007a, p. 166). The author suggested that using this tool with other student populations was recommended with “qualitative studies and focus groups” to ask students to describe their responses to the SPA-R items, inspiring this proposed study (Jeffreys, 2007a, p. 166).

### **Qualitative Second Phase of the Study**

**Sampling and participants.** After meeting with students who were in their final semester of nursing education at a community college and who consented to completing the normed survey (SPA-R), a group of mature students, over 25, who could articulate their perspectives as nontraditional learners in the role of “rich” informants, was asked to participate in stage two. Demographics were obtained regarding ethnicity, age, gender,

number of dependents, employment, and financial status. A target population of nontraditional students who met the criteria outlined in the literature review (specifically, over age 25, financially independent of their family of origin, from a minority group, including males, or with dependents other than spouse, and/or working while attending school) were invited to participate in a focus group at their college to discuss their responses to the SPA-R instrument.

The strategy of purposeful sampling is to select participants who met the criteria of nontraditional and were willing to articulate the information about their experiences in the community college nursing program from which they had recently graduated. According to Merriam (2009), this technique is a method of obtaining unique individuals with specific attributes of interest to the researcher. Newly graduated nurses were invited to participate in this study based on criteria of interest, and in this study that included those who met the definition of nontraditional, specifically over the age of 25, graduating from an ADN program, and willing to discuss their perceptions of both their SPA-R tool responses and their experiences about what led to their success.

**Data collection.** The focus group is a technique to obtain information from a specific population subgroup, according to Bender and Ewbank (1994). This method is used to investigate and explore variables found in survey data and provides a method of triangulation to improve validity and reliability in qualitative studies (Bender & Ewbank, 1994).

The focus groups also helped identify articulate individuals for stage 2-B of the study, that included semi-structured interviews of participants willing to discuss their perceptions with the researcher; interviews were conducted, but due to the small number

of participants, it is doubtful that saturation was achieved. See page 69 of this document where reasons for small sample size is addressed. Saturation, as defined by Corbin and Strauss (2008) is explained as “no new data are emerging”, but it can also denote “the development of categories in terms of their properties and dimensions, including variation, and if theory building, the delineating of relationships between concepts” (p. 143).

Merriam (2009) discusses how difficult the question is about how many interviews to conduct and her answer “an adequate number to answer the question posed at the beginning of the study” (p. 80) seemed to fit this study. These individuals provided rich information about the research question regarding support that might improve their success in the nursing program, while explaining the choices they made on the SPA-R, increasing the potential value of that tool. A pre-established schedule of questions through which the students were invited to explain their experiences in nursing school related to the previously identified factors that influence retention or attrition was developed (see Appendix C).

Two focus groups and two interviews were conducted by this researcher. Both methods provided rich data in the form of transcripts of the taped sessions. The advantage of focus groups, according to Merriam (2009) is that people could talk about the topics of interest with others with some direction from the facilitator. It is important to acknowledge that the researcher was a nurse educator, and all students who participated were reminded of that fact, and the desire to hear their point of view. Attempts were made to stay neutral, but empathetic, inviting them to share and clarifying the responses with open ended questions and gentle probing with statements like “tell me

more about that”. That process was also followed during individual interviews, conducted privately instead of in the group situation, but still using the semi-structured question as a springboard for data collection in areas where concepts needed to be developed from previous meetings. Cognizant of Merriam’s (2009) directives to the interviewer, the researcher attempted to be “respectful, nonjudgmental, and non-threatening” (p. 107). These attributes are the core of nursing care, and the background of this experienced nurse seemed an advantage in this regard.

By using open ended questioning, probing when appropriate for more information to clarify and understand the responses, potential descriptions of solutions and explanation of challenges they were facing were obtained. The participants as key informants were asked to review transcripts to verify the accuracy of their responses, as a member check, increasing validity and reliability of the qualitative findings.

**Data analysis.** The confidentiality of all participants was guarded with only audiotaped and transcribed responses of their interviews on a password protected computer, and each reviewed and signed an informed consent (see Appendix A) that has been institutional review board (IRB) approved. Their interviews were conducted in private and audio taped, then transcribed verbatim and analyzed for content and meaning. The interviews were analyzed using a grounded theory data analysis approach (Corbin & Strauss, 1990).

Developed by Glaser and Strauss (1967), grounded theory “denotes theoretical constructs derived from the qualitative analysis of data” (Corbin & Strauss, 2008, p. 1).

The data analysis process of grounded theory occurs simultaneously with the data collection process. Coding of relevant data begins early, after the first collection, and new data is constantly compared to the preliminary concepts that emerge.

The constant comparative method, developed by Glaser and Strauss (1967) assisted in analyzing the data from the transcribed focus groups and interviews. Patterns were noted, words and phrases were grouped together and eventually became categories. Clarification and modifications of those initial categories were incorporated into subsequent data collection (see Appendix G).

Grounded theory analysis requires the researcher to examine the data and identify concepts that lead to the development of categories that are composed of subcategories/codes. Each category/subcategory is further clarified through the identification of its own properties and dimensions, using inductive comparisons (Strauss & Corbin, 2007). The steps of Grounded Theory Data Analysis (Strauss & Corbin, 2007) in systemic order are *Conceptualization* (creating words that stand for common findings in the data), *Open Coding* (identifying the properties and dimensions of the concepts), *Axial Coding* (linking categories and subcategories by their properties and dimensions), and *Selective Coding* (unifying categories around a central theme and providing description and detail) . Based on preliminary coding, follow up questions and clarification were built into subsequent interviews. At that point, operational definitions grounded in the data are proposed and initial codes assigned, followed by constant comparison with the data for axial coding into categories that emerged. A unifying metaphor could then be developed that was grounded in the data.

With qualitative data analysis, collection of the data is often simultaneous to analysis (Merriam, 2009). In this project, two focus groups and two individual interviews occurring over the course of one year were accomplished by the researcher, who attempted multiple times to contact other students, now nurses, to participate in the process of data collection. Data were collected and an audit trail maintained of the analysis as it occurred. Data has been maintained in at least two secure locations, and computer software specific to qualitative analysis was employed, after the preliminary codes were identified. Memos to self that captured reflections have been included in the audit trail, as the interviews were collected. Constant comparison with previous data informed the next interview, to organize and refine the data collection with each subsequent interview. Specific leads were pursued, and irrelevant questions eliminated from the interview. Modified inter-coder reliability techniques were used to assist with theme development by reviewing preliminary categories with the methodologist.

### **Quality Criteria**

As Letts et al (2007) stated, “rigor in qualitative studies is critical” (p. 9). The researcher made every attempt to incorporate the four components of trustworthiness. Credibility was maintained by adhering to established transcription rules (see Appendix D) and attempting to use a range of ages, genders, and backgrounds with the selection of three different community colleges that have a nursing program. This also improved triangulation of the data, since multiple sources yielded confirming information. Member checking with those who agreed to share their contact information enhanced credibility of findings and was attempted to verify accuracy. The settings are thoroughly described in an attempt to prove the component of transferability, with explicit description of

participant selection. Dependability was enhanced by reviewing preliminary findings with the methodologist on the committee, and confirmability of data interpretation discussed once preliminary codes and categories were identified.

In an attempt to be transparent, as suggested by Miles, Huberman, and Saldana (2014), data were gathered and analyzed from all participants and phenomena that appeared important to the participants composed the criteria used to construct the categories. The preliminary findings were not static and continually changed with new input from each subsequent meeting. The attempt was made to decipher conditions relevant to the participants based on their perceptions of being a nontraditional student in a community college nursing program.

In checking for representativeness, all participants' responses to the interview questions were considered and included in the concepts noted in the codebook (Appendix G). When the surprising findings about the instructors were noted in the first focus group, for instance, those questions were followed up on in the next focus group and both subsequent interviews and evolved into the category of Politics, which had not previously been considered. This dynamic between the nontraditional students and their instructors could border on incivility, ranging from those who had objective, fair treatment to those who felt that the subjective evaluations in the clinical area were unfair, leading to very emotional responses and considerable frustration. This was confirmed and verified in all the following meetings with participants and gives the evidence strength.

### **Limitations of Study**

The number of nontraditional ADN students was difficult to predict and their time constraints limited how many chose to participate in the second phase of the study. The



hope was that by going to three different community colleges, there was enough diversity to generate interesting findings. However, the applicability of those findings was limited to the specific population identified. These restrictions are acknowledged. This researcher attempted to provide sufficient information for critical appraisal, acknowledging personal subjectivity and bias, while attempting to control for interaction with the participants and the data (Bradbury-Jones, et al., 2010). Obviously, the students who chose to participate were nearly through their program of study. An attempt was made to ask them to identify those nontraditional students who began the program with them and were not successful, however that only yielded anecdotal information during the interviews.

### **Overview**

Since the literature defines the problems facing nontraditional students, the focus of this research was to collect subjective data from the participants self-identified by the survey as nontraditional, to address their viewpoints on how to help deal with those issues, as well as increasing the value of the SPA-R tool. With ongoing analysis, the data obtained from these students will hopefully be utilized to develop supportive policies and practices at institutions of higher education to provide what they need to be successful graduates and eventual professionals in nursing.

## CHAPTER FOUR

### Findings

The purpose of this study was to seek the perceptions of nontraditional nursing students in community colleges about the influences that helped them to persist toward their goal of graduation and RN licensure. Participants were also asked about potential solutions to challenges from environmental factors as indicated on the Student Perception Appraisal-Revised (SPA-R) questionnaire. Specifically, students were asked about their perceived relationship between success in nursing school and environmental factors identified on the questionnaire. Additionally, the students were asked to propose solutions to address the identified problematic environmental factors; specifically regarding learning environment, institutional factors, college support facilities, financial and employment responsibilities, personal academic issues, and the support of friends and family. The participants were also encouraged to discuss what made them persist to graduation, indicating the factors that promoted their success, as well as challenged their persistence. Finally, they were questioned about potential suggestions for other nontraditional students who come to community colleges for their nursing education that could improve successful navigation through this rigorous course of study

This chapter provides details about how the data collection process proceeded from the quantitative findings to the complex analysis of the qualitative data using the grounded theory approach to develop the two categories of Internal and External Factors. Subcategories are identified and the properties and dimensions of those subcategories are detailed, illustrating the emergence of the structure from the data into the central concept of the Bridge of Support.

### Demographics

A total of 107 nontraditional ADN nursing students were initially surveyed; all from the Midwest region of the United States, 17 at a rural community college, 60 at a suburban facility, and 30 more at an urban program. All but one student were in their final semester prior to graduation. Demographics related to gender are available in table 4.1 (p. 60). As is typical of the general nursing population, over 80% are female. Most recent data available from the Health Resources and Service Administration ([HRSA], 2013) indicates that the US registered nurse workforce is composed of only 9.1% men. In the limited sample in this study, male representation is a little better in the student population of graduates noted in the aggregate (15.9%), but the rural population lags behind as noted in the following table.

Table 4.1 Gender

<i>Demographics for Nontraditional Community College Students Surveyed</i>				
	<b>Suburban SWCC</b>	<b>Rural KCCC</b>	<b>Urban SCCC</b>	<b>Aggregate (AGG)</b>
	<b>60 students</b>	<b>17 students</b>	<b>30 students</b>	<b>107 students</b>
<b>Gender</b>				
Female	83.3%	94.1%	80%	84.1%
Male	16.7%	5.9%	20%	15.9%

Age ranged from the youngest nontraditional student aged 25, to the oldest at 53 years of age. As shown in table 4.2 (p. 61), about 39% were 25 to 30; nearly 36% were 31 to 40; almost 20% were 41 to 50; and roughly 5% were over 50 years of age. In every

situation whether rural, suburban, or urban, over half were more than 31 years old. In comparison, the national statistics show the while the average age of an RN is 44.6, only 14.8% of registered nurses are 30 years old or younger, and the median age of nurses licensed after the year 2000 is 31 years for women, and 35 years for men (HRSA, 2013). Many of these graduates will work with others close to their own age.

Table 4.2 Age

<i>Demographics for Nontraditional Community College Students Surveyed</i>				
	<b>Suburban SWCC</b>	<b>Rural KCCC</b>	<b>Urban SCCC</b>	<b>Aggregate (AGG)</b>
	<b>60 students</b>	<b>17 students</b>	<b>30 students</b>	<b>107 students</b>
<b>Age</b>				
1 = 25 to 30 y/o	1 = 41.7%	1 = 35.3%	1 = 36.7%	1 = 39.3%
2 = 31 to 40 y/o	2 = 36.7%	2 = 35.3%	2 = 33.3%	2 = 35.5%
3 = 41 to 50 y/o	3 = 16.7%	3 = 29.4%	3 = 20%	3 = 19.6%
4 = more than 50 y/o	4 = 3.3%	4 = 0%	4 = 10%	4 = 4.7%
	Did not identify = 1.7%			Did not identify =0.9%
	≥ 31 y/o = 56.7%	≥ 31=64.7%	≥ 31 y/o = 63.3%	≥ 31 y/o = 59.8%
	Oldest: 53 years	Oldest: 48 years	Oldest: 52 years	Oldest: 53 years

Ethnicity variations were more significant by location (Table 4.3, p. 62). While 100% of rural students surveyed identified as Caucasian and only about 82 % of those in the suburban location selecting this choice, there is still a racial disparity with the national statistics. The classifications identified by the Bureau of Health Professions (HRSA, 2013) indicate that 75.4% of registered nurses are White, while 23.6 % are

African-American, 7.5 % are Hispanic, 3.6 % Asian, and 0.6 % American Indian or Alaskan, with 1.4% identified as two or more races. While the aggregate data are closer to these percentages, it is interesting to note that the percentage of urban students is nearly split between African-American and Caucasian students, with 10 % identifying as other.

Table 4.3 Ethnicity

<i>Demographics for Nontraditional Community College Students Surveyed</i>				
	<b>Suburban SWCC</b>	<b>Rural KCCC</b>	<b>Urban SCCC</b>	<b>Aggregate (AGG)</b>
	<b>60 students</b>	<b>17 students</b>	<b>30 students</b>	<b>107 students</b>
<b>Ethnicity</b>				
0 = Alaskan	0 = 0%	0 = 0%	0 = 0%	0 = 0%
1 = Native or American Indian	1 = 10%	1 = 0%	1 = 40.3%	1 = 17%
2 = African American or Black	2 = 1.7%	2 = 0%	2 = 3%	2 = 1%
3 = Asian or Pacific Islander	3 = 0%	3 = 0%	3 = 0%	3 = 0%
4 = Puerto Rican	4 = 5%	4 = 0%	4 = 0%	4 = 2.8%
5 = Other Hispanic	5 = 81.7%	5 = 100%	5 = 46.7%	5 = 75.5%
6 = White	6 = 0%	6 = 0%	6 = 10%	6 = 2.8%
6 = Other	1.6% did not identify			0.9% did not identify

Table 4.4 (p. 63) identifies other characteristics that were part of the demographic findings. Although the aggregate data show that over half of the students were married, it was interesting to note that 70% of the suburban students were married while only 30%

of the urban students were married. However, approximately 66% of both groups had dependent children at home. These data suggest that there is a greater likelihood that an urban student will be a single parent, suggesting an additional element of risk for attrition in that student's environment. Yet three out of four of the rural students had dependent children at home, and approximately 59% married. While approximately 10% of the aggregated sample were divorced or separated, breaking out by location showed only 1.7% of suburban students surveyed selected this marital status, about 12% of the rural students selected this choice, while over 23% chose that designation in the urban students surveyed. Also noted is that the questionnaire choice of "living with partner" was fairly consistent at 10% across all three environments, although slightly higher in the rural population.

Table 4.4 Marital Status and Dependent Children

<i>Additional Demographic Findings for Nontraditional Community College Students</i>				
	<b>Suburban SWCC</b>	<b>Rural KCCC</b>	<b>Urban SCCC</b>	<b>Aggregate (AGG)</b>
	<b>60 students</b>	<b>17 students</b>	<b>30 students</b>	<b>107 students</b>
<b>Marital status</b>				
1 = single	1 = 18.3%	1 = 17.6%	1 = 36.7%	1 = 22.4%
2 = married	2 = 70%	2 = 58.8%	2 = 30%	2 = 57%
3 = divorced or separated	3 = 1.7%	3 = 11.8%	3 = 23.3%	3 = 10.3%
4 = Widowed	4 = 0%	4 = 0%	4 = 0%	4 = 0%
5 = Living with partner	5 = 10%	5 = 11.8%	5 = 10%	5 = 10.3%
<b>Dependent children at home</b>	65%	76.5%	63.3%	67.0%

The enrollment data in table 4.5 ( p. 64) was difficult to interpret, as the choices were either part-time or full-time and there may be differing requirements or schedules, as many of the students have completed graduation requirements as prerequisites and are focusing only on their nursing courses, which may not meet full time course load.

Among this aggregate, 73.8% of students self -identified as part-time with less than 12 credit hours a semester. Only one student indicated the need for further college work after this semester, meaning over 99% in the aggregate have zero semesters remaining. Therefore, most of the participants anticipated graduating from their ADN program within a month of taking the survey.

Table 4.5 Enrollment

<i>Additional Demographic Findings for Nontraditional Community College Students</i>				
	<b>Suburban SWCC</b>	<b>Rural KCCC</b>	<b>Urban SCCC</b>	<b>Aggregate (AGG)</b>
	<b>60 students</b>	<b>17 students</b>	<b>30 students</b>	<b>107 students</b>
<b>Enrollment</b>				
<b>0 = Part-time:</b>	0 = 86.7%	0 = 11.8%	0 = 83.3%	0 = 73.8%
<12 credit hours	1 = 6.7%	1 = 88.2%	1 = 16.7%	1 = 22.4%
(hrs.) per	Did not			Did not answer=
semester	answer =			3.8%
<b>1= Full-time: 12</b>	6.6%			
or more credit				
hrs. per semester				

The demographic question about continuous enrollment was not answered by 11% (n=12) of the students. However, of the students who answered the question, 66% stated they had not been continuously enrolled. There was no way to determine how long

they had to “stop out”, but it appears that only about one out of three was able to stay continuously enrolled in their nursing program (Table 4. 6, p. 65)

Table 4.6

<i>Additional Demographic Findings for Nontraditional Community College Students</i>				
	<b>Suburban SWCC</b>	<b>Rural KCCC</b>	<b>Urban SCCC</b>	<b>Aggregate (AGG)</b>
	<b>60 students</b>	<b>17 students</b>	<b>30 students</b>	<b>107 students</b>
Semesters left in program 0 = 0 1 = 1	All participants have zero semesters remaining	0 = 94.1% 1 = 5.9%	All participants have zero semesters remaining	0 = 99.1% 1 = 0.9%
Continuously enrolled? 0 = No 1 = Yes 97 = n/a 98 = user missing	0 = 68.3% 1 = 21.7% 97 = 5% 98 = 5%  Total: 97+98 = 10%	0 = 64.7% 1 = 35.3%	0 = 63.3% 1 = 16.7% 97 = 13.3%  99 = 6.7% Total: 97+99 = 20%	0 = 66.4% 1 = 22.4% 97 = 6.5% 98 = 2.8% 99 = 1.9% Total: 97+98+99 = 11.2%
Anticipated graduation month/year	100% anticipate to graduate May 2013	91.4% anticipate graduation in May 2013 5.9% (n = 1) anticipate graduation in October 2013	100% anticipate to graduate December 2013	May 2013 = 71% October 2013 = 0.9% December 2013 = 28%

The students were asked about their employment status. About 41% were unemployed, but whether by choice or necessity there was no way to tell. This percentage is very close to the 40% unemployed identified by Jeffreys in 2007.



Approximately two out of three students surveyed worked 21 to 40 hours weekly, also consistent with Jeffreys’ findings of approximately 60% employed (2007a).

Table 4.7 Employment

<i>Additional Demographic Findings for Nontraditional Community College Students</i>				
	<b>Suburban SWCC</b>	<b>Rural KCCC</b>	<b>Urban SCCC</b>	<b>Aggregate (AGG)</b>
	<b>60 students</b>	<b>17 students</b>	<b>30 students</b>	<b>107 students</b>
<b>Employment hours</b>				
0 = Unemployed	0 = 40%	0 = 52.9%	0 = 36.7%	0 = 41.1%
1 = 1 to 11 hours weekly	1 = 6.7%	1 = 17.6%	1 = 3.3%	1 = 7.5%
2 = 12 to 20 hours weekly	2 = 18.3%	2 = 11.8%	2 = 16.7%	2 = 16.8%
3 = 21 to 40 hours weekly	3 = 30%	3 = 11.8%	3 = 36.7%	3 = 29%
4 = > 40 hours weekly	4 = 1.7%	4 = 0%	4 = 0%	4 = 0.9%
5 = One week per month	5 = 1.7%	5 = 0%	5 = 0%	5 + 6 = 1.8%
6 = Works PRN (as needed)	6 = 0%	6 = 5.9%	6 = 0%	Did not answer = 0.9%
	Did not answer = 1.7%		Did not answer = 6.7%	

**Quantitative Data Analysis**

As noted in Appendix B, the Student Perception Appraisal-Revised (SPA-R) tool asks student nurses about factors that may have restricted or supported their successful goal achievement of their graduation from nursing school (Jeffreys, 2007a). The 27 items use a six point Likert scale to question the students about how each item affected

their ability to remain in nursing courses during the semester the questionnaire was administered. Both “1” indicating “did not apply”, and “4” indicating “did not restrict or support” are neutral choices. Scores below “4” indicate restrictive items, whereas choices above “4” indicate supportive items. Of the 27 factors noted on the tool, seven appeared significant to the population for this study; see table 4.8 for descriptions (further quantitative results in Appendix F).

Table 4.8

		Descriptives								
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
						Lower Bound	Upper Bound			
Faculty advisement and helpfulness	SW	59	5.19	1.058	.138	4.91	5.46	1	6	
	KC	17	4.24	1.147	.278	3.65	4.83	1	6	
	SC	29	4.97	1.149	.213	4.53	5.40	2	6	
	Total	105	4.97	1.139	.111	4.75	5.19	1	6	
Transportation arrangements	SW	60	5.12	1.530	.198	4.72	5.51	1	6	
	KC	17	5.29	.772	.187	4.90	5.69	4	6	
	SC	29	4.31	1.834	.341	3.61	5.01	1	6	
	Total	106	4.92	1.566	.152	4.62	5.23	1	6	
College library services	SW	60	3.97	1.687	.218	3.53	4.40	1	6	
	KC	17	4.65	.702	.170	4.29	5.01	3	6	
	SC	30	3.33	1.807	.330	2.66	4.01	1	6	
	Total	107	3.90	1.654	.160	3.58	4.21	1	6	
Nursing professional events	SW	59	4.15	1.375	.179	3.79	4.51	1	6	
	KC	17	3.35	1.272	.308	2.70	4.01	1	5	
	SC	30	3.50	1.676	.306	2.87	4.13	1	6	
	Total	106	3.84	1.481	.144	3.55	4.12	1	6	
Encouragement by friends outside of school	SW	60	5.55	.790	.102	5.35	5.75	2	6	
	KC	17	4.94	1.249	.303	4.30	5.58	1	6	
	SC	29	5.07	1.132	.210	4.64	5.50	2	6	
	Total	106	5.32	1.000	.097	5.13	5.51	1	6	
Encouragement by friends within class	SW	60	5.57	1.047	.135	5.30	5.84	1	6	
	KC	17	5.71	.470	.114	5.46	5.95	5	6	
	SC	30	4.87	1.432	.261	4.33	5.40	1	6	
	Total	107	5.39	1.147	.111	5.17	5.61	1	6	
Child care arrangements	SW	59	3.69	2.087	.272	3.15	4.24	1	6	
	KC	17	2.65	1.869	.453	1.69	3.61	1	6	
	SC	30	2.77	1.906	.348	2.05	3.48	1	6	
	Total	106	3.26	2.044	.199	2.87	3.66	1	6	

Regarding faculty advisement and helpfulness and using a 95% confidence interval, all students scored this descriptive as a supportive item except some of the rural ones, as evidenced by the lower bound score of 3.65 (with a choice of ‘4’ as neutral).

This indicates a significant difference ( $p = .009$ ), despite the aggregate data indicating a mean of 4.97 (supportive) for this item.

Transportation arrangements for the aggregate group were positive at 4.92. However, some restrictions were noted for the urban students with lowest scores of 3.61, despite a mean of 4.31. Also college library services, while hovering around the neutral 4.0 mark (3.9 mean), were significantly lower at 2.66 for some of the urban students. The rural students coded this item as high as 5.01, or moderately supportive, which moved the mean for the rural group to 4.65, considerably higher than the aggregate. Significance indicates a  $p$  value of .041 for transportation arrangements and  $p = .027$  for college library services.

Nursing professional events was significant, but  $p$  value was .047, as an item for the total population came in between 3.55 and 4.12 (3.84 mean for the aggregate), relatively neutral. However when breaking this item down by location, suburban students came in highest in 4.51 as supportive, while the rural and urban students noted restrictions, coding this item as low as 2.7 for the rural students, and 2.87 for the urban students.

Childcare arrangements proved to be another significant item ( $p = .050$ ). As an aggregate group, ranging 2.87 to 3.66 with a mean of 3.26, students indicated it was an item perceived as restrictive for their successful program completion and ability to remain in the program. With that said, remember “1” indicates “does not apply”. If the student does not have children, would they code 1? This is especially apparent in the rural population where 1.69 was the lowest answer, with the highest being 3.61. Revisiting “dependent children at home” demographic data, 76.5% of the rural students

indicated they had that situation. It appears when reviewing the data that all students acknowledged some restrictions to their success if childcare arrangements were surveyed. The best score was the relatively neutral 4.24 for the suburban students, but the mean was 3.69 overall for that location.

Finally the areas that were most significant for all students, coded as moderately or greatly supportive with means over five, were the encouragement of friends ( $p = .01$  for in class friends,  $p = .023$  for friends outside school). As an aggregate the mean was 5.32, ranging from 4.3 in the urban students to 5.75 in the suburban participants. Within class friends came up even higher, with an aggregate mean of 5.39 in a range from lowest at 4.33 in the urban population to 5.95, greatly supportive in the rural population. Also significant is that all 107 participants answered this question. More statistics, including the ANOVA and multiple comparison findings are included in Appendix F.

### **Qualitative Findings**

The second page of the questionnaire asked for demographics of the participants (see Appendix B). A single question was added by this researcher asking if they would be willing to participate in a focus group interview about their experience in nursing school with a place to leave a phone number or personal email contact, if interested.

Of the 107 participants, 57 gave contact information with their demographics, indicating they would be willing to participate in a focus group interview about their experience in nursing school. Nine of the 17 rural students, 13 of the 30 urban students, and 35 of the 60 suburban students provided either a phone number or personal email for the researcher to contact them after graduation. Despite multiple attempts over the summer and fall after the rural and suburban students graduated, and several attempts to

contact the urban students after their fall graduation, only seven ultimately participated in either an interview or focus group.

Focus group number one (FG1) was conducted in the early fall, after these nurse graduates from the suburban college had passed their nursing boards. Participants in this session included a 47 year old African American female who was a military veteran, a 53-year-old Korean woman for whom English was a second language, as well as a Hispanic female age 28. This group was the most diverse in age and ethnicity. Each participant was provided with their initial SPA-R responses for review and accuracy. The approved Informed Consent form was signed by each participant, indicating their willingness to participate in the group discussion. Confidentiality was maintained by password protecting the digital files generated.

The session was audiotaped with the help of a graduate assistant, who did not participate in the discussion. The focus group was conducted in a private conference room. No names were used to identify the participants, who were encouraged not to use names and instead were identified by number. A notepad was provided for each participant to jot any notes that occurred to them while someone else was speaking. During the instructions participants were encouraged to allow each person to finish their thought before starting with the next one. The graduate assistant kept field notes during the group interaction. Following the approximately one hour group session conducted by this researcher, journal entries of impressions were made and audit trail maintained. This was used to inform the next interview. The methodology worked well and was followed with each subsequent interview or focus group.

That first individual interview (I1) occurred nearly a month later with a rural student, a 37 year old divorced mother, who came to an office setting at a college campus, well away from the college she graduated from. When asked why she thought she was the only one of the nine students who left contact information to participate, she stated that they were probably afraid.

*“You don’t want the college to get your true and honest opinion. You want to sugarcoat that because you might need to have recommendations from those teachers, or you might work with them later on. It’s a very small community.”* (lines 223-225, I1)

This interview took approximately 30 minutes. Again, the student was allowed to review her SPA-R questionnaire and was very forthcoming with her opinions about the tool.

*“The survey doesn’t really give you an option regarding the faculty’s advisement and helpfulness. Some of them are very helpful and some of them are not helpful at all.”* (lines 12-14, I1). She stated that English is her second language as well, and it was difficult for her to acclimate to the American community college environment because:

*“In my country we were allowed to question the teacher. Over here it’s ‘yes ma’am or no ma’am’, hands behind your back when you walk down the hallway. Over there you actually get a lower grade if you can’t verbalize your thoughts, and I don’t want to say argue your point, because that sounds like you’re arguing, but talking about why you feel this way.”* (lines 44-48, I1).

Focus group two (FG2) started as an interview with one participant, and the second one arrived late, so the tape was restarted. The meeting occurred in a small classroom of the local hospital where these two participants agreed to meet and have

pizza with the researcher. The graduate assistant was also present and kept field notes during the interaction while running the audio equipment. These two students were both white females who had recently graduated from the suburban program. They were both in their mid-30s and had young children at home. Originally four people signed up for this focus group conducted early in December, but the weather did not cooperate and two were unable to participate. Those two participants were offered alternative dates, but did not respond to multiple attempts to set that up. One of them was male, and his input would have been especially welcome. Despite the small focus group, over a third of the qualitative data gathered came from this transcript. Again, journal entries of impressions were made directly after the group met by the researcher, and the responses obtained informed the next interview.

Finally, in an attempt to gather data from an urban college in a metro area, an individual interview (I2) with a 25-year-old African-American female was accomplished. This occurred in a fast food restaurant chosen by the participant. When asked why she felt she might be the only one interested in discussing her nursing school experience, she stated “*she would let her classmates know I was interested and get them to call me*” (line 210, I2) and in fact, got on her iPhone and posted it to their social media website. Unfortunately, despite multiple attempts to connect with this group, no one was forthcoming. However, this interview did provide an interesting perspective by the youngest student of the nontraditional age group interviewed.

All transcripts were reviewed line by line multiple times, and open coding was done to develop categories (Appendix G). Considerable reflective thought and brainstorming with the methodologist consolidated data into subcategories by axial

coding. Following a grounded theory approach as described by Corbin and Strauss (1990), all data were analyzed and grouped, consolidating into a structure which can be conceptualized as a bridge (Figure 4.1, p. 73).

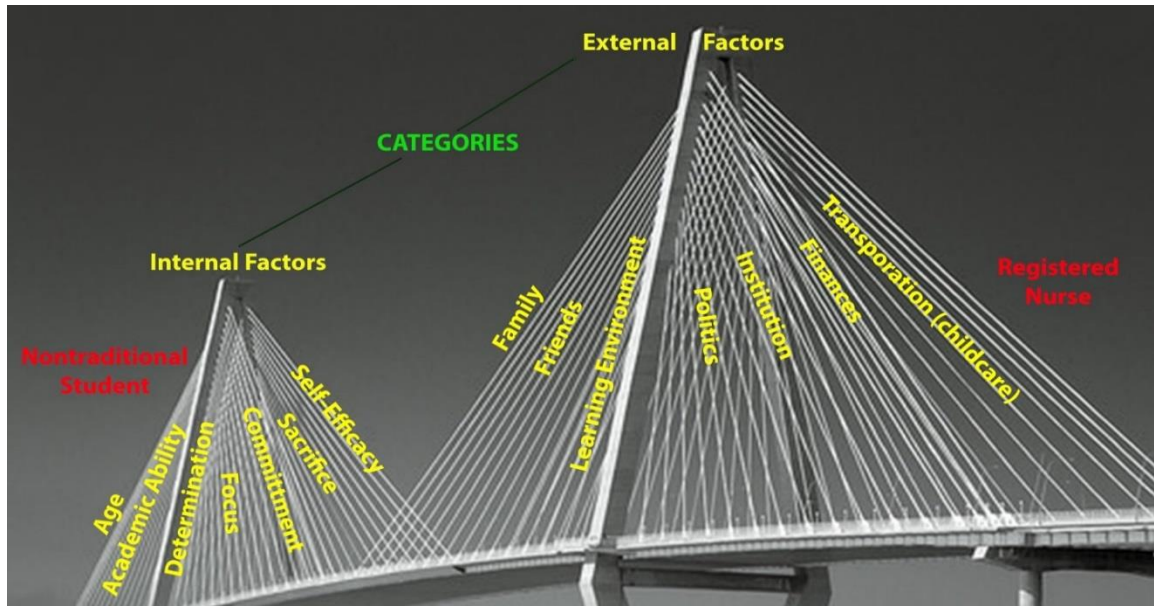


Figure 4.1 Bridge of Support

If one views all the data as a river, the bridge from bank to bank symbolizes the crossing of nontraditional students into nurses. This analogy helped explain how the categories of Internal and External Factors emerged from the data as essential supports to the bridge. Seven Internal Factors became subcategories intrinsic to the learner. They include Age, Academic Ability, Determination, Focus, Commitment, Sacrifice, and Self-efficacy. These are analogous to the cables that come from one of the two main support structures of the bridge. The other essential support for the bridge becomes External Factors. These were items outside of the individual student that supported the transition



from layperson to nurse. Those are very similar to the factors identified by Jeffreys (2007) and consist of: Family (including parents, siblings, spouses and significant others as well as children), Friends (both in school and those outside the community college), the Learning Environment (both at home and school), Transportation to get to school and clinical, the Finances to pay for the program and books, the Institution itself where the student chooses to be educated, and the Politics of the situation within the community college they attended, which is a previously unidentified area that had to be added to explain some of the subjective comments made by the students interviewed.

### **Internal Factors**

The journey across the Bridge of Support to RN begins with assessment of students' internal strengths and weaknesses. The invisible knapsack of characteristics contains many factors intrinsic and personal to each student, some of them controllable, and other factors that are not under their control. The motivation to begin the process is different for each student, but finding those factors can be essential to retaining these people and supporting them to persist and graduate.

To explain and illustrate how the category identified as Internal Factors evolved, the transcripts contain many rich examples of each subcategory for analysis and the essence of the data will be shared. The decision trail explained in the following section shows how the relevant concepts progressed into categories. Verification of the coding was supported by journal entries of impressions from each of the interviews, and results of how each interview informed the next illustrated. Using qualitative content analysis while supporting each subcategory with specific quotes, the properties and dimensions which emerged will be supported with rich description provided by the participants.

**Age.** The first Internal Factor, or subcategory identified was Age. This cable of the Bridge of Support is one of the uncontrolled factors, which can be seen as a strength or a weakness, but definitely a consideration for nontraditional students. Only people who were over 25 years of age qualified to be part of the interview phase of the study. Therefore, the dimension of age ranged from 25 to 53 years for these participants. However, with regards to properties or characteristics as an adult learner, that could be positive or an asset, as evidenced by the first focus group (A), or a problem area that created a challenge, as noted by another in that group (B):

(A) *“The older you get, the more you have your priorities in line”* (line 565, FG1).

(B) *“The harder it is to focus, retain. It takes more for me to get it.”* (line 543, FG1).

The Age factor emerged in all four transcripts, and is best illustrated by the youngest participant. She stated:

*“I’m at a time in my life where I want to be growing in my career and not starting over. But to do nursing, I have to be starting over—struggling to feel confident in my skills—at the age I am, that’s what I want.”* (lines 82-88, I2).

**Academic ability.** The next Internal Factor subcategory identified was Academic Ability. This cable of the Bridge of Support is somewhat under the control of the nontraditional student who is aware of their learning preferences, but perhaps has never had this rigorous of a test of their scholarly abilities prior to nursing school. Defined simply by the youngest participant as *“having the brains to be a nurse”* (line 161, I2), the participants were all very forthcoming about the benefits and challenges they had faced obtaining their degree in nursing. They identified their learning styles:

*“Pictures help so much, and if I can get my hands on it, I learn faster.”* (line 245, FG1) and *“I taped myself reading the material out loud so I could listen to it again later.”* (line 273, FG1).

They freely discussed the time involved in reading and preparation for class, clinicals, and testing. Many quotes were considered, but the following seemed to best illustrate the time commitment they had to make to be successful.

*“Finding time outside of class was next to impossible.”* (line 97, FG2).

*“I read for hours and hours—you need to live and breathe the nursing.”* (line 394, FG1).

*“Most weeks I spent at least 32 hours in the library in addition to class.”* (line 54, I2).

However, most telling was the discussion about study habits. This seemed best articulated by one of the second focus group participants as:

*“Changed from memorizing (the material) to long term storage, so I have information to deal with problems at the clinic.”* (line 55, FG2).

While all of the students had to meet the grade point average for admission into the program and had taken fairly rigorous prerequisite courses such as anatomy and physiology and chemistry, many were quite surprised at how memorization skills no longer worked and critical thinking and application became essential to their success. This cable of the Bridge of Support, Academic Ability, was important to their successful completion of the journey to RN.

**Determination.** A third Internal Factor that emerged as a subcategory was Determination. Defined as *“drive”* by one of the interviewees (line 56, I2), it ranged

from being discouraged by “*lack of determination*” (line 52, I2) to confidence, or “*wanting to be the one that made it*” (line 143, I1). Nearly every participant mentioned how hard they worked to persist, despite “*wanting to stop—I didn’t want to do it anymore, and I cried quite a bit*” (line 293, FG1), emphasizing the uncertainty of ability to those who felt successful, “*it can be done if you stick to it*” (line 148, I2). The dimensions were noted to be easy when “*the instructors helped—made you want to do well for them as well*” (line 293, FG1) to difficult as evidenced by comment “*I had to resign my job to devote time to study*” (line 225, FG1). However, many talked of faith in themselves or a higher power “*I had to prove I could do this--push past it*” (lines 341-2, FG1) and “*I made it because of God’s grace--you must be willing to serve people.*” (lines 319-320, FG1). Finally the property of strength with regards to the subcategory of Determination ranged in dimension from lacking, when “*I got very down on myself*” (line 119, I2) to incredible, acknowledging “*my strength came from a deep faith in God and consider nursing to be a calling from the Lord*” (Lines 316-318, FG 1).

This third cable in the Bridge of Support theory is a difficult one to assess prior to beginning the journey of nursing school. But without the factor of Determination, the chances for success are diminished and students could give up instead of persisting.

**Focus.** Focus was a word used by many of the participants to describe the fourth Internal Factor identified during qualitative analysis. Defined as the ability to “*concentrate on my studies*” (line 28, I2), many were challenged to avoid their “*mind wandering at times*” (line 265, FG1). Limited time to focus was identified by one of the first group members as a reason one of her peers was not able to pass:

*“She was a very smart student, but life was too busy to do the reading and she had difficulty passing her boards.”* (lines 392-396, FG1). That same student said that her own focus was improved by *“establishing a schedule, a structure for study. Habits like arriving early and sitting in the same place helped.”* (lines 355-364, FG1). Comments included being *“spread so thin and pulled in a million directions”* (line 398, FG1) and demonstrated the challenges of not having this internal attribute. One student even quit her job to sharpen her focus *“resigning because I had to keep focusing on reading and studying and doing assignments.”* (lines 534-535, FG1).

Instructors could present the content in a way that was confusing *“you had to tune the lecture out sometimes to avoid confusion when it contradicted the text”* (lines 131-133, FG1) or clearly *“some prepared the material and shared their Power Points, which were helpful to have to prepare for class and increased involvement”* (lines 91-91, FG1).

The Focus cable on the Bridge of Support can be strengthened with opportunities and suggestions shared by these nontraditional students. It appears to be one of the factors that is controllable and able to be augmented during the nursing program, which can benefit the future nurse in practice.

**Commitment.** The fifth cable of the Bridge of Support is a controllable factor. The subcategory of commitment was defined as devoting resources and time to the goal of becoming a nurse, as illustrated by this comment from the first interview regarding total commitment: *“I had no personal life. There’s just no time for anything but school and homework.”* (line 242, I1). This concept was best articulated by a student who let her family know *“I need this time if you want me to be successful.”* (line 515, FG1). Marginal devotion to the goal of graduation is difficult to evaluate, since all these

students expected to do so in the near future and no unsuccessful students were part of the study, but the anecdotal evidence provided indicates that those with marginal support might feel like this student, who expressed her feelings about *“that one day, it was just awful and I was questioning whether or not, you know, if this was my calling”* (lines 454-456, FG1).

Some had few concerns when it came to finances *“receiving scholarships for my education, plus we saved enough to be okay”* (lines 186-188, FG 2), while others found it essential to be supported, where the participant stated *“money dropped off very low, but I think it was important for me to do that so I could concentrate on my studies.”* (lines 27-28, I2).

Devotion to the goal of crossing the Bridge of Support appears essential for the successful completion of the journey. Commitment as an internal factor is something to assess and evaluate as an indicator of whether a student will persist in the journey to graduate and become a nurse, especially when challenged by mitigating factors present in their complex lives outside of school.

**Sacrifice.** The last quote brings the next subcategory into sharp focus. Sacrifice as an internal factor was noted by numerous examples from all four sessions, ranging from neglecting family responsibilities *“if you are one of those people who need to have a clean house, you’re not going to be able to clean”* (lines 312-313, FG2) to making accommodations *“I cooked meals on the weekends so there was one less thing on my mind”* (line 380, FG1). Personal needs were met by giving up independence *“I had to move back home because I saw how hectic my schedule was going to get.”* (line 25, I2), while others neglected their families, stating *“it tears down the family, when you’re not*

*able to do the things you used to do*” (lines 85-88, I2). One of the older students crystallized this category of Commitment, emphasizing the goal by saying:

*“Sometimes you have to make just a little bit of a sacrifice to get what you want. And sometimes your children have to make those sacrifices too....But in the long run, it pays off for them in the end.”* (lines 401-406, FG1).

The cable analogy for the Bridge of Support identifies the internal factor of Sacrifice as essential to success because not only will there be sacrifices along the way to graduation from nursing school, but also because nurses sacrifice their own needs to care for their patients every day. They are away from their families for long periods of time caring for others’ needs, often postponing basic nutrition and elimination for the patients they serve. Emphasizing this reality to students and strengthening their awareness of this part of the professional requirements will ultimately benefit them in their career.

**Self-efficacy.** The final internal factor identified came from suggestions from members of the proposal defense committee about using Bandura’s theory of self-efficacy (1977). Defined as the person’s estimate of their ability to perform well, “postulating that cognitive processes mediate change but that cognitive events are induced and altered most readily by experience of mastery arising from effective performance” (p. 191), these students had to believe in their ability to reach their goal to take on the challenge of nursing school. The participant from the first interview called this her “*stubborn streak*” (line 263, I1). The youngest student said what made her persist when things got challenging was “*getting selfish—I motivated myself to prove to my family that it could be done.*” (lines 143-145, I2).

Properties for this important subcategory ranged from mastery, moving from novice student nurse to graduate “*seeing other nurses and knowing if they can do it, I know I can*” (line 331, FG1) and being proud, seeing graduation as “*a personal accomplishment*” (line 336, FG1), to belief in self. This belief wavered between uncertain when the students “*didn’t feel like I knew what I was doing*” (line 459, FG1) to internal confidence, as evidenced by “*that push, that constant push*” (line 285-6, FG 1). This provided the motivation internally “*to prove to my family that it could be done*” (line 143-145, I2). Another said “*Just knowing I’m this smart person, I can do this; not getting discouraged and just keep on trying harder.*” (lines 332-334, FG1).

As noted on the Bridge of Support graphic (p. 73), Self-Efficacy is a central cable that intersects with many of the other factors previously described. The behavioral changes that must occur to transition a layperson into a registered nurse are extensive and challenging. By enhancing this internal factor, coping, retention, and successful navigation through the nursing program could help nontraditional students persist to graduation.

### **External Factors**

While the Internal Factors covered in the previous section emerged from the qualitative data stream as attributes that nontraditional students bring to the Bridge of Support as they initiate their nursing school journey, there are items outside of the individual student that support the transition into RN as well. These External environmental Factors became a category with seven subcategories analogous to the bridge cables previously identified as supports necessary to ensure retention. When these



factors are perceived as restrictive by nontraditional nursing students, they can impair their ability to successfully navigate the transition to graduate nurse.

Beginning with Jeffreys' tool, questioning began with factors that were significant to student nurses regarding support of friends and family, the learning environment, transportation, finances, institutional factors and college support; valuable information was obtained during interviews and focus groups. Since these areas had been previously identified as important to nontraditional students, and were confirmed as significant by the quantitative findings from the earlier survey, the participants were asked to give their opinions about these factors (see Focus Interview Protocol, Appendix C).

**Family.** With regards to the subcategory identified as Family, relationships discussed ranged from those with parents, siblings, children, and significant others including their spouse. All seven participants had something to say. In focus group 1, the woman from Korea stated “*my husband paid for tuition and he gave 100%--No, more than 100%*” (line 223, FG1). The African-American veteran stated that “*my sisters were the greatest support system that anyone could ask for*” (line 281-284, FG1) and also “*my eight-year-old son studying with me was also great support*” (line 286, FG1). She also acknowledged her husband; “*he basically took over everything and gave me time to study*” (lines 288-289, FG1). The youngest member of this focus group, the 28-year-old Latina student stated “*the thought of not disappointing my parents helped me push through it*” (line 330, FG1). She also spoke of a “*really bad day, when I was just not feeling it, and I was questioning whether or not, you know, if this was my calling. And I talked to my husband and he was like ‘you know you’ve always wanted to do this for a long time and just finish it—we’ll see where we go from here’*” (lines 454-457, FG1).

These words indicate how important the family support was to the students, but they were also quick to identify the opposite dimension, as one student discussed regarding a friend who did not make it through the program. *“She struggled tremendously. Her family doesn’t understand that these are not just the regular type of test questions that you get. She needs to let her family know ‘I need this time if you want me to be successful- I need this time’ and she’s still struggling with that.”* (lines 512-516, FG1), indicating the challenging dimension of this subcategory. .

Perhaps the most significant response related to the subcategory of Family, incorporating the dichotomy of this topic was from the youngest participant, the African-American urban student who stated *“My mom was my number one fan. She allowed me to move back home. She was supportive emotionally, but I know it was emotionally draining on my mom and she would get frustrated and maybe feel like I didn’t care, when of course I do. So I think she would get a little mad sometimes, but she knew it was for greater cause and she was still able to support me when she could.”* (lines 83-90, I2).

The support cable of Family emerged as a strong indicator of how essential this part of the Bridge becomes to successful completion of the nursing program chosen by these nontraditional students. The strands of the cable include their children, their spouses and significant others, their parents, and their siblings, often providing the strength to continue on the journey to their goal of completion of the journey to RN.

**Friends.** The subcategory of Friends yielded rich, significant results as well. It seemed natural during data analysis to further subdivide this category into friends outside of class, and those within the program. With regards to friends who were not in school, dimensions ranged from understanding *“they knew where to find me—in the library*

*because my head was in the books*” (lines 35-36, I2) to letting them know they had different priorities *“I’m not always gonna be able to be there, not because of issues, but because I need to focus my time”* (lines 502-504, FG1), indicating the opposite dimension of this subcategory called oblivious. .

Concerning friends in school, two properties emerged. One was study groups, ranging in dimension from helpful to not utilized, as evidenced by these quotes:

From focus group one, *“we lifted each other up and solved problems together”* (line 299-300), while another participant noted *“we were a close knit group who became like a little family”* (lines 300-301) another who concurred, stated *“we just became family, my other sisters”* (lines 306-307). However, some felt very differently, stating, *“I don’t study in groups. They’re distracting and they don’t get anything done-- and they chat.”* (lines 7 & 11, I1). Between these two extremes were those who occasionally used them to study and prepare for tests *“when we met in the conference room of the library or other students’ homes for test preparation”* (line 77, FG1).

The second property discussed had to do with peers in the program, either at the same level or above. The dimensions ranged from positive and beneficial where *“people would call me when things were going bad and maybe together, you know, we’d relieve a little bit of the stress”* (lines 202-205 FG2) to judgmental feelings, such as *‘The younger ones generally just wanted to get out of there. They don’t care if they understand it, they just want to get out --and I want to understand’* (lines 37-38, I1).

This External Factor comes up very significantly in the quantitative findings previously acknowledged by others who have studied nursing student retention (Jeffreys, 2012; Kern, 2012). Friends as a subcategory (or cable) to the Bridge model must be

acknowledged, indeed encouraged, as a strong indicator of the strength of support that can be provided to the nontraditional nursing student as they navigate the difficult transition to registered nurse.

**Learning environment.** The subcategory Learning Environment was divided into the properties of home and school. The home environments these students described ranged from quiet and organized “*a dedicated room with a desk, books, and quiet where no one bugs you*” (line 46, FG 1) to much more stimulating and unconventional, labeled chaotic and noisy: “*I’ve always been a studier where the TV can be on and the kids can be around*” (line 30, FG2). But that student also stated that “*when it got close to an exam I just studied in my car, because it’s the most comfortable environment and it’s what I’m used to*” (lines 31-33, FG2).

School properties for the Learning Environment subcategory included the instructors, tutors, lab staff, advisors and counselors, as well as clinical sites. By far, the most discussed topic was instructors. Dimensions of this property ranged from supportive to challenging. Although Jeffrey’s tool has only one item about faculty advisement and helpfulness, this seemed to be the area that everyone wanted to discuss. When referring to the answer they coded on the survey, most stated they wished there was a place to indicate more than a number. For instance, class preparation in teaching could be very positive, as evidenced by comments such as “*the PowerPoints were really helpful to have to prepare for class*” (line 150, FG1) or extremely negative “*it is so hard to keep up without the PowerPoints, and you couldn’t prepare or comprehend while writing so fast*” (line 123, same student). One student emphasized how “*quality is more important than the quantity of information presented*” (line 120, FG1). The English as

second language students encouraged the instructors to “*take more time, slow down, and provide more explanation*” instead of “*rushing to cover all the material*” (lines 105, 120, FG1). This topic was further explored at the first interview after the focus group, where the rural student, who coded faculty as ‘moderately restrictive’ on the survey, stated “*some of them are very helpful with study hours before and after class; and then there were some of them, especially in the senior year, that were not helpful at all. If you came in and asked questions because you didn’t quite get it or wanted to make sure you got it right, they kind of made fun of you because you needed it the second time.*” (lines 16-21, I1).

Clinical instructors, who might be different than those the students have in the classroom also ranged from supportive “*giving you a pat on the back when you’re down*” (line 292, FG1) to the punitive “*making you feel so little*” (line 110, FG 1). This topic was covered with each subsequent interview, to get more information. The rural student said “*instructors want to prepare you for the real world --there’s not going to be any handholding. Most of the students left in tears after clinical hours every day. It was very much ‘you’re on your own’. She was there just to pretty much get you out of the program*” (lines 82-87, I1). This strong feeling was discussed in both subsequent interviews, and in the second focus group both students agreed their clinical experience “*could’ve been better*” (line 75, FG2), with the comment from one of them that “*they did not have a very strong preceptor experience and got no IV experience*” (line117, 132, FG2), a problem echoed in nursing education research, due to lack of clinical placement opportunities. In fact, some students work more with simulated patients in a lab than they do with actual people in the hospital.

Another property of the subcategory Learning Environment included tutors, who ranged from available and knowledgeable to the more neutral not used but “*I knew they were there*” (line 185, FG1) if needed. The youngest student interviewed appreciated the tutors at her urban school were “*dedicated to nursing*” (line 10, I2), and one of the other focus group members commented “*they really knew their stuff and came prepared*”. However the Korean student felt the tutors “*didn’t understand her and it didn’t work out*” (line 162, FG1). In the second focus group, this finding was explored further, and both participants made comments. One stated “*I didn’t really use the tutors*” (line 57, FG2) and the other felt “*they could have been more helpful*” (line 58, FG2).

With regard to advisors and counselors, they were often helpful and supportive “*treating them special, keeping them informed and helping students find money for school*” (lines 176-177, I2). But frequently “*not used*” (line 63, FG2), according to several of the participants.

Also discussed was the lab staff who helped the students learn their nursing skills for clinical. The comments here were much more positive, ranging from appreciation for dedication and convenience: “*skills lab staff are amazing*” (line 99, FG2) to the need for updated facilities and inconvenient availability as a negative “*we need more hours to feel competent and our lab really needs updating*” (line 111-113, FG2).

In review of this cable of support, the Learning Environment is a very complex, interwoven one that needs to be available to nontraditional students to support their transition into the nursing profession. If the Bridge of Support is to serve as a successful passage for these students, the External Factors of instructors, tutors, lab staff, advisors, and counselors are important to consider when evaluating community college nursing

programs. In fact, this could be the beginning of “information networks” (Karp, et al., 2008, p.1) leading to academic and social integration, hopefully improving retention and persistence.

**Politics.** Many of the students discussed interactions between themselves and their instructors, as well as with other students. Some spoke of being aware of the dependency they had on how instructors’ opinions of them made a difference in whether they were successful or not. Politics, as defined by the online unabridged dictionary is “the use of strategy in obtaining any position of power or control, as in business, university, etc.” (n.d) and seemed to describe some of the challenges these nontraditional students had to face, and was therefore added as a significant subcategory of External Factors, based on recorded journal entries of areas of high emotion.

Age discrimination for example, was described by one student who felt challenged for her lack of technology savvy: *“I didn’t have the Internet on my phone, and the younger students showed me --it makes a huge difference. They’re younger, they’re already into that whole technology and if they’re my age they might be a little hesitant”* (lines 250-253, I1). She also stated *“the ones that were on Facebook and friended the teachers fared a lot better than the older population, like me and my friends; we thought that it was the wrong thing to do, a little bit unprofessional”* (lines 108-117, I1).

These statements seemed to indicate that students require an ability to navigate the political situation, especially for nontraditional students who may be very different than their instructors with regards to culture, age, and socioeconomic status. Another example from the first focus group was the older Korean-American student who *“didn’t want to get too close to a person (teacher) because everyone wanted to succeed to make a*

*good grade; but sometimes she made you feel so little-- I didn't appreciate that"* (lines 108-110). She described a clinical day, where her instructor was *"really upset"* (line 422) because she made a mistake *"but we make mistakes and if I know everything why am I student? If we make mistakes supposedly the instructor is to teach us you know, show us what to do. But at the end of the day she told me 'I want to talk to you'. She made me stay late, took me in another room where another instructor was waiting. She made me go and see the director and it was really heartbreaking. She could have handled it by herself without bringing the issue all the way to higher level"* (lines 425-432, FG1).

Multiple examples were given of the power that instructors have to subjectively determine whether a student succeeds or not. For instance, the clinical rating system was described by the rural student: *"when you have clinicals they rate you every time. One is subpar, two is standard, & three is above average. If you get three ones you're out of that clinical. Well wrongs you can do is the wrong color earring, the wrong size earring, your hair might be touching your eyebrows or touching your hair to get it out of your eyes, you might have forgotten to put your scissors in your pocket or your pants legs could be touching the floor. But the teacher-- her hair was not up in a ponytail, her pants legs were touching the floor, she didn't have a watch or scissors and that would've been four one's that day! I find it unfair you know-- they have to set an example"* (lines 289-299, I1) and provides evidence for the dimension of subjective and controlling with regards to power as a property of the subcategory Politics.

The negative end of this political subcategory was clear, and subsequent focus groups and interviews revealed that instructors could be helpful in playing a big part in the student success. For instance *"I had a family situation and I had to transfer from one*



*campus to another, because I had to drop out one semester because of issues. But they talked me through it—I mean they kept me going, they motivated me, and I feel like they really made me into the independent nurse I am today”* (lines 63-66, I2), indicating the objective and fair treatment dimension of this subcategory.

No matter what the External Factor known in this study as Politics is called, the power and strength of this cable must be acknowledged. To navigate from layperson to professional nurse, understanding the presence of this subcategory and learning how to negotiate through it will be helpful in most any environment where nurses might practice after graduation.

**Institution.** The subcategory Institution denotes facilities at the college each student chose to attend, and includes the properties of library, classrooms, and laboratories. The positive end of this dimension was discussed by the urban student who stated *“we have our own computer lab, so it helped out not having to go to library where everyone is, because our computer lab-- you couldn't come in unless you are in nursing, so I kind of felt like we were treated a little bit special. The school I think provides for us well-- provides for our department well”* (lines 10-14, I2), coded with the dimension of availability. On the opposite end of the dimension was lack of use, as evidenced by the rural student's statement, *“I didn't really use the library unless I absolutely had to. They don't have enough computers down there. You can do most of what you need to do at home”* (lines 174-176, I2). Most typically, library and facilities use was moderate, available when needed, *“reserved rooms to study”* (lines 79, 158, FG1). One of the

tudents used the library *“to watch videos, but the online library was much more helpful”* (lines 96-97, FG2).

The Institution subcategory was important to acknowledge in the Bridge of Support metaphor because it could make a difference in the nontraditional students' navigation from layperson to nurse. As noted in the literature review of chapter two, many of the students at community college in nursing are nontraditional, and strong facilities and support services from the library, skills labs, and classrooms can help them transition across the bridge deck into lifelong learners.

**Finances.** All students interviewed openly discussed the subcategory of Finances, which included financial aid, scholarships, employment, and any other sources of money that allowed them to complete their nursing education. The dimensions ranged from requiring assistance to totally independent coverage of costs. In interview one, the rural student said, *“they had the Perkins program where you can get up to \$200 for your books and I used that”* (lines 176-177, I1). She also applied for a scholarship *“for single parents who don't have a lot of income and were first time in college”* (lines 182-183, I1). In addition she stated *“my mommy provided financial support, too”* (line 230, I1). The urban student was very matter-of-fact when explaining how important financial aid can be; *“I knew I had the brains, I didn't have the money. If financial aid were not in place I probably wouldn't have had a graduating class”* (lines 161-166, I2).

One of the students from the second focus group stated *“I received a Pell grant for both years of nursing school. If it wasn't for that I wouldn't have completed nursing school-- I wouldn't have been able to afford it”* (lines 166-168). She stated she had to work to supplement the grant *“I had to pay for my own books and I had to work for*

*everything--for more than 40 hours a week most of the time.”* (lines 174-175, FG2).

When asked when she had time to study and sleep, she stated, *“after the kids were in bed-- and I usually got less than 5 ½ hours. My primary care doctor and I went back and forth on it because every time I came in I would be so tired. But I’m in a better place now because I pushed”* (lines 181-184, FG2). This harkens back and intersects with Sacrifice, the previously mentioned Internal Factor.

The other student in the focus group stated *“I received scholarships for my nursing education. I think the biggest hardship for me while I was doing this was having to quit my job and giving up the paycheck and knowing that yes, I would be okay, we saved enough, but it was still hard knowing am I making the right decision? Am I going to get out of this and like it? It’s always on your mind.”* (lines 186-189, FG2).

Focus group one had two students who got assistance from the GI Bill, one as a veteran, and one who was married to an active duty soldier. Both discussed how *“affordability at the community college”* (line 215) made their dollars go further, but one complained that she *“had to get permission to use funds for school supplies—and that was stress that was unneeded. It was given to you for the purpose of going to school and you should be able to use it for those academic things that you needed”* (lines 177-182, FG1). The other military wife said *“I wish I could have got some scholarships, but already having a bachelor’s in biology kinda made that really difficult. They declined it ‘cause I already had that degree”* (lines 216-217, FG1). Finally, the most mature aged student from Korea exhibits the other end of this dimension by stating *“my husband paid for it. I didn’t have any difficulties there”* (line 223, FG1).

When discussing the property of employment under the subcategory of Finances, there was quite a range of opinion. From the previously mentioned student who had to work at least 40 hours a week, to the rural student who stated “*the first year I could kind of work part-time where I can set my own hours. But the second year there is no way*” (lines 245-246, I1). Many of the first focus group students kept working part-time after beginning their program, but as the Korean student stated “*I had to resign my second year to have time enough to study*” (line 225, FG1). The youngest member of this focus group stated she was lucky because “*it was a job where they let me work one or two days a week. So it was very manageable and they were very good about letting me do that, so it was only a few hours. So I felt like I could do both and kind of add that on my resume so they could see that I was working, and I was able to manage time and priorities*” (lines 232-235, FG1). Finally, the veteran summed up the feelings by commenting; “*if you don’t absolutely have to work full time and you can do just a couple of days a week I would say that that would benefit you more, because the stress level that you deal with, and then having to deal with work, and then if you have a family, to deal with that. I just don’t see that works with nursing school. I’m grateful that I didn’t have to do it*” (lines 519-523, FG1).

Regarding the Bridge of Support, the cable of Finances is definitely a consideration for these nontraditional students who nearly completed the trip across from layperson to RN. It was often the reason the community college program was chosen, for affordability and access, allowing them to meet their responsibilities with occasional assistance from grants, scholarships, and family support. Most had to sacrifice income to

successfully navigate the journey through school, but the rewards both intrinsic and extrinsic for doing so made them persevere.

**Transportation and childcare.** A weak subcategory that was almost eliminated from the External Factors category was Transportation and childcare, because not too many students had much to say about it. However, this data did not seem to fit with any of the other subcategories, so will be acknowledged here. It did not seem to be much of an issue for the urban student, who stated *'there's lots of ways to get around the city'* (line 24, I2), mentioning public transportation when her own vehicle gave her difficulties affording gas. In focus group two, one of the students stated *'having my own car made it really helpful'* (line 7) but that *"when clinicals were a distance we carpoled together"* (lines 8-9, FG2). She stated *"we even had a couple of instructors who offered to get some of us a ride if we were uncomfortable driving across the river. So that made it really easy"* (lines 9-10, FG2). As previously mentioned, one of the students with small children at home stated she would *"just take my car and park somewhere like a Park or even the parking lot at school and I just study in my car"* (lines 31-32, FG2). Childcare responsibilities were only mentioned in passing. One of the participants, *"studied at night after the kids went to bed"* (line 177, FG2) and another mentioned that after a test she *"always went home afterwards and turned back into mommy"* (line 229, FG2). Both of these participants had a range of reaction from their families, with one stating *"my family was **not** a good support. All my mom would say was that you need to slow down-- you're going to miss your kids growing up and you're going to feel guilty about this for the rest of your life"* (lines 240-242, FG2) while the other student said *"you know I kind of had the opposite, where my husband was phenomenal. He took over the mom role in a*

*minute, taking care of the kids, cooking, cleaning, and constantly reminding me that everything would be okay in life. By making this change I was going to have more time with my kids than what I had before”* (lines 245-249, FG2).

However, since these students were successful at crossing the Bridge of Support to their RN goal, there is no way to determine from the data whether others who were not successful dropped out because of transportation or childcare problems. Since it came up in the quantitative findings as significant, being in the restrictive category for many students if there were problems here, this support must be in place for successful program completion, apparently.

This chapter was about how each of the two categories, Internal and External Factors emerged from the qualitative data findings. Using the Bridge of Support metaphor, seven subcategories were identified in each of the two main categories, with supportive properties identified and dimensions explained, and described as cable supports that contributed to successful navigation across the bridge to RN. The voices of the participants helped emphasize the decision trail followed by the writer, producing rich findings for qualitative analysis, while raising some interesting variations on quantitative findings that will be discussed further in chapter five.

## CHAPTER 5

### Discussion and Conclusions

This chapter summarizes and discusses results of this study. What is significant and meaningful about the data is explained, and conclusions and recommendations are presented. The chapter shares findings regarding the perceptions of nontraditional nursing students in community college associate nursing degree programs, with implications for educators and suggestions for further research.

### Summary of Findings

As noted in the previous chapter, nontraditional students who were given a voice had much to say about their nursing education. They were able to provide rich descriptions of their perceptions about the experience of attending college and the complex phenomena that contributed to their success and challenged their ability to persist.

The problem of the national nursing shortage is very real, as evidenced by the literature review in chapter two; the projected demand for these specialized caregivers will only increase as our population ages and the Affordable Care Act creates the need for more health care providers. One of the proposed solutions is to bring nontraditional students into the profession by way of the community college and the associate degree in nursing option awarded by these institutions. This more accessible and affordable route is appealing to both the interested student and those who would support them. By listening to the voices of the study participants, perhaps nurse educators can better

support the retention and success of those who currently make this educational choice, as well as encourage others to pursue professional education in the discipline.

The process of seeking perceptions of nontraditional nursing students at the community college level was accomplished by first identifying them through a normed survey, inviting them to participate in either a focus group or private interview to discuss their responses, then analyzing their responses to answers to the following questions:

- 1) How did nontraditional nursing students perceive the relationship between their success in nursing school and factors in their environment?
- 2) What solutions were proposed to address the problematic environmental factors?

To accomplish this purpose, a mixed method study was initiated with community college nursing students in their last semester before graduation. In an attempt to provide a variety of participants, a rural college, a suburban college, and an urban college in a metropolitan area of the Midwest were included. Data were collected from all the nontraditional nursing students who consented to participate in the quantitative portion of this study, then qualitative findings were generated from those participants over 25 years of age who agreed to discuss their responses in either a focus group or private interview.

Analysis of the quantitative findings from the SPA-R questionnaire reinforced Jeffreys's (2007a) findings regarding student retention as it relates to the factors of environment, institution, personal academic issues, college facilities, and friend support. However, significant variations were apparent during data analysis for this study. While the aggregate data closely mirrors the findings of the original study conducted using the SPA-R instrument, analyzing data in this study by location told a different story. For instance, under the category of faculty advisement and helpfulness, there was an



aggregate score of moderately supportive at 4.97 (with 5 indicating moderately supported student success). But, when breaking out specific college locations, the range was 3.65 (in the moderately restrictive category) at the rural program to a high of 5.46 (with 6 being greatly supportive) at the suburban program. Discrepancies like this were discussed, both in focus groups and interviews with the students who participated in the qualitative portion of this study.

During analysis of the qualitative findings from two focus groups and two interviews, a metaphor emerged from the data identifying both Internal and External factors that provides the essential “Bridge of Support” that allows nontraditional students to become registered nurses. Using qualitative content analysis, subcategories were identified using axial coding in a grounded theory approach.

### **Discussion of Findings**

The relationship of this study to previous findings about nontraditional students seems to reinforce that nursing students’ perceptions of variables influencing retention are fairly consistent. Although the sample size was small, with only 107 participants in the quantitative portion, factors such as faculty advisement and helpfulness, transportation and childcare, and institutional services were significant to the nontraditional students. Encouragement by friends both within the class and outside of school seems essential to successful goal achievement. Interesting data did come from separating responses from each of the three locations, providing a slightly different picture for those in rural areas as compared to those in suburban or urban colleges.

Data differences were noted with regards to gender that are important for nurse educators and directors of associate programs to note, depending on the location of their

program. Although sample size is small, rural students were more likely to be female (94%) than the national findings of men in nursing (nearly 10%). Suburban and urban students are more gender diverse than national averages, with nearly 17 to 20% of the students identifying as male. This could be important to consider when recruiting nursing students, either to improve the ratio to more men in rural areas, or to continue the trend of inclusion that is beginning to show in other community colleges.

Educating faculty on curriculum delivery to the adult student is an area that could improve outcomes for nontraditional students, too. Over half their students are over 30, no matter which location data were collected from, and they have different learning styles than millennials. Workshops for nursing instructors on andragogy, emphasizing Knowles' findings about the need for applicability of content and active learning opportunities instead of lecture and content coverage would go a long way to satisfying this population of learners. For instance, assessing technology competence early in the nursing program and remediating those who would benefit from the tools available to nurses using the electronic medical records of their patients would be beneficial to students in the program, as well new graduates entering practice. Pharmacology is another area that revisions to curriculum could be beneficial to all nursing students. Instead of memorizing every drug they might administer in the clinical situation, teaching them to look up the important specific information using the available tools in their database while learning classifications and general information about medications would be more realistic.

Diversity in nursing does not mirror the population of the US, with three out of four RNs of the Caucasian race; less than one out of four nurses is African American, and

less than eight in a hundred identify as Hispanic. While community colleges tend to reflect the population ethnic mix of the area surrounding each college, efforts could improve regarding support of those students who choose to study nursing. Indeed, it is a difficult course of study, but becomes even more challenging when considering the factors identified by this study regarding politics, finances, and the learning environment. When the majority of the teachers and nurses are white women, how can people who are not one of these groups find mentors and role models to improve their self-efficacy? The answers could be discovered by continuing research.

Marital status is an area revealed to be significant in this study, as would be predicted and anticipated from Jeffreys' findings. However, although the aggregate results from the quantitative findings indicate over half of students were married, when considering the separate locations a more complete picture emerged. Many of these students have dependent children at home (nearly 70 %) but many of the urban students are single (twice as many as the suburban and rural students), and if their childcare arrangements fall through, their ability to persist in their studies can be compromised. Could the colleges anticipate this conflict by creating a network of support for these students? Creating cohorts of parents with the same potential problem could provide the backup necessary to support their success. Even partnering with the early childhood program that many community colleges offer could be a mutually beneficial solution, providing experiences for the students in that program, while ensuring adequate childcare coverage for the nursing students. However, the administration at the institution would have to be flexible regarding scheduling of classes and clinical days to accommodate this arrangement, and willing to support and encourage the association of programs. This

reflects back to the External Factor identified in the Bridge of Support model known as Institution, or the facilities at the college available to nursing students.

Those Institutional facilities identified both quantitatively and qualitatively by this study could impact persistence, too. Urban students expressed appreciation at having dedicated computer labs, during the interviews, while the rural students criticized their institutions for being too busy to accommodate their needs. Although the aggregate data indicate a relatively neutral selection from the SPA-R tool for college library services (3.9 with 4 being neither supportive or restrictive), it appears that rural students code this item as necessary to success (ranging 4.65-5.1, or moderately supportive to their ability to remain in school). This result paired with the interview comments indicates that improvement in the availability of library facilities could help students, especially those who attend a rural college who may not have reliable computer facilities at home.

Strong evidence, both from quantitative and qualitative findings, indicate that the encouragement of friends and family makes quite a difference in those who are successful in navigation through the nursing program, no matter which location surveyed. These students all indicated how supportive this factor was to their ability to remain in their nursing courses (significant at  $p = .010$ , ranging 4.87-5.57), and every single participant gave multiple examples of how their friends and family members made such a difference when their own Internal Factors were weakened by the rigor of the journey across the Bridge of Support. Parents, siblings, spouses and partners, children, friends outside of class, as well as new friendships created by circumstances within class, helped these students persevere when things became challenging, as is inevitable in such a rigorous program and professional choice. Cultivating these supportive people early on,

perhaps during orientation to the program after admission of these students, could be a valuable investment for faculty and administration. If the nontraditional student's significant others understood how important their short term support is to the long term success of their loved one, and were given relevant information and acknowledgement of the challenges the student will face, it may motivate them to provide the strong encouragement needed for these students to persist.

Finally, surprising findings about how influential faculty support can be, or how much it can challenge the nontraditional student when the perception is negative regarding that support impressed this researcher the most of all the data collected. There is only one specific item on the SPA-R regarding "faculty advisement and helpfulness" (Jeffreys, 2007a, p. 163) and it coded significantly for this study with the aggregate data indicating moderately supportive (4.97, with 4 being neither restrictive nor supportive). However, when separated out by location, it appears that this can range into the restrictive categories and was explored by the qualitative portion of this study. This topic elicited much subjective data, where the students explained that when support from instructors was positive, it was very helpful, but when it was punitive or negative, it created more challenges that were not appreciated. Obviously, nursing instructors are much more influential than they realize at creating an environment that encourages persistence. A strong set of Internal Factors that the students bring to the Bridge can get them started along the journey, but to continue until graduation and licensure, it takes the support of their friends and family, a learning environment that supports their transition, and people in positions of power to believe in their capabilities and ability to succeed. As Bandura (1986) notes, the Personal, Environmental, and Behavioral aspects all need to be

considered for learning to occur. Honest and constructive performance appraisals, coupled with teaching nontraditional students how to manage setbacks, and modeling the behaviors of a professional nurse will create improved self-efficacy. These skills will serve them not only as students, but as the next generation of caring professionals.

None of these interpretations of findings will apply to all associate degree nursing programs. The Bridge of Support simply highlights all the Factors to be considered when program directors and faculty in community colleges work with nontraditional students. As evidenced by the data, location can make a difference in which of the cables could be reinforced to make that Bridge stronger and more likely to be crossed successfully. The specific setting and population served by each nursing program should be considered by each nurse educator to determine innovative ways to address the needs of nontraditional students who they want to support and retain.

### **Context of Findings**

With regards to the current knowledge on nontraditional nursing students, this study reinforces findings previously noted in the literature regarding perceptions of this population of students. However, what is significant and meaningful are the qualitative findings and how location of the program can create variations on interpretation of results. Students suggested a comment box be added to the SPA-R questionnaire, so the student could explain that a category could be both supportive and restrictive, depending on the context. For instance, nursing faculty can be very positive or extremely negative with regards to support to nontraditional students who wish to become registered nurses.

Jeffreys' tool, the Student Perception Appraisal-Revised (SPA-R), uses a Likert scale to discern if environmental factors such as financial and emotional support from

family, childcare and family responsibilities, and employment can restrict or support successful goal achievement of nursing undergraduates. These factors consistently show up in the literature about nontraditional students' ability to persist in their education. However, this topic is so complex, one wonders if a simple 27 item tool can truly capture the context and answer the questions about these students' perceptions about how challenging it is to become a nurse. Is the data generated going to be useful to educators if all we know is that the problems exist? How do those problems affect our students? But most importantly, how can we mitigate them?

In discussing the tool with the students profiled in this study, they felt quite strongly that the SPA-R did not really allow them to elaborate on why they selected the choice they did on this instrument. For instance, Jeffrey's Environmental Factors included financial status, which only considers the students' perception about how that item "may have restricted or supported YOUR successful goal achievement and how it affected YOUR ability to remain in nursing courses this semester" (SPA-R, Appendix B). Even students whose tuition was covered acknowledged the sacrifices they made to pursue the course of study as noted by this participant:

*"I received scholarships for my nursing education. Having to quit my job and giving up the paycheck and knowing that yes, I would be okay, we had saved enough, but it was still hard knowing am I making the right decision?"*

This student coded "4" on her survey, noting that means it did not support nor restrict her ability to continue in the program, but her words elaborate about why she chose the neutral selection. In other words, choosing one number to respond to a broad topic like financial status does not necessarily give the researcher the whole picture.

The rural student who coded “faculty advisement and helpfulness” as moderately restrictive, stated “*the survey doesn’t really give you an option of praising some and bashing the other ones*” and several pages of the transcript from that interview explained how challenged she was by some faculty, and how appreciative she was of others. In this sense, context matters, and that is what is missing from quantitative tools. Students often wanted to clarify or explain that to make one choice for the whole question was challenging, because sometimes the frame of reference depended on the situation. The tool could be revised to incorporate a free text response or comment box for each question and give valuable insight from the data collected as to why they judged an item on the questionnaire as restrictive or supportive, with their true attitudes more accurately captured.

As quick and efficient as Likert-type questionnaires are to get quantifiable data that can be analyzed with statistical software, meanings of each question can be different based on culture, context, and interpretation. This is very evident when considering the data generated by this small study. The culture at a small rural school can look quite different than a larger, more urban community college. Although the aggregate findings of all 107 students mirrored many Jeffreys’ findings, looking at each location more critically, different variations on the students’ perceptions can be noted. Inconsistencies can lead to insights, like how important educators can be to student success and how significant their role can be to promoting persistence.

These students have life challenges that have been identified in the literature, then are placed in a challenging field of study when they chose to pursue a nursing education. Although they are students, they often see their primary role as parents, employees, and



providers. How can we as educators support their learning and persistence? According to the literature, integration is the key. By combining the findings from Astin's (1999) involvement theory with Tinto's (1988) theory of departure, perhaps we can help them navigate the difficult transition from layperson to registered nurse by providing a Bridge of essential support factors and encouraging behaviors that enhance the passage.

While we cannot totally eliminate the stress that comes with learning and making transitions to higher levels of education, perhaps we can encourage persistence in this challenging environment by considering Bandura's (1977) theory of self-efficacy. As stated in Chapter 2, Personal, Behavioral, and Environmental factors are mutually important to learning. This links to the strong behavioral component noted in Milem and Berger's model, where involvement with peers and faculty lead to longitudinal integration of the student and ultimately persistence, if not inhibited by isolation or incongruence. So if the external environmental factors identified by this study are anticipated, and the personal, internal factors are enhanced, all three of the components of self-efficacy can be strengthened by giving the students opportunities to master behaviors that will improve and support their learning. For example, students often underestimate the amount of time and commitment required to be successful in the nursing program, given the reading, study, and clinical preparation necessary. Could the newly admitted students "shadow" a student about to graduate for a day? This might give them exposure to the demands before they get too far along, so they can make accommodations to their perceptions of life as a student nurse. If the senior student consents, perhaps a mentoring relationship could be established creating the "information network" described by Karp et al. (2008).

But nurse educators need to model the behaviors of caring that are central to nursing as well. Nursing the student nurse, focusing on them as unique individuals, and persuading them that they have the ability to succeed, just as we do our patients. Caring for them holistically, knowing that nurturing and respect is central to the role of the nurse creates relationships that can connect learning experiences to behavior and provide authentic guidance to the next generation of professional caregivers. Enhancing content with life experiences, allowing them to witness the many roles of the nurse, and modeling teamwork and advocacy can transform the learning environment in a positive way.

Most importantly, allowing them to articulate the connections between what they are learning and what they have experienced can be extremely valuable. Reflecting about how they met challenges, using mistakes as learning opportunities, and giving constructive feedback reinforces their self-efficacy. We need to listen to what they say. The qualitative approach used in this study generated recommendations by the students for improving success including:

- Making resources for students easier to understand and be aware of, such as tutoring.
- Using technology to reinforce learning.
- Finding a mentor, like a recent graduate or upperclassman who knows the program and is willing to provide advice and support.
- Joining a study group for academic and emotional support.
- Providing orientation for families so they understand how important their support is to student success.

- Learning stress management and caring for self with regards to nutrition and sleep.
- Avoiding employment if possible and considering school a full-time job.
- Realizing that you can make a real difference in people's lives.

It was surprising how insightful and committed these students were to leaving a legacy to the students who would follow them. Although it had been a long and arduous journey through nursing school, most felt it had been worth the investment of time and energy. The ability to serve people by becoming a professional nurse motivated them to do what it took to be successful.

### **Implications for Practice and Suggestions for Future Research**

Based on the findings from this study, it is apparent that a "Bridge of Support" is essential to the success of those nontraditional students who desire to become registered nurses. The Bridge analogy is helpful to consider when educating tomorrow's caregivers. These research findings from this study improve the understanding of those factors identified by previous studies as significant to nontraditional students by asking them to explain their perceptions about factors that supported or restricted their ability to persist in community college nursing programs, and suggest that location be considered when evaluating those perceptions.

With regards to Internal Factors, is age an asset or a liability to the mature student who enters the community college? The data from this study indicate that it can be positive, because the student has decided on this profession, often after seeing other parts of life and committing to this path as a potential occupation that can make a difference in the lives of others, but can also create challenges with regards to learning. Can we as

nurse educators play to this strength while supporting their learning with quality teaching of concepts that can be applied to the clinical situation rather than overwhelming them with content? If we can move from the biomedical disease care model to focus on health promotion instead, emphasizing concepts and active, authentic assignments that allow these adult learners to put the theories into practice, the answer could be affirmative.

Noting the connections between the knowledge and experience of care in an atmosphere of mutual respect and trust would be an important paradigm shift to strive for.

Remembering that these nontraditional learners bring life experiences to the learning environment, we can facilitate their learning by building on the determination and resilience that got them back to college and focus on encouraging them to use the resources available to support their success.

Academic ability is another internal factor identified by this study as an essential subcategory for success. Can we teach them how to think critically without destroying their confidence? How can we scaffold the information they need to understand without making them feel inadequate? Remembering Knowles' (1984) theory of adult learning, or andragogy, we need to get students involved in planning and evaluating their instruction and give them direction, but allow them to immediately apply what they know in experiential ways and learn from their inevitable mistakes. Putting the information into the context of why the content is relevant to the nursing role, incorporating the experiences that these mature students have had with caregiving to others in their lives, and allowing them chances to discover knowledge for themselves can enhance their natural internal motivation to learn.

Important Internal Factors that were identified seem to come from within the students themselves, like Determination, Focus, Commitment, and Self-efficacy. Creative and supportive ways to identify and acknowledge those attributes could be studied to improve outcomes for those nontraditional students, and screening for those traits could be part of the admission process. Also making the students and their families aware of the sacrifice they will probably need to make to be successful, including giving up some of their employment and household responsibilities in the short term to focus on the long term, larger goal of being an RN might be a kindness. Nursing educators need to provide realistic expectations of the rigor involved in the program of study they have chosen. Perhaps increasing admission requirements to having all prerequisite courses complete and screening for technology competence before they enter the nursing curriculum would be helpful to the focus they need for success. Early lessons on stress management and coping could be part of the orientation, and having the students articulate their goals and motivation to be a nurse early in the process could prove beneficial to their persistence. This is an area where future research could be conducted.

It seems obvious, based on studies done before this one, that the External Factors that have been identified in the “Bridge of Support” model incorporate common variables influencing retention of nursing students. This study corroborates many of those previous findings, but breaking out the results by specific location can create insights that could stimulate further research in areas of practical application, like recruitment. However, it seems likely that the information shared in this study will benefit future students who begin to cross this Bridge, if for no other reason than to emphasize the lived experience about how essential support from friends and family can be. Nurse educators

should capitalize on opportunities for students to work together, as they will in practice as RNs. Development of “information networks” where students can get answers to frequently asked questions about the program requirements could be established with social networking through the course management software. Wikis, blogs, and other technology could facilitate integration and collaboration between students and create peer support, which was strongly acknowledged by many of the participants in this study as essential to their success. Research into how technology tools can support retention and persistence would be valuable to pursue.

With regards to the broad subcategory of learning environment, students might be encouraged to begin the program with a cohort of a few similar minded learners, either to meet for studying, or just for support. Perhaps pairing with an upper level student who has completed the fundamental year that they are just beginning could provide a mentor and guide for what is to come, and an example of how success is really possible in the program. Bandura’s (1977) theory of self-efficacy includes that learners modeling behaviors of successful people can create a stronger sense of commitment to goal accomplishment. This is an interesting area for future studies to confirm with regards to mentoring the next generation of nurses.

Learning environment is also an area that instructors can augment, encouraging nontraditional students to be successful by making them aware of resources that may not have been available to them the last time they were in school, like technology, tutors, library facilities, and other ways to get the information needed for success. The qualitative findings from this study and the students themselves recommend these

strategies as helpful and supportive. Confirmation could be achieved with further research into these factors of the learning environment.

Considering the External Factors of transportation and childcare for those who have that need for support in those areas, can counselors who help the students register for the nursing program make that an area of inquiry? If the community college has an early childhood program for certification or degree, might that be a place that could be a resource for those who need it to provide consistent child care? Might clinical groups be composed of students who live near enough to each other to carpool or to exchange childcare with others in the program who have different days to be on campus? These are all future studies that could be done based on the insights from this study of how essential reliable coverage in these areas is to student retention and success.

Even if those areas are not problematic, finances generally must be considered by most of the students surveyed. Granted, many chose the community college for affordability, but having to reduce employment or give it up altogether is a very real situation that many of the students from this study faced. Stress caused by lack of financial resources is over and above that caused by the difficult program of study these students have chosen. How can support in this area help society increase the number of nurses? That is an interesting topic for others to pursue, but this study makes one aware of the problem many have had to solve to stay in the program, and there is no way to tell how many people have left their nursing program for financial hardship reasons. It would be interesting to pursue that population for their insight into the reason they were not successful.

Institutional factors like accreditation, location, and facilities available to the students as they do their clinical rotations and take their courses, make a difference to these students as well. As an External Factor that was not discussed as deeply, it would be an area to explore with further research. Future studies could focus on choice of institution for the nontraditional student to reveal new insights, too. Virtual classrooms, online programs, and simulation labs with patients that are sophisticated manikins could be interesting to pursue. Further exploration of BSN completion options would be helpful and interesting to future researchers.

Finally, the new External Factor identified by this study was related to the politics of the situation called nursing school. Incivility is a hot topic in the nursing journals recently, and it seems to be alive and well in the community college environment, as well. Many of the students brought up feeling ‘belittled’ and spoke of the subjective nature of clinical evaluation. When instructors were positive and helpful, it made all the difference to the students’ success. But when they felt they were being ‘weeded out’ by the teachers for subjective reasons, it created incredible stress and frustration. How can this perception be improved to ensure that more diverse groups of students are successful in crossing that Bridge into the nursing profession? This study did not include any men in the qualitative portion, despite multiple attempts to contact and encourage their participation. Granted, less than 20 % of nurses are male, but that perspective should be represented and future studies should explore that group.

### **Discussion of Limitations of the Study**

As noted in the introduction, this study only involved students over 25 who were in their last semester of the ADN program at their local community college. This limits



generalizability to students in other programs of study, or those who are more traditional, entering college right out of secondary education. Due to the relatively small population size, the objective results are mostly confirming that the normed tool, Jeffreys' SPA-R (2007a), does indeed apply to the nontraditional nursing student from the Midwest. However, when adjusting for location, interesting variations were noted that could stimulate further research regarding the significance of demographic variables and responses to that instrument. Replication of this study with larger numbers of student nurses in more locations is recommended.

Assumptions were made that focus groups and interviews would be insightful to extend the value of the SPA-R, but the low number of participants made data saturation impossible. Recommendations for further research regarding the Bridge of Support model with larger numbers of nursing students is suggested. These focus groups and interviews with a more diverse group of nontraditional students to include perspectives from males and other subgroups of this population is encouraged. Their unique insight on the factors identified by the current study could expand the areas of support required for successful crossing of laypersons into nursing.

As expected, the number of participants was difficult to predict, and there was disappointment with the number of new graduates who chose to engage with the researcher. Despite multiple attempts to contact those who gave information to follow up their initial survey, the actual number of those who participated was too low for data saturation to be achieved. Perhaps creating focus groups earlier in the semester and providing multiple opportunities for participation could improve the amount of data collected. Creative ideas regarding use of technology to obtain this information, like

virtual meetings online or a social networking site for discussion could provide rich data for qualitative analysis.

### **Closing Thoughts**

This study was eye opening to the researcher for several reasons. One of those reasons is the level of commitment it requires to conduct and disseminate research findings. Another is the challenge of getting people to actually participate, even when they agree to do so in theory. Finally, the reason research is so inspirational is the level of dedication people will display to be part of the process. From my chair person, to the committee members, to the participants themselves, none of this information would have come to fruition without their support and willingness to work to create this knowledge, and it is humbling to be part of the process.

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## Appendix A

**Division of Higher Education**

One University Blvd.  
 St. Louis, Missouri 63121-4499  
 Telephone: 314-516-6818  
 Fax: 314-516-5784  
 E-mail: althofw@umsl.edu  
 hps9p4@umsl.edu

**Informed Consent for Participation in Research Activities**

Nontraditional Community College Students in Nursing: Perceptions Personified

Participant \_\_\_\_\_ HSCApprovalNumber \_\_\_\_\_

Principal Investigator Helene Seibert \_\_\_\_\_ PI's Phone Number 618-920-8343 \_\_\_\_\_

1. You are invited to participate in a research study conducted by Helene Seibert and Dr. Wolfgang Althof. The purpose of this research is to explore nontraditional nursing students' perception of the environmental factors that influenced their persistence in their associate degree program (ADN). The study will also explore potential solutions to challenges that these students have faced in their pursuit of their degree.
2. a) Your participation will involve
  - i) Completion of a 27 item survey with collection of demographic information, which will take about 15 minutes and will be done during class time before you graduate.
  - ii) Students who meet the criteria of nontraditional based on their survey results will be asked to join a focus group of about six to ten other nursing students who have just graduated from their ADN program. This will happen in a private location in a college setting. The group interaction will take approximately one hour, and will be audio and video recorded for later transcription and analyzing of the data you and others provide. A separate consent form will be obtained for this purpose.
  - iii) Some of those students will be invited to do an interview one-to-one with the primary researcher to clarify and explain their perceptions further. This will occur in a private office on a college campus that is convenient for the participant. No more than 90 minutes will be required for this interview, and your answers will be audio recorded for later transcription and data analysis.

Approximately 250 nursing students may be involved in this research. Three local community colleges will be asked to participate and based on their nontraditional student population, those students will be invited to take part in the focus groups and interviews as described above.



- b) The amount of time involved in your participation will be 15 minutes for the survey, then about an hour for the focus groups. The interviewed students will not need more than 90 minutes. Those willing to participate in the groups or interviews will receive mileage reimbursement (\$0.50/mile) and a \$5 coupon for a food item at a local chain near the college where they come to participate.
3. There are few anticipated risks associated with this research, but there may be certain discomforts associated with participation. They include uncomfortable feelings that might come from answering certain questions about events encountered during your nursing education.
  4. There are no direct benefits for you participating in this study. However, your participation will contribute to the knowledge about persistence in nursing students and may help society.
  5. Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.
  6. By agreeing to participate, you understand and agree that your data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your identity will not be revealed. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your data. In addition, all data will be stored on a password-protected computer and/or in a locked office.
  7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Helene Seibert (618-920-8343) or the Faculty Advisor, Dr. Althof (314-516-6818). You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research Administration, at 314-516-5897.

**I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.**

---

 Participant's Signature

---

 Date

---

 Participant's Printed Name

---

 Signature of Investigator or Designee

---

 Date

---

 Investigator/Designee Printed Name

## Appendix B

Student Perception Appraisal-Revised  
SPA-R

Going to school is one part of your life. Certain factors may have restricted or supported YOUR successful goal achievement. Evaluate each item in terms of how it affected YOUR ability to remain in nursing courses this semester. Using the scale below choose a number from one (1) to six (6) and mark your response accordingly.

1 = Did not apply                      3 = Moderately restricted                      5 = Moderately supported  
2 = Severely restricted              4 = Did not restrict or support              6 = Greatly supported

1. Personal study habits	1	2	3	4	5	6
2. Faculty advisement and helpfulness	1	2	3	4	5	6
3. Transportation arrangements	1	2	3	4	5	6
4. Financial status	1	2	3	4	5	6
5. Class Schedule	1	2	3	4	5	6
6. Family financial support for school	1	2	3	4	5	6
7. Nursing student peer mentoring and tutoring	1	2	3	4	5	6
8. Hours of employment	1	2	3	4	5	6
9. Personal study hours	1	2	3	4	5	6
10. College library services	1	2	3	4	5	6
11. Nursing skills laboratory	1	2	3	4	5	6
12. Family emotional support	1	2	3	4	5	6
13. Family crisis	1	2	3	4	5	6
14. Nursing professional events	1	2	3	4	5	6
15. Employment responsibilities	1	2	3	4	5	6
16. Nursing student support services	1	2	3	4	5	6
17. College tutoring services	1	2	3	4	5	6
18. College counseling services	1	2	3	4	5	6
19. Living arrangements	1	2	3	4	5	6
20. Family responsibilities	1	2	3	4	5	6
21. Membership in nursing club or organization	1	2	3	4	5	6
22. Financial aid and/or scholarship	1	2	3	4	5	6
23. Academic performance	1	2	3	4	5	6
24. Encouragement by friends outside of school	1	2	3	4	5	6
25. Encouragement by friends within class	1	2	3	4	5	6
26. College computer laboratory services	1	2	3	4	5	6
27. Child care arrangements	1	2	3	4	5	6

## Demographic Information

1. What is the name of the nursing course in which you are currently enrolled?  
\_\_\_\_\_
2. What is your grade average in this nursing course? A (93-100%), B (81-92%), C (69-80%), F (<69%).  
\_\_\_ A  
\_\_\_ B  
\_\_\_ C  
\_\_\_ F
3. What is the total number of credit hours in which you are enrolled for this semester?  
\_\_\_\_\_
4. How many semesters do you have left to complete in the nursing program?  
\_\_\_\_\_
5. Have you been continuously enrolled in this RN-program ever since you began?  
Yes\_\_\_\_\_ No\_\_\_\_\_
6. In the nursing program, what is your classification?  
\_\_\_\_\_ I am a senior level student  
\_\_\_\_\_ I am not a senior level student
7. What is your anticipated date of graduation from this nursing program?  
\_\_\_\_\_
8. What is your current age?  
\_\_\_\_\_
9. What is your gender?  
\_\_\_ Female \_\_\_ Male
10. Which of the categories best describes your ethnic background?  
\_\_\_ Alaskan Native or American Indian  
\_\_\_ African American or Black  
\_\_\_ Asian or Pacific Islander  
\_\_\_ Puerto Rican  
\_\_\_ Other Hispanic  
\_\_\_ White  
\_\_\_ Other. Please describe:
11. Which of the following best describes your current marital status?  
\_\_\_ Single, never married  
\_\_\_ Married  
\_\_\_ Divorced/Separated  
\_\_\_ Widowed  
\_\_\_ Living with partner
12. How many dependent children are currently living in your household?
13. If you are currently employed, what is the approximate number of hours each week that you are employed in a job?  
\_\_\_\_\_ I am not currently employed.  
\_\_\_\_\_ I am currently employed and work approximately \_\_\_\_\_ hours each week.
14. If you would be willing to participate in a focus group or interview about your experience in nursing school, please leave a phone number or personal email here, so the researcher can contact you after you graduate.  
\_\_\_\_\_

## Appendix C

## Focus Interview Protocol

Please comment on these identified factors that influence retention or attrition from the survey:

- Learning environment? (Discussion)
- Institutional factors? (Discussion)
- College support facilities? (Discussion)
- Financial/employment responsibilities? (Discussion)
- Personal academic issues? (Discussion)
- Support of friends and family? (Discussion)

How were you influenced to persist in seeking your nursing degree?

What factors promoted your success?

What factors challenged your persistence?

What solutions to these challenges would you propose?

What support might improve success for students who come after you?

Would you be willing to participate in email follow-up to these topics? If so, please leave your contact information with the researcher.

## Appendix D

## Transcription Rules

1. Transcribe the interview as soon as possible after completed, ideally within 24 hours.
2. Transcribe digital audio files verbatim, then destroy afterwards.
3. Exclude filler words such as “um” and “uh”.
4. Denote short pauses of less than five seconds with three periods (...) and longer pauses with the word pause in parenthesis (pause).
5. Impressions from field notes can be noted in italics in the text box when transcribed.
6. Refer to laughter in bracketed, descriptive ways [soft giggling].
7. Place descriptive, contextual information at the beginning of the interview in italics.
8. Denote words that were not intelligible in brackets as [intelligible].
9. Use consecutive line numbering in the transcript for clarity and easy retrieval.

## Appendix E

Date: April 6, 2010

This letter is to grant permission to Helene Seibert, RN, MS

for your use of the Student Perception Appraisal-Revised (SPA-R) in your research study. The questionnaires may be reproduced; however please be sure that all respondents return the questionnaire. I do request that you send me a copy of: a) any published work resulting from use of the SPA-R; and b) any further reliability and validity test results.

Please acknowledge Dr. Marianne R. Jeffreys as the creator and copyright holder of the above mentioned questionnaires.

Best wishes in your research endeavors and commitment to promoting student retention and success. I would be happy to discuss the questionnaire with you and maintain correspondence as a consultant.

Sincerely,

A handwritten signature in black ink that reads "Marianne R. Jeffreys". The signature is written in a cursive, flowing style.

Marianne R. Jeffreys, EdD, RN  
Professor, Nursing  
[marianne.jeffreys@csi.cuny.edu](mailto:marianne.jeffreys@csi.cuny.edu)  
<http://www.mariannejeffreys.com>  
(718)-982-3825

## Appendix F

## Further Quantitative Results

## ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Faculty advisement and helpfulness	Between Groups	11.941	2	5.970	4.952	.009
	Within Groups	122.973	102	1.206		
	Total	134.914	104			
Transportation arrangements	Between Groups	15.477	2	7.738	3.295	.041
	Within Groups	241.920	103	2.349		
	Total	257.396	105			
College library services	Between Groups	19.387	2	9.693	3.727	.027
	Within Groups	270.482	104	2.601		
	Total	289.869	106			
Nursing professional events	Between Groups	13.264	2	6.632	3.148	.047
	Within Groups	217.009	103	2.107		
	Total	230.274	105			
Encouragement by friends outside of school	Between Groups	7.441	2	3.721	3.924	.023
	Within Groups	97.653	103	.948		
	Total	105.094	105			
Encouragement by friends within class	Between Groups	11.785	2	5.892	4.798	.010
	Within Groups	127.729	104	1.228		
	Total	139.514	106			
Child care arrangements	Between Groups	24.846	2	12.423	3.093	.050
	Within Groups	413.757	103	4.017		
	Total	438.604	105			

## Multiple Comparisons

LSD

Dependent Variable	(I) Location	(J) Location	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Faculty advisement and helpfulness	SW	KC	.951*	.302	.002	.35	1.55
		SC	.221	.249	.377	-.27	.71
		KC	-.951*	.302	.002	-1.55	-.35
	KC	SW	-.730*	.335	.032	-1.40	-.06
		SC	-.221	.249	.377	-.71	.27
		KC	.730*	.335	.032	.06	1.40
Transportation arrangements	SW	KC	-.177	.421	.674	-1.01	.66
		SC	.806*	.347	.022	.12	1.49
		KC	.177	.421	.674	-.66	1.01
	KC	SW	.984*	.468	.038	.06	1.91
		SC	-.806*	.347	.022	-1.49	-.12
		KC	-.984*	.468	.038	-1.91	-.06
College library services	SW	KC	-.680	.443	.128	-1.56	.20
		SC	.633	.361	.082	-.08	1.35
		KC	.680	.443	.128	-.20	1.56
	KC	SW	1.314*	.490	.008	.34	2.28
		SC	-.633	.361	.082	-1.35	.08
		KC	-1.314*	.490	.008	-2.28	-.34
Nursing professional events	SW	KC	.800*	.400	.048	.01	1.59
		SC	.653*	.325	.048	.01	1.30
		KC	-.800*	.400	.048	-1.59	-.01
	KC	SW	-.147	.441	.739	-1.02	.73
		SC	-.653*	.325	.048	-1.30	-.01
		KC	.147	.441	.739	-.73	1.02
Encouragement by friends outside of school	SW	KC	.609*	.268	.025	.08	1.14
		SC	.481*	.220	.031	.04	.92
		KC	-.609*	.268	.025	-1.14	-.08
	KC	SW	-.128	.297	.668	-.72	.46
		SC	-.481*	.220	.031	-.92	-.04
		KC	.128	.297	.668	-.46	.72
Encouragement by friends within class	SW	KC	-.139	.304	.648	-.74	.46
		SC	.700*	.248	.006	.21	1.19
		KC	.139	.304	.648	-.46	.74
	KC	SW	.839*	.336	.014	.17	1.51
		SC	-.700*	.248	.006	-1.19	-.21
		KC	-.839*	.336	.014	-1.51	-.17
Child care arrangements	SW	KC	1.048	.552	.060	-.05	2.14
		SC	.928*	.449	.041	.04	1.82
		KC	-1.048	.552	.060	-2.14	.05
	KC	SW	-.120	.608	.845	-1.33	1.09
		SC	-.928*	.449	.041	-1.82	-.04
		KC	.120	.608	.845	-1.09	1.33

\*. The mean difference is significant at the .05 level.



Appendix G  
CODEBOOK  
BRIDGE OF SUPPORT

CATEGORY: I. Internal Factors

SUBCATEGORIES: Age; Academic Ability; Determination; Focus; Commitment;  
Sacrifice; Self-Efficacy

A. Age

PROPERTIES

1. Chronological

DIMENSION (D): 25-53 years

2: Adult Learner

D: Asset-----Challenge

B. Academic Ability

PROPERTIES

1. Learning Style

D: Visual-----Auditory-----Kinesthetic

2. Time Commitment

D: Excessive-----Manageable

3. Study Habits

D: Memorization-----Understanding

C. Determination

PROPERTIES

1. Drive

D: Discouraged-----Confident

2. Work

D: Easy-----Difficult

3. Persistence

D: Unable-----Successful

4. Faith

D: In self-----In higher power

5. Strength

D: Lacking-----Incredible

D. Focus

PROPERTIES

1. Concentration

D: Sharp-----Wandering

2. Aids

D: Structure-----Lack of structure

3. Time

D: Distractors-----Full attention

4. Presentation of content

D: Confusing-----Clear

E. Commitment

PROPERTIES

1. Devotion

D: Total-----Marginal

2. Financial

D: Few concerns-----Support essential

F. Sacrifice

PROPERTIES

1. Responsibilities

D: Neglected-----Accommodating

2. Goal

D: Short term-----Long term

3. Personal needs

D: Met-----Neglected

G. Self-Efficacy

PROPERTIES

1. Mastery

D: Novice-----Graduate

2. Belief

D: Uncertain-----Confident

3. Motivation D: Internal-----External  
 4. Growth D: Discouraged-----Enhanced

## CATEGORY: II. External Factors

SUBCATEGORIES: Family; Friends; Learning Environment; Politics; Institution;  
 Finances; Transportation; and Childcare

A. Family

## PROPERTIES

1. Family DIMENSION (D): Supportive-----Challenging  
 (Includes parents, siblings, significant others, and children)

B. Friends

## PROPERTIES

1. In school  
 a. Study Groups D: Helpful-----Not used  
 b. Peers D: Beneficial-----Judgmental  
 2. Outside school D: Understanding-----Oblivious

C. Learning Environment

## PROPERTIES

1. Home study space D: Organized & quiet-----Chaotic & noisy  
 2. School  
 a. Instructors D: Supportive-----Challenging  
 b. Clinical sites D: Helpful & -----Frustrating &  
     Available      Inconvenient  
 c. Tutors D: Available & -----Not used  
     Knowledgeable  
 d. Advisors & D: Extremely helpful-----Not useful  
     Counselors  
 e. Lab staff D: Dedicated & ----- Outdated &  
     Convenient      Inconvenient

- P: Clinical experience D: Coaching-----Demeaning

D. Politics

## PROPERTIES

1. Environment D: Dynamic-----Uncivil  
 2. Power D: Objective & -----Subjective &  
     Fair              Controlling  
 3. Emotion D: Supportive-----Frustrating

E. Institution

## PROPERTIES

1. Library D: Available-----Not used

- 1. Nursing Lab
  - F. Finances  
PROPERTIES
    - 1. Assistance
    - 2. Employment
    - 3. Affordability
  - G. Transportation  
PROPERTIES
    - 1. Requirement
  - H. Childcare  
PROPERTIES
    - 1. Responsibilities
- D: Dedicated-----Inadequate
- D: Adequate-----Struggle
- D: Essential-----Optional
- D: Helpful-----Essential
- D: Necessary-----Optional
- D: None-----Heavy & challenging

Categories	Sub-categories	Properties	Dimensions	Exemplars
I. Internal Factors	A. Age	1. Chronological	25-53 years	“I’m at a time in my life where I want to be growing in my career and not starting over. But to do nursing, I have to be starting over—struggling to feel confident in my skills—at the age I am, that’s what I want.” (I2, 82-88)
		2. Adult Learner	Asset (a) to Challenge (c)	(a) “The older you get, the more you have your priorities in line.” (FG1, 565)  (c) “The harder it is to focus, retain. It takes more for me to get it.” (FG1, 543)
	B. Academic Ability [defined as intelligence or “the brains to be a nurse” (I2, 161)]	1. Learning Styles	Visual-Kinesthetic (v) to Auditory (a)	(v) “Pictures help so much, and if I can get my hands on it, I learn faster.” (FG1, 245)  (a) “I taped myself reading the material out loud so I could listen again later.” (FG1, 273)
		2. Time Commitment	Excessive (e) to Manageable (m)	(e) “Finding time outside of class was next to impossible.” (FG2, 97)  “I read for hours and hours—you need to live and

				<p>breathe the nursing.” (FG1, 394)</p> <p>(m) “Most weeks I spent at least 32 hours in the library in addition to class to manage.” (I2, 54)</p>
		3. Study Habits	Memorization (m) to Understanding (u)	(m-u) “I changed from memorizing to long term storage, so I have information to deal with problems at the clinic.” (FG2, 55)
	C. Determination [defined as “drive”(I2, 56)]	1. Drive	Discouraged (d) to Confident (c)	<p>(d) “lack of determination” (I2, 143)</p> <p>(c) “wanting to be the one that made it” (I1, 143)</p>
		2. Work	Easy (e) to Difficult (d)	<p>(e) “Instructors helped—made you want to do well for them as well.” (FG1, 293)</p> <p>(d) “I had to resign my job to devote time to study.” (FG1, 225)</p>
I. Internal Factors		3. Persistence	Unable (u) to Successful (s)	<p>(u) “wanting to stop—I didn’t want to do it anymore, and I cried quite a bit.” (FG1, 293)</p> <p>(s) “It can be done if you stick to it.” (I2, 148)</p>

		4. Faith	In self (s) to a Higher power (h)	(s) "I had to prove I could do this—push past it." (FG1, 341-342)  (h) "I made it because of God's grace-You must be willing to serve people." (FG1, 319-320)
		5. Strength	Lacking (l) to Incredible (i)	(l) "I got very down on myself." (I2, 119)  (i) "My strength came from a deep faith in God and consider nursing to be a calling from the Lord." (FG1, 316-318)
	D. Focus  [defined as the ability to "concentrate on my studies" (I2, 28)]	1. Concentration	Sharp (s) to Wandering (w)	(s) "When you can just focus on school it is a tremendous help." (I2, 91)  (s) "Resigned my job because I had to keep focusing on reading, and studying, and doing assignments." (FG1, 534-535)  (w) "My mind wandered at times." (FG1, 265)
		2. Aides	Structure (s) to Lack of structure (l)	(s) "establishing a schedule, a structure for study. Habits like arriving early and sitting in the same place helped." (FG1, 355-364)

				(l) “spread so thin and pulled in a million directions.” (FG1, 398)
		3. Time	Distractors (d) to Full attention_(f)	(d) “She was a very smart student, but life was too busy to do the reading and she had difficulty passing her boards.” (FG1, 392-396)  (f) “You had to devote time, focused on this.” (FG1, 504)
		4. Presentation of content	Confusing (c) to Clear (cl)	(c) “You had to tune the lecture out sometimes to avoid confusion when it contradicted the text.” (FG1, 131-133)  (cl) “Some prepared the material and shared their Power points, which were helpful to have to prepare for class and increased involvement.” (FG1, 91-94)
I. Internal Factors (continued)	E. Commitment [defined as resources and time towards becoming a nurse]	1. Devotion	Total (t) to Marginal (m)	(t) “I had no personal life. There’s just no time for anything but school and homework.” (I1, 242)  (m) “that one day, it was just awful

				and I was questioning whether or not, you know, if this was my calling.” (FG1, 454-456)
		2. Financial	Few concerns (f) to Essential to be supported (e)	(f) “I received scholarships for my education, plus we saved enough to be okay.” (FG2, 186-188)  (e) “Money dropped off very low, but I think it was important for me to do that so I could concentrate on my studies.” (I2, 27-28)
	F. Sacrifice  [defined as giving up something for a greater cause]	1. Responsibilities	Neglected (n) to Accommodating (a)	(n) “If you are one of those people who need to have a clean house, you’re not going to be able to clean.” (FG2, 312-313).  (a) “I cooked meals on the weekends so there was one less thing on my mind.” (FG1, 380)
		2. Goal	Short term (s) to Long term (l)	(s-l) “Sometimes you have to make just a little bit of a sacrifice to get what you want. And sometimes your children have to make those sacrifices too... But in the long run, it pays off for them in



				the end.” (FG1, 401-406)
		3. Personal needs	Met (m) to Neglected (n)	(m) “I moved back home when my lease ended and I only worked every other weekend to concentrate on my studies.” (I2, 25-28)  (n) “It tears down the family, when you’re not able to do the things you used to do. Mom would get a little mad sometimes, but she knew it was for a greater cause.” (I2, 85-88)
I. Internal Factors (continued)	G. Self-efficacy [defined as a person’s estimate of their ability to perform well]	1. Mastery	Novice (n) to Graduate (g)	(n) “Seeing other nurses and knowing if they can do it, I know I can.” (FG1, 331)  (g) “This is a personal accomplishment.” (FG1, 336)  (g) “I had to prove I could do this.” (FG1, 342)
		2. Belief	Uncertain (u) to Confident (c)	(u) “I didn’t feel like I knew what I was doing.” (FG 1, 459)  (u) “Rumors about how difficult it was gave you a negative view going into a class.” (FG2, 59)  (c) “I think there were days when I

				would've said, I'm done, you know? But I had that push, that constant push." (FG 1, 285-286)
		3. Motivation	Internal (i) to External (e)	(i) "getting selfish—I motivated myself to prove to my family that it could be done." (I2, 143-145)  (e) "The encouragement and interest of my siblings and my eight year old studying with me helped." (FG1, 286-288)
		4. Growth	Discouraged (d) to Enhanced (e)	(d) "Some positive reinforcement would make it little easier." (FG2, 75)  (e) "Just knowing I'm this smart person and I can do this, not getting discourage and just keep on trying harder." (FG1, 332-334).
II. External Factors	A. Family  [includes parents, siblings, significant others and children]	1. Family	Supportive (s) to Challenging (c)	(s) "My husband paid for tuition and gave 100%--no <u>more</u> than 100%." (FG1, 223)  (s) "My sisters were the greatest support system that anyone could ask

				<p>for.” (FG1, 281-284)</p> <p>(s) “The thought of not disappointing my parents helped me to push through it.” (FG1, 330)</p> <p>(c) “Her family doesn’t understand that these are not just the regular type of test questions that you get. She needs to let her family know “I need this time if you want me to be successful.” (FG1, 512-516).</p> <p>(c) “My family was not a good support. My mom said ‘you need to slow down, you’re going to miss your kids growing up.’” (FG2, 240-241)</p>
<p>II. External Factors (continued)</p>	<p>B. Friends</p>	<p>1. In school</p> <p>a. Study groups</p>	<p>Helpful (h) to Not utilized (n)</p>	<p>(h) “We lifted each other up and solved problems together.” (FG1, 299-301)</p> <p>(h) “We just became family, my other sisters.” (FG1, 306-307)</p> <p>(n) “I don’t study in groups. They’re distracting and they don’t get anything done—and they chat.” (I1, 7, 11)</p>

		b. Peers	Beneficial (b) to Judgmental (j)	<p>(b) “People would call me when things were going bad and maybe together, you know, we’d relieve a little bit of the stress.” (FG2, 202-205)</p> <p>(j) “The younger ones generally just wanted to get out of there. They don’t care if they understand it; they just want to get out—and I want to <u>understand</u>.” (I1, 37-38)</p>
		2. Outside school	Understand-ing (u) to Oblivious (o)	<p>(u) “They knew where to find me—in the library.” (I2, 35-36)</p> <p>(o) “I’m not always gonna be able to be there, not because of issues, but because I need to focus my time.” (FG1, 502-504)</p>
	C. Learning Environment	1. Home study space	Organized and quiet (o) to Chaotic and noisy (c)	<p>(o) “A dedicated room with a desk, books, and quiet where no one bugs you.” (FG1, 46)</p> <p>(c) “I’ve always been a studier where the TV can be on and the kids can be around.” (FG2, 30)</p>

		2. School a. Instructors	Supportive (s) to Challenging (c)	(s-c) "Some of them are very helpful with study hours before and after class; and then there were some of them, especially in the senior year, that were not helpful at all. If you came in and asked questions because you didn't quite get it or wanted to make sure you got it right, they kind of made fun of you because you needed it the second time." (I1, 16-21)  (s) "Giving you a pat on the back when you're down." (FG1, 292)  (c) "Making you feel so little." (FG1, 110)
II. External Factors (continued)	C. Learning Environment (continued)	2. School b. Clinical sites	Available and helpful (a) to Frustrating and inconvenient (f)	(a) "Most of my clinical experiences were great." (FG2, 144)  (a) "Having different preceptors, I learned a lot of different techniques." (FG2, 150)  (f) "I didn't feel like I gained too much from it. I was never given the opportunity to pass

				<p>meds.” (FG2, 160-161)</p> <p>(f) They did not have a very strong preceptor experience and got no IV experience.” (FG2, 117, 132).</p>
		c. Tutors	<p>Available (a) and knowledgeable to</p> <p>Not used (n)</p>	<p>(a) “They really knew their stuff and came prepared.” (FG 1, 204)</p> <p>(a) “Dedicated to nursing.” (I2, 10, 12)</p> <p>(c) “I knew they were there.” (FG1, 185)</p> <p>(c) “I didn’t really use the tutors.” (FG2, 57)</p>
		d. Advisors and Counselors	<p>Extremely helpful (e) to</p> <p>Not useful (n)</p>	<p>(e) “Treated us special, keeping us informed and helping students find money for school.” (I2, 176-177)</p> <p>(n) “Not used.” (FG2, 63)</p>
		e. Lab staff	<p>Dedicated and convenient (d) to</p> <p>Outdated and inconvenient (o)</p>	<p>(d) “Skills lab staff are amazing.” (FG2, 99)</p> <p>(d) “Willing to help.” (FG1, 164)</p> <p>(o) “Instructors and lab assistants didn’t always see eye to eye on how we</p>

				<p>should do things.” (FG2, 102-103)</p> <p>(o) “The program needs to get updated in order to come out of it and be competent enough in certain skills to get started.” (FG2, 111-113)</p>
<p>II. External Factors (continued)</p>	<p>D. Politics [defined as the use of strategy in obtaining any position of power or control]</p>	<p>1. Environment</p>	<p>Dynamic (d) to Uncivil (u)</p>	<p>(d-u) “The ones who are on Facebook and friended the teachers fared a lot better than the older population like me and my friends; we thought that was the wrong thing to do, a little bit unprofessional.” (I1, 108-117)</p> <p>(d) “I didn’t have the internet on my phone, and the younger ones showed me—it makes a huge difference.” (I1, 250)</p> <p>(u) “You have to be careful because some of them are two-faced. You gotta figure out—you have to read people.” (I1, 269-270)</p>

		2. Power	Objective and Fair (o) or Subjective and Controlling (s)	<p>(o) “I had a family situation and I had to transfer from one campus to another...but they talked me through it—I mean they kept me going, they motivated me, and I feel like they really made me into the independent nurse I am today.” (I2, 63-66)</p> <p>(s) “When you have clinicals, they rate you every time. One is subpar, two is standard, three is about average. If you get three ones you’re out of that clinical.” (I1, 288-291)</p>
		3. Emotion	Supportive (s) to Frustrating (f)	<p>(s) “This instructor really got to me, because she looked at me and said all you’re doing is memorizing things for a test, then you’re dumping it. You’re not storing it in long term memory, and that was one of the key things that taught me to change my study habits.” (FG2, 50-53)</p> <p>(f) “My instructor was really upset because I made mistake, but we</p>



				make mistakes and if I know everything, why am I student? She made me go see the director and it was really heartbreaking.” (FG1, 422-432)
II. External Factors (continued)	E. Institution [defined as the facilities at the college the student chooses to attend]	1. Library	Available (a) to Not used (n)	(a) “We have our own computer lab, so it helped out not having to go to the library where everyone is.” (I2, 10-11)  (a) The online library was much more helpful.” (FG2, 96-97)  (n) “I didn’t really use the library unless I absolutely had to. They don’t have enough computers down there. You can do most of what you need to do at home.” (I1, 174-176)
		2. Nursing Lab	Dedicated (d) to Inadequate (i)	(d) “You couldn’t come in unless you are in nursing, so I kind of felt like we were treated a little bit special. The school provides for our department well.” (I2, 10-14)  (i) “Needs to be updated and more time devoted to

				feeling competent with our skills.” (FG2, 108-111)
	F. Finances  (includes financial aid, scholarships, employment, and any other sources of money that allowed student to complete their nursing education)	1. Assistance	Adequate (a) to Struggle (s)	(a) “Perkins program where you can get up to \$200 for your books and I used that.” (I1, 176-177)  (s) “I knew I had the brains, but I didn’t have the money. If financial aid were not in place, I probably wouldn’t have had a graduating class.” (I2, 161-166)  (a-s) “I received a Pell grant for both years of nursing school. If it wasn’t for that, I wouldn’t have completed nursing school—I wouldn’t have been able to afford it.” (FG2, 166-168)
		2. Employment	Essential (e) to Optional (o)	(e) “I had to pay for my own books and I had to work for everything—for more than 40 hours a week most of the time.” (FG2, 174-175)  (o) “I received scholarships for my nursing education. Having to quit my job and giving up the paycheck and knowing that yes, I

				<p>would be okay, we had saved enough.” (FG2, 186-187)</p> <p>(e-o) “The first year I could kind of work part time where I can set my own hours. But the second year there is no way.” (I1, 245-246)</p>
II. External Factors (continued)	F. Finances (continued)	3. Affordability	Helpful (h) to Essential (e)	<p>(h) “Affordability at the community college...but I had to get permission to use funds for school supplies.” (FG1, 215, 177)</p> <p>(e) “I wish I could have gotten some scholarships, but already having a bachelor’s in biology kinda made that really difficult.” (FG1, 216-217).</p>
	G. Transportation	1. Requirement	Necessary (n) to Optional (o)	<p>(n) “Having my own car Made it really helpful.” (FG2, 7)</p> <p>(n) “I just take my care and park somewhere, like a park or even the parking lot at school and I just study in my car.” (FG2, 31-33)</p> <p>(o) “There’s lots of ways to get around the city” (I2, 24)</p>

				(o) "When clinicals were a distance we carpoled together." (FG2, 8-9)
	H. Childcare	1. Responsibilities	None (n) to Heavy and challenging (h)	<p>(n) "It's a struggle with all families when you have someone who used to be around that can't be around anymore, especially if they have little kids. I'm happy I didn't have that situation." (I2, 83-85)</p> <p>(h) "I had to study at night after the kids when to bed...and often got less than 5 ½ hours of sleep." (FG2, 177, 181)</p> <p>(h) "After a test, I always went home afterwards and turned back into mommy." (FG2, 229)</p>

## Open Coding Concepts

Focus Group One (n=3)	Focus Group Two (n=2)
Confusion (-)	Frustration (-)
Contradictory information (-)	Sleep deprivation (-)
Learning (+)	Uncertainty (-)
Responsibility (+/-)	Give up paycheck (-)
Frustration (-)	Ultimate goal (+/-)
Time (-/+)	Difficult (-)
Scheduling (+/-)	Facing fear (-)
Structure (+)	Positive reinforcement (+)
Ritual (+)	Lack of confidence (-)
Habits (-/+)	Rumors (-)
Repetition (+)	Difficulties (-)
Spread too thin (-)	Negative attitudes (-)
Resignation (-)	Desire for growth (+)
Reading and study (+/-)	Excessive study time (-)
FOCUS	Persistence (+)
Devotion of time (+/-)	Struggle (-)
High stress (-)	Starting over (-)
Tears (-)	Prayer (+)
Excess time commitment (-)	Direction (-/+)
Informing family (+/-)	Kids SACRIFICE too (-/+)
COMMITMENT	Responsibilities (+/-)
Responsibilities (+/-)	SUPPORT (+)
Employment (+/-)	Judged by others (-)
SACRIFICE	Provided reassurance (+)
Make a difference (+)	Supportive friends (+)
Not as sharp (-)	Understanding (+)
Priorities in line (+)	Grants (+)
Challenged (-)	Scholarships (+)
Learning styles (+/-)	Financial assistance (+)
Repetition (+/-)	Unemployment (+/-)
Desire for growth (+/-)	Unmet needs (-)
Starting over (-/+)	Quit job (-/+)
Flexibility (+)	Lived on savings (-)
Study habits (+/-)	Study challenges (-)
Grades (+/-)	Focus on quality (+)
Keeping up (-)	Overwhelmed (-)
Comprehension (-)	Expectations (+/-)

Understanding (+)  
 Smart (+)  
 Struggle (-)  
 Resigned (-)  
 Prove self (+/-)  
 Do well (+)  
 Wanted to quit (-)  
 Cried (-)  
 Faith (+)  
 Distraction (-)

Clarification (+)  
 Approachable mentors (+)  
 Direction (+)  
 Belittling (-)  
 Rushed (-)  
 Challenging (-)  
 Unprepared (-)  
 Confusing (-)  
 Memorization (-)  
 Smart (+)

Interview One (n=1)	Interview Two (n=1)
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No diversity (-)  
 Mixed messages (-)  
 Blocked (-)  
 No personal life (-)  
 Time management (+/-)  
 COMMITMENT (+/-)  
 No time (-)  
 Couldn't work (-)  
 Selfish (+/-)  
 Motivated (+)  
 Strong (+)

Time investment (+/-)  
 Self-esteem suffered (-)  
 Worries (-)  
 Desire to succeed (+/-)  
 Persistence (+)  
 Determination (+)  
 SELF-EFFICACY  
 Grades (+/-)  
 Brains (+)  
 Challenges (-)  
 Low money (-)

Willful (+/-)  
 Stressed (-)  
 SACRIFICE (+/-)  
 Attitude (+/-)  
 Punitive (-)  
 Unfair (-)  
 Encouragement (+)  
 SUPPORT (+)  
 Disappointment (-)  
 Push/drive (+/-)  
 Understanding (+)  
 Positive attitude (+)

Moved back home (-)  
 SACRIFICE (+/-)  
 Sleep deprived (-)  
 Stubborn (+/-)  
 Persistent (+)  
 Abilities (+)  
 Helpful teachers (+)  
 Dedicated computer lab (+)  
 Treated special (+)  
 Provided for (+)  
 Studied hard (+/-)  
 Appreciated SUPPORT (+)

Challenging (-)  
 Experience (+)  
 Choices (+/-)  
 Independence (+)  
 In demand (+)  
 Job availability (+)  
 Mentoring (+/-)

Broken family (-)  
 Parental involvement (+/-)  
 Collaboration (+)  
 Shared struggles (+)  
 Bonded (+)  
 Proud of accomplishment (+)  
 Motivated (+)

Lack of experience (-)  
Lack of clarity (-)  
Stress (-)  
Fear of failure (-)  
Concentration (+/-)  
Lack of motivation (-)  
FOCUS (+)

Set example (+)  
FINANCIAL aid (+)  
Matching funds (+)  
Had to quit work (-)