THE USE OF GROUNDED THEORY TO DEVELOP A FRAMEWORK

FOR UNDERSTANDING STUDENT RETENTION

IN COMMUNITY COLLEGE NURSING PROGRAMS

by

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June 2013

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College of Nursing

Gaining admission into pre-licensure nursing programs has proven to be quite difficult

for the average college student. Topping the list of crucial priorities for many academic

institutions is the retention of these nursing students. Yet, the reality is that many students decide

not to complete their course of study for reasons other than academic failure. The retention of

nursing students is essential to securing competent, well-educated nurses to care for society in

years to come. Current research has indicated that the enrollment of students pursuing an

Associate Degree of Nursing within the Community College systems has greatly increased;

however, attrition rates remain high in these groups when compared to Baccalaureate Nursing

programs. Quantitative studies have identified academic as well as non-academic reasons that

influence students' decisions to stay in school. Yet, our efforts to fully understand these reasons

remain limited by the closed-ended questions asked of these students about their challenges to

remain in school. This study took a different approach to further investigate the actions and

processes identified by non-traditional college nursing students in order to contribute to student

retention theory. The grounded theory methodology of Charmaz (2006) was used to identify

three major study concepts that were identified from audio-recorded interviews which

highlighted the retention actions and processes from ten non-traditional college nursing students. The major concepts of enhancing personal capacity, learning to balance, and maintaining support were interpreted from this study's findings. The postulate interpreted from this study included the following: Community college non-traditional nursing students who are able to enhance their personal capacity through the actions and processes of learning to balance and maintaining support may have increased capabilities to remain in their nursing programs.

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PROGRAMS

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by

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DEDICATION

This dissertation is dedicated to my wonderful husband, Rob Priode. His words of encouragement and support were so welcomed, not to mention his continuous teaching to me that an expletive was never needed. To my wonderful parents, C. E. and Bonnie Slone, their never-ending loving support and faith in me to achieve such an undertaking was immeasurable.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE: BACKGROUND OF THE STUDY

In a time of increased pressure to graduate more nurses, community colleges are experiencing problems in retaining their nursing students (Desrochers, Lenihan, & Wellman, 2010; North Carolina Board of Nursing [NCBON], 2013). Due to this pressure, I wanted to understand the retention issues related to community college nursing students from the perspective of the students. The current study examined the retention of non-traditional college nursing students enrolled in a community college. In the Associate Degree Nursing (ADN) program that served as the study setting, student attrition for the fall semester of 2010 (first nursing course) was over 35%, with 22 out of 60 students failing or withdrawing from the program. Yet, applications for entry into the program at that point numbered well over 400. Throughout North Carolina (NC), community colleges continue to experience extraordinarily high levels of applications to their nursing programs (NCBON, 2013). The challenge is to retain students so that they graduate and successfully perform on the National Council Licensing Examination for Registered Nurses (NCLEX-RN) and enter the workforce. When colleges experience low retention rates, nursing faculty and administrators face issues including: (a) appropriate and adequate student admission requirements, (b) the probability of adequate pools of eligible students, (c) available adjunct clinical faculty appointments, and (d) reasonable faculty teaching responsibilities. ADN programs, in comparison to the Baccalaureate and diploma nursing programs continue to enroll the highest percentages of nursing students, nationally as well as statewide, and present the opportunity to study the grave problem of student retention. Student descriptions of perceived processes, actions, obstacles, challenges, and facilitators of retention may provide a deeper understanding of nursing student retention. A vast amount of student retention research exists, and many factors appear to prevent nursing students

from staying in a program and graduating. However, nursing student retention theoretical frameworks are virtually non-existent. The purpose of this study was to investigate the student actions and processes that impact student retention and to begin the development of a retention theory based on personal interviews with second level (second year) ADN students who were enrolled at a community college in NC.

Introduction to Grounded Theory

In order to understand the introduction, literature review, and methodology, it is critical to understand the research design chosen. I chose a grounded theory approach. Although there are many grounded theorists with differing methods, Charmaz's (2006) grounded theory methods allowed my research to be grounded in the data. Following the methods of Charmaz (2006) and Strauss and Corbin (1998), I made an effort to present an organized coding process to develop theory. The reasons for a grounded theory approach are further detailed in Chapter Three, the methods section.

The purpose of the literature review for this grounded theory qualitative study was established by three separate presentations found throughout the report. Charmaz (2006) argues that the literature review relevant to the concepts drawn from the data should be delayed until after the analysis. I used my literature review to provide a justification for the study (Chapter One), to identify what is already known concerning student retention (Chapter Two), and finally to contrast the findings from this study to other studies on nursing student retention (Chapter Five).

Workforce Justifications

Nursing student retention is critical to ensure that there are adequate numbers of qualified and competent nurses to enter the workforce (Last & Fulbrook, 2003). Nursing shortages loom

over the practicing workforce as the generation of baby-boomers begins retiring (United States Labor Bureau of Statistics, 2010). Earlier researchers, such as Higgins (2005), predicted that the confluence of low student retention, decreased faculty eligibility, and retirement would result in a shortage of over 400,000 nurses by 2020. According to the United States Labor Department Bureau of Statistics (2010), this projection now has increased to over one million more registered nurses (RNs) required by the year 2020. The American Hospital Association (AHA) (2011) has projected a need for over 2.8 million nurses by 2020 in response to the retirement of the "baby boomer generation," who are the current majority of our practicing nurse population. The AHA (2011) noted great concern about the ability to provide continued quality patient care in light of these predictions. In response to these predictions, there have been several attempts to obtain federal funding with a focus on increasing nurse education and preparation (AHA, 2011).

NC is projected to become a leading retirement area according to the National Active Retirement Association (National Active Retirement Association, 2013). The 1990 and 2000 censuses placed NC among the top five states for retirement, and is predicted to become the number one retirement state within ten years (Wilson, 2011). The NC Department of Health and Human Services ranks this state as the fifth most attractive state for retirees (NC Division of Aging and Adult Services, 2010). These projections point to an increasing demand for nurses due to an increased population of older adults who may have health needs associated with aging, further substantiating the need to explore all avenues for maintaining student enrollment and graduation.

Evaluators from nursing organizations, such as the National League for Nursing (NLN), have pointed to the importance of examining retention among nursing programs and its relevance for the future healthcare demands of our nation (NLN, 2013). Efforts to improve retention rates

among all nursing programs are considered important initiatives that could serve as the basis for petitions to the federal government to prepare for future shortages among the RN workforce. With NLN backing, federal and state bills have been introduced to provide funding for future nursing faculty and for students pursuing a nursing degree. The Institute of Medicine (IOM) has suggested how to meet the future healthcare demands of our nation. For instance, the initiative, Baccalaureate of Science in Nursing (BSN) in Ten, outlines how Associate Degree prepared RNs (ADN) could acquire a BSN in ten years from their date of licensure. This initiative has become a valuable goal for nursing preparation and entry into the workforce (IOM, 2010). NC is one of the states with the greatest numbers of ADN graduates (NCBON, 2013), and thus it is important to encourage these graduates to continue their education and enroll in one of the many existing bridge programs, such as the Registered Nurse to Baccalaureate of Science in Nursing Degree (RN to BSN).

The NC Foundation for Nursing Excellence (FFNE, 2013) has been awarded grant funding to formulate a joint venture of both private and public universities and community colleges. The project, entitled, Regionally Increasing Baccalaureate Nurses (RIBN), consists of alternate educational tracks for nursing students in which they complete three years at a community college while dually enrolled at the partner four-year university. Once students have completed the first three years and acquired their ADN and RN licensure, the students continue for one more year at a university in order to complete their BSN. With the nation facing severe shortages of healthcare providers, including nurses, it is crucial for nurses to be highly educated, and schools of nursing need to create educational paths for students that allow a seamless transition from school to practice (IOM, 2010). The first step in addressing national healthcare needs, while promoting adequate nursing preparation and education, is to retain the greatest numbers of

student nurses. This supports the efforts of this study to investigate and identify strategies to retain the community college nursing student.

The anticipated nursing workforce shortage is the overarching reason for studying the retention of student nurses. According to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) (2002), one leading healthcare area where there is both a current and anticipated shortage of available staff is long-term care. This is a grave concern for people anticipating placing loved ones in these healthcare settings. JCAHO (2002) published a white paper that outlined the nation's dire need for practicing nurses in acute care. Based on a study by JCAHO (2002), this white paper noted the importance of implementing recruitment and retention strategies for practicing nurses in the face of a nursing shortage. According to this white paper, the consequences of low numbers of available practicing nurses included Emergency Room (ER) overcrowding (38%), diversion of ER patients to other hospitals (25%), reduced numbers of available patient beds (23%), discontinuation of services (17%), and cancellation of elective surgeries (10%). In spite of efforts to recruit and retain practicing RNs, the nursing shortage persists and is now deemed the longest shortage recorded since these statistics were first obtained (Buerhaus, 2005). Buerhaus, Auerbach, and Staiger (2009) noted that some improvement in the overall nursing crisis may have been realized, but this is due largely to cutbacks by healthcare facilities and decreased patient census resulting from the lack of availability of healthcare insurance for the unemployed in the midst of an economic recession. Thus, examining nursing students' experiences as to how they remain in school is not only of the utmost importance to students, but it is of paramount importance in patient care.

Community College Justifications

According to the United States Bureau of Health Professions (2010), community colleges graduate well over 50,000 nurses from ADN programs yearly, while 4-year universities estimate their numbers of BSN nurses to be around 30,000 yearly. Nationally, 45.4 % of all RNs report receiving their initial degree from an ADN Program (United States Bureau of Health Professions, 2010). The NCBON tracks on-time completion rates in an effort to anticipate numbers of eligible nursing students graduating from both ADN and BSN programs. For the years of 2009 through 2011, the aggregated on-time completion rate for the ADN nursing graduates was calculated as 59% while the on-time completion rate for the BSN nursing graduates was calculated as 73.9% (Fraher, Belsky, Carpenter, & Gaul, 2008; NCBON, 2013). Yet in spite of high numbers of graduates, levels of attrition among the community college programs have far exceeded those of Baccalaureate Nursing programs (United States Bureau of Health Professions, 2010). Attrition rates for all nursing programs remain high, estimated at 37% nationally (Pryjmachuk, Easton, & Littlewood, 2008), with the majority of dropouts and withdrawals occurring the first year of study (Fraher et al., 2008; Jeffreys, 2004).

Currently, community colleges struggle financially to offer programs and often they are limited in the services they can provide to the public. From personal experience, I have witnessed the heavy burden of offering adequate nursing and lab supplies in ADN programs that have fewer resources than traditional 4-year universities. Desrochers et al. (2010) reported that in 2008, community colleges received only 57% per full time equivalent (FTE) of the amount provided from local, state, and federal appropriations compared to 4-year universities, or roughly $10,396 compared to $17,909 per student. With lower funding among community colleges and with enrollment of over half the nation's student nurse population, these academic settings are

forced to rely heavily on adjunct faculty with larger class sizes and fewer instructional resources for faculty and students.

In examining the success of a nursing program, nurse administrators and educators not only weigh the number of entering students but also the 'staying power' of students with the expectation of successful completion of the NCLEX-RN (National Councils of State Boards of Nursing (NCSBN, 2013; NCBON, 2013). The continued success of these community college programs is an important factor in providing nurses to local communities. A substantial portion of ADN graduates tend to remain in local areas, providing needed resources and services to rural communities (Fraher et al., 2008; United States Bureau of Health Professions, 2010).

Many local community hospitals 'court' potential nursing graduates to meet anticipated patient care needs. Typically, these agencies provide substantial funding toward scholarships and other opportunities for students enrolled in community colleges. In an effort to 'grow their own' future nurses, clinical agencies agree to spend dollars for student receptions and student shadowing of bedside practicing nurses, in anticipation of future nurse recruitment. Because hospitals provide funding for student nurses, better understanding of student retention would benefit future workforce needs.

Adequate retention rates among nursing programs at the community college level in NC are tied to overall evaluation of the success of the programs (NCBON, 2013). NC has 58 community colleges, each, along with several universities, offers commensurate numbers of Associate of Science Degrees in Nursing. The average numbers of students enrolled in these settings range from 20 to 200 during any given semester (NCBON, 2013). If small programs loose even few numbers of students, the result is a high rate of attrition. As high rates of attrition continue, these smaller nursing programs must submit to a greater level of scrutiny and

evaluation from their governing bodies (NCBON, 2013). Therefore, evaluation of student retention and attrition is crucial in assessing the success of a nursing program as well as in implementing appropriate instructional methods and student resources (Jeffreys, 2006; Last & Fulbrook, 2003).

The National Center for Educational Statistics has documented the increasing enrollment in community colleges by students desiring to enter the health professions (2011). With the ever-growing interest of students in a career in nursing, educators and administrators are going to great lengths to identify and support eligible students. The rigorous admission requirements of nursing programs, both among community colleges and 4-year universities, are typically reviewed yearly. These admission criteria vary nationally and statewide. Fraher et al. (2008) reported compelling findings from a study addressing retention and attrition across ADN programs in NC. Programs with higher than expected graduation rates were cited as incorporating the following admission processes: (a) used standardized tests in their admissions processes, (b) employed slightly more educated faculty, (c) tended not to use the same faculty in clinic and lecture settings, and (d) required orientation for clinic instructors more frequently (Fraher et al., 2008). Adequate admission criteria are essential for nursing programs to seat eligible students. Likewise, retaining these nursing students is equally important. Losing eligible students to unforeseen circumstances, or to circumstances that might in some way have been avoided, is disappointing to nurse educators as well as students. Therefore, this is an opportune time to contribute to the development of theory that explains how and what helps some students to stay in school while others do not.

Financial and Emotional Justifications

The failure to complete a degree in nursing can result in a heavy financial burden to students and academic institutions. Tuition costs increased nearly 5% for all undergraduate students in the 2010-2011 academic years (College Board, 2011). This is of great significance as academic institutions try to stay affordable, competitive, and accessible for students in the current financial landscape of substantially decreased federal funding. In addition, limitations to the maximum amount of federal funding allocated per student and institution have recently been enacted, along with restrictions pertaining to time frames to complete college programs (Federal Student Aid, 2011).

The financial strain on academic institutions offering nursing programs is increasing. Securing lab supplies and equipment, such as simulation equipment for nursing skill labs, is crucial to adequate preparation of student nurses. In order to meet this need, some nursing administrators have increased their reliance on grant monies instead of budgeted monies from local and federal programs. In addition to unequal program resources, large numbers of adjunct and varied nursing faculty and heavy director teaching responsibilities with little to no grant writing opportunities at the community college level may contribute to this financial strain.

The typical nursing student also incurs high financial costs while enrolled in a nursing program. These costs are for appropriate shoes, uniforms, stethoscopes, watches, and scissors, which enhance learning and are needed to identify the student in the clinical setting. In many programs, students must purchase personal lab kits in order to practice and check off specific nursing clinical skills. Clinical rotations, which are mandated components of nursing courses, may take place away from the college campus, requiring transportation and off site gasoline

expenses. Exploring whether the high costs incurred impact student retention would allow opportunities for better planning by faculty and nurse administrators.

Nursing students who experience emotional distress may not complete their course of study and this distress may be due in part to the stress of such a rigorous program (Deary, Watson, & Hogston, 2003; Kotecha, 2002). It is important to learn how and why some students have a greater staying power and resistance to stress than others. The stress of not continuing or even delaying completion of a program can also become an issue. This stress may be financial or emotional as students accumulate and have to pay back large amounts of student loans even if they do not complete their degrees.

Although there have been many studies on the retention of traditional college students (Spady, 1970; Tinto, 1975, 1982, 1993), less is known about non-traditional college students (Bean & Metzner, 1985; Metzner & Bean, 1987; Pascarella & Terenzini, 2005; Seago, Wong, Keane, & Grumbach, 2008; Wild & Ebbers, 2002). There is also a limited body of information on the retention of ADN students (Jeffreys, 2004, 2006; Phillips, Spurling, & Armstrong, 2002; Pryjmachuk et al., 2008). Yet, research has shown that nursing education now consists of diverse, largely non-traditional students with higher levels of anxiety, more personal roles to perform, and greater environmental obligations to fulfill than ever before (Campbell & Dickson, 1996; Fraher et al., 2008; Jeffreys 1998; Symes, Tart, Travis, & Toombs, 2002).

The nursing literature repeatedly mentions how important these findings are to students and nursing faculty (Baker, 2010; Campbell & Dickson, 1996; Cook, 2010; Deary et al., 2003; Dorsey & Baker, 2004; Fraher et al., 2008; Higgins, 2005; Jeffreys, 2004; Johnson, C., Johnson, R., Kim & Mckee, 2009; Rudel, 2004). Low rates of nursing student retention continue to exist and this literature highlights the need for an explicit understanding and development of theory to

explain retention and attrition. Yet, there has been little to no theory development pertaining to the retention of the nursing student. A theoretical framework is greatly needed to guide nurse researchers in furthering our understanding of student retention.

Purpose Statement

The purpose of this study was to investigate the student actions and processes that impact student retention and to begin the development of a retention theory based on personal interviews with second level (second year) ADN students who were enrolled at a community college in NC.

Research Questions

Research questions framing this grounded theory study of nursing student retention included:

1. What processes do nursing students identify that assist them in remaining in school?

2. What actions do nursing students see as important for retention?

Significance and Relevance of the Study

Investigating the retention actions and processes of nursing students has relevance to nurse educators and to the profession of nursing. With the projections of nurse shortages, understanding these actions and processes of student retention is crucial to the success of nursing education. In preparing future nurses to meet patient care needs, nurse educators must continue to educate, anticipate, and prepare for the needs of their students. Continuous nursing program evaluation includes review of rates of retention, attrition, graduation, and licensure of our students. Monitoring these students and gaining this perspective as they matriculate through their programs can offer a wealth of information to students and nurse educators.

CHAPTER TWO: REVIEW OF THE LITERATURE

This chapter presents the literature pertinent to the study of nursing student retention. The chapter begins with a general discussion, including a historical view of student retention studies, and then moves to more specific studies of nursing student retention. Existing theories and models of general college student retention are presented. The chapter concludes with the identification of recent theory and model development in the study of nursing student retention. A model synthesis is presented along with definitions of retention and attrition applicable to this proposal. Two tables are presented in this section; one displays retention definitions and the other displays retention factors that are similar in the seven theories reviewed. A discussion of the characteristics of traditional and non-traditional students is presented. Then a final presentation is divided into two sections; one which summarizes pertinent nursing student retention studies and a second section which details pertinent student retention factors.

Student retention has been studied for over five decades. However, the need to understand the "web of events that shape student leaving and persistence" continues (Tinto, 2006, p.1). Early in the process of evaluating student retention, educators often associated staying in school with psychological characteristics. Early researchers frequently described students who did not stay in college as not having the right personality for traditional college course work, or as being less able, less motivated, or less willing to adhere to the requirements of a college education (Spady, 1970, 1971; Tinto, 1975, 1982, 1993). The belief was that "Students failed, not institutions" (Tinto, 2006, p. 2). In the 1970s, a move toward understanding the relationship of the individual within society guided educators to a richer analysis of why students leave or stay in college. Most notably, Tinto's early work led others to evaluate student retention through the lens of involvement and persistence.

Currently, great focus is placed on why students are not completing their degrees and academic institutions are trying to evaluate this phenomenon. Nurse leaders are calling for changes in nursing education in an effort to retain more students and increase nurse availability in the workforce (Gardner, 2005; IOM, 2010). Over five decades of research on student retention has led to the conclusion that reexamining student retention is warranted when workforce needs change, when college enrollment practices change, or when educators see differences and changes in the needs of students (Jeffreys, 2004; Tinto, 2006). Many changes have been made to admission requirements, student eligibility, tutoring, and college services and resources based on some of these studies. Tinto (2006) concluded that research on student retention has given us an enhanced appreciation of the multitude of forces that contribute to a student's retention, in particular, cultural background, economics, social support, and the characteristics of the institution.

Retention is generally defined as the student's ability to remain in a college course or program (Baker, 2010). Other definitions of retention include the persistence of the student. Coined by college students, persistence can be understood as the staying power to remain in school. The term, retention, is often associated with the way an academic organization monitors students and degree completion. It is important to these institutions to know whether their enrolled students have the opportunities to complete their education or decide to not finish their programs.

Research on this topic, however, remains inconclusive, especially in the community college setting (Cook, 2010; Jeffreys, 2004, 2006; Phillips et al., 2002; Pryjmachuk et al., 2008). With guidance from the development of theory, academic institutions may be able to merge

some similar definitions of retention, maintain accurate measurements of retention, and identify strategies that help students to remain in school.

Traditional theories and models of student retention have provided worthwhile information for educators and students. However, there is disagreement about implementing retention strategies (Tinto, 2006). Some theories of student retention have been merged, and others have evolved into quite different explanations of student success (Ashar & Skenes, 1993; Cabrera, Nora, & Castaneda, 1993; Calcagno, Crosta, Bailey, & Jenkins, 2006; Jeffreys, 2004; Monroe, 2006: Summers, 2003; Tinto, 2006).

It is important, therefore, to examine the classic theories and models of student retention. Seven of these classic theories and models are presented in the next section. Research in this area began with traditional students at typical four-year university campuses. Later, researchers started to address retention factors affecting non-traditional students found on campuses similar to community colleges. Classic theories and models of student retention include Spady's (1970, 1971) explanatory sociological model of the dropout process; Tinto's (1975) student integration model; Astin's (1984) model of student involvement; Cabrera et al. (1993) integrated model; Metzner and Bean's (1987) non-traditional student attrition model; and Pascarella's (1985, 2005) conceptual model for research on student-faculty informal contact. Jeffreys's (1994) model of nursing undergraduate retention and success (NURS), a seventh theory, incorporates the non-traditional nursing student.

Traditional Theories of Student Retention

William Spady

William Spady (1970) is recognized as one of the early researchers of student retention. His work was based primarily upon Durkheim's (1951) theory of suicide. Speculating on the

correlation between the egoistic theory of suicide and students dropping out of college, Spady (1970) suggested that the two behaviors were similar in explaining what might happen to individuals who failed to interact socially with their environment, such as in the college setting. He said that social integration for students was related to five variables: academic potential, normative congruence, grade performance, intellectual development, and friendship support (Spady, 1970). Spady postulated that academic performance was most important to student retention. He suggested that the dropout decision was influenced by the first four variables through two intervening variables, satisfaction and institutional commitment (Spady, 1970).

Spady (1971) tested his model (Figure 1) by surveying 683 freshmen at the University of Chicago about their perceptions of environmental and social influences upon student retention. Major revisions to the model were incorporated based on gender differences. He reported that the grade performance of men was the most important factor for retention, while institutional commitment and social integration were second (Spady, 1971). However, women reported that the dropout decision was based primarily on institutional commitment, followed by academic performance (Spady, 1971). Spady (1971) concluded that females would not stay in an unsatisfying college environment; however, achievement and persistence were very important across gender lines.
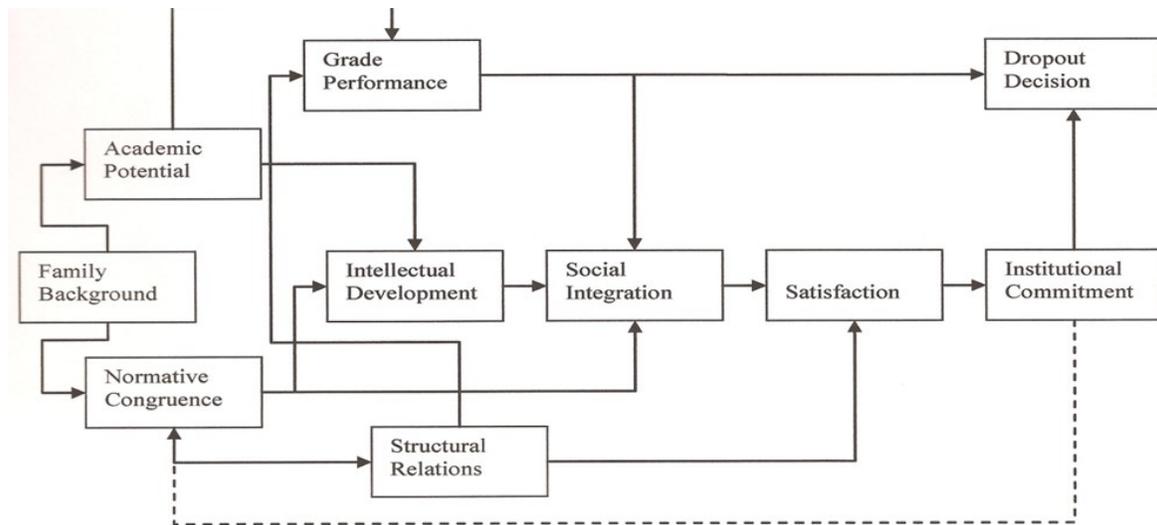
Figure 1. Spady's explanatory sociological model of the dropout process from "Dropouts from Higher Education: Toward an Empirical Model" by W. G. Spady, 1971, *Interchange, 2*(3), p. 39.

Vincent Tinto. Vincent Tinto's work, considered one of the best theoretical perspectives on student departure from college, was adapted from the work of Spady (1970, 1971). Tinto posited two factors on student retention: academic and social integration (Attewell, Heil, & Reisel, 2011). Tinto's model (Figure 2) depicts these two factors. The first factor, academics, leads to dropout when there is a mismatch between the student's academic abilities and the regulations, policies, and required course work placed upon the student by the academic institution (Attewell et al., 2011).

The other factor, social integration, can be best understood by considering the aspects of socialization such as peer and faculty relationships (Attewell et al., 2011). From Tinto's perspective, "Student departure occurs because of a lack of fit between the student and the institution, indicated either by low academic integration or by low social integration, both

16

creating problems that reduce the student's commitment and persistence" (Attewell et al., 2011, p. 538). In response to Tinto's (1975) theory of student departure, Ashar and Skenes (1993) note that smaller class size enhances the social interaction and increased student retention often found in the non-traditional settings.

Tinto's (1975, 1982, 1993) work on college student retention has been frequently tested. Overall, these studies have generated mixed results; some have confirmed assertions that aspects of social integration predict retention (Jeffreys, 2006, 2007; Seago et al., 2008), while others have reported that the theory fell short of their expectations (Bean, 1982; Bean & Metzner, 1985; Derby & Smith, 2004; Metzner & Bean, 1987; Pascarella & Terenzini, 2005; Wells, 2003).

In response, Tinto (1993, 2006) has suggested that the student departure theory could be improved by focusing on a descriptive instead of a prescriptive explanation. This extension of his original theory, which focused on the four-year university setting, helps to explain student retention in the non-traditional, community college setting. Differences in dropout rates between the two academic settings including academic failure versus voluntary withdrawal may also be explained. However, because the definitions of attrition and retention vary across college settings, it is important to precisely define and describe these constructs.
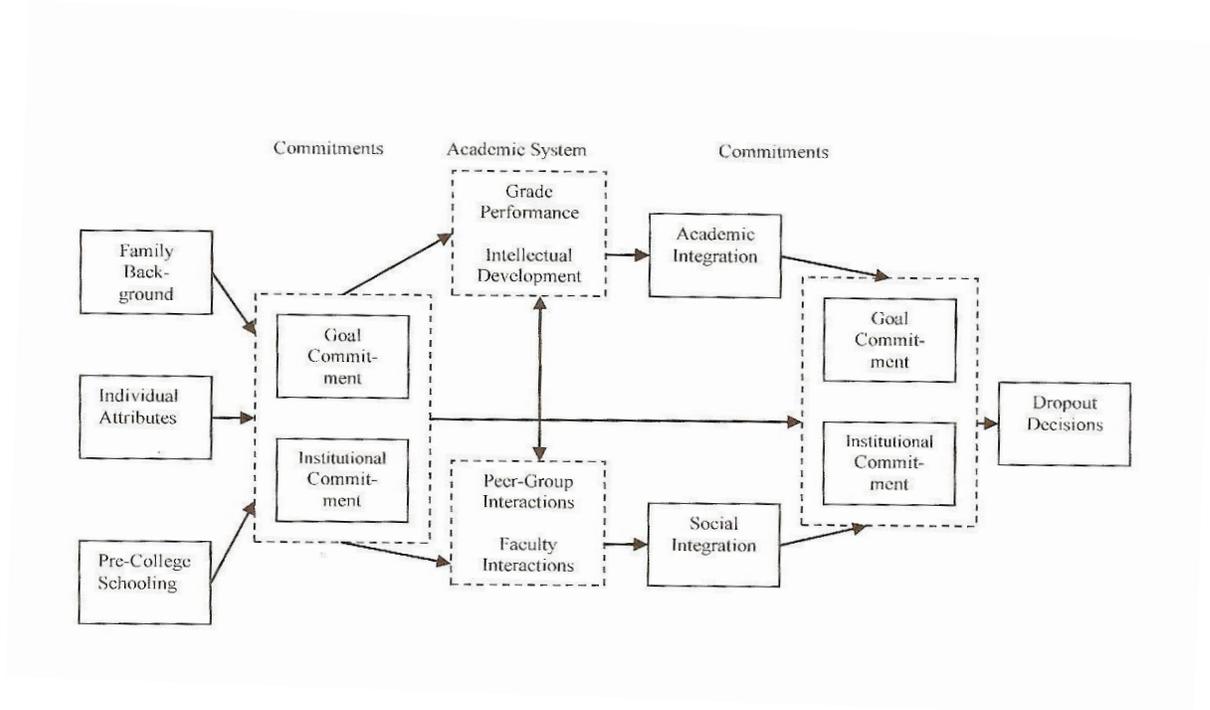
Figure 2. Tinto's student integration model from "Dropout from Higher Education: A Theoretical Synthesis of Recent Research" by V. Tinto, 1975, *Review of Educational Research, 45*, p. 95.

Alexander Astin. Alexander Astin (1984) postulated that student retention improves as students become invested both physically and emotionally in their campus environment. A model of this theory does not exist because the author felt that the title (model of student involvement) was simplistic enough for understanding (Pascarella & Terenzini, 2005). According to Astin (1984), time is very important to the typical college student and, therefore, retention is achieved by staying in residence on campus. The result is more time for the student to study and become involved, and achieve better grades, leading to completion of the degree. Also, opportunities for students to involve themselves with on-campus activities and with faculty provide an optimal environment for retention (Astin, 1984). In a later article, Astin (1993) reported that the three most important forms of student involvement were academic involvement,

involvement with faculty, and involvement with student peer groups. He suggested that there is no one attribute that defines the persistent student who remains in school, but opportunities can be found among academic institutions, faculty, and students themselves. "On the aspect of student persistence, a requirement of a deeper understanding of the importance of educational community to the goals of higher education must be included" (Astin, 1993, p. 212). Astin (1984) pointed to the need of the student to feel involved, connected, and persistent in relationships with peer groups and faculty. He suggests that the student plays the lead role: if change is necessary to remain in classes, then the student is involved in capitalizing on opportunities for retention (Pascarella & Terenzini, 2005). Tinto's work offers guidance to researchers and college administrators seeking to implement academic and social programs that promote students' educational growth (Pascarella & Terenzini, 2005).

Alberto Cabrera. Alberto Cabrera and colleagues (1993) tested Tinto (1975, 1982, 1993) and Bean's (1980, 1985) theories using structural equation modeling to examine the differences in the two conceptual frameworks. They found that environmental factors, such as encouragement from friends and family, were much more important than Tinto theorized and were congruent with Bean. Bean (1982) postulated that environmental factors and active socialization were crucial to student retention and had the strongest influence on persistence. Bean (1982) contributed immensely to the study of persistence and retention of non-traditional college students.

Cabrera et al. (1993) found that grade point average (GPA) was a poor measure of academic integration, as Tinto had suggested; instead Cabrera et al. (1993) viewed GPA separately, as Bean had suggested and found that GPA and the intent to persist had the largest effects upon persistence. The Cabrera et al. (1993) model (Figure 3) suggested that the following

factors directly affect institutional commitment: academic and social integration, intellectual development, and financial factors (Cabrera et al., 1993). The model also explains how pre-college academic achievement and college GPA affect institutional commitment.

The model (Figure 3) is simple yet useful. The openness of the model in not prescribing detailed aspects of each of the main categories may be attractive to researchers. This model can also be used in diverse academic settings which offer different pathways and educational tracks for students.
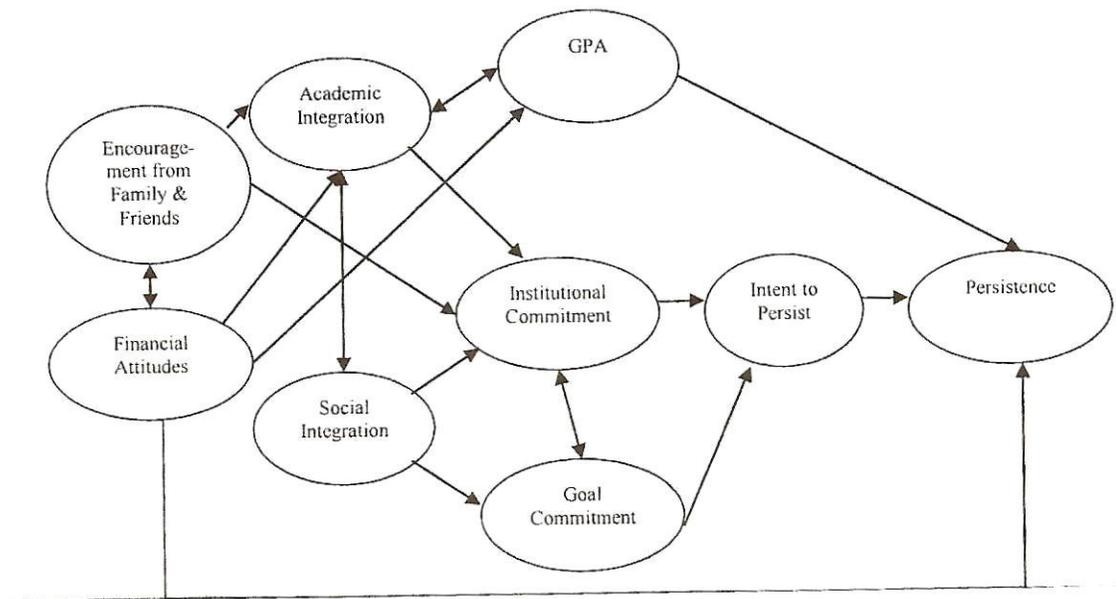
Figure 3. Cabrera, Nora, & Castaneda's integrated model from "College Persistence: Structural Equation Modeling Test of an Integrated Model of Student Retention" by A. F. Cabrera, A. Nora, and M. B. Castaneda, 1993, *The Journal of Higher Education, 64*(2), p. 134.

Non-Traditional Student Retention Theories

In evaluating the traditional student retention theories of Spady (1970, 1971), Tinto (1975, 1982, 1993), and Astin (1984, 1993), their relevance to retention of non-traditional students is crucial. For instance, it is very difficult and complex to track students who transfer from one campus to another. In many cases, whether these students ever complete their course of study

remains unknown. Student demographics and transcript completions are often lost when students transfer from a community college setting to a traditional university setting or from one community college to another. With these unknown factors, it is difficult to know when and if these students are retained within the academic setting. Also, there may be differences in how retention is defined and measured in the different academic settings.

John Bean and Barbara Metzner. Metzner and Bean (1987) developed a non-traditional student retention model adapted from the work of Tinto (1975, 1982) and from prior work by both researchers (Bean, 1982; Bean & Metzner, 1985). Their work evaluated factors in student retention such as age, enrollment status, educational goals, gender, ethnicity, and high school performance. The model (Figure 4) was tested on 624 part-time commuter students. The study found that over 29% of the variance in dropout was predicted. These non-traditional students experienced high amounts of stress from various role commitments, and this was related to non-completion of their studies (Bean & Metzner, 1985). Overall, the study validated Metzner and Bean's (1987) model (Figure 4) of non-traditional student attrition. Unexpectedly, environmental effects failed to directly affect dropout; however, indirect effects such as psychological outcome variables, goal commitment, and stress had significant effects on dropouts through the variable of intent to leave.
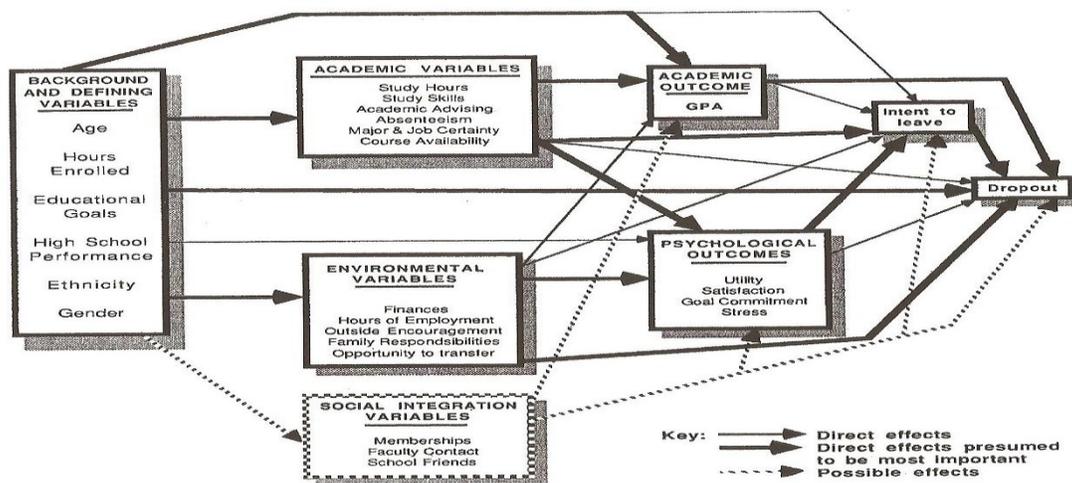
Figure 4. Metzner and Bean's non-traditional student attrition model from "The Estimation of a Conceptual Model of Non-Traditional Undergraduate Student Attrition" by B. S. Metzner and J. P. Bean, 1987, *Research in Higher Education, 27*, p. 17.

Ernest Pascarella. Ernest Pascarella (1980, 1985) developed a causal model (Figure 5) of student retention designed to understand learning and cognitive development in post-secondary education. These patterns could be attributable to the quality of student effort, student background, and interactions with agents of socialization which directly influence learning. Pascarella (1985) reported that residential facilities and a dominant peer group strongly influenced academic achievement, while informal student and faculty interaction were less influential in retention. In later studies, Pascarella and Terenzini (2005) identified that students with specific career goals, such as nursing, were more likely to complete their course of study than other students.
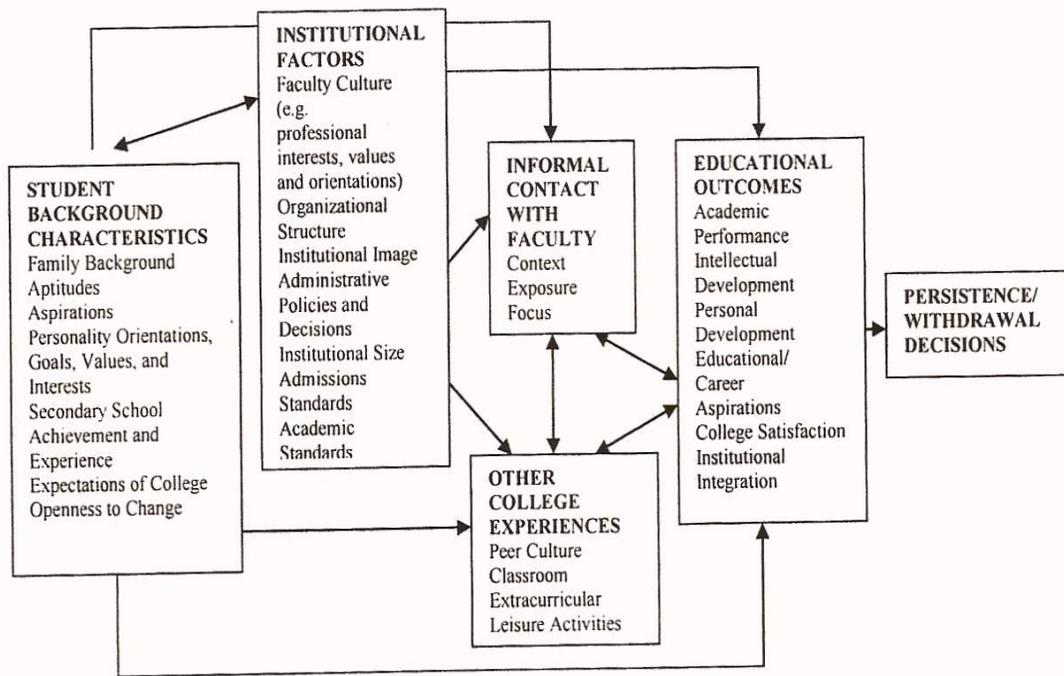
Figure 5. Pascarella's conceptual model for research on student-faculty informal contact from "Student-Faculty Informal Contact and College Outcomes" by E. Pascarella, 1980, *Review of Educational Research, 50, p.* 569.

Retention of the Nursing Student

Nursing school continues to be a complex experience. Nurse researchers have evaluated the actions of their students and shown how some progress through the program without impediment, while others with similar admission characteristics have a rough path. The identified stress and coping from this struggle have been linked to overall nursing student retention (Brodie, 2004; Deary et al., 2003; Kotecha, 2002).

Multitudes of studies as well as student retention models (Astin, 1984, 1993; Bean & Metzner, 1985; Cabrera et al., 1993; Metzner & Bean, 1987; Pascarella, 1980; Pascarella & Terenzini, 2005; Spady, 1971; Tinto, 1975) have provided nurse educators with information

regarding the factors that influence student retention. These studies have typically generated student questionnaires and surveys in order to obtain responses to questions deemed important for students to remain in their nursing program. General findings include that students with good academic performance remain in nursing programs longer than students with poor academic performance (Jeffreys, 1998). Also, non-academic factors such as financial status have been associated with barriers to completing degree programs. Williams and Calvillo (2002), Jeffreys (2007), and Zuzelo (2005) found that socioeconomic status could influence students' study time. Studies have reported that factors other than academic performance are important for retention. For example, environmental influences were the main predictors for students when earning poor math grades, poor anatomy and physiology grades, not meeting program admission requirements, or withdrawing from the nursing program after achieving As and Bs (Jeffreys, 2004, 2006).

A selection of pertinent studies and models has been presented representing student retention of the general traditional and non-traditional college student population. However, theoretical frameworks to guide retention of nursing students have not been developed (Dorsey & Baker, 2004; Jeffreys, 1998, 2001, 2004; Wells, 2003). Jeffreys (2004) has presented the best framework to date that describes retention of the non-traditional college nursing student.

Marianne Jeffreys. Adapted from other works on retention (Bean & Metzner, 1985; Metzner & Bean, 1987; Tinto, 1975), Marianne Jeffreys's work offered insight into retention of the nursing student. Most of her work evolved from the study of non-traditional ADN students in the northeastern United States. She provided numerous questionnaires to ADN students in order to develop a model of retention. Jeffreys's (2004) model of undergraduate retention and success (NURS) described the relationships between academic, environmental, professional, and

24

psychological factors that led students to stay in a nursing program. In addition, as a response to the increasing enrollment of minority students in non-traditional nursing programs, the NURS model (Jeffreys, 2004) offered an organizational framework to meet the needs of these students. Along with the need to increase the diversity of the RN workforce, this framework provided some considerations for retaining diverse students and meeting the needs of our diverse society (Jeffreys, 2004; Symes, Tart, & Travis, 2005).

Jeffreys's work placed emphasis on environmental factors that created obstacles to staying in a nursing program. These factors included: friends inside and outside of class, child-care stressors, and employment hours, which were often obstacles to education for adult learners (Jeffreys, 2001, 2004, 2006, 2007; Priode, 2010). The model (Figure 6) examined the ultimate goals of nursing students—graduation from a program with successful performance on the NCLEX-RN exam.

The NURS model (Figure 6) also incorporated factors originating from student affective areas such as self-motivation and self-efficacy. Jeffreys included these areas in an attempt to capture students' perception of their ability to stay in school. Based on Bandura's (1997) theory of self-efficacy, motivation and persistence are often thought of as one and the same. Thus, students' perception of being able to successfully stay in school might be explained by measuring some of the characteristics of self-efficacy. Campbell and Dickson (1996) noted that self-efficacy was a strong predictor of performance outcomes. However, there was little empiric evidence on whether and how positive self-efficacy perceptions increased retention of nursing students (Campbell & Dickson, 1996; Jeffreys, 1998, 2006).

I tested the NURS (Figure 6) model with a sample of 59 ADN students (Priode, 2010). The findings on environmental influences that the students perceived as restrictive or supportive

to their remaining in school were similar to those in Jeffreys's (2004) NURS model. Similarities included restrictive factors such as financial status, family crisis, employment responsibilities, and college tutoring services while supportive factors included faculty advisement, living arrangements, and encouragement by friends outside of school.

The NURS (Figure 6) model was also tested with BSN students at NC State University (Alden, 2008). The Alden (2008) study assessed 370 BSN students in regard to on-time completion in six semesters. Independent variables were reading comprehension, math skills, and stress. A logistic regression analysis showed that predictors of early academic success were science, reading, and math skills. For program completion, reading comprehension, math skills, and completion of a previous degree were significant predictors. The noncognitive variables of stress, age, and ethnicity were not significant in the Alden (2008) study.
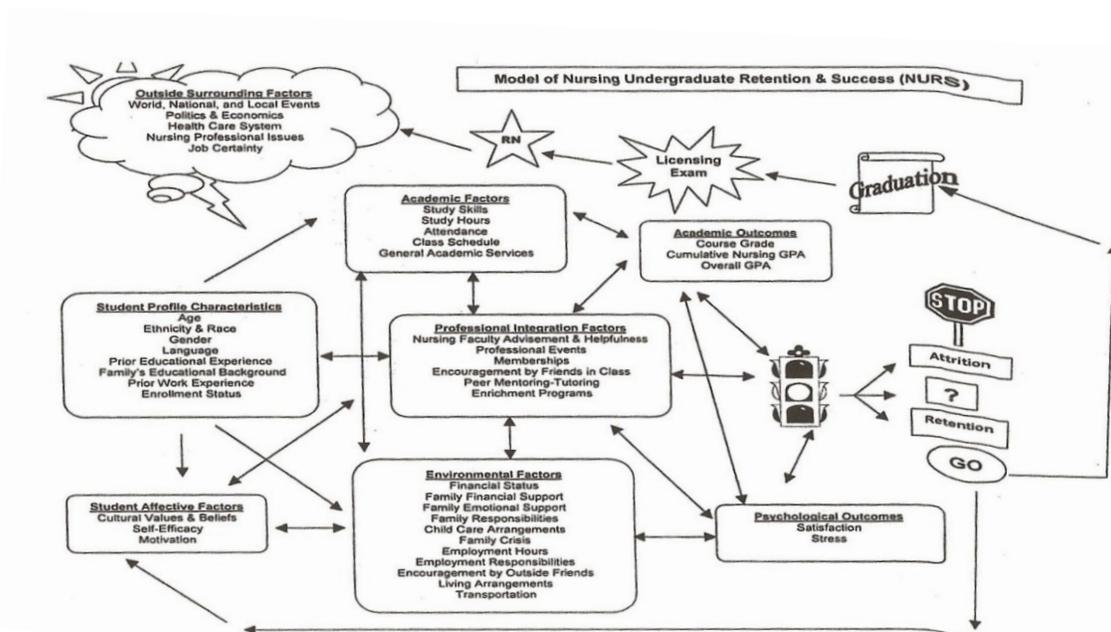
Figure 6. Jeffreys's model of nursing undergraduate retention and success (NURS) from *Nursing Student Retention: Understanding the Process and Making a Difference* by M. R. Jeffreys, 2004, p. 6: Springer, New York, NY.

Synthesis of the Major Student Retention Theories and Models

It is important to compare and contrast the major theories of student retention in order to understand how they overlap as well as the inconsistencies that exist between them. Generally, Spady (1971) and Tinto (1975) presented models with little overlap, in part because Tinto (1975) included several additional factors in student retention. Astin's (1984, 1993) theory was quite different in that it stressed the role of the student as a participant in retention and success; whereas, earlier researchers stressed the role of the institution. Spady (1970, 1971) and Tinto (1975) and focused on the traditional college student, while Bean and Metzner (1985) extended this focus on student retention by incorporating non-traditional students. Pascarella and Terenzini (1985) evaluated whether students with a career goal were more likely to remain in school than other students without a career goal. Having a career goal and being enrolled in a specific college program were typical of non-traditional students. Pascarella (1980, 1985) and Pascarella and Terenzini (2005) presented several student retention factors including demographic factors, institutional factors and other college experiences involving informal contact with faculty and peers (Bean & Metzner, 1985; Cabrera et al., 1993; Jeffreys, 2004; Metzner & Bean, 1987; Tinto, 1975).

These major theories and models all demonstrated similar student outcomes—either persistence and graduation or dropout and withdrawal. Most of the researchers found many of the same student retention factors to be important in achieving a positive outcome. For instance, Spady (1971, p. 39) used the term "grade performance" to represent good grades, while Metzner and Bean (1987, pp.17, 26) used "GPA and academic factors." Cabrera et al. (1993, p. 126) used the term "academic integration," Pascarella (1980, p. 569) used the term "educational outcomes," and Jeffreys (2004, p. 8) used the term "academic outcomes."

Jeffreys (2004) claimed that "good academic performance resulted in retention decisions only when accompanied by positive psychological and environmental outcomes" (p. 158). Good academic performance, such as an adequate GPA of nursing students, was linked to increased retention of these students. However, whether psychological and environmental factors were predictive of the retention of nursing students remained less clear (Bean & Metzner, 1985; Jeffreys, 2004; Metzner & Bean, 1987; Pascarella & Terenzini, 2005; Seago et al., 2008).

I would like to further explore possible links between psychological and environmental factors and student retention. Utility, which Bean and Metzner (1985) defined as student perception of the usefulness of college education, satisfaction with courses, goal commitment, and stress were identified as variables that may affect student retention. Metzner and Bean (1987) reported that student dropout was related to GPA, credit hours enrolled, utility of education, satisfaction with the student role, opportunity for transfer, and age. They also reported that absence from class, age, high school performance, and ethnicity had indirect effects on dropout. Metzner and Bean (1987) concluded that social factors had little influence on non-traditional students and that commitment and academic factors were more important in dropout of these students. Variables found to have the greatest effect upon dropout were GPA, intent to leave, hours enrolled, absenteeism, and high school performance (Metzner & Bean, 1987). Satisfaction, utility, opportunity to transfer, age, and ethnicity had important indirect effects on dropout, all through the factor of intent to leave (planning to leave school) (Metzner & Bean, 1987). Intent to leave accounted for 34% of the shared variance among the factors (Metzner & Bean, 1987). Background and environmental factors strongly affected intent to leave; however, academic variables had a much smaller effect on this variable. Thus, environmental and psychological factors tested in Metzner and Bean's (1987) study proved inconclusive of its

relationship to student retention or dropout. Environmental factors did not directly affect student dropout, though they did indirectly affect intent to leave. The psychological factors of satisfaction and stress were also not linked directly to dropout or intent to leave.

Jeffreys's (2004) NURS model and theoretical framework appeared to be reflective of the non-traditional general college student model of Metzner and Bean (1987) and other, prior studies on the retention of traditional college students (Bean, 1980; Pascarella, 1980; Tinto, 1975). Future research is needed to provide a clearer theoretical framework and model of nursing student retention.

In order to present a clearer synthesis of the major categories of student retention factors, I adapted a simple yet meaningful table (Table 1) by Pietras (2010) comparing the major theories. This table (Table 1) demonstrates the similar terms and meanings that each of the theories use. Each "X" represents a major category construct or term that is part of the model, with similar or like definitions.

Table 1

Comparison of Student Retention Factors of Selected Theories and Models

Author	Model Name	Grade	Dev	Enc	Peers	Goal	Inst	Faculty	Env	Pre
Spady	Dropout Process	X	X	X	X	X	X			
Tinto	Student Integration Model	X	X		X	X	X	X		X
Metzner and Bean	Non-traditional Student Attrition	X		X	X	X	X	X	X	X
Astin	Student Involvement Model	X	X		X	X	X	X	X	X
Pascarella	Conceptual Model for Research on Student-Faculty Informal Contact	X	X	X	X	X	X	X		X
Cabrera	Integrated Model of Student Retention	X	X	X	X	X	X			
Jeffreys	Nursing Under-graduate Retention and Success	X		X	X		X	X	X	X

Note. Adapted from Pietras (2010, p.30). Grade = grade performance; Dev = intellectual development; Enc = normative congruence/encouragement from family and friends; Peers = social integration/peer group interaction; Goal = intent to persist/goal commitment; Inst = institutional commitment/satisfaction; Faculty = faculty interaction; Env = environmental; Pre = pre-college achievement. X= similarities

Variations in the Definition of Retention

There are many definitions of retention which have primarily been based on the specific academic setting. Wild and Ebbers (2002) have called for a mutual agreement on the definition of retention in order to achieve better outcomes for students. In my study, retention was defined as the continuous enrollment in a nursing program without withdrawal or academic failure (Jeffreys, 2004). Student retention may also be defined as the persistence of the student to stay in school. From a former student's perspective, the term, staying power, was linked to retention and has great meaning for this study. The term, retention, was often associated with the way an academic organization explained and monitored students' completion of degrees. Whether these enrolled students had the opportunities to finish their degrees and programs, by staying in school, was important to these institutions. Yet, the definition of, retention, proved to confuse students, nurse educators, and administrators and was found to have different meanings on different college campuses such as two-year and four-year settings (Derby & Smith, 2004; Jeffreys, 2004; Wild & Ebbers, 2002). Many of the studies to date have not presented definitions of like terms for retention and were based on the assumption that the reader was familiar with the terms both conceptually and operationally. Table 2 presents the variety of conceptual and operational definitions and like terms for retention.

Table 2

Related Terms and Definitions of Retention

Meaning	Author	Conceptual	Operational
	Retention		
Enrollment in a subsequent semester with GPA less than 2.0	Wild & Ebbers (2002)		X
Continuous enrollment in a nursing program without withdrawal or academic failure.	Jeffreys (2004)	X	X
Continued student participation in learning events to completion of the associate degree in nursing requirements	Rudel (2004)	X	
An institution's ability to keep a student from enrollment to commencement	Berger & Lyon (2005)	X	
Continued enrollment in a BSN or ADN program and graduation	Baker (2010)		X
	Retention Rate		
Rate of persistence	Wild & Ebbers (2002)		X
	Attrition		
Withdrawal of students from a college at which they are registered	Spady (1970)	X	X
Dropout from a nursing program whether voluntary or involuntary	Jeffreys (2004)	X	
Loss of individuals from nursing programs	Deary, Watson, & Hogston (2003)	X	
Withdrawal from college, regardless of reason, without completing degree requirements	Catalano & Eddy (1993)	X	
Student departure	Tinto (2006)	X	
	Leavers		
Failure to register for next semester	Pascarella & Terenzini (2005)	X	
	Discontinuers		
Departure during the first year	Andrew, Salamonson, Weaver, Smith, O'Reilly, & Taylor (2008)	X	
	Persisters- Persistence		
Students who obtain a degree, but take an extended amount of time	Derby & Smith (2004)	X	
	On-time Graduation		
Graduation within three years of enrollment	Fraher, Belsky, Carpenter, & Gaul (2008)		X

Note. X= signifies the use of the definition of the selected term.

Characteristics of Traditional and Non-Traditional Nursing Students

Students are often described as traditional or non-traditional. Metzner and Bean (1987) reported that to be categorized as non-traditional, a student must have at least one of three characteristics: attend school part-time, commute to school or over 24 years of age. Jeffreys (2004) further characterized non-traditional nursing students as (a) older than 25years, (b) commuting to class, (c) enrolled part-time, (d) male, (e) member of an ethnic or racial minority group, (f) speak English as a second language, (g) has dependent children, (h) earned an equivalence diploma, or (i) required remedial classes.

Other attributes of the non-traditional college nursing student are important to explain. The next section of this chapter further addresses these attributes which are relevant for this study. These areas include: role and social characteristics, enrollment status, and diversity.

Role and social characteristics. The non-traditional nursing student may play several social roles while enrolled in college courses including caregiver, part-time or full-time worker, family bread-winner, and caretaker of one's parents (Jeffreys, 2007). The non-traditional student often maintains these roles at the same time she or he is following a rigorous course of study, such as nursing. The traditional university or college student may not have the same social responsibilities as the non-traditional student. Management, prioritization, and delegation of different social roles may be more of a priority for community college nursing students than making good grades (Jeffreys, 1998, 2001, 2004, 2007; Priode, 2010).

Students enrolled in a community college may spend less time on campus, participate in fewer extracurricular activities, have less contact with faculty, and spend more time with non-college friends and family (Astin, 1984, 1993; Jeffreys, 2004; Metzner & Bean, 1987; Pietras, 2010). Often, the social support structures for traditional students are not available to non-

traditional students. Traditional students may think twice about dropping out of a college setting when they have to leave friends and terminate rental agreements, whereas this is usually not a concern for non-traditional students.

Enrollment status. Non-traditional students often work part-time and are enrolled in fewer credit hours than traditional students. These students often exhibit more trepidation about the financial costs of their education and the time needed to complete their studies. I have observed that these students often drop out of their program due to schedule conflicts or loss of federal funding, seemingly taking precedence over all other considerations. Many have no help or financial support from family.

Diversity. The socioeconomic and academic backgrounds of non-traditional students are often different from those of traditional students. Jeffreys (2004) cited the disparity in minority nursing student persistence as a major issue. In a later study, Jeffreys (2006) concluded that older minority students were more likely to not complete their first semester of an ADN program. Students enrolled in these programs are often of lower socioeconomic classes, from blue-collar families, are of minority status, and are from families who themselves often have low levels of education (Jeffreys, 2004; Symes et al., 2005). Diversity is most prevalent in inner cities and in non-traditional nursing programs. Many rural nursing programs do not report even moderate numbers of minorities among students; therefore, studies conducted in these settings may be limited in generalizability (Symes et al., 2002, 2005). Anecdotally, as the director and as a faculty member of an ADN program in rural NC, I noted that over 8 years, only 6 out of 480 students were African Americans.

The lack of diversity among nursing students contributes to the lack of diversity in the RN workforce (Baker, 2010; Johnson et al., 2009). In a 10 year meta-analysis of nursing student

retention factors, Campbell and Dickson (1996) noted that there was an explosion of diverse non-traditional students entering higher education venues and the trend would continue well into the 21st century. They found that cognitive factors such as GPA and science classes were most likely to predict retention. Age and parental education factors were more predictive than other non-cognitive predictors (Campbell & Dickson, 1996). There is ongoing debate about how to best attract and retain minority nursing students, especially given expectations of increased populations of minorities.

Summary. A review of the literature on nursing student retention concludes the first section in this chapter. Classic studies were identified, along with importance to current nursing student retention. Relevant strategies and best predictors of student retention, with suggestions for future research were also included. The literature review in this section was organized based on how the studies fit in to specific categories regarded as crucial to understanding nursing student retention.

This overview of classic and current studies was initiated using the databases of CINAHL and ProQuest. Descriptors of student retention, nursing student retention, ADN student, and student persistence were utilized. In addition, texts written by retention theorists were reviewed.

The second section of this chapter is presented to explain my understanding of student retention factors. These factors were selected due to their importance and similarity among many of the studies and models presented. Main categories that are reflected include academic and non-academic factors of student retention.

Nursing student retention has been studied in a variety of ways. For example, some studies have used researcher developed or established questionnaires to ask students about areas identified as important for student retention (Jeffreys, 2004; Seago et al., 2008). Other studies

were developed in response to concerns by educators, administrators, and agencies of government about the nursing workforce (Fraher et al., 2008; Jeffreys, 2004, 2006, 2007; Johnson et al., 2009; Phillips et al., 2002; Wild & Ebbers, 2002).

The literature implies that there are circumstances that influence a student to stay in school. These circumstances were described by terms such as factors, obstacles, or challenges that appeared meaningful to the student. The term, factor, was the best, most inclusive definition. For instance, the term, factor, was all encompassing and included obstacles or challenges as well as positive influences for the student to stay in school.

There has been a vast amount of research on the topic of student retention. While I present these factors individually, it is important to keep in mind that many factors overlap. Areas discussed include main categories of academic and non-academic nursing student retention factors. The following areas that appear to influence the staying power of nursing students include academic and student confidence factors, environmental and social factors, and age factors. Each area is addressed.

Academic and student confidence factors. Those nursing students who successfully matriculated exhibited critical thinking skills and applied learning. This was not like the rote memory aspects of learning that were often found among the 'hard' science classes, to which many students were, accustomed (Jeffreys, 2004, 2007). Some students appeared to struggle during the first semesters of a nursing program because instruction and testing differed from those of general education preparation. However, grades from science classes have long served as the only measuring tool to predict student success in nursing courses (Fraher et al., 2008; Seago et al., 2008).

Jeffreys (2007) tracked admission, progression, graduation, and licensure characteristics of 112 culturally diverse ADN students and reported that circumstances were viewed differently with different types of student attrition. Retention was reported as ideal (26%), continuous (24%), or interim-stopout (25%). Attrition comprised the remaining sample with first semester failure (9%), voluntary withdrawal (14%), and involuntary withdrawal (2%). Stopout was defined as a student stopping the course of study, then returning to complete the program at a later date. Attrition was defined as voluntary or involuntary; voluntary attrition consisted of factors other than academic that influenced students' decisions to stop their program, while involuntary attrition could be tied to academic failure. The nursing students in Jeffreys's (2007) study were successful when they passed the NCLEX-RN examination, when they had at least a "B" GPA, when they had no withdrawals or failures from any nursing courses, and when they had at least a "B" in the course Medical-Surgical I (Jeffreys, 2007). Thus, the academic ability of nursing students was reflected in the first medical-surgical course. Higher student grades from specialized nursing courses, such as maternity and pediatric courses, along with at least an overall average of a "B" GPA were also high indicators of student retention and successful performance on the NCLEX-RN (Jeffreys, 2007).

Andrew, Salamonson, Weaver, Smith, O'Reilly, and Taylor (2008) reported that students who left during the first semester of a nursing program were more unlikely to return than students who left during their second semester. This finding is consistent with my personal observations of the high attrition rates from first semester ADN students and their failure to return to the program after waiting a year. Strategies for retention may result in better outcomes if educators focus on students who leave their program after the first semester.

The staying power of enrolled nursing students was influenced by a myriad of factors. For instance, student academic performance was tied to the success of the student. However, the factors that influenced the academic performance of college students were less clear (Bean & Metzner, 1985; Metzner & Bean, 1987; Seago et al., 2008). Students who have good grades but who do not achieve success and matriculate through a college program, such as nursing, raise significant questions for nurse educators and researchers.

Other academic factors included the clinical performance of the nursing student. Successful performance in the clinical setting by nursing students was linked to improved student retention overall (Phillips et al., 2002; Rees, 2006; Symes et al., 2005). Clinical grades and successful clinical evaluations by students were often in contrast to classroom grades. Sometimes, students were able to demonstrate adequate understanding of nursing concepts through application in the clinical setting; however, many of these same students achieved less than desirable classroom grades.

Another component that influenced retention was the student's confidence in maintaining staying power in the face of unforeseen circumstances. It was not clear how non-academic aspects influenced nursing students and whether they stayed in school (Jeffreys, 2004; Seago et al., 2008). Seago et al. (2008) analyzed 796 student surveys from four California Community Colleges and two Universities to identify factors that influenced student retention. Based upon the theoretical framework of Pascarella and Terenzini (1991), four subscales— math and science ability, confidence in the future, self-expectation, and confidence in ability— were components of the study. However, Seago et al. (2008) reported that student confidence in the future and self-expectation for success did not predict student retention.

The study from Seago et al. (2008) was clearly more applicable to the community college setting. Many students attending college courses in this setting aspired to obtain job skills, reading and writing skills, or trade skills, and they did not extend their studies to a 4-year university or college setting. Students often selected ADN programs, offered mostly at the community college setting, with the desire to graduate sooner and gain RN licensure. Student confidence was clearly important to student retention and may be important in more ways than reported. Academic self-confidence and self-concept, as reported by Choi (2005), were significant for grades. Bean (1982) reported that grades were important for low-confidence female students, and grades ranked fifth in importance for high-confidence females (Bean, 1982). Poor self-concept, inaccurate self-appraisal, and lack of supportive resources identified by baccalaureate students were significant for retention of traditional students, but were less clear in regard to non-traditional nursing students (Jeffreys, 2004, 2007; Kornguth, Frisch, Shovein, & Williams, 1994). Thorough self-appraisal by students may assist nurse educators in identifying opportunities for intervention in the hope of increasing retention. Faculty interventions included promoting adequate study time and time management strategies, facilitating peer and faculty relationships, and recognition of priority tasks in both the clinical and classroom settings (Jeffreys, 2004).

In a classic study by Metzner and Bean (1987) of 624 non-traditional commuter students, cumulative GPA and the intent to leave their course of study were found to be the best predictors of dropout. Based upon Tinto (1975, 1982) and Spady (1970, 1971), these findings included that academic performance was a function of academic preparation and served as the primary motivational factor for staying in school and attending class. Metzner and Bean (1987)

concluded that students may drop out of school based on a questionable level of commitment to their studies, but social factors were not significant factors in leaving school.

Non-academic factors. Researchers have historically concentrated their attention on the academic reasons that deter students from staying in school. College classes such as science and math have a great bearing upon how well students perform in programs such as nursing. However, researchers are beginning to realize that other non-academic factors may influence the staying power of nursing students. These factors include environmental and social factors such as friends and family support, study groups, and faculty support.

Environmental and social factors. The ADN student is often classified as a non-traditional student, whereas the BSN student is often classified as a traditional student (Jeffreys, 1998, 2004, 2007). Jeffreys's (1998) study of 151 first semester ADN students revealed that the combination of environmental and academic factors in the presence of positive self-efficacy explained a moderate amount of the variance in student retention. Non-traditional students were often faced with challenges unforeseen by traditional students, such as living off campus and having fewer opportunities for socialization (Jeffreys, 2004, 2007; Rees, 2006). Symes et al. (2005) postulated that factors that prevented baccalaureate students from staying in school stemmed from disadvantaged backgrounds and a lack of resources, including financial and social support. There is some speculation today that university students may be facing obstacles similar to those of non-traditional students given the challenging economic times.

Some studies have suggested that peer mentoring and student study groups might present opportunities to improve student retention. Baker (2010) surveyed 200 nursing faculty from 16 southeastern states to investigate the effectiveness of 14 faculty strategies in successfully retaining minority students in either ADN or BSN programs. She reported that faculty

involvement with minority students were more effective than strategies with no faculty involvement. The strategy found most effective by faculty was availability and timely feedback on tests and clinical performance. However, it was reported that these faculty were recruited to participate in the survey by their administrators and this may have resulted in significant bias to the findings. Nevertheless, this research demonstrates the importance of early faculty intervention for students at risk of not completing their program (Baker, 2010; Dorsey & Baker, 2004; Fowler & Norrie, 2009; Higgins, 2005; Jeffreys, 2004; Symes et al., 2002). In an earlier study by Dorsey and Baker (2004), it was postulated that faculty mentoring was very important and was positively correlated with student retention.

Non-academic factors (those considered to be environmental by Jeffreys), such as family support, friend support, and work obligations, are becoming a greater priority for some students than academic factors (Fowler & Norrie, 2009; Jeffreys, 2004, 2007). With the interest of our younger generation in social networking, some students may feel the need to be part of a class or study group. As mentioned, traditional students who live on campus may have more opportunities for social interactions and support than non-traditional community college students. Fowler and Norrie (2009) found that, in addition, family responsibilities such as child care issues, parental illness, partner support, and being a single parent may determine whether students stay in school. Jeffreys (2007) also noted that family crises and responsibilities were restrictive for students as they tried to remain in school, but made no reference to being a single parent or spouse. In contrast, these students claimed that family emotional support, friends in class, and friends outside of class were greatly supportive to staying in school. Hours of employment, financial status, and employment responsibilities were also seen as obstacles for these students (Jeffreys, 2007). In other studies by Jeffreys (1998, 2004, 2006), support by

friends and family was as important in whether the student was successful in staying in school as good grades or time spent studying.

I conducted a pilot study ($N = 59$), in which students with children cited encouragement by friends in school, financial aid and scholarship monies, and faculty advisement and helpfulness as the three most supportive retention factors (Priode, 2010). Students from a first semester ADN program responded to a 25-item questionnaire adapted from Jeffreys's (2004) Student Perception Appraisal-Revised questionnaire. The descriptive study identified the most common factors cited by students in their perceptions of whether they could stay in school. Bandura's (1997) theory of self-efficacy provided the underpinning for the study. Students working over 20 hours per week cited hours of employment, employment responsibilities, and family crises as most restrictive to them in trying to stay in school (Priode, 2010). Overall, environmental factors such as encouragement by friends in school, family emotional support, faculty advisement and helpfulness, encouragement by friends outside of school, and transportation arrangements were the top areas that students cited as meaningful for staying in school (Priode, 2010).

Wells (2003) suggested that non-academic factors, such as relationships with faculty, may have more of an influence upon student retention now than in earlier generations. This suggestion points to the need to evaluate such factors in addition to the academic factors that historically were examined in student retention research. Wells (2003) also pointed to an urgent need to examine retention in the non-traditional nursing student programs to identify critical points for intervention.

Wild and Ebbers (2002) noted that most research has been centered on students in traditional university or college settings and easy generalization to the community college setting

may not be appropriate. These researchers also noted that community colleges often defined retention differently. For instance, students in the community college setting often started and stopped their course of study many times. Many attended the community college for two years, and then transferred to a four year university, resulting in inaccurate tracking of these students. The nursing students enrolled in the community college setting typically assumed that they will be in school for the duration of the program. From personal experience, I witnessed many ADN students burdened with economic hardship; therefore, many were beginning to see that attending a college program such as nursing as less of a priority. Research could be helpful in identifying some of the strategies that may support at-risk students and strengthen their staying power to stay in school.

Age factors. Pryjmachuk et al. (2008) reported that the qualifications and age of students were the only factors to predict student completion of their studies. Qualifications that were low or largely vocational were found to predict higher non-completion than higher academic entry qualifications (Pryjmachuk et al., 2008). Findings from 1,200 students indicated that mature students (older than 25 years of age) were more likely to have a disadvantaged educational preparation but were more likely than younger students to complete their course of study (Pryjmachuk et al., 2008). The authors recommended that nursing programs lower their entry qualifications but required higher course grades in an effort to level the playing field for students at an educational disadvantage.

Phillips et al. (2002) found that students in the age group of 20-44 years were most successful of all age groups in remaining in school. In this study, characteristics of nursing students were reported from 20 California community colleges. Based on a theory by Cross (1981) grouping student characteristics of retention, the longitudinal study of over 5,000 students

enrolled from the years 1994-1995 to 1998-1999 concluded that females (78%) and students with English as a primary language (78%) were most successful in completing their nursing program.

In a key study by Fraher et al. (2008), the program, student, and faculty characteristics of a 2002 cohort of ADN programs in NC were evaluated. The authors found that nursing students identified as at-risk to not graduate included younger students (less than 23 years of age), non-white students, those with a GED, and those receiving a Pell Grant. Program characteristics that indicated that higher rates of retention and graduation, included whether standardized testing and science competencies were used as admission or progression criteria (Fraher et al., 2008). Students who achieved grades of at least a "B" in any of the transitional nursing courses (NUR 110, NUR 115) were more likely to graduate on time than students who earned a "C" in these courses or students who repeated the course more than once (Fraher et al., 2008). This was similar to other findings (Jeffreys, 2006) and was relevant for many ADN program admission and progression criteria. Fraher et al. (2008) recommended that nursing programs throughout NC should consider basic science competencies for students seeking admission (Seago et al., 2008), graduate level prepared faculty, and orientation programs for clinical faculty as strategies to increase nursing student retention (Fraher et al., 2008).

Summary

This literature review presented the multifactorial phenomenon of nursing student retention, with the overlapping of academic and non-academic factors in retention. The development of a theoretical framework that explains how nursing students remain in school is of the utmost importance. Utilizing a grounded theory approach can allow beginning concepts to emerge from the explanations of student actions and processes that might assist the non-traditional college nursing student to stay in school.

CHAPTER THREE: METHODOLOGY

The purpose of this study was to investigate the student actions and processes that impact student retention and to begin the development of a retention theory using personal interviews with second level (second year) ADN students who were enrolled at a community college in NC. Serving as the beginning steps in theory development, this identification of nursing student actions and processes, helped to understand retention in a more thorough manner. This chapter presents the research questions and approach, definitions, rationale for grounded theory, sampling, data collection procedures, data analysis, data validity and trustworthiness, researcher's assertions and preparation, and researcher as the instrument.

Research Questions and Approach

I used a grounded theory approach to address the following two research questions: what processes do nursing students identify that assist them in remaining in school and what actions do nursing students see as important for retention? A grounded theory methodology allowed real life understandings of nursing student retention to emerge. Commensurate with grounded theory tradition, this approach lent itself to describing and understanding the key beginning components of social, psychological, and structural processes occurring in a specific setting (Polit & Beck, 2008). This study was designed to investigate the student actions and processes that impact student retention and to begin the development of a retention theory using personal interviews with second level (second year) ADN students who were enrolled at a community college in NC.

Definitions

Several definitions are presented that are relevant to the study.

Academic factors. Academic factors are defined as factors that describe the general academic skills of students, included but not limited: college GPA, grades in related classes,

study skills, high school GPA, and entrance exams such as Scholastic Aptitude Test (SAT) or placement testing scores (Jeffreys, 2004; Metzner & Bean, 1987).

Confidence in academic ability. Confidence in academic ability is defined as a students' motivation and self-assessment of their perceived ability to accomplish their academic goal (Seago et al., 2008). Seago et al. (2008) measured confidence in academic ability by using a student questionnaire.

Dropout behavior. Dropout behavior is defined as the failure to attend college classes (Tinto, 1982, 1993).

GPA. GPA is defined as the student's grade point average, based on a 4.0 academic scale (Jeffreys, 2004).

Non-traditional student. A non-traditional student is defined as the college student who meets one of the following: (a) is older than 25, (b) commutes to class, (c) is enrolled part-time, (d) is male, (e) is a member of an ethnic or racial minority group, (f) speaks English as a second language, (g) has dependent children, (h) has a (GED), (i) requires remedial classes, and (i) attends classes at a commuter or community college (Jeffreys, 2004, 2007).

Retention. Retention is defined as continuous enrollment in a nursing program without withdrawal or academic failure (Jeffreys, 2004).

Science and math aptitude. Science and math aptitude scores are defined as grades from related science and math classes that meet admission criteria for entry into an ADN program (Jeffreys, 2004).

Traditional student. A traditional student is defined as a student who attends college courses in residence or at a four-year university (Jeffreys, 2007).

Rationale for Using Grounded Theory

A revelation occurred to me in reviewing nursing student retention research. I was still unclear as to how these students were able to stay in their nursing programs. A grounded theory approach was selected because research on general college student retention has been inconsistent and theories only partially explained retention. There are unanswered questions about how and what happens from the student perspective when faced with obstacles to staying in school. Student surveys or questionnaires are based on existing theory, not student experience. Using grounded theory allowed for the formation of a theoretical framework that evolved from the real life experiences of nursing students.

A grounded theory approach to nursing student retention allowed student experiences and processes of what is going on, to emerge (Creswell, 2007). Exploration of the actions and processes that students verbalized created a means of going beyond superficial explanations and digging deeper than the closed-ended questions that might be asked in a questionnaire on student retention. Lincoln (1997) stated that, "Multiple stories feed into any text; but, equally important, multiple selves feed into the writing or performance of a text, and multiple audiences find themselves connecting with the stories which are told" (p. 38).

Selecting the grounded theory approach was for me an awakening as well as an effort to find an approach that fits well with a study of nursing student retention. After conducting an in-depth literature review during my quantitative pilot study (Priode, 2010), I found that my questions pertaining to nursing student retention were not completely answered. I then concluded that to move this body of research forward, a qualitative approach, such as grounded theory, would allow for a greater exploration of student retention and generation of theory (Strauss & Corbin, 1998). This step was truly the beginning of my process in framing this study. With my

experience in teaching the nursing student at a community college, I could not step away from what I already knew and questioned, therefore the grounded theory as described by Charmaz seemed the best fit. "Neither observer nor observed come to a scene untouched by the world" (Charmaz, 2006, p. 15).

Charmaz and her work in constructivist grounded theory guided me by confirming my desire to build on the findings from my quantitative study. Charmaz (2006) argued that we often use basic grounded theory guidelines with twenty-first century methodological assumptions and approaches. For instance, the belief that grounded theory methods can complement other research and not stand in opposition to them was relevant to this research (Charmaz, 2006). Yet, as a novice qualitative researcher, I realized that I required a pragmatic process to ensure accuracy and relied upon the work of Strauss and Corbin (1998) to provide structure in the data analyses of this study.

The work of Charmaz (2006) underpinned the research design of this study from several aspects. For instance, her work pertaining to the constructivist worldview closely paralleled this study. She argued that a "constructivist would emphasize eliciting the participant's definitions of terms, situations, and events" (Charmaz as cited in Reissman, 2009, p. 390). Secondly, Charmaz (Reissman, 2009) pointed to this constructivist version of grounded theory by "entering participants' worlds by interpreting meanings and human processes from the ground up" (p. 391). The use of interviews was crucial to this study in order to travel into the students' worlds through their language and experiences. The interpretations of these interviews were not an exact picture (Charmaz, 2006); however, by examining these student retention actions and processes through abstract interpretation, I was afforded a deeper understanding. In addition, "grounded theory centers among a category-based approach to social processes" (Reissman, 2009, p. 391).

With the utilization of grounded theory, the findings from this study allowed for the "lifting of concepts" derived from the data findings (Charmaz, 2007, p. 139). This was accomplished through the use of open, axial, and final selective category construction all originating from a line-to-line coding process necessary for actual data interpretation. "Recognizing sensitizing concepts as the point of departure allows for refinement and elevates these codes to conceptual categories which begins the task of theorizing from the data" (Charmaz as cited in Reissman, 2009, p. 391). The concepts arose from the data and formed the basis of an effort to begin the steps of developing theory of nursing student retention. Finally, Reissman (2009) outlined the concept of "the temporality of identity" from the work of Charmaz (p. 391). According to Charmaz (2006), this concept illustrated what processes mean within the research community. According to her,

> A process consists of unfolding temporal sequences that may have identifiable markers with clear beginnings and endings and benchmarks in between. The temporal sequences are linked in a process and lead to change, thus, single events become linked as part of a larger whole. (Charmaz, 2006, p. 10)

The concept of "temporality" paralleled the purpose of this study (Reissman, 2009, p. 391). My goal was to identify nursing student retention actions and processes by interviewing participants who had experienced the phenomenon of staying in school, something that occurs across time (from first year through second year). Participants were able to identify a multitude of processes they engaged, planned, structured, and restructured during their enrollment as a second year (second level) community college nursing student. Some of these processes definitely led to changes in several aspects of these students' lives. Student retention actions and processes are further detailed in Chapter Four: Findings.

To further explain my selection of grounded theory qualitative research, I would like to build a scenario. I reviewed many research articles on the performance of student nurses during my course work as a PhD student. I initially focused on NCLEX-RN performance, but with influencing work from other authors (Beeman & Waterhouse, 2001; Sayles, Shelton, & Powell, 2003; Waterhouse & Beeman, 2003), I found that no one factor seemed to outweigh any others in predicting student performance on this examination. In an effort to further my research on nursing student success, I focused on student retention. In order to take a high stakes examination, such as the NCLEX-RN, the student has to have staying power while enrolled in school. In a small pilot study, I identified multiple retention factors that reflected students' perceptions of what might support or restrict their ability to stay in school (Priode, 2010). In that study, non-academic factors such as family and friend support were identified as most supportive during the first semester, while lack of faculty support was most restrictive (Priode, 2010). In a typical scenario that I have personally witnessed, nursing students started to achieve less than desirable grades, moved to a period where they reprioritized study time and life obligations, then stopped completing assignments or attending class. The students then decided to make less of an effort to try and catch up with their studies, assumed a position of failing the course, and finally withdrew from or failed their course and program. This example illustrates the process of student leaving. The process not only left open seats that could have been filled by other qualified students, but these open seats also placed a burden on nursing program retention and graduation rates. Some students claimed that noncompletion of a nursing program stemmed from factors including course difficulty, inability to juggle studies and personal reasons such as family and work obligations, and fear of failure (Jeffreys, 2001, 2007).

Creswell (2007) presented the basic idea that conceptual frameworks should be selected to design a research study. My selection of grounded theory was first based on addressing two questions: 1) What does the researcher already know about the phenomenon? 2) What approach allows the best statements (ideas) to emerge with as little interference as possible from the researcher? The next step in my selection of a grounded theory approach was to address the epistemological and theoretical perspectives for this research. According to Creswell (2007), there are four major worldviews that shape qualitative research: postpositivism, pragmatism, constructivism, and advocacy and participatory research. I realized that the overarching goal of this research was to generate the objective reality of nursing student retention from the participants themselves.

Constructivism is closely aligned with my personal worldview as related to research. Creswell (2007) described constructivism as interpretive, i.e., the researcher addresses the processes of interaction among individuals. "We conduct qualitative research when we want to empower individuals to share their stories, hear their voices, and minimize the power relationships that often exist between the participants and the researcher" (Creswell, 2007, p. 40).

The constructivist worldview allowed questions to be broad so that the participants could describe their constructed meaning. Creswell (2007) states, "Questions that are more open-ended are better" (p. 21). The interpretation of participants' responses was based on my recognition that historical, personal, and cultural experiences helped the participants to make sense of the findings. The process of fully listening to participants was important for precise interpretation. Charmaz (2006) pointed out that research participant discovered meanings and views, and researchers' finished grounded theories, were constructions of reality. With my interpretation of student retention actions and processes, these constructions were acknowledged.

When I read about nursing student retention, it became clear that I needed to know more than performance scores or Likert scale responses. Students bring varied social interactions and social roles to classes in their pre-licensure nursing education. Because I did not share these varied roles, it would be difficult for me to construct surveys or questionnaires that would elicit a variety of experiences. Using quantitative methodology would limit my understanding, as students could only answer what is asked of them, not more.

Grounded theory was an appropriate method for this research because of the multitude of factors that surrounded student retention. Both academic and non-academic factors in why students stay or why they leave have been well studied (Bean & Metzner, 1985; Jeffreys, 2004, 2007; Kornguth et al., 1994; Metzner & Bean, 1987; Tinto, 1975, 1982, 1993; Wells, 2003). However, by exploring actual student accounts of the processes and actions that guided their decisions to stay or leave a course of study provided richer and deeper meaning to these experiences. No single theoretical framework has been identified that fully described the process of retention in an ADN program (Fowler & Norrie, 2009; Jeffreys, 2004, 2007; Phillips et al., 2002). This study, conducted with community college nursing students, provided new and enlightening information regarding the actions and processes of student retention.

Sampling

 Sample identification. Grounded theory research includes selective sampling, which is the identification of a population before data is collected (Draucker, Martsolf, Ross, & Rusk, 2007). In this study, my sample consisted of ten second level nursing students from an ADN program in a rural setting. My selection of this study sample was based on two reasons. The first reason involved the identification of the most likely academic setting where the majority of college level non-traditional nursing students were enrolled. Retention issues were most likely to

occur with non-traditional nursing students and the academic setting most likely to enroll these students consisted of the community college setting supporting an ADN program (Bean & Metzner, 1985; Desrochers et al., 2010; Fraher et al., 2008; Jeffreys, 2004; Metzner & Bean, 1987; Pascarella & Terenzini, 2005; Seago et al., 2008; Wild & Ebbers, 2002). In addition, these non-traditional nursing programs supply the majority of working RNs in this nation (United States Bureau of Health Professions, 2010). Secondly, the rural areas in NC house the majority of these programs and supply RNs to rural community hospitals (NCBON, 2013). A rural setting is an area that encompasses all the population, housing, and territory not included in an urban area, while an urban area is characterized as an area where over 50,000 people live (United States Census Bureau, 2010). According to the 2000 census by the NC Rural Economic Development Center, 85 of the 100 counties of NC are considered as rural areas. Adopted by the NC General Assembly, these areas were defined as having no more than a population density of 250 people per square mile (NC Rural Economic Development Center, 2012).

In conducting this study, it was crucial to avoid using actual student names or other means of identification. In order to protect the identity of this vulnerable population of students, each participant was given a pseudo-name. Permission to conduct this study was approved by the investigator's affiliated University and Medical Center Institutional Review Board (Appendix H) and the Community College's Executive Council and College President (Appendix I). Participant (student) consent (Appendix A) was obtained prior to data collection.

Participant selection. This study included a selective sample of second level (second year) ADN students at a local community college. Patton (2002) suggested that in qualitative studies, a minimum number (with no specification of the exact number) of participants would satisfy proposed sampling requirements in order to understand the phenomenon. In contrast,

Artinian, Giske, and Cone (2009) suggested that the qualitative researcher should plan for the point when participant responses would become similar, creating the exit point for the study to end. In addition, Polit and Beck (2008) specified that sample size should be based upon informational needs and that sampling should represent data saturation – a point at which no new information is obtained and a degree of redundancy is achieved. In this study, the selection of a minimum of ten participants was anticipated to be necessary in order to understand the central phenomenon. If few similarities were found among the participant responses, an additional selection of voluntary participants would be warranted. In this study, the ability to further select interested participants was achieved by maintaining a list created during an information session and by planning to extend the study to Phase II, which would include a second affiliated community college setting. If the study was to proceed to Phase II in order to achieve data saturation, then permission from the second community college president would be obtained at that time.

Achieving saturation in a qualitative study may depend upon several factors. For instance, Morse (2000) suggests that if participants are good informants who are able to reflect on their experiences effectively, saturation can be achieved with a smaller sample. Students who were able to tell their stories and reflect effectively about their experiences of trying to stay in school were those selected for the study. Achieving qualitative data saturation is further described by Charmaz (as cited in Denzin & Lincoln, 2005) as "interpretative sufficiency" (p. 528). This relates to a period in which no new concepts are introduced. Morse (2000) also points out that the research question determines the sample size. For example, a research question with a broader scope may require more participants. This current study included narrow research questions characterizing only the retention processes of nursing students, whereas, a broader

question would have additionally included examples of those processes that might facilitate leaving.

Phases I and II. A possibility existed in which adequate participation at the selected community college setting would not have provided adequate data saturation for a qualitative study; therefore, it was necessary to include plans for how to invite and manage additional participants. Phase I (College A) of this study consisted of interviewing participants at the selected community college site. If necessary, a second phase of the study would have included the selection of a second community college (College B) to interview nursing students about retention processes in an effort to achieve adequate data saturation.

Participant inclusion criteria. The selection of second level (second year) nursing students permitted participants to have had the necessary opportunities to matriculate through the actions and processes of retention through enrollment in the program for an adequate length of time. Creswell (2007) points out that in grounded theory, the researcher chooses participants based upon their ability to contribute to the evolving theory.

Inclusion criteria for the self-identification of participants in this study included:

1. Must be enrolled in an ADN program in NC.

2. Must meet at least one of the following characteristics to be considered a non-traditional nursing student (Jeffreys, 2004):

    1. older than 25 years;

    2. commutes to class;

    3. enrolled part-time;

    4. male;

    5. member of an ethnic or racial minority group;

6. speaks English as a second language;

7. has dependent children;

8. earned an equivalence diploma (GED);

9. required remedial classes.

3. Must have progressed to the second level (second year) of the nursing program.

4. Experienced challenges or obstacles of which the student has considered how to remain in their course of study.

Data Collection Procedures

The use of an open-ended, in-depth interview was chosen as the means for collecting qualitative data in this study. In preparation to conduct these open-ended, in-depth interviews, I relied upon my experiences as a practicing nurse interviewing patients, my experiences as an Administrative Director of three levels of patient care in interviewing nurses for hire, and as the director of an ADN program interviewing potential faculty. These experiences were in no way a total representation of the unique skills that professional qualitative researchers would have, but I felt reasonably prepared. In addition, I read several articles (Charmaz, 2006; Diccio-Bloom & Crabtree, 2006; Kvale & Brinkmann, 2009) in order to enhance my qualifications and felt that I would also learn a great deal for the preparation of future interviews.

The selection of the interview, utilized as the collection method of this study, permitted an in-depth exploration of a topic with a person who had the experiences described (Charmaz, 2006). Kvale and Brinkmann (2009) cited that the interview has the purpose of producing knowledge. Producing knowledge, with the use of everyday conversation, was important for this study in an effort to allow the participants' voices to be heard and with the intent to develop the beginning steps of a nursing student retention theory (Charmaz, 2006). Regardless of how

beneficial the process, the use of focus groups was not included in this study simply due to the desire for one-on-one contact, confidentiality concerns, and the relative convenience of access to this group of students. Focus group and storytelling data collection procedures would, however, be an important aspect of comparison for future research of this nature.

The open-ended, in-depth interview. Diccio-Bloom and Crabtree (2006) explained that the face-to-face in-depth interview fosters learning about individual experiences and perceptions about a given subject. In this study, an audio-recorded interview was conducted with each participant. To maintain accuracy as well as similarity with each audio-recorded interview, an interview guide (Appendix C) consisting of open-ended questions was utilized. Open-ended questions allowed for participants to more carefully consider the questions and their experiences as they responded. Patton (2002) encourages the interviewer to adhere to tolerance and understanding while interviewing as well as maintaining a non-judgmental manner.

Diccio-Bloom and Crabtree (2006) cited four ethical considerations in interviewing which included: (a) reducing the risk of unanticipated harm, (b) protecting the interviewee's information, (c) effectively informing the interviewee of the nature of the study, and (d) reducing the risk of exploitation. I abstained from any judgmental responses by being mindful of non-verbal body language such as distracting eye contact. Investigator field notes were taken during each interview, and I explained my use of these notes to each participant. My aim in facilitating each interview was to allow participants to voice their perceptions about what helped them to remain in nursing school. I wanted them to feel at ease and trusting of the entire process.

I anticipated that each audio-recorded in-depth interview would consist of three phases. These three phases consisted of the introduction, interview, and the conclusion. The first phase was an introductory greeting with a review of the consent procedure. Obtaining participant

demographics (Appendix D) concluded this phase. The second phase consisted of asking each question to the participant while allowing sufficient time to respond. These questions included: (a) What processes do nursing students identify that assist them in remaining in school? (b) What actions do nursing students see as important for retention? Finally, the conclusion of the in-depth interview consisted of a general question pertaining to whether there was anything further the participant wanted to add. Information about follow-up email interview interpretative summaries, validation of the findings, and ways to contact me concluded each interview.

All ten participants were interviewed by me. This allowed for the process of each interview to be similar with each question asked in a like manner. The length of each interview ranged from 20 minutes to 42 minutes and took place in a nonthreatening, secure, and quiet vacant classroom located on each respective campus. Access to this population of students was reasonably obtainable due to the knowledge I had gained about the program during my prior position as a faculty member in a pre-licensure nursing program. However, I was mindful of both researcher bias and issues concerning the study of vulnerable groups, such as students. For instance, students could misinterpret their participation and my faculty position as being affiliated with a grade or successful completion of a course.

Students, as study participants, are considered to be a vulnerable group of human subjects. Shamoo and Resnik (2009) defined a vulnerable group of human subjects as exhibiting one or both of these two characteristics: (a) compromised decision-making ability, and (b) lack of power. In this study, students, as participants, were interpreted as having a lack of power to promote their interests. As a vulnerable sample, it was important to promote the study in a professional and appropriate manner, only accepting students who volunteer.

Shamoo and Resnik (2009) highlighted several safeguards that can be used in research studies to protect vulnerable subjects. For instance, establishing clear and concise rationales for using a vulnerable population rather than using a less vulnerable group was important to clarify. In this study, the knowledge gained in retaining nursing students may benefit both students and nurse educators. This group of vulnerable human subjects was selected because of specific questions relating to this population (Shamoo & Resnik, 2009). These authors also pointed out that in evaluating risk limitations for vulnerable populations, a modified and continued assessment of informed consent was important. Four aspects to a clear and appropriate informed consent include the following: (a) adequate decision-making capacity, (b) sufficient information, (c) understanding of the information, and (d) freedom from coercion or undue influence (Shamoo & Resnik, 2009). In this study, a thorough informed consent (Appendix A) in anticipation of minimal risk and issued by the University and Medical Center Institutional Review Board, was reviewed by the researcher and signed by the participant prior to the beginning of each audio-recorded interview. All students were of legal age and were attending college, thus the requirement of adult understanding was fulfilled. Likewise, at any given time, the participants were able to withdraw from the interview process with no penalty or disadvantage to them. For those participating in the study, it was important to stress that there would be no relevance to a course or grade and responses along with all identifying information were confidential. The final safeguard in protecting the nursing students was the means of allowing participants to determine pseudo-names thus not disclosing specific participant identifying information.

To access the population I followed several steps. The first step was to distribute an information request sheet (Appendix B), prior to any face-to-face contact, about attending an information session. A faculty member, affiliated with the targeted community college,

distributed the information request sheet to the nursing students at each campus after their scheduled class. This ensured that the information session would be pre-planned to take place after a scheduled class, making it convenient for the students; however, I made it clear to the students that they were not required to attend. The information sheet stressed that those students who may have experienced obstacles or challenges to remain in school were welcome to attend the information session and had the opportunity to participate in the study. The second step was to conduct the information session for these students outlining the study's objectives, my contact information, and sharing of the findings from the study. I circulated a sign-up list during the information session for students to consider volunteering for the audio-recorded interview with the expected time frame of one hour. With a telephone call, I scheduled a convenient time for the hour long interview to take place between the participant and myself.

The study was conducted with ten volunteered participants at one of the community colleges located in western NC. This research setting was chosen due to the relative access and prior knowledge gained from teaching in the ADN program. In addition, I concluded that to expand my research from that of a quantitative pilot study to a qualitative study was best represented by studying similar students from a similar location. This research site also offered a unique setting as the two individual community college campuses were housed under one nursing program with an enrollment of 70 total students each fall. These two campuses included a rural setting composed of families from low to middle socioeconomic income base and affiliated with local furniture factories while the other campus was situated in a university town with a higher socioeconomic income base where many families have children and other members that have attended college.

Charmaz (2006) pointed out that in grounded theory research, not only is hearing an important aspect of data collection, but seeing is also important. During each of the ten audio-recorded interviews, I wrote field notes. Polit and Beck (2008) defined field notes as broader, more analytic, and more interpretative than a single listing of occurrences. These theoretical field notes were meant to document my thoughts about how to make sense of what was going on during the interviews and created opportunities for me to attach meanings to my observations with a starting point for further analysis (Polit & Beck, 2008). During these interviews, I made it clear to each participant not to be alarmed of my writing and the reasons for keeping notes. These theoretical field notes consisted of my quick interpretations of both verbal and non-verbal communication from the participant in addition to any enhanced responses I observed during the interviews. My field notes also served as a guide in writing interpretative summaries for each participant. These interpretative summaries were sent to each participant by email.

Data Analysis

I utilized a grounded theory approach which included a thorough systematic analysis of the data (Strauss & Corbin, 1998). This systematic process included open coding, axial coding, selective coding, and the development of a relational model. It was imperative that in using this approach, data was broken down, compared, and coded for similar characteristics (Strauss & Corbin, 1998). Using such a systematic process with data that involve words, phrases, and sentencing ensured that all data were considered and compared. Strauss and Corbin (1998) specify that:

> Open coding is the initial process of discovering concepts. Open coding involves opening up the text and exposing the thoughts ideas, and meanings contained.

Axial coding involves reassembling the data that were fractured during open

coding. These would be reflected with a corresponding matrix. (pp. 102; 124)

In this study, open coding included repeated examinations, by sorting, coding, and

comparing, guided by the language of the responses from the participants. A professional

transcriptionist typed a transcript from the audio-recorded interviews. To provide each

participant with an opportunity for reflection, an immediate interpretative summary, guided by

my field notes and audio-recordings, was sent by email. Instructions for responding to each

interpretative summary were included with an anticipated response of within two weeks. These

returned participant responses were added to the raw data for interpretation. Five out of ten

responses were returned. Participants were instructed that if they agreed with their interpretative

summaries, they did not have to respond to the emails.

Each typed transcript from the ten interviews was placed in a working (word file)

document. This document consisted of three columns with the following headers:

1. Raw Data

2. Preliminary Codes (open coding)

3. Final (axial) Coding

The first column of the working (word file) document was entitled, raw data, and was specific to

begin the open coding process. The second column represented my first impressions and helped

to provide a transitional link between the raw data and the coding process (Saldana, 2009). My

written interpretation of each participant's comment, word, or phrase that I deemed important

was added to column 2 to represent open coding. This process was initially completed by hand

allowing for a thorough interpretation of the data, organization, and reference to line-by-line

numbering of the entire typed transcript.

Axial coding involves the systematic development of relational categories. Strauss and Corbin (1998) define axial coding as the reassembling of data that represents a fractured process during open coding. In this study, my interpretations of axial coding were placed in column 3 of this working document. This occurred after open coding and involved reconnecting words, phrases, and sentences that represented relationships between categories and subcategories (Strauss & Corbin, 1998). For example, participants used words such as teacher support, family support, advisement, feedback, follow-up, friend support, family concern, and caring. These words and phrases were responses to questions that the participants perceived as helpful for them to remain in school. These words and phrases were then placed under the category Support, as an example of selective coding, which is the next step of qualitative analysis (Strauss & Corbin, 1998).

Strauss and Corbin (1998) define selective coding as a process that includes refining of the developing theory. The refinement of theory may involve a return to the raw data in order to capture the substance of the phenomenon (Strauss & Corbin, 1998). In this study, returning to the raw data was important to validate actions and processes identified that helped students to stay in school. Reconnecting the data by the researcher was optimal in revealing stories or themes to emerge (Creswell, 2007).

Further analysis of the data, by returning to the raw data, was accomplished by using the qualitative analysis program of NVivo. This software program provided the organizational platform, which easily highlighted emerging categories from the coding of text, as the frequency of words, phrases, and sentencing became similar. The NVivo software program refers to categories as "nodes," which were easily apparent as text was highlighted in the program. A total of 19 categories (nodes) were identified from the program. By highlighting similar transcript

text, the program created an organizational feature in which these categories were expressed as, coming out, thus providing the basis for the development of related theory. Selective coding concludes the final analyses of data in this study. This was accomplished by comparing the categories supported from the NVivo program with the manual coding from the handwritten working document. This procedure represented the data reduction coding process in an effort to establish the beginning steps of theory development.

Serving as another step to satisfy the process of constant data comparison was the development of two code books. A sample from the first code book is included in Appendix E. The code book includes columns that refer to: open coding, axial coding, selective coding, descriptions of and reference to selective coding, which illustrate the transcribed text and audio-recordings. The final column of the first code book includes inclusion and exclusion examples represented by participant quotes. A second code book, Appendix F, was established by maintaining the first three columns from the first code book. The second code book was expanded to include selective coding definitions and specific participant quotes in an effort to strengthen and support the coding process. In this study, three selective codes (categories) emerged from the open and axial coding. These categories are entitled, enhancing personal capacity, learning to balance, and maintaining support. These categories became evident as my interpretation of words and phrases that described the student retention processes were realized.

In generating theory, the researcher engages in the coding process to provide insight into specific categories which lead to a central phenomenon. "Selective coding involves generating hypotheses or propositions that relate the categories from the coding paradigm" (Creswell, 2007, p.161). This is often accomplished by a matrix, a diagram, or hypotheses, which detail the wide range of conditions or processes relating to this central phenomenon. In this study, a model and

the formulation of a postulate were developed to both describe and visualize the identified relationships and to create a model of nursing student retention, thus creating the initial steps in generating a theory.

Data Validity and Trustworthiness

Trustworthiness includes addressing the study's credibility as seen by the reader, participant, and researcher (Creswell, 2007). The qualitative approach of grounded theory research involves establishing this credibility by clear and precise methods leading to the development of theory (Creswell, 2007). I established trustworthiness by prolonged engagement, member checking, an audit trail, thick and rich descriptions, and expert review supported by the method of peer-debriefing. Peer-debriefing was accomplished by keeping a personal journal with verification from a colleague.

Prolonged engagement. Prolonged engagement is the process by which the researcher takes opportunities for persistent observation including building trust with participants, learning the culture, and checking for misinformation (Creswell, 2007). This was easily established given my current position as faculty in a pre-licensure program. I have been both a teacher and an observer of student issues and concerns about retention. I have witnessed students who have withdrawn from or failed classes over a period of seven years in an ADN program.

Member checking. The process of member checking has been viewed by some researchers as one of the most critical components of qualitative inquiry (Lincoln & Guba, 2000). This involves taking the data, processes, observations, and conclusions back to participants for validation (Creswell, 2007). Included in this study, interview interpretative summaries were developed from the field notes and audio-recorded interview transcripts and sent to each participant for reflection. This process included email correspondence which provided a

means for verification in ensuring that the participants' stories were reflected and voices were represented. This allowed for discussions to take place about what interpretations were missing. Participants were asked to respond to the interpretative summaries by email and within two weeks. Instructions included that not responding by email within the two week period would be interpreted as agreement with the summaries. It was important to secure confidentiality of responses by participants. Therefore, responses were reviewed on an individual basis. This provided for rich, honest, and thoughtful feedback.

On-going interpretation from each participant's response to the transcript interpretive summary became new data. These new data were an important component within all data collected for the study. Comparison of the new data and major concepts from the transcript interpretive summaries was a good example of constant comparison analysis, which is commensurate with qualitative research (Strauss & Corbin, 1998).

Appropriate triangulation of the data was accomplished by adding a third dimension: engaging two dissertation committee members in the analysis for this study. Two of my committee members, with expertise in qualitative methods, agreed to analyze three interview transcripts. This process included both an individual analysis and an analysis that included multiple discussions between me and the two committee members. This process allowed for an informative and thorough discussion of the major concepts. Randomly transcribed interviews analyzed together and individually, with multiple returns to the transcribed interview text, served to validate the findings, thus ensuring the credibility of the study.

Audit trail. Creating an audit trail for qualitative studies shows evidence of credibility. The purpose of an audit trail outlines the research process and the evolution of codes, categories, and theory (Creswell, 2007). For the purpose of this study, the audit trail consisted of the

interview guide; audio-recordings; interview transcriptions; field journal notes; emailed transcript interpretative summaries; data reduction notes consisting of open, axial, and selective coding; and personal journal entries. The audit trail also included the listing of (node) categories outlined by the NVivo software program and the development of both code books that formed the basis of the analysis.

Thick and rich descriptions. Charmaz (2006) states that "rich data is detailed, focused, and full" (p. 14). This process provides one way to establish credibility through obtaining rich data during the study. Obtaining rich data for this study included the documentation of field notes, the collection of further personal responses from emails, and compiling detailed written transcripts from the audio-recorded interviews (Charmaz, 2006). In addition, demographic information was gathered by asking each participant to fill out the demographic sheet (Appendix D) prior to the start of the interview. Table 6 was constructed to outline this information with a further description of the demographic information included with each participant's emailed interpretative summary in (Appendix G). Credibility was established by the documentation of these nursing student retention actions and processes in detail.

Researcher's Assertions and Preparation

Researcher as instrument. The credibility of the researcher parallels the instrument reliability and validity in quantitative studies. Patton (2002) describes researcher credibility as being dependent on the researcher's skill, competence, and rigor as he or she completes the field work. Because I was the instrument responsible for the collection of data in this study, the importance of describing some characteristics of my credibility was paramount. I have taught nursing students for seven years in an ADN program in western NC. I became a program director for the last two of the seven years. I was faced with the challenge of how to increase retention

rates and decrease attrition in the program. This was an initiative by both the academic institution where I was employed and by the NCBON. This initiative was largely due to low pass rates on the NCLEX-RN exam by our graduates. I was surprised to discover that low retention was a common finding among ADN programs throughout the nation.

As a faculty member and program director, I witnessed that when students encounter withdrawal or failure, they may rearrange life schedules, rearrange study time, face financial hardships, or start and stop this process several times, delaying their overall career goals. These processes of student adaptation became very important to me. I made an intense effort to assist and advise these students to become eligible for the ADN program, so failure or withdrawal of the student was quite disappointing, personally as well as professionally. Having taught in and also directed an ADN nursing program informed me that a deeper understanding of student retention issues was warranted. For instance, I realized that being involved with these students afforded me with the privilege to hear many aspects of their lives which were discussed in class or clinical that otherwise would not have been known. Not having assurances of my influences upon these students and whether what they were saying was honest and truthful was questionable. How and what appeared to influence these nursing students as they struggled to remain in school provided a superficial understanding at best. This led to my increasing interest about the non-traditional nursing students and their abilities to matriculate through their programs. I felt more informed about this population than the average researcher, but I also had many questions, which further stimulated my interest.

Conducting my quantitative pilot study was a means of first exploring some of the familiar retention issues that were known. I based this research mainly upon the work of Jeffreys (2004). With an expanding body of knowledge regarding student retention issues, I pursued a

qualitative approach to further enhance this interest. I researched many qualitative studies both during my PhD course work and outside of class. My experiences as a nursing instructor, an ADN program director, my ability to conduct a quantitative pilot study, and my research as a student have greatly contributed to my credibility as a novice qualitative researcher.

      Peer-debriefing. Peer-debriefing is a process which involves sessions with peers to review and explore various aspects of the inquiry (Polit & Beck, 2008). The process of peer-debriefing helped me to self-reflect during the data collection of this study as both a researcher and an educator. This consideration was established through the use of a personal journal that was shared with a colleague during the data collection phase of this study. This journal allowed me to reflect upon my findings and interpretations as data were collected. The journal was reviewed every two weeks with a colleague. I also approached this research with an honest and open mind, not solely relying on any prior knowledge of how students may respond to questions but instead evaluating the actual findings. I strived to ensure that each participant had adequate time to respond to the research questions. I ensured that the interview took place in a manner which was confidential and informative. I took great lengths to make sure that each participant felt as comfortable as possible and understood the consent and recording process.

      As mentioned, I have been both teacher and observer of students failing or withdrawing from their nursing programs. For this research, I kept a separate personal journal which provided the means for continued self-reflection as a qualitative researcher and educator. In addition, this personal journal reflected the following peer-debriefing questions, as outlined by Polit and Beck (2008): (a) Is there evidence of researcher bias? (b) Are there possible errors of fact? (c) Are there competing interpretations? (d) Have all important themes been identified? and (e) Are the themes and interpretations knit together into a cogent, useful, and creative conceptualization of

the phenomenon? I shared this journal with a colleague at least every two weeks during the collection of data in an effort to stay as true to the data as possible. Creswell (2007) suggests that the qualitative researcher must be conscious of biases, values, and experiences he or she brings to a study. In this study, a personal journal provided the means for a personal audit and true self-reflection.

These explanations, pertaining to the audit process to maintain the trustworthiness of this study, have been thoroughly discussed. In addition, I have constructed Table 3 to further show my process and timeline for maintaining credibility and constant comparative analysis of these findings.

Table 3

Methods Process and Timeline

Month- Year	Process
8/9-2012	10 student interviews completed
	Transcripts typed from audio files
	Transcripts edited while listening to audio-recordings for clarification
10-2012	Interpretative summaries generated and sent to each participant for response
	5 of 10 responses received by email
	Personal Journal developed and shared every 2 weeks with colleague
11-2012	Raw data generated on working document with line-by-line coding and data reduction by construction of open, axial coding twice
	Transcripts entered into NVivo program with third coding process
	Individual, collaborative coding of 3 written transcripts by researcher and 2 members of committee
12-2012	Nodes (categories) constructed within NVivo program and re-arranged to represent selective coding categories
	Models for selective coding generated for evaluation
1-2013	2 code books generated with inclusion examples. Coding twice again
	Analysis of interpretative summaries for exclusion examples to be added to code books
	Model reworked to represent major categories (concepts)
2-2013	Discuss and collaborate with committee members for clarification of major study concepts, postulate construction
3-2013	Writing of qualitative report (dissertation)

As a nurse educator who has personally witnessed students who prematurely withdrew from or failed a program, I have seen how frustrating and disappointing noncompletion is to the educator as well as the student. It was evident that the reasons for noncompletion of a college program vary. Tinto (1993) suggested that the theories of student departure should include clear explanations of relationships between individuals and institutions in regard to dropout behavior. He emphasized that little research has focused on community college non-completion. When nurse researchers and educators strive to understand the needs of our students in the same manner as we try to understand the needs of our patients, research will further our knowledge and enhance the profession of nursing.

Summary

The purpose of this study was to investigate the student actions and processes that impact student retention and to begin the development of a retention theory using personal interviews with second level (second year) ADN students who were enrolled at a community college in NC. Through this exploration, the identification of the beginning concepts toward the development of a student retention theory enhanced the meanings of the quantitative factors already known as to what supports and restricts nursing students to remain in school. Remaining in nursing programs is the first step in identifying methods by nurse educators to assist students toward graduation and successful performance on the NCLEX-RN, thus becoming members in the nation's RN workforce.

CHAPTER FOUR: FINDINGS

The categories of Enhanced Personal Capacity, Learning to Balance, and Maintaining Support represent the major concepts identified in this study. These concepts represent the nursing student retention actions and processes interpreted from participant audio-recorded interviews. To begin the explanation of the major concepts interpreted from this study, a demographic table (Table 4) has been developed to introduce each participant to the reader. The intent of this placement was necessary to create a simple flow of information for each participant as major concepts are discussed. Table 4 represents the written information that was obtained from each participant prior to the start of each interview.

Table 4

Demographic Profiles of Ten Participants

Name	Age in Years	Gender	Ethnicity	# Dependent Children	# Stops and Starts in Program	Hours Working Per Week	Receiving Financial Aid
1. Harry	58	Male	C	0	0	25-30	N
2. Fiona	23	Female	C	0	1	0	
3. Anna	26	Female	C	1	0	0	Y
4. Aurora	30	Female	C	1	0	0	Y
5. Trinity	23	Female	C	0	0	10-15	Y
6. Gwyen	37	Female	C	2	1	24	Y
7. Henrietta	37	Female	C	2	0	16-24	Y
8. Amber Lynn	32	Female	C	3	0	0	Y
9. Bridget	21	Female	C	0	0	15-18	Y
10. Christy	33	Female	AA	1	2	0	Y

Note. # = Number; C = Caucasian; AA = African American; Y = Yes; N = No.

To create a simple, yet structured flow of the presentation of this study's findings, it is necessary to divide this chapter into two sections. This organization will represent the coding process and the progression of interpretative thought. My interpretations of the major concepts will become evident.

The first section illustrates these interpreted findings which are then represented by a relational model of nursing student retention. This model is significant to visually show the relationships between the concepts illustrating the major categories and subcategories. These conceptual relationships, constructed from my interpretation, will be presented and discussed. The beginning concepts of a student retention theory will be presented with supporting evidence. This study's model will then be compared and contrasted to the Tinto (1975) and Jeffreys (2004) student retention models. To finalize the first section of this chapter, my study postulate is offered to both create a final interpretative thought as well as to summarize the major concepts.

The second section of this chapter is represented by an in-depth presentation of each participant in an effort to fully understand their responses with the use of interpretative summaries. Due to length, I placed these interpretative summaries in an appendix (Appendix G) for clear explanation. These interpretative summaries were significant for creating an in-depth lens to the actions and processes of student retention by using their words and phrases.

Organization of Data Findings

Interpretative findings from these interviews created the data necessary for non-traditional college nursing student retention theory development. My interpretations progressed through several adaptations with data reduction being accomplished at every stage. It is, therefore, necessary to outline this process and succinctly present the personal descriptive illustrations from participant interviews to support the construction of these interpretations.

The NVivo qualitative analysis program along with the manual working document confirmed subcategories and categories which originated from the raw data, open coding, and axial coding. Validating this interpretation were the findings from the development of the two code books. Samples of the code books are found in the Appendices of F and G. In addition, these two code books also represented the major example of reconnecting with the data by simply signifying my interpretative transition of thought outlining this process. Patton (2002) points out that interpretation of qualitative data consists of explaining the findings by answering why questions, outlining significance of certain findings, and placing patterns into an analysis framework. This framework grew from my analysis of the subcategories and categories patterning relevant final selective coding words and phrases of student retention.

Table 5 was developed in order to represent my interpretation of the progression from open and axial coding, represented by the NVivo node list, to subcategories and the final major selective categories. The second and third columns demonstrate the numbers of sources and references within the NVivo qualitative statistical program as they are represented in the first column of Table 5. The fourth column in the table signifies the subcategories which outline my interpretation of non-traditional college nursing student retention actions and processes constructed from the NVivo 19 nodes. The final major selective categories found within the fifth column of the table outline my interpretation of nursing student retention processes constructed from the preceding subcategories. Signifying the interpretative concepts from this study of nursing student retention are three final selective categories, Enhancing Personal Capacity, Learning to Balance, and Maintaining Support.

Table 5

Progression of Coding Process: NVivo Nodes, Open/Axial Subcategories, and Selective Coding Categories

NVivo Nodes	# Sources	# References	Open/ Axial Coding Subcategories	Selective Coding Categories
Balance	5	10		Learning to Balance
Managing	5	13	Time Management	
New Life Plan	7	14	New Life Plan	
Part-Time Work	7	11	Part-Time Work	
			Redefining Success	
			Negotiation with Others	
Support	8	26		Maintaining Support
Family Support	8	10	Family	
			Spiritual	
	3	5	Employer	
			Friend	
Social Life	5	11		
				Enhancing Personal Capacity
Physical Needs	3	6	Maintaining Health and Wellness	
$ Support	7	20	Ways to Finance	
Perseverance	7	22	Perseverance/ Redefining Self	
Sacrifice	5	11	Sacrifice	
			Strategies for Learning	
Process Info	10	56	Processing Information	
Minimizing	3	9	Minimizing	
			Adjusting for Living	
			Tolerance	
Education Helps	4	9		
Grades	1	4		
Instructor (teacher) Help	4	6		
Study Habits	9	34		
Surprise	5	16		

Note. Both sources and references are from NVivo Nodes. # = Number of Instances; $ Support = Financial Support; Process Info = Process Information.

The next section of this chapter will present definitions of the final categories (concepts) of Enhancing Personal Capacity, Learning to Balance, and Maintaining Support. Each category is discussed at length with participant descriptions that outline the corresponding relationships to each other and the central phenomenon. Within the descriptions of each of the three major categories, the central phenomenon is linked. A final postulate is presented which illustrates the overarching relationship between the major categories of the retention actions and processes of non-traditional college nursing students. A relational model follows which visually highlights these interpretative concepts. Discussion, regarding the significance of this study's model is then presented. The final area from the first section of this chapter presents correlating concepts from this study's model to the Tinto (1975) and Jeffreys (2004) models of student retention. Tinto's model was chosen because I felt that a classic and original student retention model was important for comparison. The Jeffreys's (2004) model was chosen because it displayed the best non-traditional college nursing student retention model to date.

Definitions of the Major Final Categories

  Enhancing personal capacity. These are statements that describe how the non-traditional college nursing student stays in school by redefining self in maintaining health and wellness, minimizing learning strategies, restructuring finances, and adjusting for living tolerance.

  Learning to balance. These are statements that describe how the non-traditional college nursing student stays in school by restructuring time, prioritizing, negotiating with others and redefining success in order to accommodate school with personal and work needs.

  Maintaining support. These are statements that describe the way others enable the non-traditional college nursing student to stay in school. These include the actions and processes of

comforting, communicating, and problem-solving from family, friends, employers, and spiritual influences.

Overview

This qualitative study was conducted in an effort to further understand the impact of retention actions and processes explained by non-traditional college nursing students. For several years I worked as a nurse educator at a local community college ADN program, it became apparent that the energy and fortitude of helping students was centralized around the reasons for failure and withdrawal instead of success and graduation. As students matriculated through the rigor of prerequisites and competitive admission criteria to enter the nursing program at this community college, it was disappointing that these students had disappeared within the year. It was crucial to my understanding of this issue to discover how some nursing students maintained their enrollment, while others did not.

In prioritizing the three study categories (concepts) and as the central phenomenon emerged, it became evident that the category of Enhancing Personal Capacity proved to be the all-encompassing process which was discussed at length from these non-traditional college nursing students. This central phenomenon was interpreted as a crucial concept in some aspect for each of the interviewees. The central phenomenon of Enhancing Personal Capacity is presented with corresponding examples.

The Central Phenomenon and Major Category: The Concept of Enhancing Personal Capacity

Creswell (2007) points to the process of identifying the central phenomenon and development of theory by reducing the database to a small set of categories, then selecting the category which was discussed most extensively by the participants as the central phenomenon.

The central phenomenon from this study, Enhancing Personal Capacity, served as the interwoven thread found within each of the ten participant interview perspectives of student retention. As the interviews progressed, it became apparent how important these participants perceived their processes of adapting to unexpected life changing events were as they attempted to stay in school. Some examples of these life changing events consisted of abrupt changes in life schedules, changes in work schedules, changes in study habits, changes in processing information, and changes in learning. Several mentioned the unexpected and life changing sacrifices they were forced to make to stay in school and how they learned the value of perseverance. Another aspect included the extent of how they had to restructure their family finances in preparation for nursing school.

The actions and processes of Enhancing Personal Capacity from this research included a wide spectrum of learning and adaptation strategies, which ranged from learning to balance, minimizing learning strategies, and receiving support to restructuring, redefining, and self-reflecting. The process of Enhancing Personal Capacity often included a redefinition and self-reflection of the individual in order to accommodate changing life events. At the individual stage, building personal capacity included how people thought about their ability to affect social and educational systems that were important to them (Ogilvie, Allen, Laryea & Opare, 2003). In this study, the personal participant descriptions about retention were instrumental in showing how the non-traditional college nursing students were able to promote self-reflection strategies and redefine themselves. A clear illustration of the central phenomenon from my interpretation of this research was necessary for theory development in student retention. Examples from all ten participants included but were not limited to:

Participant one. Harry stated, "The budget is down to zero and I can float the charge card, but that is without any medical insurance."

Participant two. Fiona stated, "I completely rearranged my whole life, really my whole life."

Participant three. Anna stated, "I was failing miserably. I had not passed any of my exams. I had not spent any time with my son, my husband, nothing."

Participant four. Aurora stated, "I worked the first semester, and I worked one week into the second semester. But, I said I can't do this anymore. Because it was just, it was just too much."

Participant five. Trinity stated, "When I first started the program the biggest challenge was the shear amount of material that we covered and specifically the volume of pages we had to read per unit."

Participant six. Gwyen stated, "I was trying to work full time, deal with two little ones and study, and try to keep a house and it just wasn't working."

Participant seven. Henrietta stated, "I found myself struggling to find time to study because when you're at home with children you are always trying to spend time with them. So, I had to remove myself from that situation."

Participant eight. Amber Lynn stated, "I have three children ages seven, eleven, and thirteen and when I started the nursing program I was planning on working a couple of days a week. But after getting in I decided that wasn't for me, so I quit my job. It did burden my family."

Participant nine. Bridget stated, "Basically my whole life has changed since nursing school. I spend a lot more time reading textbooks. Before nursing school, I got an Associate Degree in Arts and I never spent this much time in school all throughout my entire degree."

Participant ten. Christy stated, "Work was my biggest problem. Trying to work 12 hours on Saturday and Sundays or 16 hours shifts was just too much."

The concept of Enhancing Personal Capacity is related to several disciplines ranging from enhancing personal resilience in workplace adversity (Jackson, Firtko, & Edenborough, 2007) to building personal capacity among groups and organizations (Ogilvie et al., 2003). Similar definitions have also been related to the concept of personal capacity but are illustrated with different words such as personal resilience, personal capacity, self-empowerment, goal congruence, social capital, and self-efficacy. Maconick and Morgan (1999) have presented the best definition for capacity as the abilities, behaviors, relationships, and values that enable individuals, groups, and organizations to carry out functions or tasks that achieve their objectives over time. In this study, the non-traditional college nursing students demonstrated their abilities to redefine time and management processes, preparation for exam and study habit processes, relationship processes, family and financial structure processes, all in order to make nursing school fit in their lives. These participants also discussed how they incorporated their personal capacity abilities by detailed and well-thought out descriptions instead of individual day-to-day quick fix solutions. These examples further supported how these non-traditional college nursing students utilized actions and processes in their attempts to try to remain in school. Building capacity involves a process instead of a single intervention or activity and may be described as processes of time, human agency, social structure, change, and sustainability (Ogilvie et al., 2003).

These examples of Enhancing Personal Capacity from the participants were but a small portion of their continued efforts in redefining themselves and making changes to remain in their nursing program. However, this illustration represents my interpretation of the extent to how the central phenomenon was realized. In this context, the Enhancing Personal Capacity statements describe how the non-traditional college nursing student stays in school by redefining self in maintaining health and wellness, minimizing learning strategies, restructuring finances, and adjusting for living tolerance. Each subcategory is further deconstructed.

Maintaining health and wellness. Enrollment in a nursing school at any level is very rigorous. Due to the weekly clinical participation and the extent of often difficult content, many students had little time for taking optimal care of themselves. Food may be an afterthought and eating less than nutritious meals occur more often than one may realize. For the non-traditional college nursing student, this self-care was often further compromised with the care of children and family members or working while in school. Examples outlining this concept are listed below but were not limited to:

Participant two. **Fiona** stated, "You have to listen to your body, you can't get so worked up and caught up in the stress that you don't eat or exercise or drink enough water. I have started five new prescriptions since I started nursing school."

Participant three. **Anna** stated, "I don't think I hardly ate at all during the first semester. Eat and sleep."

Participant four. **Aurora** stated, "I had a panic attack and would have passed out before I even got up to my patient's room."

Participant eight. Amber Lynn stated," Dinner hasn't been so healthy lately. I do something better every now and then, but it is usually pretty quick like macaroni and cheese and hotdogs."

Maintaining health and wellness for these participants was accomplished in various ways. For example, several rearranged meal times with children and families and others claimed that they tried daily to make plans for eating, sleeping, and exercising. These actions contributed to their ability to enhance their personal capacity through maintaining health and wellness in an effort to remain in school. For the non-traditional college nursing students, maintaining their health and wellness allowed for the opportunities of surviving all that was required of them and enhanced their personal capacities to manage. Therefore, the central phenomenon and concept of Enhancing Personal Capacity was easily linked through the subcategory of Maintaining Health and Wellness.

Minimizing learning strategies. The term "minimizing" was used by one participant during her interview. I found this to be an excellent explanation of the actions and processes participants described in having to reduce certain steps and priorities to manage all aspects in accomplishing their goals. Minimizing is defined as, "reducing something to the minimum" (Meriam-Webster's Dictionary, 2013). Several participants described the process they utilized as a way to manage study habits. Other words and examples used by participants included compartmentalizing, detailing, deconstructing, and breaking down their study habits.

I was surprised by the detailed explanations of the processes these participants utilized in redefining their learning strategies. For instance, several mentioned how they reconstructed their preparations for nursing exams. Several participants had reevaluated and improved these processes if their goals had not been accomplished. For instance, some of these learning

strategies that had been employed and improved included highlighting the text; recopying their class notes; categorizing their notebooks with colored tabs; reading, then rereading the content; and waking up as early as 4 or 5 a.m. the morning of the exam for a last review of the content. Several of the participants suggested participating in study groups while others thought this activity was a waste of time. Other study habits were detailed such as taking notes in class or listening to audio recordings of lectures as beneficial ways to study. One participant said, "I just listen so as to create visual and audio memories of the nursing instructors." Some other examples include but were not limited to:

Participant one. Harry was explicit by stating, "I try and record the classes and then go through the tapes and the PowerPoint outlines. I then put it in the note mode and type in relevant, bulleted statements of what I think is important. Then I print the notes and between this and what is highlighted in the book, I start reading and memorizing by placing a paper clip. Then I go back hoping the paperclips start coming out. If they don't, those areas become flash cards."

Participant two. Fiona stated, "If your study habits are not working, change it. We (the students in her study group) started just revamping all our study habits."

Participant three. Anna stated, "Study groups help, but not large study groups. I had one, and I tried it. I tried it with three people, four people. Tried it by studying different ways with other people, but I found that I studied well with one person."

Participant four. Aurora stated, "I don't like study groups. I am a little OCD and I don't like the way people organize their information. I have one person that I study with and we start at the beginning and go through page by page and just talk about it."

Participant five. Trinity stated, "When I study, I have to have it really quiet, no TV or video games. I have to be comfortable so I usually sit on the couch or the bed and sometimes I

lay on the floor. I lay everything out on the floor to study…I tried to break it down day by day and even looked online for study tips."

Participant six. Gwyen stated, "I have my bookshelf, my computer, everything is right there at home. Any charts I need, I print them and hang them on the wall so I can look at them while I study. I take my notes in class, and then I go home and recopy them and make note cards. My notebook is divided with one tab for labs, one tab for clinical, and one for each test so I keep everything together. I have to stay organized."

Participant eight. Amber Lynn stated, "I have to read and read and read. I have to go back and check. I'm constantly in the books. I kind of lost the recording opportunities, so that hurts. I now read and draw pictures."

Participant nine. Bridget stated, *"I think as far as studying goes there is no real correct way but just depends on how you study. I could listen to something all day long and not know what happened in it, so I rewrite notes."

Participant ten. Christy stated, "I try to do reading or studying and on test days I have special lotion that I use. I have special pencils and have to chew Big Red chewing gum. I have heard that if you do the same things or kind of the same things when you are studying, it will help you remember stuff for the test."

Another area mentioned during these interviews was processing information. I placed this area under the subcategory of Minimizing Learning Strategies for two reasons. First, the process of gaining new knowledge was necessary for learning a new field, such as nursing. These participants commented several times about their efforts in learning nursing content, which for them, was deemed a foreign concept. My interpretation of these efforts was that these individuals were speaking about a subject matter by looking in from the outside of the paradigm of nursing. I

86

had anticipated that these participant descriptions of learning nursing content would easily represent some involvement within the discipline of nursing. However, I felt that these participants were describing processes of which they were not allowed to participate from their learning community overall. For example, participants described their continuing efforts to gain new knowledge and to be able to retain this knowledge in order to pass the nursing examinations. These comments ranged from "a logical process" (participant one, Harry) of gaining nursing knowledge to one participant coining the phrase of "trying to think as a nurse" (participant eight, Amber Lynn). As I interviewed these participants, I interpreted their descriptions of these processes as something almost unreachable and only with a license as RNs would they finally understand this knowledge. I surmised that, overall, the participants from this class felt like outsiders due to many classmates failing or withdrawing. One participant mentioned that the attrition rate for this class was currently 65%. This was much higher than expected, both on a local as well as a national level and may have contributed to how these participants felt about their nursing program

The second reason for placing Processing Information under the subcategory of Minimizing Learning Strategies was that several adaptations of these processes had taken place. Participants commented on their many attempts at learning different strategies in order to understand this new information. For example, these participants described some of their attempts in having different numbers of students participating in study groups in order to achieve improved group cohesion and better grades on examinations. Through these adaptations in learning new knowledge, it appeared that these non-traditional college nursing students were guilty of minimizing this process and creating efforts to break down new knowledge for understanding.

The processes of redefining, minimizing, detailing, and restructuring learning strategies were a necessary component for these non-traditional college nursing students to stay in school. These processes allowed the participants in this study to redefine and improve upon their ability to perform well academically in a nursing program. Easily linked to the overall central phenomenon of this study, the subcategory of Minimizing Learning Strategies was an example of how these non-traditional college nursing students gained the personal capacity to stay in school by reducing nursing content, reducing nursing knowledge, and reducing required reading and assignments to a working and manageable capability.

Restructuring finances. When I started this research, I was under the impression that securing finances would be an important aspect for these non-traditional college nursing students. I was surprised by the prevalence of this issue. As a once struggling college student, I was familiar with the on-going balance to remain in school, pay for tuition and fees, get to clinical, and eat. These participants presented several aspects of securing finances, which were not initially realized by me. For instance, several described the struggle they encountered with obtaining financial aid while facing a cut back to part-time work from a full-time job. One participant described her experiences with foreclosure of her home and having to move twice during the first semester of the nursing program. The one male participant pointed out his struggle with his finances when he experienced a reduction in income, reduction in work hours, and obliteration of his savings and retirement. These struggles of financial security happened during a time when these participants were trying to remain in their program. Other examples of this process included:

Participant two. Fiona stated, "I tried to keep working, keep my job while I went through nursing school and I floated by for most of the first semester, but it wasn't enough."

Participant three. Anna stated, "Everyone kept telling me, you need to quit your job. I was working full time but had switched to 32 hours between Saturday and Sunday. I was failing miserably. My husband and I had been talking about me quitting my job and how feasible it would be."

Participant four. Aurora stated, "Our daycare really understands. They will keep my daughter a little later if need be. The fact that money from the Work Enforcement Act (WIA) helps pay for my childcare is amazing. We couldn't do it otherwise."

Participant five. Trinity stated, "We did look at our bills really closely when I started the program and we've minimized them as much as we could."

Participant seven. Henrietta stated, "I knew I'd have to leave my full time job and start daytime classes. The Pell grant helps me to pay my childcare for my youngest and WIA helps to purchase tuition, books, and all the equipment I need. I could not have done this without this assistance."

Participant eight. Amber Lynn stated, "I used to work 40+ hours a week. I worked through all the prerequisites. I was planning on working a couple of days a week, but during the first semester I decided that wasn't for me and I quit my job. It did burden the family."

Participant nine. Bridget stated, "One of the big problems that I had was finances. Neither of my parents have jobs, so I've been paying for this all by myself. I receive a grant, but it doesn't really cover quite enough because we're considered part time. I have to get to and from clinical, buy supplies, and feed myself at clinical."

The extent of these student descriptions of their financial struggles was surprising, yet certainly understandable due to the current economic downturn. For non-traditional college nursing students, their financial commitments are often many, yet may be undetermined or

unclear. For instance, older non-traditional college students may support parents and children who are not members of their households. Jeffreys (2004) points out that these students have greater financial commitments such as tuition, fees, textbooks and other learning materials, living expenses, mortgages, child care, parent care, and car expenses. These students also perceived that virtually any financial concern was often viewed as an obstacle that they could not manage. This finding was further supported by my pilot study (Priode, 2010) which specified that financial concerns were restrictive to students' attempts to stay in school.

These attempts to restructure financial capabilities further supported the purpose of this study as non-traditional college nursing students engaged in actions and processes to accomplish their goal of staying in school. These processes consisted of managing and rearranging of their day-to-day financial needs. Often, these concerns changed dramatically and quickly. One participant, in this study, moved three times during her first semester of nursing school due to foreclosure, eviction, and loss of a job. Additionally, several students mentioned that they never quite knew the amount of federal funding and when it would be available to them. The reimbursement processes that are often the procedures for many federal assistance programs created burdens for these students.

The unknown of securing financial grants and loans down to the last moment was a grave concern and created the possibility for further stress. Jeffreys (2004) points out that with these financial issues, the non-traditional nursing students often perceive financial needs as obstacles to their staying in school. As a means to supplement income, several participants in this study commented on their ordeals of trying to stay in school while working full or part-time. Working, while in nursing school, led many of these participants to realize that their study time was

compromised; thus creating the possibility for early withdrawals or academic failure especially as several were overburdened or could not manage their financial capabilities.

The financial restructuring of these participants' lives easily corresponded to this study's central phenomenon of Enhancing Personal Capacity. In order to remain in school, these non-traditional college nursing students managed their financial capabilities in such a way as to support the various roles of their lives. Therefore, the restructuring of their financial capabilities dramatically enhanced their personal capacities to maintain the various roles they needed to perform daily while also permitting them to remain in nursing school.

Adjusting for living tolerance. The process, Adjusting for Living Tolerance, is described as those actions pertaining to how non-traditional college nursing students adjust their lives to the unknown of being enrolled in a nursing program. Several participants presented situations in which they felt surprised by the volume of reading, time spent in studying, time and preparation required for clinical experiences, the unknown of having several different nursing instructors, changes to social or spiritual structure, and the differences between nursing exams. Another example of this adjustment consisted of several participants commenting on their processes of "figuring ourselves out" (participant two, Fiona) in order to remain in school. Examples include but were not limited to:

Participant one. Harry stated, "The questions are vague and it is very difficult to nail that. I know the material, but they are not asking in a way that makes sense."

Participant two. Fiona stated, "I think that nursing school has been a lot of figuring me out as far as how my brain actually works."

Participant three. Anna stated, "It took me almost failing the nursing program for me to realize how to give it to God."

Participant four. **Aurora** stated, "I have learned that if I understand the big concept, the little stuff makes sense. It's just kind of a natural progression."

Participant five. **Trinity** stated, "I definitely like taking notes on the laptop because we (the students) figured out last summer that there's just way too much information and not enough time. You can't write that fast. When I first started the program, the biggest challenge was the shear amount of material that we covered and specifically the volume of pages we had to read per unit."

Participant six. **Gwyen** stated, "When I first started the program, I was all study. That was all I did. If I wasn't at work or asleep, I was in my office studying. My kids were cooking. I failed my first two nursing exams. I started backing off the studying a little bit and started getting free time in there and my third exam was a 91."

Participant seven. **Henrietta** stated," It's been difficult. I've never encountered these types of questions. My anatomy and physiology questions were black and white; you have a wrong and a right. I know the material well, but I find myself struggling."

Participant eight. **Amber Lynn** stated, "It took a while for everything to get situated at the house and school and I just kind of had to learn to let things go."

Participant nine. **Bridget** stated, "I don't go out much anymore. I also had to change my work situation with home health. They were not flexible with my school schedule. Ways of studying is more of figuring it out on your own because you are the only one who can know if it is effective. I don't think you can teach that to people."

One example, of the process of Adjusting to a Living Tolerance, was demonstrated by these participants when discussing the addition of a rigorous program, like nursing, into their lives. This perspective, of what these participants thought about their nursing program, presented

processes of which I had not suspected. For instance, their adjustment was solely based on the

fact that prior to enrollment in a nursing program, their day-to-day lives were already established

As one participant so eloquently stated, "getting in is the easy part, staying in is the hard part"

(participant seven, Gwyen). As these participants adjusted to their new lives in nursing school, it

became apparent that this was in fact a major struggle which affected other components of their

lives. For several participants, this adjustment meant redefining their home life or work life

around their commitment to nursing education. For others, this adjustment consisted of trying to

understand and work through their interpretation of "the vagueness of the testing" (participant

one & seven, Harry & Henrietta) and the preparation needed to continually perform at an

academic standard in order to survive to the next semester. The willingness to step into the

unknown, such as undertaking an unfamiliar nursing examination instead of the known area of

testing mentioned by one participant, as the "black and white" (participant one, Harry) questions

from anatomy and physiology, supported the central phenomenon of Enhancing Personal

Capacity. This willingness to step into the unknown of this specific testing method was achieved

by the efforts of these students to gain the required knowledge to answer these new types of

questions and strive to do well academically.

Examples of some of the processes, of Adjusting to Living Tolerance, such as adjusting to

the new addition of nursing school, are descriptions of how the lives of these participants easily

parallel with the central phenomenon of Enhancing Personal Capacity. For example, it became

evident that an inordinate degree of adjustment had to be accomplished in order to remain in the

nursing program. Yet, as these participants were striving to adjust to the requirements of being

enrolled in nursing school, there was a degree of ambiguity because they really were not sure

what to expect. For instance, participant one, Harry said, "I am very logical, but the nursing

questions remain vague to me. The way that they word the questions is such that not even experienced nurses always agree with each other on the answers." Participant three, Anna, stated, "The process of staying in school is just trial and error." Participant eight, Amber Lynn, mentioned, "But, all in all, you really just never know. They can pull something out of the air that is related to the topic but isn't anything we went over." This ambiguity, surmised by several participants, seemed to create yet more stress for them as they tried to progress through the program. The process of learning a new method of testing, with application questions instead of the more "black and white" (participant seven, Henrietta) questions, also created a situation of ambiguity for these non-traditional college nursing students.

These examples, of the tolerance of ambiguity described by these participants, are best illustrated by the earnest desire to build capacity. Building capacity was achieved by mutual trust, tolerance of ambiguity, and a willingness to step into the unknown (Ogilvie et al., 2003). This required adjustment gave clarity and direction to these non-traditional college nursing students as they felt the need to enhance their resilience and perseverance to remain in school.

Summary. The central phenomenon and first major category of this study, Enhancing Personal Capacity, has been shown to be interwoven throughout the subcategories of maintaining health and wellness, minimizing learning strategies, restructuring finances, and adjusting to living tolerance. This phenomenon was clearly supported by the personal explanations from the interviews of community college non-traditional nursing students.

The next section of this chapter illustrates how the central phenomenon, Enhancing Personal Capacity, is supported and linked to the two categories of Learning to Balance and Maintaining Support.

Second Category: Learning to Balance

The second major category interpreted from this study was Learning to Balance. The non-traditional nursing student was able to accomplish Learning to Balance by employing and combining several different processes that influenced their ability to stay in school by maintaining a balance of life, work, and school. These processes included managing time, restructuring a new life plan, working part-time, redefining success, and negotiating with others. To create a simple flow of discussion, it is therefore necessary to present this category in a slightly different manner. The intent is to present examples from the participants that represent these actions and processes in coordination and combination with one another.

It was evident that many of the actions and processes employed were unexpected while others became quite burdensome. Participants described several processes of how they learned to balance many of the day-to-day life commitments and priorities which helped them to manage to stay in nursing school. As one participant stated, "I had to learn how to include nursing school in my life" (participant seven, Henrietta) In this study, Learning to Balance is defined to include those statements that describe how the non-traditional college nursing student stays in school by learning to manage time, prioritizing, negotiating with others, and redefining success in order to accommodate school with personal needs and work. Participant examples are presented to support the interwoven processes of Learning to Balance and how it relates to the underlining central phenomenon of Enhancing Personal Capacity. These examples included but were not limited to the following:

Participant one. Harry stated, "It has been very difficult balancing work and school."

Participant two. Fiona stated, "I didn't have enough time to dedicate to the nursing program. I didn't make it through that program, so I started here and I completely rearranged by

whole life." In addition, Fiona stated, "I was on a break at clinical and I checked my phone and I had a text from my boyfriend who I have been with for years. He said that he didn't think it was working out. It is ten o'clock and I just ended what I thought was a relationship I thought would end in marriage. I had to make a decision. Was I going to be a basket case or was I going to pull it together and go take care of my patient?"

Participant three. Anna stated, "It was really difficult to get in the swing of things because I didn't know how to manage my time. That is not something that somebody can tell you how to do, because everybody's household is different. I would say to someone wanting to be in a nursing program to try your best to stay organized." Anna also included how she negotiated with her children in finding time to study. For instance, she stated, "I had to explain to my three year-old that I have mommy time and I have your time and I have daddy time."

Participant four. Aurora stated, "Just stay ahead and keep ahead. Be just a couple of days if not a week in advance with your reading." Aurora included how she negotiated with her daughter in order to study. She said, "When I tell my four year old daughter that I have homework, I also get her a notepad and some crayons and she sits beside me and I let her highlight in my books."

Participant five. Trinity stated, "Everyone is always asking me what my secret to studying is, because I do well on the tests. I've only failed a few, which I think is good. I feel that I don't have that many study strategies, but I guess I have more than I realized."

Participant six. Gwyen stated, "There's no way I could do it without managing my time. I'm a single parent with two kids, animals, a mortgage, and a job. I have to manage my time." In addition Gwyen stated, "I am strong because I have to be. It's always been there, it just took something like this to bring it out."

Participant seven. Henrietta stated, "I have to leave my home in order to study. I found myself struggling to find time to study because when you're at home with children you're always trying to spend time with them." In addition, Henrietta was concerned about her job schedule. She said, "I spoke with my supervisor when I was working as a certified nursing assistant that I needed her to be lenient with my hours."

Participant eight. Amber Lynn stated, "I easily get distracted and lose focus. I catch myself having to read a paragraph two or three times. I can't remember what it said, so I need my peaceful time to do what I need to do." Looking forward was important for Amber Lynn. She stated, "I just keep pushing a day at a time, reminding myself that it's less than a year."

Participant nine. Bridget stated, *"*In the first semester it's hard to group study because you're feeling out who really gets it and who might end up somewhere else. It's just a way of thinking and a lot of people just haven't clicked into that way of thinking yet." Bridget also was concerned about her job schedule. She stated, "Before nursing school I was working at a grocery store and then I started working in home health, thinking that would be more flexible. But, that turned out to not be very flexible, so I ended up quitting."

Participant ten. Christy stated, "I try to manage my time wisely, I get up early around 4 a.m. because I can't sleep. It works out better now that I don't work and I can manage my time and concentrate."

These above examples demonstrated the processes non-traditional college nursing students utilized in learning to balance time, working part-time, redefining success, structuring new life plans, and negotiating with others in an effort to stay in school. By creating workable actions and processes of balance, they greatly enhanced their ability to remain in school. Each of the ten participants presented unique priorities of these processes. For instance, several had

small children and felt a necessity to negotiate with them about allowing for time to study while others declared that working part-time was a necessity. Redefining successful actions and processes clarified how the participants of this study were able to test and retest certain strategies for learning how to balance all life commitments and nursing school. Actions and processes that represented new life plans included family schedules, study schedules, and work schedules that arose from being enrolled in a nursing program. Furthermore, these actions and processes of retention that were utilized by the non-traditional college nursing students, were firmly placed among their already established life schedules instead of life schedules being placed among nursing school requirements. Jeffreys (2004) pointed out that the non-traditional college nursing student has greater commitments and roles they must adhere to and perform daily.

The major category of Learning to Balance was linked to this study's central phenomenon of Enhancing Personal Capacity through several interwoven processes. Learning to balance daily structure was accomplished by the actions and processes of managing time, planning new life structures, working part-time, redefining success, and negotiating with others. One identified process was the attempt at managing time and planning new life structures which represented the urgency for balance in an effort to enhance personal capacity. For instance, one participant noted how she restructured her time with her children and their evening social and school needs. She ensured that she could drive her children to afterschool activities, get homework completed, and prepared a quick dinner, while she also studied and prepared for her nursing school assignments. Another example was represented by an attempt to redefine success and balance the actions of working part-time while negotiating with family members in an effort to enhance personal capacity and stay in school. In this example, the participant described the necessity of staying on

campus after nursing school classes to study. This plan was described as an urgency to meet both family needs and school needs on a daily basis.

Participants often perceived some of these actions and processes of Learning to Balance as unknowns, as they were not really sure of the outcomes. For instance, one participant described her willingness to restructure home and school schedules while also realizing there were no guarantees of success. Another participant commented on the lack of confidence in her attempts at redefining success (participant five, Trinity). For example, this participant described how she had not been assured of success while trying to restructure work schedules from full to part-time while in school while also trying to meet monthly bills (participant five, Trinity). These examples illustrated the willingness of the participants to step into the unknown and also their tolerance of ambiguity (Ogilvie et al., 2003), which easily linked this study participants' efforts to increase personal capacity. Utilizing these actions and processes in the attempt to maintain balance was important for non-traditional college nursing students in order to expand their personal capacity and allowed them to remain in their nursing program.

Third Category: Maintaining Support

The final major category of this study represents the retention actions and processes of Maintaining Support from outside resources such as family, friends, spiritual, and employer influences. Once again, each of the ten participants explained unique situations of support to demonstrate their representation of priority. For instance, participants explained how they found family or friend support to be most important for them to stay in school while other participants explained their priorities of employer support. In this study, spiritual support was represented by one participant finding that religious affiliation was optimal while another found that her

spiritual reflection of inner strength was most important for her to stay in nursing school. Examples demonstrated include:

Participant one. Harry stated, "When I started the program, all I wanted to do was to just cover call time."

Participant two. Fiona stated, "With my whole social network, my family, friends, and relationships, we had a big pep talk before school started because of the first time when I didn't make it. I kind of had a heart to heart with everybody about how you are not allowed to be a stressor for the next two years."

Participant three. Anna stated, "I came home from work one day and between my husband and my in-laws, they had found a desk and painted my entire new office." Spiritual influences were also important for Anna. She stated, "Instead of praying for myself, and a lot of what's keeping me in this program is my faith."

Participant four. Aurora stated, "I would say that family support, like my husband, mother in-law, and my dad."

Participant five. Trinity stated, "Family support as far as encouragement from my family and my husband's family." In securing a certified nursing assistant position, Trinity stated, "They told me that they didn't want to work around my school schedule. They didn't want to hire me without experience."

Participant six. Gwyen stated, "I have a supportive employer which helps. I can bring my books to work and study when I have some down time." Gwyen also felt that friend support was as important as family in trying to stay in school. She stated, "My best friend is a big support along with my kids and my boyfriend."

Participant seven. Henrietta stated, "I am a PRN (as needed) employee at the hospital." In addition to employer support in allowing PRN employees, Henrietta felt that family support was important for her to have the opportunity to study and stay in school. She stated, "I have a very strong family support. I think that being able to leave home, while my wife watches the kids and take care of other responsibilities, makes it happen."

Participant eight. Amber Lynn stated, "I do, even though family is not around, I do get a lot of support from them. That's a big thing."

Participant nine. Bridget stated, "One of things that have really helped me a lot is that I'm really close to my parents." Bridget's boyfriend was also instrumental for her staying in school. She stated, "One of things he [boyfriend] does that really helps me is look at it from an Emergency Technician's perspective."

Participant ten. Christy stated, "What helps me stay in school is that I have a good support system. I have my Mom and I have my husband."

These examples signified supportive actions and processes, utilized by the non-traditional college nursing student, to stay in school. These outside influences appeared to have a great bearing upon whether students were able to manage other daily structures in addition to nursing school. Most would anticipate that these outside influences would be in the form of financial support such as money, transportation, and housing. Conversely, in this study, one participant explained her process of family support to be in the form of not stressing her out and allowing her time for study. These study participants explained how they benefited from the support processes stemming from their family members, including children and in-laws. One participant commented on how her teenage children were very supportive now compared to an earlier nursing school admission while her children were much younger. Participant in-laws were found

to help on several levels, such as buying groceries and paying monthly bills. Several of the participants commented on the unconventional things that families had provided for them, such as a place and time to study. One participant commented on the office that was provided to her with a new desk and sayings on the walls that inspired her. This process appeared to take the form of a joint family venture instead of individual support. In this study, an example of individual support was often provided in several forms from spouses. These levels of support included being the sole breadwinner, allowing for the participant to attend classes while not holding a full-time job, providing childcare, and allowing for study time and exam preparation. Other examples included gaining support from understanding employers who addressed participants' part-time working needs through flexible scheduling. This study clarified the crucial need for non-traditional college nursing students to have outside resources such as family, employer, friend, and spiritual processes that helped them to remain in school. Jeffreys (2004) points to environmental factors such as family, friend, employer, and spiritual influences that are perceived by students as having a greater influence upon retention instead of academic factors.

The actions and processes of Maintaining Support, for the non-traditional college nursing student, appeared to be an important aspect of retention. Examples of these ranged from employer support of flexible work schedules and part-time hours to family support of finances and time for study. These actions and processes of maintaining support were instrumental for these participants in providing encouragement to stay in school, thus enhancing personal capacity. One participant eloquently stated, "I cannot trust just anyone with the care of my children" (participant four, Aurora). This statement was interpreted as referring to how trust was necessary for the many support processes normally found among the relationships between the participants and families, participants and spouses, and participants and spiritual influences.

Several participants commented on their continued maintenance of these favorable relationships by sure effort and prioritization. These relationships were crucial for them to stay in school but were also difficult for them to continue while in school. Maintaining trustworthy relationships ensures the opportunity for building personal capacity (Ogilvie et al., 2003). Employer support was also tied to building personal capacity. This was achieved through a trustworthy relationship between worker and employer by generating understanding work schedules to serve both the financial and the school needs of the student. Ogilvie et al. (2003) outlined that in building personal capacity, trust among partnerships was crucial for success. In this study, the category of Maintaining Support summarized the actions and processes of support that non-traditional college nursing students utilized to stay in school.

Summary

The major categories (concepts) of Enhancing Personal Capacity, Learning to Balance, and Maintaining Support, identified from interviews with second level (second year) community college nursing students have been thoroughly presented and discussed. Enhancing Personal Capacity was presented as the central phenomenon interwoven throughout all subcategories and categories from this study. Major findings from this study were termed as categories and were constructed from my interpretations of interviewing these ten participants. The term categories relates to the underlying sensitizing concepts generated from qualitative grounded theory research. Charmaz (2006) points to these sensitizing concepts as places to start in developing theory. In this study, the sensitizing concepts of Enhancing Personal Capacity, Learning to Balance, and Maintaining Support were identified as the actions and processes of student retention and are the tools in beginning the development of student retention theory.

The study's sensitizing concepts are further illustrated by a relational model of nursing student retention in Figure 7.
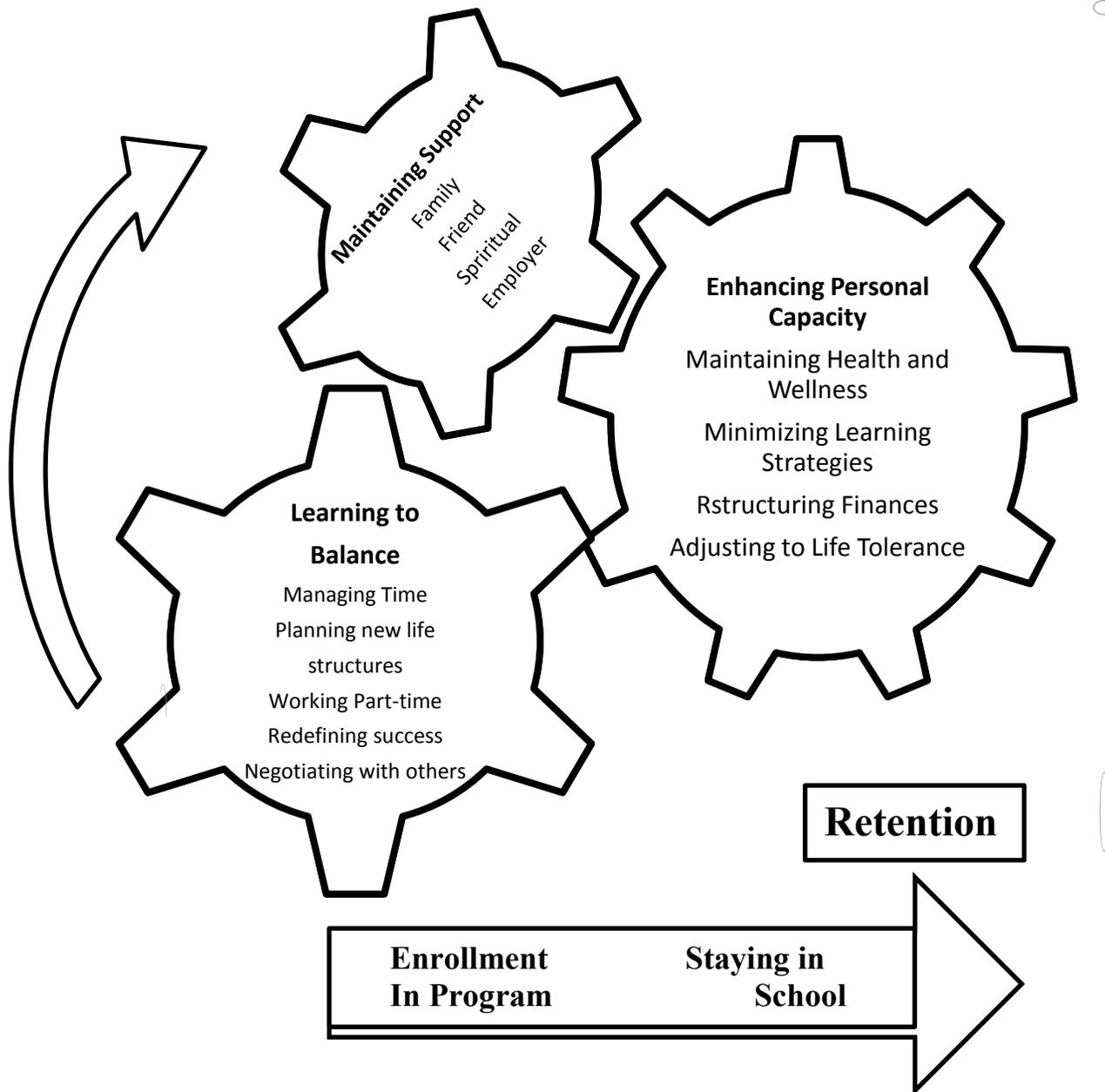
Figure 7. Priode model for community college nursing student retention.

Significance of the Study Model

This study's student retention model represented the actions and processes that non-traditional nursing college students utilized in order to remain in their program. The selection of cogwheels to represent the findings was symbolic to me. These cogwheels signified the interconnectedness of the concepts and how one influenced the other. Charmaz (2006) argues for the "symbolic interactionist theoretical perspective" in that we are part of the world we study and that we construct theory through our past and present involvement with people and interactions. (p. 7).

The central phenomenon of the study, the concept of Enhancing Personal Capacity, was illustrated in the model, by being aggrandized in size and strategically placed in comparison to the other concepts presented on the other two cogwheels. The model demonstrated how the central phenomenon, Enhancing Personal Capacity, served as both the end result of many other student retention actions and processes and was also interwoven within the other two concepts, Learning to Balance and Maintaining Support. This interpretation portrayed my construction of theory from the findings of this study. The significance of the arrow pointing toward the major concept of Enhancing Personal Capacity paralleled the movement of non-traditional college nursing students toward the success of staying in school. This movement also outlined a significant time period (while being enrolled in an ADN program) for these students in which these actions and processes occurred. This time period signified the temporal sequence that Charmaz (2006) outlined as a starting and not an ending to theory development. "The temporal sequence has an identifiable beginning and end with benchmarks in between, is linked to a process, and may lead to change" (Charmaz, 2006, p. 10). The model clarified my interpretation of the process of Enhancing Personal Capacity throughout the period of enrollment in a nursing

105

program. Like the projections on a wheel, the cogs in the model represented the actions and processes of student retention. This was further illustrated in how the projections of the cogs fit together and how they start and stop at different points. The interlinking projections represented interwoven concepts signifying events that became parts of a larger whole. This larger whole was demonstrated by how the cogwheels all moved toward the end result of motion and was symbolically demonstrated from the model as the larger whole of student retention.

        Study model fit with other student retention models. The discussion and presentation of classic student retention models was crucial to the beginning development of theory. With the construction of a nursing student retention model from this study, it was pertinent to compare and contrast the Priode model with selected student retention models. Tinto's (1975) student retention model and Jeffreys's (2004) NURS model were selected as appropriate for comparison. Table 6 has been developed to represent these comparisons.

Table 6

Comparison of the Priode Model for Community College Student Retention to the Tinto and

Jeffreys Student Retention Models

Category	Priode	Tinto	Jeffreys
Enhancing personal capacity	X	X	X
Maintaining health and wellness	X	X	
Minimizing learning strategies	X		X
Restructuring finances	X		X
Adjusting to life tolerance	X	X	X
Learning to Balance	X	X	X
Managing Time	X		X
Planning New Life Structures	X	X	
Working Part-time	X		X
Redefining success	X	X	
Negotiating with others	X	X	
Maintaining support	X	X	X
Family	X	X	X
Friend	X	X	X
Spiritual	X	X	X
Employer	X		X

Note. The "X" illustrated in the table represents similarities.

Model Comparison Discussion

The Priode model for community college student retention demonstrated a high majority of similarity with both the Tinto and Jeffreys models. For instance, the study's model categories, representing Maintaining Support, such as influences from family, friend, spiritual, and employer, were found to be similar with all categories from Jeffreys's model. In addition, this category was similar to the Tinto model with one exception regarding employer support. This similarity clarified that environmental influences (Jeffreys, 2004) and social integration categories (Tinto, 1975) were found to be a favorable concern for the participants from this study. The categories of Learning to Balance demonstrated by managing time, planning new life structures, working part-time, redefining success, and negotiating with others appeared to coincide more directly with the Tinto model. The comparison of the study category, Learning to Balance, with Tinto's model included his categories of goal commitment, academic integration, grade performance, institutional commitment, social integration, and faculty interactions. Jeffreys's model was similar to this study's model category of Learning to Balance with working part-time and managing time influences. The last study category of Enhancing Personal Capacity coincided well with both other models, but Jeffreys's model presented one additional similarity. Jeffreys's model was found to be similar with this study's model and included the categories of minimizing learning strategies, restructuring finances, and adjusting to life tolerance with student affective factors, academic factors, environmental factors, and professional integration factors. Tinto's model comparison with the category of Enhancing Personal Capacity included maintaining health and wellness and adjusting to life tolerance with individual attributes and goal commitment influences.

Summary

This chapter has presented the findings from this study by demonstrating my interpretations from the data. The beginning concepts of nursing student retention theory development were supported from the findings from this study. The major study concepts, Enhancing Personal Capacity, Learning to Balance, and Maintaining Support were supported by my interpretations and by participant descriptions of their actions and processes to remain in school. The concept of Enhancing Personal Capacity served as the central phenomenon and was shown to be interwoven throughout the other two concepts of Learning to Balance and Maintaining Support. My interpretation of the overarching concept of Enhancing Personal Capacity was well supported through the use of personal interviews and other models of student retention. Addressing the study's research questions, my postulate is summarized with the following statement and is supported by the presentation of this study's model and findings.

> **Postulate:** Community college non-traditional nursing students who are able to enhance their personal capacity through the actions and processes of learning to balance and maintaining support may have increased capabilities to remain in their nursing programs.

CHAPTER FIVE: DISCUSSION

This study explored the identified actions and processes that non-traditional community college nursing students employed to stay in school with the use of personal interviews. Ten participants volunteered and graciously shared their experiences of the processes they engaged in order to remain in their ADN program. Anecdotally, I have witnessed similar students arrive to their nursing program with exhilaration and excitement. However, as the first year continued, these students often fell into unfamiliar and surprising challenges that they found so overwhelming that many withdrew or failed academically. Unfortunately for some of these students, their daily challenges of life made their continuance in nursing school impossible.

Community college nursing programs share both high enrollment numbers and high attrition rates (Fraher et al., 2008; NCBON, 2013). Historically, the continuing existence of community college nursing programs has surpassed original thought as to their survivability. Mainly serving as the quickest route to licensure and entry into the RN workforce, the importance of these programs perpetuates their on-going examination of attrition and graduation rates. Consequently, most community college nursing programs have stringent admission criteria and many students often spend over two years preparing for entry into these programs. Therefore, some students seeking a two year degree attend community college for at least four years. My intent with this study was to gain a better understanding of the actions and processes that these students engage as they try to remain in school. The overall intent of this study was to begin the steps of formulating a retention theory based upon my interpretation of student identifications of these actions and processes.

This qualitative grounded theory study was guided by two central research questions:

   1. What processes do nursing students identify that assist them in remaining in school?

2. What actions do nursing students see as important for retention?

Furthermore, the postulate interpreted from my analyses was summarized with the following statement*:*

Community college non-traditional nursing students who are able to enhance their personal capacity through the actions and processes of learning to balance and maintaining support may have increased capabilities to remain in their nursing programs.

This final chapter is divided into three sections. In the first section, the study's substantive theory and findings is contrasted with existing studies regarding nursing student retention. The second section of this chapter presents my explanation and discussion of this study with the four aspects of criteria for grounded theory research outlined from Charmaz (in Denzin & Lincoln, 2005). These four aspects include: credibility, originality, resonance, and usefulness for education practice and research. It is my intent to offer these interpretations conceptually and with correlation to process change. A discussion outlining some of the limitations of the study finalizes this section. The third and final section of this chapter presents a final summary with some suggestions in addressing the question, what do we do with this new knowledge? This summary will represent the work of Charmaz (2006) regarding the transformation of knowledge from qualitative grounded theory research.

Comparison of Study's Substantive Theory with Existing Student Retention Studies

Grounded theory produces a substantive theory from a small specific population, is grounded in data, and is often a springboard for formal theory (Strauss & Corbin, 1998). Charmaz (2006) posits that grounded theory transcends across substantive areas and generates abstract concepts and specifies relationships in order to understand a phenomenon. This study's development of grounded theory begins to investigate the impact of actions and processes

111

identified by the non-traditional college nursing student suggested that students who were able to enhance their personal capacity through the processes of learning to balance and maintaining support may have an increased ability to stay in school.

This study's beginning substantive grounded theory was consistent with much of Jeffreys's work. For example, in her quantitative study (Jeffreys, 2007) and book (Jeffreys, 2004) regarding nursing student success, she presented the link of environmental and social factors to student retention. Non-traditional nursing students cited that friends inside and outside of class, college resources, financial resources, class schedules, faculty support, and study groups were identified as influences. This is consistent with my study's findings being similar to the components of the major concepts of Learning to Balance and Maintaining Support. This study's findings included that family, friend, spiritual, and employer support was beneficial for these participants for staying in nursing school. In addition, balancing school, work, and family commitments was important for these participants. Another similarity may be linked to this study's major phenomenon of Enhancing Personal Capacity and Jeffreys's (1998) link to Bandura's (1997) theory of self-efficacy. Appraisal of self-efficacy abilities and the process of enhancing personal capacity were congruent in that both were found to be similar in context and important for the staying power of nursing students. Self-efficacy is an "analytic and individualized perceptual process based on the weighted and combined contributions of perceived ability, task difficulty, amount of energy expenditure, external assistance, task outcomes, and prior patterns of successes and failures" (Bandura as cited in Jeffreys, 1998, p. 45). For example, students who perceived themselves to be supremely efficacious may feel they need little preparatory skills for exams and clinical demonstrations (Jeffreys, 1998). This study's major concept of Enhancing Personal Capacity was defined as the statements that describe how

112

the non-traditional college nursing student stays in school by redefining self in maintaining health and wellness, minimizing learning strategies, restructuring finances, and adjusting for living tolerance. Self-efficacy and personal capacity have common connotations in how people may perceive their abilities to achieve an outcome.

This study's findings were consistent with Cook's (2010) qualitative grounded study. For instance, she described "psychic strength" as the comprehensive term describing the characteristics that helped nursing students to maintain their ability to stay in their programs (Cook, 2010, p.71). These characteristics were closely associated with my study's identified actions and processes which further defined the major concepts. For example, Cook's characteristics consisted of "moral and ethical abilities; ability to reason, think, feel, perceive, and judge; behavioral and emotional characteristics; capacity for exertion or endurance; and power to resist force" (Cook, 2010, p. 74). My study's major concepts of Learning to Balance and Maintaining Support included the processes of managing time, planning new life structures, working part-time, redefining success, and negotiating with others including family, friend, spiritual, and employer support. Furthermore, Cook's (2010) core category of "psychic strength" was linked to this study's core category of Enhancing Personal Capacity (p.71). Both terms support the nursing students' individual ability to cope and find strategies to face the challenges of life and nursing school, while maintaining their enrollment.

The key study from Fraher et al. (2008) was instrumental in defining the problem of non-traditional college nursing student retention in NC. Findings from the Fraher et al. (2008) study posited that student demographic and socioeconomic characteristics were the most powerful predictors of on-time graduation. The findings from my study were easily correlated with the socioeconomic aspect of the Fraher et al. (2008) study, but had little reference to the

demographic characteristics. For example, my study posited that students with financial support and the ability to restructure their finances were more likely to be able to enhance their personal capacity and remain in school. My intent was to not focus on the demographics of these participants for this research, but instead to simply report some of their non-traditional characteristics once they met the inclusion criteria and were interviewed.

There were fewer similarities with the current study when compared to the study from Seago et al. (2008). For instance, these researchers suggested that to improve students' retention, the situational construct factors of work issues and financial issues, the institutional subscales of diversity and faculty support, the dispositional construct of math and science ability, and the career values construct including job characteristics and work style were highly predictive of student success. My study was consistent with two of the constructs from the Seago study. In my study, the concepts of Learning to Balance and Maintaining Support were consistent with the factors of work and financial aspects from the situational construct proposed by Seago et al. (2008). These aspects from both studies referred to the balance of school, work, and family with the supports from family, friends, spiritual, and employers. In addition, faculty support was important to my participants for retention, which was consistent with the faculty aspect of the institutional constructs from the work of Seago et al. (2008). In contrast, my study did not focus on diversity, career values including job characteristics or work styles, or math and science ability from the dispositional construct of which Seago et al. (2008) found to be predictive of nursing student retention.

Existing research studies that purport social and environmental factors that influence nursing student retention correlate well with the findings from this current study (Fowler & Norrie, 2009; Jeffreys, 1998, 2004, 2006, 2007; Rees, 2006; Symes et al., 2005; Wells, 2003).

For instance, findings from the study by Symes et al. (2005) conducted with BSN students, postulated that factors preventing students from staying in school stemmed from disadvantaged backgrounds and a lack of resources, including financial and social support. My study was easily correlated with the Symes et al. (2005) study including the lack of financial and social supports, not having resources such as time, having to work full-time, and not having the financial means. All these processes were considered obstacles for each of the study's participants to stay in school. However, the Symes's study was conducted with BSN students whereas my study was conducted with students from the community college.

In a mixed methods study, Pappas (2006), posited that students ($N = 24$) identified 21 themes from the qualitative component designated as important for retention. The findings from my study were consistent with many of the themes she identified. For instance, the relationship themes between both the faculty and the students, the support of peers, the determination and commitment to the goal of becoming a nurse, the support from family, and the realization of the difficulty of a nursing program each correlated well with my concepts of Enhancing Personal Capacity, Learning to Balance, and Maintaining Support. One important aspect that stood out and was consistent with Pappas (2006) was the identification of how difficult a nursing program can be. One participant summed up this idea nicely:

> I'd say my first three semesters in nursing school here have been difficult for me. I've never encountered the types of questions that I've had. I've never really had critical thinking questions. My anatomy and physiology questions were black and white; you have a wrong or a right answer. So, I think I know the material well, but I find myself struggling with how to answer these critical thinking questions on my nursing exams. (participant seven, Henrietta).

In a phenomenological study by Rudel (2004), several themes were identified as to how non-traditional nursing students experience education. The major concepts from my study were consistent with several of these themes. For example, Rudel (2004) suggested that retention was largely due to outside influences apart from the academic institution. These included support from family, peers, and social systems. This finding was directly correlated with my third major concept of Maintaining Support. The second theme from Rudel's study included faculty characteristics as having a significant influence upon student empowerment. These included caring, trust, consistency, mutual respect, and an appropriate sense of powerfulness (Rudel, 2004). Several participants in my study explained how their trust in the nursing faculty helped them to stay in school; however, all participants did not focus on this one aspect from the theme of faculty characteristics. The final theme identified by Rudel (2004) included that students felt challenged when faculty did not utilize applications of adult learning theory. Participants in the Rudel (2004) study viewed this lack of sensitivity as creating many unwanted obstacles for them. This theme included utilizing empowerment in how adults learn with a conscious and sensitive approach to the various roles that adults tend to employ in comparison to younger learners. My study included a very detailed explanation of how the non-traditional college nursing student managed studying and learning new knowledge. This process included some real life considerations such as faculty being sensitive to family issues, clinical, and child care issues, and the scheduling of the program courses. My second major concept of Learning to Balance is consistent with Rudel's (2004) theme of challenges in adult learning empowerment.

Summary

This section of the final chapter was constructed to present the findings from my study in comparison to some of the existing studies on nursing student research. My intent was to

demonstrate how my study correlated with portions of existing studies that I felt to be relevant. This presentation is not intended to conclude any thought or interpretation of this grounded theory research, but instead should be taken as the mere beginnings of the development of student retention theory.

Grounded Theory Criteria

The four aspects regarding relevant criteria for conducting grounded theory research include: credibility, originality, resonance, and usefulness (Charmaz as cited in Denzin & Lincoln, 2005). The next section of this chapter presents these criteria with respect to nursing education practice and research. Each section is addressed.

Credibility. I have related my familiarity with the topic of nursing student retention by introducing my experience and instruction with the non-traditional college nursing student. I have demonstrated the "interpretative sufficiency" (Charmaz as cited in Denzin & Lincoln, 2005, p. 528) of findings from both the ten interviews and interpretative summaries. I have been able to show the constant comparison of data and the repeated reviews of original data by the use of two code books and the NVivo qualitative software program. Concepts were constructed from audio-recorded personal interviews, field notes, interpretative summaries, email responses, code books, and nodes emerging from the NVivo program in comparison to open, axial, and selective coding processes. I have presented a strong argument for the construction of my postulate and study model supported by the identification of the major concepts, Enhancing Personal Capacity, Learning to Balance, and Maintaining Support. The concept of Enhancing Personal Capacity was supported as the central phenomenon by discussion and the development of a study model highlighting all the interlocking concepts constructed from the categories and subcategories. Finally, by presenting participant support of each of the three major concepts by both personal

quotes and discussion, I have provided a reasonable interpretation of my understanding of these findings which may easily be critiqued from the reader's perspective.

Originality. In meeting the grounded theory criteria of originality, this study presented a new and fresh approach to exploring nursing student retention actions and processes by using qualitative research instead of the many questionnaires and surveys that represent quantitative research. The findings from this research may offer a new conceptual approach to the study of student retention. These findings, rendered from the data and represented by the constructed postulate, represent a fuller understanding of nursing student retention and may be considered for future theory development. This originality has social and theoretical significance by examining the very real issue of the retention of nursing students and its impact on our nation's healthcare future. This study focused on the retention actions and processes non-traditional college nursing students perceived as important for their staying power. With the use of personal interviews, research questions that were broad, focused, and open-ended provided opportunities for participants to explain and discuss these retention measures.

This study lends an opportunity for further research. An example of this would include a study to explore strategies to help students build personal capacity in their daily lives while enrolled in a nursing program. Additional avenues for further research could pertain to other groups such as with the traditional nursing student seeking a BSN conducted in different geographical locations. To expand this study, it might be interesting to compare the participant responses relative to each community college campus. Also, opportunities for nurse educators to extend certain practices of education, including additional curriculum tracks, student mentoring by faculty, and nurse tutors, would exist. These strategies may allow non-traditional students more opportunities for success in placing nursing school within their already established lives. I

118

challenge each nurse educator to exercise outside the box thinking in order to create useful strategies for these students and help to place nursing school curricula into the lives of their students rather than having them plan their entire lives around nursing school.

Resonance. This research proposes opportunities for others to see beyond the aspects of student retention that were originally based on only the factors produced from a survey or questionnaire. In qualitative research, it is important for grounded theory researchers to present fuller explanations of the issues with the hope for new understandings. My intent with this research was to conduct a study that would dig deeper in an effort to reach new understandings of what or how the non-traditional college nursing student manages to stay in school when others do not. From my pilot study, I felt that certain things may have been taken for granted by both faculty and students. For instance, encouraging these students to secure child care while enrolled in a nursing program was often discussed by nursing instructors. In my experience, these discussions were conducted in the format of what the student *needed* to do to attend class and clinicals with little emphasis on any further guidance or instruction on *how* to secure these measures. A one size fits all method of curriculum development, clinical scheduling, and class scheduling may not be in the best interest of these non-traditional college nursing students to help them to successfully matriculate through these programs.

Usefulness. To better our society, it is critical that we develop sustainable nursing programs that address retention improvement with increased certainty of how to sustain adequate healthcare personnel. However, the first step in securing an adequate RN workforce is retaining the nursing student. This research offered everyday interpretations such as what is important to the non-traditional nursing college student to allow him or her stay in school. For instance, managing time; maintaining health and wellness; learning to balance school, work, and family

life; and maintaining support from others are useful to people from every educational and socioeconomic level. These processes are found within most people's vernacular as they face everyday challenges. This study is useful for education and practice for nurses in the healthcare environment. For instance, practicing professionals such as RNs, with the expertise to deliver quality patient care, are crucial to our society. This research is essential to support the non-traditional college nursing student and for those educating the student nurse with the hope that we can provide adequate numbers of competent nurses to fully promote quality patient care.

Limitations of the Study

Limitations to this study included the possibility that with another sample of student participants, such as the BSN student, additional concepts and postulates may have been discovered. Limitations may also exist due to aspects such as differences within demographics of a student population, location of a community college, and limited access of college resources. My being a novice qualitative researcher certainly must be considered as a limitation.

Another concern that might be viewed as a limitation is the on-going discussion and evaluation of whether community colleges are admitting the best academically qualified students to matriculate through their nursing programs. As community college nursing programs review and update their yearly admission criteria, these programs typically incorporate a very competitive process in order to manage the enormous applicant pool. However, with the underlying premise by some community colleges of being vested in an open door admission process, the answer to this question may not be a one size fits all resolution and in some circumstances may be unattainable.

Fraher et al. (2008) cited that of the 42 NC community college nursing programs, the most common admission criterion was a standardized testing feature. Only one NC community

college nursing program from the Fraher study claimed no additional criteria for admission of students. My qualitative study regarding retention lends credence for NC community colleges to continue their efforts to evaluate nursing student eligibility for admission by considering how students can manage to stay in school once admitted to their programs. Admission criteria, for the community college nursing programs, remain important but are often seen as creating conflicting philosophies between the administrators and managing personnel. The issue of appropriate community college nursing admission criteria remains convoluted at best and perhaps not one that can fully be addressed here.

One further limitation to this grounded theory research was the inability to conduct theoretical sampling. Charmaz (2006) says that theoretical sampling is purposeful sampling and is achieved through sampling from the categories that one develops from the analysis. The next step to enhance this research includes the development of expanded research inquiry with the conduction of another interview based on the major concepts now known. This study included initial sampling needed for the beginning development of theory for grounded theory qualitative research; whereas, theoretical sampling would direct the possibility for this research to be expanded with the development of formal theory.

Final Summary

This qualitative grounded study has provided a new and fresh way of explaining the actions and processes of student retention in community college nursing programs. Findings from this study included the actions and processes of Enhanced Personal Capacity, Learning to Balance, and Maintaining Support as the major concepts while answering the study's research questions. These concepts have been supported in explaining that each has credibility, resonance, originality, and is useful to society. According to Charmaz (2006), these important aspects of

121

grounded theory development are significant for changes in social processes. The social

processes outlined from these findings included the beginning development of student retention

theory for the non-traditional college nursing student. Acquiring this knowledge has social

consequences for those non-traditional nursing students trying to stay in their nursing programs.

Charmaz (2006) outlines the transformation of knowledge as the ultimate goal in

conducting constructivist grounded theory research. The knowledge gained from this study

serves the purpose of taking an extended look into the lives of these nursing students and their

journeys to acquire and employ the actions and processes that help them to remain in school,

graduate, and obtain licensure for practice. The pragmatic analytic processes of Strauss and

Corbin (1998) along with the fluidity and open-ended influence of Charmaz (2006) allowed for

the gained knowledge from this study to become known.

To address the possibility of transforming the knowledge gained from this study, I want to

address how to apply these findings to nursing education and practice, hoping to offer forward

thinking perspectives for the nursing discipline. For instance, knowing that these non-traditional

college nursing students were concerned about how they might balance nursing school within

their already established lives might lead educators and administrators in community colleges to

generate new policies and procedures to accommodate these students. Directors of these

programs might include alternate student educational tracks to assist these students so that their

lives can be better managed while in school. Having this knowledge might assist educators to

reevaluate their progression policies so that students might not be penalized for unforeseen

family and child care issues while enrolled. Community college nursing administrators may be

able to develop alternate and offsite areas of study after scheduled classes or start child care

programs for specific times of the day that might complement nursing student clinical hours. In

addition, students starting community college nursing programs may have opportunities to employ strategies to accomplish the process of enhancing their personal capacity, thus having the knowledge to change social processes and perhaps increase their staying power to remain in school. These suggestions for advancing nursing education and practice are but a small part of benefitting from the knowledge outlined from this study in regard to the non-traditional college nursing student. This knowledge may give those preparing for and teaching in these community college nursing programs opportunities to begin the conversation of how they might utilize these concepts to assist students to remain in their nursing programs. Nursing student retention remains especially important for those seeking the community college degree and for those committed to the educational efforts in establishing and maintaining adequate RN personnel to meet society's future needs.

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This information is for the participant to consider before taking part in research that has no more than minimal risk.

Title of Research Study:

"The Use of Grounded Theory to Develop a Framework for Understanding Retention of Students in Community College Nursing Programs"

Principal Investigator: Kimberly Priode PhD(c), MSN, RN, CNE
Institution/Department or Division: East Carolina University
Address: East Fifth Street, Greenville NC. 27858
Telephone #: 252-328-6131

Researchers at East Carolina University (ECU) and _____Community College study problems in society, health problems, environmental problems, behavior problems and the human condition. Our goal is to try to find ways to improve the lives of you and others. To do this, we need the help of volunteers who are willing to take part in research.

Why is this research being done?
The purpose of this research is to explore what helps you to remain in nursing school when faced with many challenges. The decision to take part in this research is yours to make. By doing this research, we hope to learn about some of these processes and construct strategies that would be beneficial to the nursing student and nurse educator.

Why am I being invited to take part in this research?
You are being invited to take part in this research because you are currently enrolled in an Associate Degree Nursing program, have expressed an interest to participate, and have experienced challenges and obstacles to continue your nursing education. If you volunteer to take part in this research, you will be one of about 10 people to do so.

Are there reasons I should not take part in this research?
You should not volunteer to participate in this research study if you feel that you have not experienced challenges or obstacles to your nursing education or are not currently enrolled in an Associate Degree Nursing program in North Carolina.

What other choices do I have if I do not take part in this research?
You can choose not to participate.

Where is the research going to take place and how long will it last?
The research procedures will be conducted in a vacant classroom or office at your community college. You will need to come to this classroom or office at the pre-arranged

136

scheduled time.   The total amount of time you will be asked to volunteer for this research study is one hour, with a later time to respond to an email about the findings of the research.

What will I be asked to do?
You are being asked to do the following:
1. Participate in an audio-recorded interview with the researcher.
2. Respond to the three questions asked from the researcher.
3. Respond to an email at a later date as to your reflection of the interpretation of the transcript from the interview.
Information about the audio-recorded interviews:
No identifiable information will be revealed. Each participant will be given a pseudo-name for confidentiality purposes. Participants will respond to an email which summarizes their interview. For example, participants will be asked if this interpretation is accurate and is anything missing from the summary. The recorded interview, typed transcripts, and email responses will be kept by the researcher in a locked cabinet in their office and only available to the researcher and dissertation committee members involved in the analysis process.

What possible harms or discomforts might I experience if I take part in the research?
It has been determined that the risks associated with this research are no more than what you would experience in everyday life.

What are the possible benefits I may experience from taking part in this research?
We do not know if you will get any benefits by taking part in this research study. This research might help us learn more about what supports nursing students to remain in their programs and graduate. By exploring what may be beneficial to the retention of the nursing student may in turn help nurse educators to assist students to graduate and enter the nursing workforce. There may be no personal benefit from your participation but the information gained by doing this research may help others in the future.

Will I be paid for taking part in this research?
We will not be able to pay you for the time you volunteer while being in this research study.

What will it cost me to take part in this research?
 It will not cost you any money to be part of the research study.

Who will know that I took part in this research and learn personal information about me?
To do this research, ECU and the people and organizations listed below may know that you took part in this research but because of the pseudo-names given to you at the start of the interview no correlations may be inferred. With your permission, these identified people will be the only ones knowledgeable about your information.

- The University & Medical Center Institutional Review Board (UMCIRB) and its staff,

   who have responsibility for overseeing your welfare during this research, and other ECU

   staff who oversee this research.

- The researcher conducting the research study.

How will you keep the information you collect about me secure? How long will you keep it?

Your audio-recorded interview, typed transcript, and response to the emailed summary will be kept indefinitely secured within the personal office of the researcher. The transcript interpretative summaries, that include findings from the research study, will be shared as teaching and presentations and may be published with the pseudo-names included. Once again, no identifying information will be revealed. No future researchers will have access to specific information other than what is included in the findings.

What if I decide I do not want to continue in this research?

If you decide you no longer want to be in this research after it has already started, you may stop at any time. You will not be penalized or criticized for stopping. You will not lose any benefits that you should normally receive.

Who should I contact if I have questions?

The people conducting this research study will be available to answer any questions concerning this research, now or in the future. You may contact the Principal Investigator at 828-273-5504 OR 828-262-8004 between normal day working hours

If you have questions about your rights as someone taking part in research, you may call the UMCIRB Office at phone number 252-744-2914 (days, 8:00 am-5:00 pm). If you would like to report a complaint or concern about this research study, you may call the Director of UMCIRB Office, at 252-744-1971

I have decided I want to take part in this research. What should I do now?

The person obtaining informed consent will ask you to read the following and if you agree, you should sign this form:
- I have read (or had read to me) all of the above information.
- I have had an opportunity to ask questions about things in this research I did not understand and have received satisfactory answers.
- I know that I can stop taking part in this study at any time.
- By signing this informed consent form, I am not giving up any of my rights.
- I have been given a copy of this consent document, and it is mine to keep.

Participant's Name (PRINT)   Signature   Date

_____

Person Obtaining Informed Consent: I have conducted the initial informed consent process. I have orally reviewed the contents of the consent document with the person who has signed above, and answered all of the person's questions about the research.

Person Obtaining Consent (PRINT)   Signature   Date

_____

APPENDIX B: INFORMATION REQUEST SHEET

My name is Kimberly Priode and I am conducting a research study concerning retention

processes that Associate Degree Nursing students may experience while enrolled in school.

I am very interested in how and what helps students to remain in nursing school as you face

day-to-day challenges. I plan to hold an information session about this study after your

scheduled class on _____.

Inclusion criteria to volunteer and participate in the study includes:

1. Must be enrolled in an Associate Degree Nursing program in North Carolina.

2. Must meet at least one of the following characteristics to be considered as a non-traditional

nursing student.

        1) older than 25

        2) commutes to class

        3) enrolled part-time

        4) male

        5) member of an ethnic or racial minority group

        6) speaks English as a second language

        7) has dependent children

        8) earned an equivalence diploma (GED)

        9) required remedial classes.

3. Must have progressed to the second level (second year) of your nursing program.

4. Experienced challenges or obstacles of which you have considered how to

remain in your course of study.

Please consider attending if you have experienced certain challenges while enrolled in school and are interested in this research. I will answer questions about the study during this session and hope to schedule any volunteers for an hour long audio recorded interview at your convenient time. In order to accomplish my objectives, permission by your academic institution and my affiliated University (ECU) has taken place. These interviews are confidential and no identifying information will be shared or published. You will have to sign a consent form prior to the interview.

My goal is to understand these challenges that you face and identify some beginning concepts that might contribute to the development of a framework that will assist the nurse educator in helping students to stay in school.

Sincerely,

Kimberly Priode

APPENDIX C: INTERVIEWER'S GUIDE

1. Please tell me what processes help you (the nursing student) to remain in school?

2. Can you describe for me any actions you see as important to remain in school?

3. To conclude this interview, is there anything else you would like to add about remaining in your current nursing program?

APPENDIX D: PARTICIPANT DEMOGRAPHICS

1. Pseudo-Name_____

2. Age_____

3. Date of Interview_____

4. Other nursing program attended_____

5. Projected date of graduation_____

6. Number of previous starts/stops in nursing program_____

7. Contact information, email, mailing address, phone_____

_____

8. Receiving any financial aid?

Pell_____Loans_____Grants_____Scholarships_____

10. Dependent children? How many?_____

11. Hours working per week_____

12. Ethnic group affiliation

a) Caucasian_____

b) African-American_____

c) Alaskan Native or Native Indian_____

d) Asian or Pacific Islander_____

e) Hispanic_____

f) Other____

APPENDIX E: CODING EXAMPLES FROM TRANSCRIPT 1 IN CODE BOOK 1

Open	Axial	Selective (Nodes)	Description	Inclusion	Exclusion
Needs support					
Financial	Financial Support	Support	***1. Support***	This participant has sacrificed personal savings, loans, and income all to stay in school.	No statements regarding the need of external support to stay in school.
Balancing study time, work, school			Statements regarding external support such as		
Dedication to staying in school			financial, emotional, family and		
Time for school	Balancing	Learning to balance	instructor support.	Line 34-"It has been difficult balancing work and school."	
Foreclosure					
Credit decreasing	Perseverance	Perseverance			
Financial resources	Time				
Have gone through all means to stay in school		Support			
	Financial support				
Marginally have money	Life changes	Learning to balance	***2. Learning to balance***	Made statements regarding the continued on-going dedication of trying to stay in school	No statements regarding the need to balance life structure such as schedules, work, school, etc. to stay in school.
Balancing work, school			Statements regarding learning to balance life structure, school, and work requirements.		
Working 60 hours					
Working influenced grades and clinical					
Financial					
Float a charge card		Learning to balance		Has cut back on full time work in order to have the time to study.	
Stockpiles meds					
Health issues	Part-time hours			This participant has had to balance their prior healthcare knowledge with new knowledge of nursing.	
Nursing different	Restructure finances and work				
Ambiguous					
Where is the logic?					
Looks for finite logic					
Nursing is too broad		Learning to balance		Line 61-"Nursing is very different."	
Vague nursing questions	Physical needs				
Surprise	Health			Line 70-"It is so easy to know all the information when it is essentially finite and the way that they work the questions are such that not even experienced nurses always agree with each other on the answers to the questions."	
Looking for key question or key comment	Sacrifice				
Get together on the test	Restructure logical process to stay in school.				
Changed study habits					
Time, place to read		Learning to balance			
Read, records, notes					
Types relevant statements	Looks at nursing discipline as not logical but "vague"				
Sleeps with index cards, paperclips					
Osmosis of information					
Less knowledge					
Diffusing		Educational helps	***3. Educational Helps***		
Seems to stick	Keys to success		Statements regarding the		
Study value			participant's attempts in trying		
First for understanding			to deconstruct study		

APPENDIX F: CODING EXAMPLES FROM TRANSCRIPT 1 IN CODE BOOK 2

Open	Axial	Selective (Nodes)	Description	Inclusion	Final Selective Categories and Definitions
Needs support					*1. Support*
Financial	Financial Support	Support	*1. Support*	This participant has sacrificed	These are statements that
Balancing study time, work, school			Statements regarding	personal savings, loans, and	describe the way others
Dedication to staying in school			external support such	income all to stay in school.	enable the nursing student
Time for school	Balancing	Learning to balance	as financial,	Line 34-"It has been difficult	to stay in school. These
Foreclosure			emotional, family and	balancing work and school."	include comfort,
Credit decreasing	Perseverance	Perseverance	instructor support.		communication, and
Financial resources	Time			*3.Enhancing personal*	problem-solving
Have gone through all means to stay		Support		*capacity*	from family, friends,
in school	Financial support		*2. Learning to*	*2. Learning to balance*	employers, and spiritual
Marginally have money	Life changes	Learning to balance	*balance*	Made statements regarding	influences.
Balancing work, school			Statements regarding	the continued on-going	
Working 60 hours			learning to balance life	dedication of trying to stay in	*2. Learning to balance*
Working influenced grades and			structure, school, and	school	These are statements that
clinical			work requirements.		describe how the nursing
Financial					student stays in school by
Float a charge card		Learning to balance		*2. Learning to balance*	learning to restructure time,
Stockpiles meds	Part time hours			Has cut back on full time	learning to prioritize,
Health issues	Re-structure finances			work in order to have the time	learning to negotiate with
Nursing different	and work			to study.	others, and learning to
Ambiguous				This participant has had to	redefine success in order to
Where is the logic?				balance their prior healthcare	accommodate school with
Looks for finite logic				knowledge with new	personal needs and work.
Nursing is too broad	Physical needs	Learning to balance		knowledge of nursing. *2.*	
Vague nursing questions	Health			*Learning to balance*	*3. Enhancing personal*
Surprise	Sacrifice			Line 61-"Nursing is very	*capacity*
	Re-structure			different."	These are statements that
				3. Enhancing personal	describe how the nursing
				capacity	student stays in school by
					redefining self in
				Line 70-"It is so easy to know	maintaining health and
				all the	wellness, minimizing.

APPENDIX G: PARTICIPANT INTERPRETATIVE SUMMARIES

The introduction of these participant interpretative summaries is an effort to illustrate some of the main characteristics of each. These summaries also highlight the main concepts representing this research. All ten participants brought unique actions and processes to this research. It appeared that one vast similarity was the desired opportunity to be interviewed and to discuss how they had remained in school.

Participant Number One, Harry

Harry was the only single male Caucasian of the group. He was not receiving any financial aid and had no dependent children. As a 58 year-old, his typical work week consisted of a range of 25-30 hours. He had no previous starts or stops in a nursing program, was a second degree seeking student and had worked in healthcare for many years. Harry discussed many financial challenges he had faced, which ranged from nearly financial bankruptcy to dramatically cutting back work hours in an effort to balance work and school. He explained how he would greatly have benefitted from financial support resulting in only having to attend classes. Having an advanced college degree with previous healthcare experiences had not served this participant in any way and had no bearing upon his success in the nursing program. He claimed that, "the nursing exams are extremely difficult." Preparation for these exams included much more time than originally anticipated. Harry described how changing study habits and preparation for exams and assignments were burdensome for him. "Changing the way that I study has been an issue and the reading has been prodigious."

Differences in the nursing program when compared with other programs eluded this participant. For instance, he found that nursing courses included very broad subject matter; therefore, making it even harder to anticipate what was expected to know for exams and

assignments. "It is so easy to know all the information when it is essentially finite. The way that the questions are worded is such that not even experienced nurses always agree with each other on the answers to the questions." Furthermore, Harry was specific in how he had learned to accept a different language, nursing, in trying to understand healthcare concepts. "It's easier to just remember the wrong answer." He was surprised as to how his preparation for nursing exams included very detailed steps but that his grades did not correlate with the insurmountable degree of time and effort. He described that specific nursing exam items, such as application questions, were continually missed with over 80% incorrect.

This participant described how family support was of great importance for the nursing student. He felt that while classes were in session, little time was afforded for social interactions with family. For instance, Harry's family lived out of state and he had little to no contact with them during this period. Harry described a well-known concern, evidenced by research, that more nurses would be needed to meet patient needs and enter the RN workforce in the coming years. He questioned why more resources were not identified in an effort to educate and prepare more student nurses to meet this concern.

Participant Two, Fiona

Fiona was a 23 year-old single female Caucasian. She had no dependent children and was not working. She was enrolled in a previous nursing program and was not successful. She did not indicate that she was receiving any financial aid. Fiona had failed out of the previous nursing program due to "working too much." In her interview, she stressed the need for a specific and planned process of making it through nursing school. "I didn't have enough time to dedicate to the program and I didn't make it through. I started here and I completely rearranged my whole life, really my whole life."

147

Fiona described the extremes of negotiation she encountered with family and friends, such as allowing her to have sufficient time and a quiet, stress free place to study and prepare. She found that her success of staying in school was dependent upon the balance between school, work, and any social interaction. "I take the time that I would be going out and having a normal college kid social life to relax and just be still. I will put away my books and just have a relaxation sanity day." She commented that she had to live alone and could not work while classes were in session. Fiona did benefit from being able to record nursing lectures and discussions. She described her repeated negotiation with family members, "no one is allowed to stress me out." Fiona's continued separation from life stresses allowed her to be successful and stay in school. She described how her self-confidence had greatly increased while enrolled in the current nursing program. She had employed specific actions to stay focused and aspired to her life goal of a career in nursing. Fiona explained, "I compartmentalize to the extreme." This statement explicitly described her process of minimizing actions such as ending relationships with long-term friends and learning to place priorities by ignoring outside stressors.

This participant outlined some of the ways she had "revamped" study habits while in school, such as: making outlines, rereading, doing more practice questions, learning what times of the day would be best for retaining concepts, printing out and reading articles with highlighting, not wasting time, and participating in study groups. Participating in study groups was important to Fiona because it helped her to notice things that she ordinarily would not have noticed. In conclusion, she described how important it was for her to listen to her body while being enrolled in such a rigorous program. This included time management for addressing physical needs and as she so poignantly stated, "in figuring out yourself." This would include paying attention to eating, exercising, and drinking enough water. Fiona experienced some

physical issues during nursing school, such as on-going headaches and the identification of a heart condition. "I think that nursing school has been a lot of figuring me out as far as how my brain actually works."

Participant Three, Anna

Anna was 26 year-old married female Caucasian with a four year-old son. She was currently not working and was receiving financial aid. She had no previous starts or stops in a nursing program. She had financially prepared for nursing school by hoping to attend classes during the week while working as a nursing assistant on the weekends. However, this plan was changed when Anna started falling behind in her studies. "I was doing 32 hours between Saturday and Sunday, which left me the entire week open. I thought this would be good. I could go to school Monday through Friday. That worked for three months. I was failing miserably, had not passed any of my exams, and had not spent any time with my family." This created undue stress for this participant with an additional unforeseen aspect of not having time with her family. Anna detailed her journey in trying to manage stress from school and trying to balance her time with her child and family. "I am not going to cry over this program anymore. I will spend time with my child and my family and pull my weight." She significantly altered her life priorities while not listening to others. "Everyone kept telling me, you are going have to kiss your family good-bye and tell them you will see them in May." As these events were unfolding, she commented on her unrelenting goal and perseverance in becoming an RN. "I needed to do something where I would always be able to take care of my family."

This participant described how family support was so encouraging to stay in nursing school. Her family supported her by giving her a new desk and a quiet place to study. "They went in and painted my entire new office, with furniture and sayings on the wall such as if you

believe it you can become it." Consequently, she quit her job, allowing much needed time with her family and school work.

Another outside and important influence for this participant was her spiritual support. She realized that the one thing she could rely on was her faith. "I found I needed to trust in God and let God carry the burden." Anna described how her family and spiritual faith supported her in all things of life including nursing school. This reliance enabled her to develop priorities which relieved stress from school. "I felt like there was a glass-ceiling. I was making 78s on my tests." This participant described how her grades improved with less worry. She was able to concentrate better and not worry so much about the nursing program. She found that an established routine and time management strategies were crucial. For Anna, this included keeping Sunday as family day, staying organized by scheduling time for family and praying, and completing daily readings. The ability to improve her overall stress of school appeared to be paramount for this participant.

In preparation for studying and exams, Anna declared that devotion to memorization techniques was of no benefit. Studying with small groups, covering more of the difficult nursing content, and reviewing notes right after class provided more of a benefit. Anna had tried many exam strategies. "I did the whole peppermint thing because it helps your memory, wear blue, highlight in different colors. I did it all. It didn't help." She offered tips for studying including not procrastinating and keeping a calendar for time management. "Asking questions is important during class and staying positive." Support and assistance from the nursing instructors helped her with understanding of the nursing content. She commented on how important this was for her and advised others to seek out instructor help. Staying positive was also very important for this participant. One important aspect of reviewing for exams included redefining when to study.

Anna found that by getting up at 3 a.m. to go over highlighted content was the best way for her to review. "This is quiet time and it keeps things fresh."

Participant Four, Aurora

Aurora was 30 year-old married female Caucasian with a four-year old daughter. She was currently receiving financial aid and was not working. She had no previous starts or stops in a nursing program. She considered herself to be a single parent because her husband was working out of town through the week. With a good degree of family support, Aurora was able to ensure child care, especially on clinical days. She received some federal support during school ensuring that child care would not bankrupt the family when she had to quit her job. Aurora described how her family support has been so important while in school. "Having children also has proved a little difficult, but establishing study time for all has been helpful." She included her daughter with study time by letting her draw pictures and color on old clinical maps. "I tend to do a lot more studying either at school before I pick up my daughter or wait until she goes to bed." Finding outside supportive resources such as an understanding day care that allowed early drop off and late pick up was helpful for Aurora. This participant was greatly dedicated and mentioned her commitment saying, "This is my calling, this is what I was put on this earth to do. So, whatever it takes to get through."

In learning how to study for nursing exams and assignments, Aurora found that, "You have to grasp the big subject and focus on the important content." She typically tried to learn at least 70-80% very well, allowing the rest to follow. "Instead of nit-picking and learning every single little thing, if I understand the big concept, the little stuff makes sense." Other study habits included recording herself while she studied with the ability to listen repeatedly. This participant commented that she does not like large study groups. She found that studying with just one other

person helped her best. During class, Aurora did not take notes or record anything. "I am more auditory, and it helps put a voice memory with the information so I can remember; I just listen." She found benefit from stress-reducing activities and staying ahead with her reading. Aurora highly praised the support she had been given from her nursing instructors and the influence they had upon her to stay in the program.

Finally, she described her intent of going to school and her commitment of wanting a better life for her child with degree completion and licensure. Aurora mentioned the sacrifice that she and her family had endured in order for her to keep going to school, "But really, just being committed and being willing to sacrifice things that I want and time I want to spend with my daughter." Nothing was going to stand in the way of this participant achieving her dream of becoming an RN. "Over my dead body, I am not failing out. This is not going to happen."

Participant Five, Trinity

Trinity was a 23 year-old single female Caucasian with no dependent children. She was receiving financial aid and was working from 10-15 hours per week. She reported no starts or stops in a previous nursing program. This participant expressed a great need to have financial support while in school. Trinity had personally received financial aid such as Pell (Basic Opportunity Educational Grant) grants, student loans, and WIA (Workforce Investment Act of 1998) funding, all of which were greatly needed to stay in school. However, the paperwork to adhere to guidelines for federal monies had, at times, become a great burden for this participant. "I made sure I kept up with everything such as appointments every two weeks and all the attendance sheets and all the forms I had to fill out." She expressed how changing from full-time to part-time work caused such a burden for her. In seeking out advice from her nursing

instructors, Trinity realized the necessity of balancing school and work. "We also talked about the fact that I was working part-time, and she told me that I was working too much."

Trinity benefitted greatly from family support in order to manage finances to stay in school. Her mother often bought groceries for her during the semester in order to help out. Preparing for nursing school was of great importance for this participant. Financial concerns included evaluating bills for restructuring, trading cars for a cheaper payment, reducing insurance payments, and especially not planning for any vacations. "We did look at our bills really closely when I started the program, and we've minimized them as much as we could."

Academically, Trinity redefined her study habits. These actions included restructuring her note taking, participating in remedial sessions, and avoiding study buddies. "I definitely like taking notes on the laptop better because we figured out last summer that there's just way too much information and not enough time because you can't write that fast." She was very surprised as to the required volume of reading and preparation for nursing classes. "When I first started the program, the biggest challenge was the shear amount of material that we covered and specifically the volume of pages we had to read per unit." She diligently searched the internet for strategies that would help deconstruct nursing content in order to better retain the information. In the beginning of her nursing program, Trinity was studying over eight hours per day. Currently, she has minimized that requirement to less than four hours per day with better time management.

In preparation for exams, she highlighted specific nursing content, reviewed power point presentation outlines, and sought out a quiet time and place for studying by lying on the floor with all study materials spread out around her. Trinity highlighted the benefits from reviewing study material the morning of the exam and the utilization of practice questions. During nursing examinations, this participant described the importance of not allowing other students finishing

153

early to not be distracting. "There is always this one person who is done, and I'm about 50% done, and I just have to not let it bother me." Trinity shared the continued importance of trying to feel as comfortable and stress free as possible during testing to ensure a better performance on nursing examinations. Lastly, the nursing examinations were different than others with which she was familiar. "Once I got past the scare of all the reading and got more comfortable taking the test, which was another challenge, this was a whole new type of testing."

Other processes of trying to stay in school included job experiences in healthcare. "I even looked into whether working as a nursing assistant would help while in school." Nursing instructors had greatly encouraged students who were struggling to find part-time work as nursing assistants. However, this participant found little to no job opportunities in which employers would work around her school schedule. One home health service insisted that she care for an extremely obese patient with no assistance with personal care, placing Trinity in a legal as well as an ethical dilemma in delivering patient care.

Completing the pre-requisites for admission to the nursing program was a process and a challenge. "There was lots of highlighting and summarizing, which prepared me somewhat for the nursing program." Trinity shared that she felt school breaks were not beneficial when students stopped studying and instead suggested that they should keep reading. "The brain forgets." In addition, watching others drop or fail out of the program was quite disturbing for this participant. This class had seen an attrition rate of over 65%. "I was very upset over students dropping. It was hard to watch that each semester students were not returning." This shared stress from Trinity's class perpetuated similar questions among students including, "Am I studying enough compared with others?"

In conclusion of this interview, the participant described an easier transition and less stress when being familiar with the requirements of the nursing instructors from semester to semester. Typically, in the ADN programs, students may have contact with several classroom and clinical instructors. Trinity found the changing nursing instructors to be difficult in anticipating course requirements. Yet, she was very determined in completing her degree. "You have to do what it takes to stay in school."

Participant Six, Gwyen

Gwyen was a 37 year-old single female Caucasian parent with two teenagers. She typically worked 24-hours per week while in school. She was currently receiving financial aid. She had one previous start in a nursing program in a different county. She overwhelmingly expressed the importance of time management to stay in the nursing program. "With two kids, animals, a mortgage, and a job, I have to manage my time." She had to decrease her work hours to manage classes. Her previous enrollment in a nursing program resulted in academic failure due to many unmanageable stresses. At that time, her children were much younger, and she had little help from her spouse.

Organization of time for this participant included specific strategies she incorporated for work, home, nursing class, and clinical. "I take notes in class, and I do it really sloppy and go home and recopy them. My notebook is divided, one tab for labs, one tab for clinical, one tab for each test, and so I keep everything together." In addition, she was able to read and study at work and was a member of a study group. Gwyen found that her experiences as a nursing assistant were meaningful and helped her with school. For example, she was able to apply her prior work experiences to her nursing class and clinical course requirements. She described her reliance upon friends and her current partner, which was in contrast to her previous enrollment in a

155

nursing program. "There's a lot that you have to do, too. Getting in is the easy part, staying in is the hard part. There's so much you have to sacrifice."

Gwyen commented on the importance of finding the right balance of fun and school. Her children are now older, and she has more time for studying. "Before, I was all study; I failed the first two exams. On the third, I made a 91." This scenario represented, for Gwyen, a need for some time away with a reasonable balance of school and social interaction. She described how some "away time" would be important for everyone.

This participant described how teacher support was crucial during a time of stress. "I feel more comfortable with the instructors here; they were not so helpful where I was before." Gwyen commented on how she benefitted from seeking out her nursing instructors for advice and that she felt that her current instructors were not "trying to weed her out." From this interaction she found inner strength and was able to rely on her independence. "I was going to go postal. I was losing it. I was so stressed between both classes and all the work we had to do and things going on at home. I was ready to kill somebody. So I talked to Ms. M and she gave me this little pep talk. She said we know you can do this and we are behind you 100%." Partner support has also been important for Gwyen. With two ex-husbands, she has learned to rely upon her inner strength and independence for survival, which also helped her to find the strength to stay in school. "You have to really want the degree."

Participant Seven, Henrietta

Henrietta was a 37 year-old female married Caucasian second career seeking student with two small children. She was receiving financial aid and was working between 16-24 hours per week. She had no previous starts or stops in a nursing program. Financial balance was crucial for this participant to attend nursing school. "I knew that I would be leaving my full-time job, and I

had a two year-old. I knew that I needed to get my finances in order. So, I paid off the vehicle bills and credit cards. I got us as debt free as possible." As a student attending evening classes, Henrietta was able to maintain a full-time job while keeping up with pre-requisite courses. However, once admission to the nursing program was realized, a plan for attending day classes was necessary. "You really have to anticipate the rigor of school." She explained how working 16-24 hours Friday through Saturday, leaving the week to prepare for class, was optimal for her. Financial aid such as Pell grants and WIA were also crucial for paying for child care and paying for tuition and books.

Henrietta presented some strategies of planning for how to study. "I found myself struggling to find time to study because when you're at home with children you're always trying to spend time with them." She found that studying away from home was conducive for success. For instance, Henrietta described how staying after classes to study in the library gave her significant balance. "I really struggled during the first semester. I had to remove myself from the situation to figure it out." Also important to Henrietta was her family. She expressed the desire to stay in school and to be able to spend time with her two and seven year-old children. Supports from family, the opportunity to work less, and staying in school were the goals that this participant set forth.

One area of grave concern for this participant was the surprise of the difficulty of the nursing exams. "I've never encountered these types of questions before." The participant described the differences she found with testing. "It involves critical thinking, whereas in courses like anatomy and physiology, the exams were very concrete." Henrietta suggested some strategies for success for nursing students enrolled in Associate Degree Programs. For instance, more time for review of nursing exams was desired. "Tests should be learning experiences." She

felt that exams should be followed with extensive review time for struggling students which would also create further learning opportunities of the content. "Test answers are protected and the rationales are not enough." Due to this protection, Henrietta purchased supplemental resources and texts to help prepare for the exams.

Restructuring study habits was a necessity for success in preparing for nursing exams, assignments, and clinical activities. Henrietta suggested that taking notes on a computer during class was most helpful for her, but that participating in study groups was not. Rising early the morning of an exam served her well and gave her the opportunity for reviewing in a quiet setting.

Henrietta gave significant examples of how colleges could support nursing students through mentoring and tutoring services. "I would say there is not a lot of support out there for nursing students. When I was in my first semester, we'd been working at the hospital for a short time. I remember thinking how great it would be if a second year nursing student could mentor a first year student, even in clinicals." Henrietta felt that there should be opportunities for support. For instance, most colleges offer biology and math tutors, so it would be beneficial to also offer nursing tutors.

Participant Eight, Amber Lynn

Amber Lynn was a 32 year-old single female Caucasian with three children ages 7, 11, and 13. She was receiving financial aid and was not currently working. She had no previous starts or stops in a nursing program. She had planned on going to nursing school and working at least twice per week, but with the rigor of the program, she had to quit her job, which burdened the family. "If it wasn't for my hard-headedness and pride, this program probably would have did me in." Amber Lynn survived several financial stressors during the first few semesters. Not only had her family undergone foreclosure, but they had to move twice during the first year of

nursing school due to financial troubles. Because of the current national economic issues, her husband, a contractor, had to start working on the coast. Therefore, little childcare support was available. In addition, Amber Lynn had no local family and all her friends had childcare issues of their own. "It has been hard because we have had to move several times during school, and he was on the coast working." She described how important financial aid had been for her and her family during the first year of nursing school. "Pell grants have been very helpful." With the sudden downturn of the economy, moving, and other family issues, Amber Lynn felt compelled to stay in school while trying her best to organize everything on her own. "I found myself at home crying and did not want to continue in school. It was very hard." She shared how she relearned how to manage and balance her entire life to stay in school. "It has been hard to study in a messy house and there were many rule changes in the house because of it. So it took a while for everything to get situated at the house because of school and all and I just kind of let things go."

This balance of school, family, and finances had proved to be a new learning experience for Amber Lynn and her family. For instance, she described how much she had learned in the first semester about the rigor of the nursing program and the sacrifices that had to be made to stay in school. With three children, Amber Lynn had to learn to balance not only meals but other activities such as ball practices and games. "Dinner is not so healthy." She emphasized her desire to get the kids to practices and not "put them on the back burner." "I have to constantly explain to them that it will get better." She has learned to manage study time right after nursing classes and before her children came home from school. Amber Lynn has also sacrificed family relationships to maintain her goal. "It has put a damper on my relationship with my husband just because it's so time consuming, stressful, and tiring."

Staying in school has demanded much more time for studying. She described that "I am constantly in the books." Amber Lynn was explicit in describing how she studies. For instance, she mentioned how she has to reread everything three and four times due to not retaining as well as she would have liked. "Taking notes, making note cards, drawing pictures, and all the readings: I pretty much do it all. I even had my kids be my little dummies." Her goal when taking notes during class was to capture what the instructor emphasized. Having the use of dictionaries and highlighting the text were all important to this participant. Amber Lynn mentioned that she benefitted greatly from being able to record lectures, but that the privilege had recently been taken away from her class. This had occurred due to class arguments that had started over what one of the instructors had emphasized in class compared to what was addressed on an exam. "Going back and listening again was great."

The unavailability to record lectures was postulated as an obstacle by this participant. Amber Lynn also described that one-on-one tutoring sessions would be more beneficial instead of the large study groups that were advised by nursing instructors. She highlighted how meeting with study groups was a hindrance for her when everyone wanted to meet at noisy restaurants. This was time Amber Lynn could not afford especially when, "The group would get off on another subject." In addition, another obstacle to her success was the frequent test items in which she felt were not somehow emphasized in class. "They can pull something out of the air that is related to the topic but wasn't anything we went over."

Participant Nine, Bridget

Bridget was a 21 year-old single female Caucasian with no children. She was receiving financial aid and she was also working anywhere from 15-18 hours per week. She also had no previous starts or stops in a nursing program. She expressed the significant change in her

lifestyle while trying to stay in nursing school. "Actually, I like to joke that I don't have friends, which is not true, but it's funny because I never go out." Bridget was self-supported because neither of her parents worked. In order to create some income, she was working at a grocery store instead of with a more recent job with a home health agency. She mentioned how the home health agency was not flexible with class schedules or clinicals. Recently, she had obtained a tutoring job with the same community college she was attending. "I got a job tutoring at the college and it has been the best job I could have because the people that run the tutoring understand about trying to go to class and study."

Bridget has had to assume many financial costs due to receiving Pell grants that were based on part-time enrolled hours. She expressed her disappointment in that she was only considered a part-time student because the nursing program does not fulfill the standard of 12 hours for full-time status. Bridget has been very creative in trying to enhance her income to stay in school. She has had several part-time jobs in order to try and manage around classes and clinicals. This included making up the difference for tuition, fees, books, meals, and car costs for clinicals.

The emotional support from her parents was crucial for Bridget. She described how she depended on them and that she felt very close to her parents. This participant shared her routine of having breakfast with her dad before an early clinical day, and how much it helped her to stay focused. "I actually get up earlier for it, but it really helps me big time to decompress."

Study habits for this participant included sitting down with notes and reading with no television or distractions, reading the chapters while trying to fill in the gaps, and teaching certain aspects to her boyfriend. Her boyfriend was an Emergency Medical Technician and his influence helped Bridget to see the whole picture. "I think, with information that is so

161

complicated, the more perspectives you can get, the more complete the picture is." Bridget tried to incorporate a broader perspective when studying by including everything she could find out about the nursing topic. Another study habit she described was how she did not like group projects, but instead liked to teach others. "I don't like my grade being dependent on someone else."

Bridget was able to communicate how she felt about trying to become a nurse and that some were not adaptable to the process. "You can tell if they belong in nursing. It's a way of thinking." She mentioned how some people process information differently and how some of this information gets retained. "Some of them just aren't going to make it and you can kind of tell because it's just not their thing." The perspective of "thinking as a nurse" was, for Bridget, a process that not everyone could accomplish. "Nursing is a specific perspective of life and learning and not everyone can understand it." She thought that who you study with was as important as how that thinking is stimulated. For instance, this process is often identified in the first semester. "There are different ways to take in the world around you and there is no specific way to study. If you're a lawyer, you go to law school and learn to think like a lawyer; and in nursing school, they are trying to make you think like a nurse. I think some people have the ability and then others just can't think that way just because of how they process." In conclusion of the interview, Bridget mentioned that it would be a good suggestion to have a pre-nursing class for students and instructors to see if they can adapt to thinking as a nurse.

Participant Ten, Christy

Christy was a 33 year-old married female African American participant with one dependent child. She was receiving financial aid and was not currently working. She had two previous starts in a nursing program of which she was not successful. She described how

important adequate support systems were for nursing students to stay in school and do well. "My support system was the biggest reason that I could remain in school. If I didn't have that, there would be no way since I don't work." Her main financial provider was her husband. She explained how valuable and close her relationship was with her mother and that it often took precedence over her relationship with her husband. Christy also felt that it was important to have opportunities to converse and rely upon parents and friends. "I am looking for positive feedback. I feel like once you hear anything negative, it just brings you down. I need people around me, which help lift me up. I have days when we all get down, and I need the positive reinforcement letting me know that I can do it." Learning from life experiences, whether positive or negative, was also paramount for this participant. "I just try to work harder. I just learn from my experiences." For instance, these life experiences have helped Christy to understand that she has to study at home and that she could not focus on any marital issues while in school. "Not letting marital issues get the best of me like I was before. I have to leave that at home." She also described how not working has been the best change in her lifestyle. "It works out better now that I don't work, and I can manage my time and concentrate."

Christy was adamant about trying to relieve some stress by performing certain rituals while studying and completing nursing exams. These measures included using body lotion that was intended to relieve stress, chewing Big Red chewing gum, and using a specific pencil. "I have heard that if you do the same things or kind of the same things when you are studying, it will help you remember stuff for the test."

She commented on the necessity to rearrange her daily schedule by not working and taking things day by day. Christy's study habits included doing the same things over and over while ensuring she had a quiet place with no distractions from a phone or television. She

emphasized that practice questions and alternative resources from suggested texts were important for her to be successful. Morning routines on nursing exam days included that she would rise early to do reading and studying. "This helps me to concentrate better."

APPENDIX H: UNIVERSITY AND MEDICAL CENTER INSTITUTION REVIEW

BOARD PERMISSION LETTER

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office **252-744-2914**@ · Fax **252-744-2284**@ · **www.ecu.edu/irb**

Notification of Initial Approval: Expedited

From: Biomedical IRB
To: Kimberly Priode
CC:
            Marie Pokorny
Date: 7/23/2012
Re: UMCIRB 12-001313
            The Use of Grounded Theory to Develop a Framework for Understanding Retention of Students in
            Community College Nursing Programs

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any
consent form(s) is for the period of 7/21/2012 to 7/20/2013. The research study is eligible for review under
expedited category #6 and 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to
eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to
participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing
review/closure application to the UMCIRB prior to the date of study expiration. The investigator must adhere
to all reporting requirements for this study.

The approval includes the following items:

Name	Description
Appendix B | History	Recruitment Documents/Scripts
Appendix C | History	Interview/Focus Group Scripts/Questions
Consent form-Dissertation study | History	Consent Forms
Dissertation proposal | History	Study Protocol or Grant Application

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418 IRB00004973

APPENDIX I: COMMUNITY COLLEGE PRESIDENT PERMISSION LETTER

**Caldwell Community College
and Technical Institute**

Office of the President

September 22, 2010

East Carolina University Institutional Review Board
East Carolina University
East 5th Street
Greenville, NC 27858-4353

Dear Institutional Review Board:

This letter is to inform you of our support to allow Kimberly Priode to proceed with research in an effort to investigate nursing student retention. Permission is granted to conduct this research on the campus of Caldwell Community College and Technical Institute in preparation for dissertation and directed research requirements.

Sincerely,

Kenneth A. Boham, Ed. D.
President

2855 Hickory Blvd., Hudson, NC 28638 ● (828) 726-2200, 328-8697, or 264-7670
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