# ATTRITION IN AN ASSOCIATE DEGREE PROGRAM: THE LIVED EXPERIENCE OF THE NURSING STUDENT

by

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#### Abstract

Using Wylie's (2004) Model of Non-Traditional Student Attrition as the theoretical framework, results of the analysis revealed student- and nursing-program-related factors that facilitate or hinder successful completion of the program. Barriers of completion included (a) amount and difficulty of course requirements, (b) difficult test rubrics, (c) ineffective instructors, (d) fulltime teaching, (e) difficulty in balancing work, family, and school responsibilities, (f) language barriers, and (g) separation of work and school environment. Results of the study further showed that resolution of students' personal obstacles hindering program completion included (a) time and financial management, (b) establishing good relationships with instructors, and (c) use of student support services. While there is a plethora of extensive studies that have developed theories to explain students' early departure from nursing programs, there are only limited studies conducted with respect to nurse programs' retention or attrition in terms of the factors that lead to success in nursing programs. This current study investigated the lived experiences of students currently enrolled in an Associate Degree in Nursing (ADN) program as well as those who have dropped out of the program at a Midwest community college. Data were collected from 13 participants who participated in the semi-structured interview and were analyzed through a modified Moustakas (1994) van Kaam method. Results can be utilized by educational institutions to create ways to eliminate these barriers. Colleges might be more willing to provide additional student support during enrollment if the external factors that help students achieve success could be identified.

## **Dedication**

This dissertation is dedicated to the many people who have influenced my life and have supported me throughout my educational endeavors. I could not have achieved this dream without their continuous support and reassurance, thus, to each of them, I am very thankful. To my children, Zachary and Phillip, who gave up a lot so I could complete this dissertation. I love and thank them both very much for understanding. I hope my completion of this dissertation inspires them to follow their dreams. To my family and Darren, thank you for your love, unwavering support and absolute belief in the completion of this dissertation that made this educational journey possible.

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### **CHAPTER 1. INTRODUCTION**

## **Introduction to the Problem**

The higher education administrators of nursing programs in the United States consider student retention as one solution to the increasing nursing shortage in the country (Douglas, 2009). With the associate nursing student retention averaging around 80% in this country in 2006-2007 (National Center for Education Statistics [NCES], 2006) and the national reports of the increasing number of unfilled nursing positions in the healthcare industry, the Associate Degree in Nursing (ADN) programs have been in the strategic position to support the inability of the bachelor's program to address the national issues of future nurse shortages (Wittman-Price & Kuplun, 2003). However, student retention remains the concern of administrators in many ADN programs across the country (American Association of Colleges of Nursing [AACN], 2008). In this regard, administrators of nursing programs are being pressured by the education and healthcare sectors to recruit, retain, and support completion of students enrolled in ADN program to consequently fill the increasing number of vacant nursing positions in the country (as cited in Douglas, 2009).

The nursing shortage has challenged nursing education programs to produce as many graduates as possible; however, research should be done to determine the elements leading to successful ADN program completion (Alden, 2008). Through the use of phenomenological research, this researcher sought to understand the lived experiences of ADN students in order to determine the factors that facilitate or hinder the completion of an ADN program.

## **Background, Context, and Theoretical Framework**

In this section, the background and context of the study will be discussed. The theoretical framework of the study, which was based on Wylie's (2004a) Model of Non-Traditional Student Attrition, will also be discussed.

## **Background**

The issue of student retention has been one of the central foci of institutions of higher education for decades. In the 1900s, education research focused on understanding both the empirical and theoretical fields of student retention (Douglas, 2009). However, the dynamics of the school and home environments led various researchers to examine the phenomenon further within a specific context (American Nurses Association [ANA], 2001; Buerhaus, Staiger, & Auerbach, 2009; Gallagher, 2010; Nevidjon & Erickson, 2006). Years of research show that the average graduation rate in this country is only 50%, a rate that cannot support the increasing demand for nursing professionals (NCES, 2009).

The field of nursing within the healthcare sector dominates the labor workforce in the United States. The unmet number of nurses required in the delivery of healthcare services is an issue that affects the national economy (Buerhaus et al., 2009). Crow and Hartman (2005) explained that work stress in the field of nursing affects the recruitment and retention of nurses during a challenging labor market. Because of this, many individuals drop out prior to graduation or leave the field between graduation and placement. However, studies confirming these factors exclude the perceptions of students in ancillary degrees (ANA, 2001; Buerhaus et al., 2009; Gallagher, 2010; Nevidjon & Erickson, 2006).

Previous studies indicated that student expectations of the higher education institution are shaped by the policies and practices of that institution (Jacobsen, 1997; Ziskin, Hossler, & Kim,

2009). However, despite the implementation of strategies with regard to student retention, there remains an increasing amount of attrition among higher education students. The issue of the relative change of school environment where competition exists between and among institutions puts emphasis on determining student satisfaction in an effort to attract, retain, and foster stronger relationships with students. This can consequently address retention among higher education students.

#### Context

The school and home environments have been considered influential in the successful academic completion of students. The specific environment that the researcher examined involved a community college that has been offering an Associate Degree Program in Nursing since the year 1975. A majority of the students enrolled were persons of color and were classified as students within the low income category.

The nursing program of this community college admits students every fall and has an average annual enrollment of 130 students. On the average, the community college admits 65 students every fall. However, due to the increasing attrition of nursing program students, this community college offers two optional exit programs. These are a two-semester Practical Nursing (PN) Program and a two-semester Associate in Science in Nursing Mobility. The first option accepts the nursing program first-year completers into the second year with no formal application required. The second option accepts practical nursing program completers. Another strategy institutionalized within the community college to address attrition was the option for students to enroll either as full-time or part-time students. These strategies were expected to deliver the required number of nursing graduates to fill vacant positions in the healthcare industry.

#### **Theoretical Framework**

The theoretical framework for this study was based on Wylie's (2004a) Model of Non-Traditional Student Attrition. This model both synthesized and extended the features of Tinto's (1993) Model of Student Departure and Bean and Metzner's (1985) Model of Nontraditional Student Attrition. Based on the work of Tinto (1993) as well as Bean and Metzner (1985), Wylie (2004a) offered new perspectives in understanding student attrition in light of the changes in the academic learning environment.

Wylie (2004a) acknowledged the theoretical contribution of Tinto's (1993) model to the current understanding of the factors that influence students to depart in the learning environment. The model postulated by Tinto remains the leading framework in studies that seek to determine factors associated with attrition of students (Braxton, 2000). Tinto's framework of student departure covers four stages of the life of students in the learning environment. According to Tinto, a student's cognitive and social qualities, intrinsic motivation, and the process of social integration influence commitment to course completion (Seidman, 2005). These variables can be analyzed individually or collectively to predict the likelihood of a student remaining in college. Tinto posited that students must have the commitment to the program of study to ensure his or her successful integration in to the academic system. However, Tinto argued that integration of students depended on the quality of the program services and systems he or she encountered. With restricted social integration, the student's level of interest and motivation may wane, which affects his or her decision to depart from school.

Bean and Metzner's (1985) Model of Nontraditional Student Attrition postulated that integration of students in school settings within the context of his or her interaction with faculty and staff is crucial in the completion of the course. These authors postulated that the perceived

marginalization factors such as age, working part-time, and lack of finances affect the student's motivation for social integration. These factors were considered as causing the nontraditional students to depart from college because these students are unable to establish social interaction with other students, faculty, and staff.

Through a review of the literature, this researcher found that numerous researchers have criticized the applicability of the attrition models postulated by Tinto and Bean and Metzner. Scholars have contested the use of these three researchers' models because of the inability of their models to provide an analytical framework regarding the peculiar needs of students in a diverse learning environment (McInnis, James, & Hartley, 2000; McInnis, James, & McNaught, 1995). Tinto (1993) and Bean and Metzner (1985) argued that these are working models that require further examination for improvement of the theoretical base.

Wylie's (2004a) model postulated two sequential processes which have been termed as facets. In Wylie's model, evaluation of pre-enrollment and re-evaluation and disengagement are processes that influence the decision of nontraditional students to depart from college. The pre-enrollment evaluation process involves the identification of the socio-demographic and academic profile of students. In the framework of Bean (1980), these variables indicated the qualities of students that are important in his or her academic journey in the learning environment. The variables academic and environment were also used in Wylie's model. In addition, two new factors were incorporated in to the model. These variables include the student's perception and self-evaluation to participate in a course and the intrinsic and extrinsic motivations that sustained his or her participation in the academic activities.

The last two variables in Wylie's theory include the behavior of the students toward themselves and their associated wants and aspirations. According to Wylie, these variables act as

benchmarks that determine the resilience of the student to cope with difficulties in the learning environment. The high level of perceived self-worth and aspirations of students predict academic completion (Craven, Marsh, & Burnett, 2003; Summers, 2003).

The second stage of Wylie's (2004a) model, the Re-evaluation and Disengagement facets, postulated the period where students re-evaluate the purpose, commitment, participation, and difficulty encountered. In this stage, the students re-enter in a process where purpose, commitment, participation, and difficulty can be resolved through disengagement. This stage considers the facet of worth adjustment in academic, social, participation, and disengagement. Wylie claimed that when a student resorts to the process of worth adjustment, his or her concepts of self and the academic activities do not influence the student's decision to depart from the learning environment (Wylie, 2004a).

This researcher investigated the lived experiences of both currently enrolled ADN students (during the time of the study) at one Midwest College as well as those who have dropped out, in order to determine the factors that predict program completion. It is hoped that this research will add to the literature regarding attrition and will then provide nursing school administrators with the empirical information of how to decrease the attrition rate in their associate nursing degree programs.

#### **Statement of the Problem**

In 2005, Crow and Hartman reported that the increasing population in the Midwest required nursing education programs to increase their graduation rate. However, in 2010, the American Association of Colleges of Nursing indicated their inability to supply the increasing nursing demands of the state in which this research was conducted. The specific problem is that 20-70 percent of ADN students in the United States are at risk of dropping out of their program

(Pennsylvania Higher Education Assistance Agency [PHEAA], 2002). Despite studies addressing retention among nursing program students, there remains the unresolved problem of a declining number of student nurses in this country. This current study investigated the lived experiences of students currently enrolled in, as well as those who have dropped out of, the ADN program of a community college in the Midwest.

## **Purpose of the Study**

The purpose of this study was to explore the lived experiences of a number of nursing students who were currently enrolled (during the time of the study) in an associate degree in nursing program at one Midwest College, and an additional number of students who have dropped out from this nursing program. This research was crucial in order to determine the factors that contributed to the increasing attrition rate within the associate degree program. Specifically, this researcher explored the lived experiences of students in an associate nursing program, both those who have not been successful and dropped out as well as those who were currently enrolled in the program during the time of the study. It was hoped that the factors that may predict program completion would be discovered.

## **Research Questions**

The main research questions were:

- 1. What are the lived experiences of select student nurses currently enrolled in a Midwest ADN program that may contribute to the understanding of their retention?
- 2. What are the lived experiences of select students who have dropped out of a Midwest ADN program that may contribute to the understanding of their attrition?

In order to answer the main questions, the following sub-questions were then proposed:

- 1. What are the currently enrolled students' perceptions regarding the factors that facilitate the completion of an associate nursing degree program?
- 2. What are the previous students' perceptions regarding the factors that contributed to their dropping out of the program?
- 3. How do student nurses manage obstacles to the completion of the program?
- 4. What factors are perceived as being effective in completing the associate nursing degree program?

## Rationale, Relevance, and Significance of the Study

In this section, the rationale, relevance, and significance of the study are discussed in detail.

#### Rationale

The nursing profession is faced with a nursing shortage and the prediction is that it will continue to worsen. Buerhaus et al. (2009) stated that "by 2020, the United States is projected to be short at least 340,000 nurses and the associate degree programs will produce 65% of nursing graduates" (p. 35). However, attrition in ADN programs has been predicted to range from 20% and 70% (PHEAA, 2002), which indicates the continuing increase in the demand for nurses (National League for Nursing [NLN], 2004). As the attrition rates increase, so does the shortage of nurses, therefore stressing the compelling need to examine attrition in ADN programs. Also, as attrition rates increase, this generates more problems for the students, nursing programs, institutions, higher learning institutions, and health care facilities.

Despite the implementation of strategies for student retention, there remains an increasing rate of attrition among students in ADN programs (PHEAA, 2002). The issue of the relative

change of school environment where competition exists between and among institutions puts emphasis on determining students' satisfaction to attract, retain, and foster stronger relationships with students, which can affect retention among students enrolled in the programs. It was hoped that this study would support students' learning needs, motivation, and positive learning environments that foster student satisfaction. It is hoped that in the future, this study will result in substantial improvements in current educational operations within the associate degree program, which can provide a learning community that responds to the needs of the students.

#### Relevance

Higher education institutions have concentrated on student retention since their establishment. The problem of student retention can be traced back to the late 1960s. At that time, the Higher Education Act (1965) was passed, which subsidized students with low socioeconomic status to be able to attend universities. The majority of the students were underprepared scholastically so only a few of the students became low achievers. In fact, approximately 50% of the freshmen college students at that time were not successful in their first degree. Even though almost half a century has passed, the retention rates have not decreased over the years. In fact, according to the AACN (2010), only an average of 60% of college students finished their degree from the institution they enrolled as freshmen.

Students who want to pursue nursing as a career in the United States have a lot of options. A student's educational career may start with a practical nursing degree, an associate's degree, or a bachelor's in nursing. There is a distinction between a bachelor's degree in nursing and an associate's degree in nursing. Bachelor degree programs are designed for four-year completion, are comprised mainly of traditional students, subjects are traditionally in the liberal arts, math, and science and are usually offered in universities. Associate degree programs are

designed for two-year completion, are comprised mainly of nontraditional students, have fewer subjects in liberal arts, and have fewer subjects in math and science. Moreover, associate degree programs are usually taught in community colleges. The similarities between the two programs include basic nursing skills, same licensure examination, and same attrition rate of 50%.

The relevance of this study stemmed from the fact that despite strategies to address attrition, the percentage of students dropping out of nursing programs remains high. The lack of research in student nurse retention, particularly within the context of a specific community college, justified this current research study. It is hoped that this study about nursing student attrition, especially in community colleges, will lead to a better understanding of the factors that influence graduation rates of nursing students. The ultimate goal is to be able to identify the obstacles or challenges faced by the nursing students so that the obstacles/challenges can be addressed. The logic follows that as a result of solving the problems faced by nursing students, there would be an increase in the graduation rates in the field of nursing, specifically in community colleges.

## Significance

There is a demand for skilled workers in the United States. As a result, it has prompted the administrators of academic institutions to address the issue of student retention in the medical profession in general, and nursing programs in particular. Concerns regarding student retention in higher education have driven scholars to conduct studies in order to develop a theory, which could help explain the phenomenon of low student retention rates. Due to the present nursing deficiency in many of the states in this country, nursing associations advocated the proactive prevention of the shortfall of qualified nursing professionals who can lead academic institutions in ensuring high graduation rates among nursing students.

The current study is significant in identifying barriers of student completion in an associate nursing program in order to respond to the national shortage of skilled nursing graduates who can sustain the operation of the healthcare industry. The identification of factors that would help students to graduate with their degree would provide information for administrators of higher education institutions to come up with a program that would offer support to their students. A program that offers support to students would lead to a high student retention rate.

## **Nature of the Study**

This researcher used a qualitative phenomenology research design with the intention of examining the lived experiences of currently-enrolled ADN (during the time of the study), as well as formerly-enrolled nursing students who had dropped out, in order to identify the factors that determine associate nursing program completion.

Phenomenological research is an approach through which researchers can examine a phenomenon by researching individuals' experiences of said phenomenon (Drew & Hewitt, 2006; van Manen, 1990). A phenomenological approach is appropriate when there are no known instruments or measures for use within the intended study population (Armour, Rivaux, & Bell, 2009). According to Neuman (2006), phenomenology is a comprehensive way for researchers to investigate daily human experiences.

Creswell (2005) stated that most researchers conducting phenomenological studies tend to use 10-20 participants. In accordance with this guideline, this researcher used a sample size of 10 nursing student nurses enrolled in an ADN program at one Midwest College and 10 students who have dropped out from the program. The sampling strategy was purposive sampling

(Creswell, 2007; Yin, 2004). The preliminary list of participants was compiled through the assistance of the Associate in Nursing Program coordinator. The potential participants were sent an "invitation to participate" letter as well as a consent form which they were instructed to sign, date, and send back to this researcher if interested in participating in the semi-structured interview.

#### **Definition of Terms**

To assist understanding, the following terms which were used in this study are defined:

Academic achievement. Academic achievement refers to the extent of the performance of the student, teacher, and the institution in achieving the desired educational goals. As commonly used in academic institutions, academic achievement is measured through continuous assessment (e.g., school grade) and license examinations (e.g., state boards) of the knowledge and skills of the nursing students (Ramirez & Carpenter, 2009).

*Admission criteria*. The mandatory standards or examinations used by colleges in the selection of students for enrollment (Douglas, 2009).

Associate degree nursing program (ADN). ADN refers to a nursing program in a community college that is recognized by the state board of nursing. An individual has to study for five semesters. Graduates of the program are permitted to take the nursing licensure exam (as cited in Douglas, 2009).

Bachelor of Science in nursing program (BSN). BSN refers to a nursing program in a university that is recognized by the state board of nursing. An individual has to study for four year (liberal arts for two years and nursing for two years). Graduates of the program are permitted to take the nursing licensure exam (as cited in Douglas, 2009).

National council licensure examination (NCLEX). NCLEX refers to the standardized examination for the graduates of a nursing program. Like any other licensure examination, the test gauges the academic competency and readiness of nurses to take an entry-level nursing position. Those who pass the NCLEX examination become registered nurses.

Student attrition. This term refers to students who leave their program prior to completing or graduating from their program (as cited in Douglas, 2009)

Student motivation. This term is defined as one of the factors that stimulate a student's goal of finishing a program of nursing (Elliot & Shin, 2002).

*Student persistence*. This term is defined as students who continue through their study programs.

Student retention. This term refers to students who have not dropped out from the student's initial program (as cited in Douglas, 2009).

## Assumptions, Limitations, and Delimitations

In this section, the assumptions, limitations, and delimitations of the study are discussed. **Assumptions** 

This researcher assumed that the participants' responses represented their perceptions, views, and feelings as they experienced the life of a nursing student in a college nursing program in Midwest United States. Another assumption was that participants answered the interview questions honestly and to the best of their ability, even without monetary incentives. It was also assumed that all participants were able to recall their experiences to determine the factors that were associated with retention as well as attrition.

#### Limitations

The present study was not fully maximized because of one aspect of the phenomenological design which is its limitations with regard to the generalizability of the results. Limited generalizability of the results implies that the results or data findings of the study can only be applied to nursing schools with similar characteristics of the locale of the study.

#### **Delimitations**

The study covered the exploration of the lived experiences of ADN students at one Midwest community college regarding the completion of academic requirements. The study intended to involve 10 currently enrolled nursing students (during the time of the study) and 10 formerly enrolled nursing students in an interview that aimed to identify the barriers of completion of ADN course. The actual number of participants involved in this study was 13. Seven of the participants were current students while the remaining six participants were formerly enrolled in the program.

## Organization of the Remainder of the Study

Chapter 1 describes the problem that this researcher intended to examine, the purpose of the research inquiry, the significance of the study, the research questions, nature of the study, definition of terms, assumptions, limitations, and delimitations.

Chapter 2 offers an analysis of relevant studies and peer-reviewed articles about attrition and retention rates in higher education. The subsections of Chapter 2 highlight the role of academic administrators in the recruitment, retention, and completion of students enrolled in any education field, in general, and the nursing undergraduate degree in particular. Chapter 2 also highlights the methodologies previous researchers have used in analyzing student retention.

Chapter 3 provides a detailed discussion of the chosen research methodology, phenomenology, to answer the research questions of this study. Chapter 3 enumerates the techniques and procedures for data collection and analysis.

Chapter 4 details the results of the analysis conducted using the Modified Moustakas' (1994) van Kaam method. Chapter 4 also presents the answers to the research questions posed in this study.

Chapter 5 links the results of the present study to the current available literature concerning nursing student retention. Chapter 5 also details the implications and contribution of this research to the academic leaders' practices on student retention, particularly those students in the associate nursing degree program.

#### **CHAPTER 2. LITERATURE REVIEW**

#### **Introduction to the Literature Review**

While higher education imposes policies relative to achievement of positive learning outcomes, students may perceive such policies as detrimental, which could affect their interest and motivation to complete the academic program (Obasohan & Kortering, 1999). Providing options for students to enroll and achieve completion necessitates institutions that want a competitive edge to begin searching for effective and creative ways to "attract, retain and foster stronger relationships with students" (Ilias, Rahman, & Razak, 2008, p. 1).

Studies showed that institutional policies and practices shape student expectations of the higher education institution (Jacobsen, 1997; Ziskin et al., 2009). However, despite the implementation of retention strategies, there remains an increasing rate of attrition among nursing students enrolled in the academic institution. The issue on the relative change of school environment where competition exists between and among institutions puts emphasis on determining student satisfaction in an effort to draw, keep, and encourage positive relationship with students, which could lead to increased retention at their institutions.

Researchers continuously document evidence of gaps between higher education expectations and the satisfaction of students in the academic programs and the higher education institutions. This current study filled this gap in the literature by determining the factors that may predict program completion among ADN students. It is hoped that the exploration of these gaps will guide policy advocates, particularly those from the education sectors, to strategically

determine policies that address higher education expectations and student satisfaction, to consequently address the increasing attrition rates among college students, particularly students from the nursing program (Cheng & Tam, 1997).

Furthermore, while there are studies that document the practices and policies of academic institutions in decreasing attrition rate among nursing students, scholars reported that attrition of students in degree and ADN programs remains a challenge (Buerhaus et al, 2009; Ziskin et al., 2009). This researcher re-examined the factors that hinder successful completion of students in the associate nursing program. This study is significant because existing practices and policies of institutions regarding attrition remain ineffective, particularly in the ADN programs.

It is hoped that the results of this study will contribute to the literature regarding attrition, and may provide school administrators with the empirical information of how to decrease the attrition rate in their associate nursing degree programs. Further, it is hoped that the results of this study will serve as a guide that policy advocates in the education sector can use to determine policies to address increasing attrition rates among nursing students and improve student motivation to address program completion within the associate degree program.

It is in this context that policymakers address the nursing shortage through increasing the number of associate nursing degree graduates. The purpose of this study was to explore the lived experiences of 10 nursing students who were currently enrolled in an associate degree in nursing program at one Midwest College during the time of the research, as well as an additional 10 students who had dropped out from the same nursing program in Midwest United States. This research was crucial in order to determine the factors that contributed to the increasing attrition rate within the associate degree program.

Specifically, this researcher explored the lived experiences of students in an associate nursing program, both those who had not been successful and had dropped out, as well as those who were currently in the program during the time of this research study. The findings of the study provided information that was useful for the improvement of pedagogical practices and school environments that foster program completion. Further, the study aimed at providing a learning community that is better equipped to exemplify the academic efficacy of its students through addressing the performance gap. An expected outcome of this study may contribute to the increasing retention rate within the associate degree program through exposure to the merits of a model based on the theories underlying attrition.

This researcher surveyed available studies related to the nursing shortage, nursing academic programs, and predictors of successful nursing programs such as (a) the NCLEX-RN exam pass rate, (b) academic training of new students, (c) teaching workforce, (d) appropriateness of academic prospectus required for NCLEX-RN licensure examination, (e) nursing school recognition, (f) nursing schools' retention programs and policies, and (g) factors associated with student attrition. The keywords and terms associated with this topic included (a) nursing, (b) nursing shortage, (c) predictors of academic success, (d) academic achievement, (e) associate degree in nursing, (f) nursing curriculum, (g) curriculum alignment, (h) nursing faculty shortage, (i) nursing accreditation, (j) retention, and (k) attrition, persistence, and motivation.

The strategies used in the review of pertinent scholarly documents were (a) search of online peer-reviewed journal such EBSCOhost database and the ProQuest database, (b) Internet search for Google and Yahoo! Online, and (c) use of paperback materials such as peer-reviewed journals, newspapers, academic dissertations and theses, as well as public government reports.

These materials identified the gap in the literature as well as provided the direction of the implications of the study.

#### Theoretical Framework

An investigation of the different models on student retention and attrition showed how these models evolved. A more recent attrition model, Wylie's (2004a) Model of Non-Traditional Student Attrition, was chosen for the current study because it was deemed the most appropriate in understanding the experiences of nursing students. This model both synthesized and extended the features of Tinto's (1993) Model of Student Departure and Bean and Metzner's (1985) Model of Nontraditional Student Attrition.

According to Braxton (2000), Tinto's model in explaining the departure of students in school is a popular framework used in studies of attrition. The model emphasized factors that were intrinsic to students, which can affect his or her commitment over time (Seidman, 2005a). These intrinsic variables were used in the analysis of the individual's commitment and the collective effects on the student's decision to depart from his or her college. The model further postulated that commitment of students in the chosen course and the positive effect of his or her integration in to the school environment results in a new level of commitment.

On the other hand, Bean and Metzner's model (1985) investigated the integration of students in school settings within the context of his or her interaction with faculty and staff. These authors suggested that nontraditional students, such as those in higher education, withdraw their interest to interact with the academic community. Nontraditional students are those part-time and older students who have complex familial and social roles that obstruct them from completing the program (Bean & Metzner, 1985).

According to Wylie (2004b), non-traditional students (first generation students, disabled students, minority students, and older students) comprise a large portion of the student population. Wylie (2004a) asserted that non-traditional students are more likely to be at risk for attrition due to a myriad of reasons that may include their overwhelming responsibilities outside of school, inadequate basic education, and/or insufficient support from their environment.

According to Wylie, family and external responsibilities can become hindrances to non-traditional students. Mature students in particular have to deal with many external responsibilities, such as their families, their career and the like. Their past experiences can also act as hindrances. Their roles as a student become subordinate to their roles as parents or employees, among others (Wylie, 2004b, para. 4).

Through a review of the literature, it was found that numerous researchers have criticized the use of these models in understanding attrition. Scholars have contested that use of these models cannot generalize the academic experiences of students in a school environment (McInnis et al., 2000; McInnis et al., 1995). However, Tinto (1993) and Bean and Metzner (1985) purported that the model only served as a guiding framework for researchers interested in examining attrition of students in their local interest. These authors suggested that researchers who used their models could recommend areas or elements for improvement of the models.

While all of the above studies examined student attrition, a review of these studies showed that none of them studied students in associate nursing degree programs (ANA, 2001; Buerhaus et al., 2009; Gallagher, 2010; Nevidjon & Erickson, 2001). The internal factors such as pre-entry qualifications, goals and expectations, and the academic and social integration may not be applicable for students enrolled in short-term degrees. This current researcher explored the

lived experiences of students in an ADN program, both those who are currently enrolled and those who have dropped out from the program.

Moreover, Bean's (1985) model of non-traditional student attrition limits its non-traditional student definition to mature-age students taking part-time jobs and highly mobile students, which influences students' ability to remain or depart from college. This study examined the factors that classify students in associate degrees who may have different motivations in their decision to remain or depart from the program.

Wylie's (2004a) theoretical model of non-traditional student attrition in higher education assumes a short-term cyclic process, wherein a student's insufficient amount of adjustment to the academic environment and lack of social self-worth push him or her to re-evaluate, disengage and ultimately, depart from the university. The model focuses on the student's first semester in his or her program of study, making it a unique model from previous longitudinal model designs. The model proposed that the difficulties associated with adapting to the university environment are the factors forcing mature-age students to withdraw from the university. These challenges are related to the high expectations of academic ability as well as interpersonal interaction.

Wylie (2004a) posited that interventions founded on student self-evaluation can improve persistence outcomes by at least ten percent during the first semester of the non-traditional mature-age student. Based on his theory, Wylie (2004b) also developed the academic Career Evaluation System, which is a model that tries to form a system of structured institution-initiated process founded on a host of student self-evaluation strategies.

This model is used because the current study posited that nursing students have the same considerations as non-traditional students and would experience the same factors contributing to their retention or attrition. Studies have defined a non-traditional student as having one or more

of the following characteristics: is over 25 years of age, attends college or university on a parttime basis, and/or has to take public transportation to the school. Studies have shown that for the
past several decades (Aslanian & Brickell, 1980; Padula, 1994; Thomas, 2001), the number of
non-traditional students enrolling in colleges and universities is increasing (Aslanian & Brickell,
1980; Padula, 1994; Thomas, 2001). While many non-traditional students achieved success,
there are also some of the non-traditional students who encountered problems in their university
experience, specifically counseling and advising services, which lead to their dropping out
(Sands & Richardson, 1984).

According to Laing, Kuo-Ming and Robinson (2005), a traditional student is one who "entered higher education at the age of 18 straight from school or further education, [and] studied continuously and full time for either three or four years" (p. 170). Compared to non-traditional students, these traditional students experience a higher success rate because their families typically have also had experiences with higher education. As children in these families, the traditional student is influenced to pursue a college degree and is more prepared to enter the college environment. Both traditional and non-traditional students are influenced by their families' experiences with higher education, or lack thereof, and these effects vary based on the family's history (Laing et al. 2005).

Non-traditional students face the difficulty of transitioning from their regular life out in the world back into a school setting. For the non-traditional student, colleges and universities can be intimidating and solitary (Bowlby, 2001). Non-traditional students face the problem of going back into a school setting after staying out of it for so long. Going straight from high school to a higher education setting in a similar academic environment gives the traditional students the advantage to complete the program. Traditional students have been attending school and living

within the school for most of their academic years, continuously and intensively, while non-traditional students may be returning to the classroom after ten, twenty, or more years. While this does not mean that the challenges of transition cannot be resolved or that non-traditional students cannot succeed, it does mean that issues of attrition are even more complex for the non-traditional students.

## Review of Research Literature and Methodological Literature

This section is a review of research literature including research dealing with college dropouts, factors of student retention, current dropout interventions, student retention models (including Spady's Explanatory Sociological Model, Tinto's Student Integration Model, Astin's Student Involvement Model, Bean and Metzner's Non-traditional Student Attrition Model, Cabrera, Castaneda and Nora's Integrated Retention Model, and Benjamin's Quality of Student Life Model), the nursing shortage, nursing education and curriculum design, retention in nursing programs, retention in allied health programs, and, finally, a review of methodological literature.

## **College Dropouts**

Higher education is increasingly becoming a service industry that puts emphasis on the needs and expectations of the students (Cheng & Tam, 1997). Government report suggested that the nursing student dropout rate is 9.4%, and would continue to rise if it is not curbed by using appropriate student retention strategies (NCES, 2005). The highest student dropout rates in all nursing programs occurred in students from the economically poorest quartile, with a dropout rate ranging from 20.7% in 2000 to 17.9% in 2005 (NCES, 2005). This phenomenon alarms academic institutions and prompts them to engage in research aimed at determining appropriate strategies to attract enrollees and address increasing student attrition. Research consistently

reveals that student satisfaction influences student motivation, which addresses student retention (Elliot & Shin, 2002).

McGaha and Fitzpatrick (2005) defined dropout as an "untimely disconnection of a student in an academic program due to poor academic performance and inability to cope with the academic demands" (p. 287). These researchers stated that students who drop out lack confidence in their ability to complete the program. Hence, these substantial and sustained national dropout rates have resulted in schools developing alternative programs for potential dropouts (Kleiner, Porch, & Farris, 2002). The national goal of reducing student dropout rates and increasing graduation rates has resulted in many states implementing a variety of systems, efforts, and programs--including research--to seek better strategies to deter the trend of students dropping out (Schargel & Smink, 2001; U.S. Department of Education, 2008).

The studies that evaluate the results of implementing student retention programs are pervasive. Bradburn (2007) examined the 11 schools that were selected to implement the model school through a competitive grant process. He stated that each school possesses a unique problem to solve. The program assumed that technological growth of schools can support students' academic performance and thereby decrease attrition. The teachers in the program were trained in new technologies. Bradburn found that the provision of things such as computers placed in the school's family learning center created opportunities for students to commit or recommit themselves in school. This author concluded that classes using technology lead to productivity and necessary job skills.

In another study, Suh, Suh, and Houston (2007) examined the causal relationship of dropout rates and unemployment. These authors identified three factors that determine school dropout—poverty, insufficient basic education, and consequences of misbehaviors. According to

Ramirez and Carpenter (2009), discriminatory factors such as race do not significantly affect dropout rates. These authors argued that a student's experiences and his or her ability to cope with the life challenges determined his or her likelihood to complete the program. As such, the policy that aims to close the retention gap among nursing students in general may need to address issues of college students, rather than focusing on interventions for his or her ethnicity. Further, Ramirez and Carpenter also believed that policy research should understand "differences within groups rather than between groups" (p. 656). These authors stated that learning and social needs of these at-risk students are crucial in identifying strategies that address student attrition.

Although there have been programs and policies implemented to address attrition among at-risk students, the problem is still very evident in universities, colleges, and secondary education institutions (Hossler, 2005). Hossler found that a majority of academic institutions failed to conduct studies that can analyze the factors that contribute to student attrition to provide comprehensive retention programs appropriate for the needs of the diverse student population. He further revealed that schools with retention studies failed to submit the studies for empirical review. Thus, little evidence regarding the impact of the programs on student retention is available.

College applicants are becoming more diverse and higher education institutions are changing. According to Knapp, Kelly-Reid, and Ginder (2012) approximately 45% of students in higher education attend community colleges. Nora (1993) stated that almost 50% of African-American and Hispanic higher education students attend two-year institutions. It is expected that there will be an increased in student attrition rates with these changing demographics. Most of the previous studies about student retention/attrition have been done at higher education institutions that offer four-year programs. There is little known about higher education

institutions that offer two-year programs (Douglas, 2009). The aims, the hours enrolled in a semester, the aggregate completed credit hours and grade of a student are predictors of success in a higher education institution (Ziskin et al., 2009). However, there has been little research about the admission criteria and retention rates in higher education institutions that offer two-year programs.

Retention rates are also a problem for nursing programs in community colleges. There is a high demand for graduates in the healthcare arena, specifically nurses. The demand for nurses, the limited acceptance in nursing programs as well as the cost of being in a nursing program influence the high retention rate of students. Previous studies have shown that most higher education institutions used most of the criteria in their admission process; however, there are only a handful of studies that have examined the validity of each factor of the criteria with regard to student retention. The identification of the indicators of student success would lead to an identification of the most important criteria in student retention, which would help the admission process of the institutions. Students who are admitted and fit their programs lead to high student retention rates (Knapp et al., 2012).

Bohrer and Lucas (1981) examined the admission criteria of 18 community colleges. The authors found out that all the admission criteria are very different from one another. All the colleges in their study admitted students who did not graduate high school. Six of the community colleges required a GED or an alternative qualification. A distinction between higher education institution that offers four-year programs and higher education institution that offers two-year programs is with the collaboration within an academic community. A student enrolled in a higher education institution that offers four-year programs has different experiences than a student enrolled in a higher education institution that offers two-year programs. Students in community

colleges tend to be less involved in the academic community as these individuals have work outside the college as opposed to students in universities who live in dormitories (Douglas, 2009).

#### **Factors of Student Retention**

Many retention studies have indicated that student satisfaction with the school environment is shaped by several factors. For instance, Jacobson (1997) explained that for higher education institutions to attract students to a particular program school administrators must understand prospective students' expectations of school characteristics and factors that help retain the students. The belief that student satisfaction with the higher education environment significantly influences a student's motivation to complete the educational goals (Elliot & Shin, 2002) requires a deeper understanding, especially regarding determining specific dimensions in higher education that constitute student satisfaction. While attrition varies per institution due to structure of policies and practices of the colleges or universities, these policies and practices in the institution shape the expectations of the higher education institution to the students enrolled (Ziskin et al., 2009).

Research has found that the academic environment is changing and that competition is pressing institutions to provide options for students to enroll and to be retained until completion. According to Ilias et al. (2008), this means that institutions want the competitive edge to draw, keep, and encourage positive relationships with students. Private academic institutions are in a struggle to provide quality services to earn student satisfaction and increase their market share. According to Aldridge and Rowley (2001), failure to provide the expected services that students have in the institution is a predictor for student withdrawal.

There is a scarcity of available research on factors that determine the attrition among Associate Degree in Nursing (ADN) students. Quality of academic mentor-mentee relationship (Thurber, Hollingsworth, Brown, & Whitaker, 1989), social integration into a nursing program (Jeffreys, 2002, 2007), and the availability of academic and social support services (Courage & Godbey, 1992; Jeffreys, 2007) are related with student program completion. Academic and behavioral performance of students in secondary schools, and socio-demographic of students (Campbell & Dickson, 1996; Jeffreys, 2007) predict student graduation from a certain program. Academic (Briscoe & Anema, 1999; Yin & Burger, 2003) and standardized test performance (Sayles, Shelton, & Powell, 2003) have been associated with success in the licensure examination. These variables were used and found to be significantly associated with program completion. However, none of these variables have been found to relate to attrition among ADN programs.

# **Current Dropout Interventions**

Weissbound (2009), a researcher and educator, stated:

...parents and teachers working together are powerful vehicles for driving the moral growth of adults and students and, if parents and teachers mentor each other in the strongest relationships, they will achieve a kind of pure focus uncluttered by their own issues and agendas on the interests of a child. (pp. 27-28)

Weissbound (2009) stated that strategies in school cannot genuinely address student retention if educators and parents fail to recognize their contributions in mentoring and guiding the at-risk students.

In an earlier study, Gaustad (1991) recognized the involvement of parents and teachers in the overall academic performance of students. This author postulated that students who did not perform well in school, or who were retained in a grade level, had a higher likelihood of

dropping out. Vollstadt (2000) added that students who drop out of school did not recognize school as a necessity for their future endeavors.

Bridgeland, Dirulio, and Morrison (2006) presented student dropout factors that are closely associated with the involvement of parents and teachers in school. These dropout predictor variables are recognized and broadly categorized as (a) school-related factors, (b) socioeconomic factors, (c) academic performance factors, (d) family factors, (e) discipline factors, and (f) individual factors.

While the lack of interest, family or personal problems, and failing grades were the most cited factors associated to dropout students (U.S. Department of Education, 2008), research has consistently shown that dropping out is rarely the result of only one factor but may be a decision based on a number of factors that accumulated over time.

The variables associated with dropping out of school are broad and many are beyond the control of school administration. However, predictor models could help identify students at potential risk of dropping out of school. A reliable predictor model would allow education professionals to direct interventions, funds, and reform efforts toward variables that lead to dropping out. The value of a reliable predictor model is recognized by advocacy organizations. For instance, the Council for Virginia's Future (COVF, 2008) stated that no specific group of students drop out, but early warning signals might be used to determine which students are at risk for dropping out. Therefore, each school system has to devise its own set of characteristics and circumstances to identify dropouts due to variations among school districts (The National Dropout Prevention Center, 2007).

The issue of school dropouts also affects the national and global workforce. Dropout rates are representations of loss in terms of skill and productivity. These concerns inhibit

competitiveness, marketability, and economic development (Batiuk, Lahm, McKeever, Wilcox, & Wilcox, 2005). Thus, in search of reliable interventions to prevent dropping out, researchers have identified numerous variables and factors of dropping out, but have not created a strong predictor model based on identified variables. In the extant research, inaccurate and vague data have been cited as weaknesses in this endeavor. According to Somers, Owens, and Piliawsky (2009), it is important for researchers to identify and assess potential dropout factors in a predictor model that could synergize and focus prevention efforts. Further, if proven effective, this measure to prevent students from dropping out would benefit all of society, including the federal government, families, and institutions (Christenson & Thurlow, 2004).

Local, state, and private programs are currently available to help combat high school dropout. The three general approaches to dropout intervention include: (a) supplemental services for at-risk students, (b) alternative education programs for students who do not succeed in the traditional classroom setting, and (c) restructuring efforts to include the entire school (Shaul, 2002).

However, the most common services for targeting at-risk students are mentoring, tutoring, counseling, and social support (Texas Education Agency [TEA], 2009). The goals for these services are to raise student academic performance, improve self-image, and create a sense of belonging. In the study of TEA, the agency found that out of all the programs for dropout prevention in Texas, only 66 included best practices or research-based methods. Of those 66 programs, there were three commonly found strategies: family engagement, mentoring, and alternative schooling (TEA, 2009).

Hoffman and Wallach (2005) concluded that mentoring increases self-esteem. Other studies found that mentoring increases academic efficacy. For example, Broussard, Mosley-

Howard, and Roychoudhury (2006) indicated that mentoring programs provide a forum in which students can work together to solve problems, which simultaneously reduces stress, while increasing social health through communal bonding and positive association.

Kosoko-Lasaki, Sonnino, and Voytko (2006) also supported the assertion that mentoring programs are successful in the short term and there is much research that supports the premise that mentoring programs are academically beneficial and that they can ameliorate the negative effects of external factors that were previously explained.

According to Broussard et al. (2006), educators in Cincinnati, Ohio implemented a mentorship program called the Cincinnati Youth Collaborative of 1987 in response to the city's inordinately high dropout rate. The mentoring program consisted of about 1,000 students who met with business leader mentors four times a week. In this study, these students reported that they felt the mentoring program improved attendance and academic performance. In another study, Lopez-Real and Kwan (2005) indicated that in order to improve the success rate of programs, mentors as well as students must be encouraged. Without mentor encouragement, attrition may result on both the student and the mentor level.

According to Dappen and Isernhagen (2005), the establishment of a successful mentoring program requires two phases; the initial stage is planning and the second stage is implementation. The planning stage begins with building a program that promotes trust between the mentor and the student and establishing a schedule for regular meetings (Dappen & Isernhagen, 2005). Dappen and Isernhagen (2005) stated that at-risk students who completed the program provide valuable information for designing retention program. Zachary (2003) indicated that mentoring is a difficult process, and that some organizations are better equipped to initiate such a program than others.

#### **Student Retention Models**

The short-term nursing degree remains an attractive course for students with a desire to pursue a nursing career because it is easily accessible, affordable, and provides them less time to complete their degree. According to Douglas (2009), with the nursing shortage looming in the United States, this scarcity can be solved through making sure that the recruitment, admission, and retention process in each higher education institution is strengthened. Mahaffey (2002) stated that these actions are crucial especially to the ADNP as the nursing workforce of the country is comprised of 60% graduates of an associate degree in nursing.

The previous century concluded with a rich profusion of studies about student retention. This body of research began in the late 1960s and continues up to now. The issue of student retention has not only provoked comprehensive research but also prompted other scholars to explore other factors on why student leave their program.

Despite the existence of various studies on student attrition and retention, Seago and Spetz (2003) reported that there have been very few studies with nursing programs as the research focus. This researcher took the view that nursing students are non-traditional students because the majority of these students are already working and have families and children.

**Spady's Explanatory Sociological Model (1970)**. Spady was the first theorist who offered the understanding of student retention. Spady initiated in 1970 the Explanatory Sociological Model of the Dropout Process. According to Williamson-Ashe (2009), this model is considered to be the "first well-argued theory that explains the social and academic systems of the college" (p. 15) together with the constancy influenced by the products and results of the aforementioned interactions.

Spady (1970) also used the concept of suicide theory by Durkheim (1952) as an analytical framework in the study of attrition among students. According to Spady (1970), a student who had a positive interaction between his or her environment and the university setting was more likely to integrate with the system and to continue with their degree program. Spady has also argued that negative interaction would hinder the student success of an individual, which could lead the student to leave the institution.

However, recent review of Spady's (1970) work argued that the theory suggests a "lack of integration into society," which resulted in suicide (Williamson-Ashe, 2009, p. 15). Similarly, Douglas (2009) claimed that Spady's work did not represent a realistic worldview because the element of suicide cannot represent the case of student attrition. These theoretical arguments have become the basis for some scholars to oppose Spady's theory in explaining the student attrition. Douglas (2009) concluded that this model is not a true representative of an immediate academic situation.

Tinto's Student Integration Model (1975). Tinto developed a model which is acknowledged, according to Williamson-Ashe (2009), as the "most widely studied and recognized departure theory" (p. 16) and is also the "most widely discussed model" (Stavredes, 2011, p. 23). Tinto's model is based on Spady's theory and is called the Student Integration Model. Tinto's model was originally developed in 1975 and was later updated in 1987 and 1993 (Stavredes, 2011; Owens, 2007). Tinto's model posited that persistence of students is associated with the students' academic and social integration capacity (Reyna, 2008). This model emphasizes that the more integration and interaction an individual or student develops within the community or, in this case, the university, and the higher the chances of students persisting. Thus, the concept of involvement of students in the activity of the institution is an integral

element of Tinto's model.

According to Tinto (1975, 1987, 1993), the relations of the student's dealings with the school environment influences the students' final decision to either leave or stay in the university. Tinto also stated that the key to a successful retention program factors in the establishment of the institution's approaches and plans to incorporate the student both socially and scholastically. Thus, it can be inferred that one of the most significant ideas behind the theory is that social interaction and involvement from within improves student persistence and retention. Tinto (1993) used the concepts of "(a) social integration and (b) intellectual integration" (p. 101) to mean the development of students' commitment to participate in the university's activities. In the first concept, social integration is necessary in the development of students' connection to his or her surrounding community (Brown, 2007). Tinto's (1993) term "intellectual integration" is derived from shared common values in a specific society. Tinto's model has the following five basic components:

- 1. A student's pre-entry attributes;
- 2. Initial level of commitment to educational goals, higher education in general, and the specific institution of attendance;
- 3. Academic and social experiences at the institution;
- 4. Level of integration or sense of belonging that results from these experiences; and
- 5. A new or continuing level of commitment as impacted by the level of integration. (Tinto, 1993, p. 138)

These components are all interconnected as each one affects the other. The student will have pre-entry attributes that are subject to change as s/he enters and stays at the university. This is the initial level of commitment to education. As s/he becomes integrated due to academic and

social experiences at the institution, a level of integration or sense of belongingness then results from these experiences. This process may have two very different results--social integration may either increase or decrease. It must be noted that, according to Tinto, the higher the integration level of the student, the greater the persistence. Therefore, if the level of integration is low, the level of persistence will most likely also decrease which could lead to departure from the institution. In sum, those students who become adequately integrated in the school environment persist to complete their educational goals.

Tinto (1987) discussed a student's "rite of passage" into college in three stages, which was patterned on Van Gennep. Adamo (2008) reviewed these stages and noted that these are the students' experiences within a college environment. Some of these experiences have been explored in the work of Seidman (2012). In this work, separation, transition, and integration are the student's patterns of experiences in a college environment. The element concerning separation can be attributed to demographic variables and the past academic performance of students (Pappas, 2006; Seidman, 2012). These stages and variables are all significant as they are big factors in determining and measuring the level of persistence of the students at the university later on.

Tinto (1993) described the first stage, or the separation stage as the phase wherein the students separate their interest in the home and school environments. For instance, separation extends beyond physical isolation. For a student who is enrolled at a local college, separation may include mental disconnection. Applying Tinto's (1993) model, the student who has difficulty disconnecting from his or her family and past experiences may struggle with integration in to the academic community.

Tinto's second stage is known as the "transition stage." According to Tinto (1993), this stage articulates the changes of norms and patterns of behavior of old environment and marks the start of the adoption of these changes. The assumption is that the student may encounter difficulties in coping academically and adjusting to his or her new environment (Hayes, 2008). It may also be assumed that the student in this stage has struggled with the identification of appropriate engagement processes with the new environment.

In the final stage according to Tinto, the student manifests a level of comfort by interacting with other members of the academic community (Pappas, 2006). This stage puts the student in a situation of learning to adopt the new environment. The model of Tinto identified several qualities of institutional experiences in order to identify and explain the ideas of attrition and the performance of the school in addressing student attrition. These qualities include adjustment, goals, commitment, uncertainty, congruence, and isolation. For this current study, determining the qualities of students' experiences in college was crucial to identifying the factors that prevent students from integrating and completing the associate degree in nursing program. These qualities or attributes have been discussed in past research studies, but Tinto (1993) remained constant on how he viewed student perceptions and qualities.

Astin's Student Involvement Model (1975/1984). There are elements of this model that relate to Tinto's Model of Attrition. Astin created a process-oriented model where the input and environment of students influence the outcome of a student's intention to complete the program. Crucial to the work of Astin (1975) is the involvement of the student in his or her learning process. Astin explained that an involved student is one who commits enough effort and energy to his or her academics and education, allocates time on campus or in the university, is proactive and is involved actively in student organizations, activities and programs, and, lastly, is one who

often interacts and communicates with the school faculty. This theory, then, states that the student is in control of his or her level of involvement and that he or she can determine his or her own growth and development as a student.

Astin's (1975) model also emphasized that the role of the academic institution is to provide programs that motivate students to participate in school activities and that this is crucial in a student's program completion. Astin emphasized that demanding class attendance improves student involvement and affects the student's commitment to their studies and education. Astin postulated that students' involvement and commitment in their education are related to class attendance, academic advising, student counseling, and self-study.

Bean and Metzner's Non-traditional Student Attrition Model (1985). In this model, Bean and Metzner (1985) addressed factors that affect the dropout rate of the non-traditional student. They defined the non-traditional student as an individual who is over the age of 25 and takes part-time jobs to sustain daily personal and family expenditures. According to Williamson-Ashe (2009), Bean and Metzner's (1985) model of attrition was founded on the works of Bean (1980, 1982, 1985) that were based on "process models of organizational turnover and models of attritude-behavioral interactions" (p. 17). This attrition model concluded that there are several factors that can affect student attrition. These are: demographics, goals and ambitions, motivation, characteristics, norms, and values. For some studies, these variables have been used to understand the factors that dissuade non-traditional students from completing their respective program.

Environmental factors such as academic support and familial roles are for the most part significant and, according to Bean and Metzner (1985), these factors are most vital for non-traditional student retention. According to Williamson-Ashe (2009), "non-intellectual factors

play a big role in the future prediction of departure decisions in this model" (p. 17). Further, this researcher concluded that a student's environmental support was found to "compensate for weak academic support, but the reverse is not probable" (p. 17).

Other researchers (Grosset, 1991; Nora, 1987; Nora & Rendon, 1990; Pascarella & Terenzini, 1980) utilized the model, combined with categories (four in this case) of variables, and indicated supportive results with respect to the Bean and Metzner's findings (as cited in Douglas, 2009). Further research supports the conclusion that satisfaction of the student, friendships, and inquisitive problems critically influence retention (Bean, 1985; Katz & Kahn, 1978; Nettles, Theony, & Gesman, 1986; Pascarella & Terenzini, 1980).

Cabrera, Castaneda, and Nora's Integrated Retention Model (1993). Cabrera et al. (1993) redeveloped the attrition models of Tinto (1975) and Bean and Metzner (1985). By combining these two models/theories, authors such as Strauss and Volkwein (2004) suggested that the newer and more modified version of the model united the vital qualities of these two theories and may be a better framework to discuss and solve the issue of student retention. This was confirmed by Robinson (2006) who tested simultaneously "all non-overlapping propositions underlying both conceptual frameworks" (p. 124). Based on these observations, the 2007 study by McPherson found that combining the two models or frameworks aided in better comprehending student persistence. Cabrera et al. (1993) postulated that social integration determines a student's persistence. The studies of Strauss and Volkwein (2004), Robinson (2006), and McPherson (2007) all supported the contentions concerning the need to combine the Tinto and the Bean and Metzner models.

Benjamin's Quality of Student Life Model (1990). This model articulates the domains of life that define the satisfaction of students in his or her academic endeavor. In short, this

model emphasized the need to regard the student's activities, both inside and outside the university, and use this to determine and measure the student's satisfaction. This is because various demands are competing in the life of the students, which may then interfere with the ability of the student to deal with the demands of school and his or her educational requirements/responsibilities. Attrition in this model can be predicted by measuring a student's satisfaction concerning his or her academic experiences. To understand the model better, Benjamin (1990) also outlined eight domains of a student's quality of life while enrolled in the academic program: (a) perceived satisfaction, (b) felt happiness, (c) on and off campus life challenges, (d) significant turning points, (e) circumstantial intentions, (f) circumstances of school environment, (g) psychosocial, and (h) perceived life meaning.

## **The Nursing Shortage**

After reviewing the studies on student retention and attrition, this researcher decided that another area that should be studied was the nursing shortage and nursing student retention and attrition. The shortage of nurses in the United States is well-documented. In fact, this dilemma in the medical field has resulted in many studies that aimed to address retention among nurses in their respective educational institutions. However, despite the plethora of studies and available information on addressing nursing retention in general, there remains the unresolved problem of the declining number of nurses in the country. Further, other than retention among nurses who were able to enter the profession, there is also the problem of increasing the number of licensed nurses. About 20-70% of students within the program remain at risk of dropping out, which emphasizes the need to examine the obstacles that hinder their success (PHEAA, 2002).

The Legislative Analyst's Office of California (2007) claimed that supply of RNs is lower than the demands of the healthcare industry, signifying a nursing shortage. Various studies

have warned that the demand for RNs is going to increase as the population ages and grows (Legislative Analyst's Office of California [LOA], 2007).

According to Fagin, Maraldo, and Mason (2007), the nursing shortage is a serious problem as RNs are considered important members of the healthcare delivery team. RNs serve both the public and private sectors of the healthcare industry and they can be found working in various healthcare settings that are not limited to just hospitals, medical officers, clinical institutions, nursing facilities or home care settings. RNs are also employed in the academe as faculty, scholars, and practitioners (Seago & Spetz, 2003).

Seago and Spetz (2003) claimed that the nursing shortage is not surprising and that the current shortage is just a continuation of the shortages of the 1970s, 1980s and 1990s. Multiple factors contributed to the nursing shortage. These factors include such things as transformations in nurse demographics, patient demographics, the healthcare industry, and the regulatory policies of the field (Buerhaus & Staiger, 1999). Mee and Robinson (2003) argued, however, that today's nursing shortage is unique and unlike what was experienced in the earlier years. They stated that, "labor and population trends are unique today and are causing massive disruptions in the supply of nurses at the same time the need for nursing care has begun to skyrocket" (p. 52). They also noted that two population groups, the patients and the nurses, were moving in opposite directions. As these and other authors pointed out, fewer individuals are choosing nursing as a career because other professions are available to women now that were not available to them in the past. Another factor is the way healthcare institutions restructured and cut costs during the 1990s. Due to healthcare institutions downsizing, many registered nurses lost their positions within their organizations. The remaining staff had to pick up the burden of having more patients

to care for and more tasks to do. This resulted in decreased job satisfaction and increased attrition.

## **Nursing Education and Curriculum Design**

The application of nursing education began with Florence Nightingale, known as "the nurse with the lamp" (Nightingale, 1980). In 1860, Nightingale described nurses as having the ability to teach themselves and as those who aid in the reparative process of disease (ANA, 2004). Nightingale further asserted that the nurse is in charge of the individual, child, mother, and family's health. Hentz (2005) described nursing socialization as a process of knowledge acquisition, skill mastery, and identity as a nursing professional. Nursing educators, clinical faculty, and nursing professionals facilitate student socialization in practice. Hentz (2005), as well as Billings and Halstead (2009), described the curriculum as the student's experience. The curriculum is an aid that prepares nurses in all domains of nursing. The curriculum is the foundation for entry-level nursing practice that facilitates student choice in knowledge and knowing (Billings & Halstead, 2009).

The ANA report (2004) claimed that the nursing profession encompasses the practice of positive values such as compassion and respect of the differences and unique situations of the patients. Model curricula provide nursing students with dynamic, innovative, and integrative learning that prepares them for the responsibility of nursing (Billings & Halstead, 2009). Nightingale stated that the nurse takes charge of the reparative process (ANA, 2004). Nurses are uniquely positioned to educate patients in need of specialized nursing care, as described clearly by professional nursing organizations.

Billings and Halstead (2009) advocated the change in nursing curricula to reflect the needs of today's health care environment. These authors described forces external to nursing as

major factors influencing the change in nursing education. These factors include health care delivery system, increased drive for ambulatory care services, patient autonomy, specialized education models, and rising cost (Billings & Halstead, 2009). According to these authors, additional forces include the increasing age of nurses and patients, changing demographics, technology advancements, globalization of diseases, information literacy, increasing number of acutely ill patients, broad nursing competencies, and health policy reforms. These researchers described the critical nature of these forces by stating that "change is not a choice" (p. 92). Nursing is dynamic, requiring all educators to improve innovation within organizations by improving faculty and nursing student competencies.

Understanding change, nursing educators bear the responsibility of responding to current and future trends in nursing education. Heller, Oros, and Dumey-Crowley (2000) described external and internal forces that are imposing change in nursing. The changes include an increasing aged population, changing demographics, technology advancements, globalization of diseases, information literacy, an increase in the number of acutely ill patients, and health policy reforms. These authors further stated the need for nursing education models that deal with the specific issues for nursing care delivery.

Heller et al. (2000) stated that the major influencing factors contributing to the changes in the field of nursing are changing demographics, evidence-based nursing care, revenue, and the paradigm shift in nursing education delivery partnering broadly with health care providers.

Nursing curricula and competencies have to be addressed in caring for diverse and complex patients in a multitude of settings. These are crucial factors in sustaining the quality of education and ensuring that rates of graduation meet the national standard.

The National League for Nursing (NLN, 2006) recommended that nursing educators bear the responsibility for preparing high-quality nurse clinicians. Nursing's excellence in education model calls for nursing to provide high-quality care to consumers of health care. Consumers are defined as individuals, families, and communities (NLN, 2006). For nurses to deliver high-quality care, the responsibility begins with professional nurses, nursing faculty, and schools (NLN, 2006).

The NLN (2006) stated that nursing schools are responsible for employing a well-prepared, diverse faculty possessing the qualities of a knowledgeable, compassionate, and respectful healthcare leader. Nursing leaders cannot prepare high-quality nurses if the educators do not possess high-quality skills themselves.

Many nurse educators use the phrase "think like a nurse" as a learning strategy and a skill to be acquired (Lasater, 2007, p. 496). Etheridge (2007), a clinician, researcher, and educator, emphasized using curriculum models for teaching nurses to become "beginning practitioners" (p. 24). The complexity of thinking, coupled with the responsibility for caring for people's lives, may have an impact on student nurses' anxiety and their ability to think on their feet (Etheridge, 2007).

### **Retention in Nursing Programs**

Student retention and graduation rates are used as indicators of stability which ensure government subsidy (Hossler, 2005). The effectiveness of academic institutions is not solely measured on rate of state nursing board passers, but also on the rate of student completion. More importantly, the effectiveness of the school is measured on the number of graduates contributing to the social and economic well-being of the country. Despite the implementation of student retention strategies in an academic institution, dropout rates continue to be relatively high in the

United States (as cited in Douglas, 2009). Accordingly, attrition rates continue to rise in these programs (AACN, 2008).

Attempts to study the reduction of attrition among students at risk of dropping out have been conducted for decades. A review of the literature for this current study revealed that as early as the 1970s, there were retention activities and research was conducted in search of programs, policies, and strategies that would increase retention rates among students enrolled in academic institutions. Interventions designed in these early years generally focused on singular programs and practices which resulted in the integration of the academic services, student affairs, and administration that most academic institutions currently practice (Borland, 2002).

In 2005, Crow and Hartman reported that the increasing population in a Midwest United States required nursing education programs to increase their graduation rate. However, the American Association of Colleges of Nursing (2010) indicated their inability to supply the increasing demands of the state. Further, Buerhaus et al. (2008) stated that 65% of the shortage of 340,000 nurses in 2020 will be coming from the associate degree program. Unfortunately, attrition in these associate degree programs range from 20% to 70% (PHEAA, 2002). As the attrition rates increase, so does the shortage of nurses, thereby creating a compelling need to examine attrition in ADN programs. The nursing profession constitutes the largest segment of the healthcare system at present.

Nurses occupy the largest labor demand in the current U.S. healthcare industry (Buerhaus et al., 2009). Crow and Hartman (2005) stated that the attrition challenges exacerbate problems pertaining to the attraction and retention of nurses during a challenging labor market. While many individuals leave the field of nursing either prior to graduation or nursing job placement,

the existing studies on these factors of attrition exclude the perceptions of students in ancillary degrees (ANA, 2001; Buerhaus et al., 2009; Gallagher, 2010; Nevidjon & Erickson, 2006).

Attrition of nursing students in universities and colleges in the United States can be addressed through careful consideration of the individual plight of students in the academe (Nettles et al., 1986; Walker, 1988; Windham, 1994). The traditional community college at this time does not meet the standard student profile. The profile included the student's age, employment status, courses taken, GPA, and SAT scores (Nettles et al., 1986). Windham (1994) agreed that students who are most likely to survive fit the former student profile description. Rather, today's non-traditional college students most likely are older, are working, and have a family and/or other outside responsibilities. A couple things that could be done to improve retention would be to increase financial subsidy so that the student would have enough time to study rather than working. Moreover, career counseling should also be provided (Walker, 1988).

# **Retention in Allied Health Programs**

In 2011, the Director of the Center for Health Professions at the University of California stated that "allied health is a critical component of health care reform" (Institute of Medicine [IOM], 2011, p. 5). Few studies have explored the student retention rates in health programs. In the few studies, only a limited number have examined the admission criteria. A good admission program would lead to an increase of student retention rates because the students fit well with what the institution has to offer (Nash, 1977).

However, such rationale is hindered by many issues, especially with regards to the programs' "heavy dependence on state-subsidized education" (p. 8), wherein the state cannot fully provide for the students' needs (IOM, 2011). It was suggested that not only are Allied Health Programs in dire need of a "better model for the location and financing of allied health

education and for the reintegration of allied health into the care delivery system," (IOM, 2011, p. 2) but at the same time, allied health programs and professionals need to update and start thinking of involving technology within their system for the betterment of the future of the specific field and industry (IOM, 2011).

Meier, Miller, and Wilk (1975) studied 630 students enrolled in universities where health programs were offered and found that GPA of students, scores for the vocabulary part of the Nelson-Denny test as well as grading requisites preadmission were positively correlated to the GPA performance of the college student. Keene (1968) also found a significant correlation between high school grade and ACT ability test scores of the students with the students' grade in college. A current study by Gillis (2007) found out that demanding admittance conditions and criteria are needed in order to improve student retention rates.

Petty and Todd (1985) studied about the dropout rates of college students in various fields in the health sector. The study had 1,800 participants from nine colleges. The data that follow were the attrition rates that they collected.

Nursing	37%
Dental Hygiene	40%
Medical Lab Technology	39%
Physical Therapy	27%
Radiology	32%
Respiratory Therapy	15% (p. 14)

The authors stated that due to an open door policy in most higher education institutions, it would be hard to produce high graduation rates. Admission programs are vital to any institution as admitting under-qualified students in health programs would result in academic problems for the inappropriately admitted students. The conclusion of Petty and Todd (1985) was that students who are mismatched with the degree they are pursuing are likely to drop out in the long run. A

high dropout rate would lead to a limited number of college graduates in various nursing programs.

In a more recent study, Rakes (2008) found that "many allied health programs had low three-year graduation rates but higher than average retention and persistence rates" (p. 45). These programs, according to Rakes, take a longer time to complete because students must "wait for seats to become available in the clinical portion of the program" (p. 45). He further stated that prominent faculty members suggested utilizing "advisement as a tool" (p. 45) to assist the students in learning and becoming aware about the areas of the allied health that do not necessarily have long waiting periods.

According to Magnussen (2001), most of the nursing programs in the country have a 50% attrition rate. This is because the students need to master a lot of information, memorize a lot of facts and, utilize critical thinking. Knopp (2004) stated that approximately 50% of students achieving admission to an associate's degree in nursing program in North Carolina would actually complete their program. The extent of the nursing shortage at the local level necessitates immediate response from the local as well as national education sectors. Designing retention studies, especially on the ADN program can lead to the development of policy responses to the nursing shortage.

### **Methodological Literature**

During the process of reviewing the relevant studies in this study, an assortment of quantitative, qualitative, and mixed methods studies were identified. Most studies about student retention employed quantitative methods utilizing test scores. Most of the studies were also conducted in baccalaureate-granting institutions. The main focus of the studies was about the experiences of the students. For instance, the study of Tinto (1975, as cited in Douglas, 2009)

explored the connection between students who completed their degree program and variables that could have influenced them. Tinto (1975) collected data using survey questionnaires, academic records of the students, and test scores of the students in order to test the research hypotheses.

Most of the studies focused on the reasons the students dropped out or persisted in their degree program. Some studies employed a qualitative procedure described by Stake (1995) as breaking the information into smaller categories then putting them back together to form a more meaningful interpretation. Only handful of the studies about student retention employed a combination of the quantitative and qualitative methods.

Qualitative Methods. Only a few studies about student retention and student persistence employed a qualitative method. During the instances that qualitative methods were used, the data was usually coded and then interpreted quantitatively. One example of a qualitative study was of Sherrod, Harrison, Lowery, and Edwards (1992), where the authors studied freshmen nursing students. The authors utilized an interview guide to question 20 participants on their view about what factors influence their persistence in the program. The authors concluded that coursework guidance, social and academic involvement and support were significant in their persistence in the program.

With respect to this current study, an important qualitative method that can be employed is phenomenological research design which has the "ability to add the description of the complete picture of a situation" (Dunn, 2008, p. 5). In this research method, the "perceptions are considered as the primary source of knowledge" (Dunn, 2008, p. 5). Perceptions are crucial to this current study because it is significant to understand the personal feelings and knowledge of the nursing students who are currently enrolled as well as those who have dropped out of the

course as they relate to their reasons for persistence or attrition. Specifically, the modified van Kaam method by Moustakas (1994) is the most appropriate method as it involves seven steps that can serve to validate the reliability of the collected data, which further strengthen the results of the study.

Quantitative Methods. In reviewing theoretical studies regarding student retention (Astin, 1975; Bean & Metzner, 1985; Spady, 1971; Tinto, 1975, 1987, 1993, as cited in Douglas, 2009), several were found to support each theory in terms of understanding the factors that explained early departure of students from educational programs. The models of Tinto (1975) and Bean and Metzner (1985) are among the most prominent. Tinto's (1975, as cited in Douglas, 2009) study concentrated on traditional students, whereas Bean and Metzner (1985, as cited in Douglas, 2009) concentrated on non-traditional students.

A majority of the studies utilized correlation techniques in order to explore the relationship between perseverance and various family and educational variables. For instance, Berger (1992, as cited in Douglas) employed a correlational technique to examine student retention among working college students. The author used data from social work programs and academic records of the students to develop a method for identification of students who are at risk. Sandiford and Jackson (2003) employed another correlational research in order to identify characteristics of students who dropped out and students who did not drop out of their degree programs. The authors reported that students with a college-level language ability and with a high school GPA of 2.5 or higher were less likely to drop out of their degree programs.

**Mixed Methods**. Few studies have used the mixed methods approach. In the studies that have employed a mixed methods approach, the authors collected data through interviews or survey questionnaires then analyzed the data quantitatively. Walters (1997) collected qualitative

data by means of interviews then used quantitative data from a modified Institutional Integration Scale (Pascarella & Terenzini, 1980) in order to narrow the gaps of Tinto's model. The results of the study indicated that social involvement of the student is an important factor that impacts students' continuation decisions.

### **Chapter 2 Summary**

The shortage of nurses in the U.S. is a prevailing issue in the academic and healthcare industries for some time (The National League of Nursing, 2004). As the attrition rates increase, so does the shortage of nurses; thereby creating an undeniable need to examine attrition in ADN programs. In addition, as attrition rates increase, so do problems for the students, nursing programs, institutions, higher learning institutions, and healthcare facilities.

Many retention studies have indicated that student satisfaction with school environment is shaped by several factors. While attrition varies by institution due to the structure of policies and practices of the colleges or universities, student expectations are shaped by these institutional policies and practices (Ziskin et al., 2009). Some policies implemented by learning educations may affect students' interest and motivation to complete the academic program (Obasohan & Kortering, 1999). Providing options for students to enroll and achieve completion necessitates institutions that want a competitive edge to begin searching for effective and creative ways to increase student retention (Ilias et al., 2008).

The desire to address retention issues leads researchers to analyze factors associated with dropping out to identity at-risk students who need attention and guidance. Early identification of at-risk students can lead higher levels of student persistence and successful completion of high school. This research is crucial to determine the factors that contribute to the increasing attrition

rate within the associate degree in nursing program. Specifically, this researcher explored the lived experiences of students in an associate nursing program, both those who have not been successful and have dropped out, as well as those who are currently in the program to address issues concerning attrition in the associate degree in nursing program.

#### **CHAPTER 3. METHODOLOGY**

# **Introduction to Chapter 3**

The purpose of this qualitative phenomenology research study was to examine the lived experiences of currently-enrolled ADN (during the time of the study), as well as formerly-enrolled nursing students who had dropped out, in order to identify the factors that determine associate nursing program completion. Phenomenology is a research design that allows the researcher to examine the phenomenon through exploring the lived experiences of the individuals concerning the event (Drew & Hewitt, 2006; van Manen, 1990). The use of phenomenology was appropriate in this study because none of the existing literature on associate nursing programs could provide an instrument that could determine the factors of students' completion (Armour et al., 2009; Moustakas, 1994). This chapter includes the discussion of the following: (a) research design, (b) target population, sampling method, and related procedures, (c) instrumentation, (d) data collection, (e) field test, (f) data analysis, (g) limitations of the research design, (h) reliability and validity, (i) expected findings, (g) ethical Issues, and (h) Chapter 3 summary.

## **Research Design**

This researcher used a phenomenology research design with the intention of examining the lived experiences of currently enrolled ADN, as well as formerly enrolled nursing students who had dropped out, in order to determine the factors that predict successful program

completion. Phenomenological research is a type of inquiry that examines a phenomenon experienced by an individual or a group of individuals (Moustakas, 1994). This qualitative phenomenological study gives "a general description of the phenomenon" (Denman, 2008, p. 52) as these phenomena were all viewed from the perspectives of those individuals who have experienced the phenomena. This approach is commonly used in studies where no existing measures are available to understand a specific life condition of a certain population (Armour et al., 2009; Sokolowski, 2000). As a design, phenomenology provides researchers with a comprehensive opportunity to investigate human experiences (Creswell, 2009; Neuman, 2006).

# Target Population, Sampling Method, and Related Procedures

This section explains and gives details regarding the target population, the sampling method, and the related procedures for this study.

# **Target Population**

While this researcher planned to include 10 students from each group, the actual number of individuals who were willing to participate in the study included seven nursing students currently enrolled in one Midwest ADN program (during the time of the study) as well as six students who had withdrawn from the program. The inclusion criteria consisted of students who had at least two semesters of student experience to ensure that the participants had adequate experience in the program. The exclusion criteria included graduating students in the ADN program in order to ensure that the sample only included those ADN students who may have to make (or already have made) the decision to shift to another course of study or to drop out from school.

The site for this current study was a community college located in a Midwest state. This community college has a diverse student population. Forty-five percent of the students at this community college are persons of color, 53 percent are female and 48 percent are low-income students. This community college has one of the most diverse student populations in a Midwest United States' college (public and/or private) and more than 80 different languages are spoken by students and staff. Nursing program students mirror the college student demographic very closely with the exception that 40% of nursing students are persons of color. The school has been offering an associate degree program since 1975.

The Nursing Program has one admission cycle in the fall and admits 130 students per year (65 students for fall semester and an additional 65 students for spring semester). This nursing program is a four-semester career ladder program with two optional exit points. The program is a two-semester Practical Nursing (PN) Program (first year) and a two-semester Associate of Science in Nursing (ASN) Mobility Program (completion of year two of the program) termed Option A. Option A accepts program first year completers (PN Diploma-eligible students) into the second year with no formal application required. Option B of the Nursing Mobility Program serves Licensed Practical Nurses (LPNs). Option B students are accepted in to the Option B track from other PN programs.

Nursing students are given the option of attending as full-time or part-time students. The student numbers for 2011 were: 98 PN full-time students, 62 ASN full-time students, 54 PN part-time students, and 36 ASN part-time students. The national attrition rate for ADN Program is 30%. The ASN program where study was conducted is below the national average at 20%.

### **Sampling Method**

As opposed to a quantitative design that measures the reliability of study results with the required number of samples, for qualitative research, sample size is less important (Patton, 2002; Polkinghorne, 2005). While the sample size in qualitative research depends on the objective of the researcher (Patton, 2002), some researchers suggested the use of a maximum sample size of 25 participants (Creswell, 2005; Polkinghorne, 2005). According to Creswell (2005), most phenomenological researchers tend to use 10-20 participants in their studies. This researcher used a sample size of seven student nurses who are currently enrolled in the associate degree in nursing program at one Midwest College (during the time of the study) and six students who had dropped out from the program, for a total of 13 participants. The sampling strategy was a purposive sampling approach (Creswell, 2007; Yin, 2004).

This researcher sent a letter to the Director of Institutional Research and asked for written permission to conduct the study at the targeted Midwest community college. The purpose of the study as well as the sampling procedure was explained in the letter. When written permission was granted and all IRB requirements were met (both at the community college and at Capella University), this researcher then asked for a list of students who met the requirements of the selection criteria.

The preliminary list of participants was compiled with the assistance of the coordinator of the Associate in Nursing Program. The 60 potential participants were sent an "invitation to participate letter" as well as a consent form, which they were instructed to sign, date, and send back to this researcher if they were interested in participating in a semi-structured interview. A total of 13 individuals responded to the letter of invitation and all the respondents met the inclusion criteria. The potential participants were asked to submit a signed consent form prior to the face-to-face interview. This document detailed their consent to participate in the study. All

participants who signed and returned the consent form were asked for their most convenient schedule and place to conduct the interview.

#### Instrumentation

This researcher used a researcher-designed, semi-structured questionnaire and conducted 45-minute face-to-face interviews (see Appendix A for interview guide) with seven nursing students who are currently enrolled in one Midwest ADN program (during the time of the study) as well as six students who have withdrawn from the program. The semi-structured interview questionnaire with six main questions was designed to answer the research questions.

### **Data Collection**

This researcher collected data through in-depth, face-to-face interviews guided by a researcher-designed semi-structured interview guide questionnaire. According to Moustakas (1994), examining the lived experiences of the two or more study participants requires a guide questionnaire that directs the researcher to ask questions that are relevant in the life of the sample population. Six interview questions were posed to elicit answers concerning the factors that hinder the completion of students who are currently enrolled and those who had dropped out from the associate degree in nursing program.

In the conduct of the actual interviews, this researcher allowed the participants to take some minutes of silence purposely to help them recall their experiences and contemplate their views concerning the specific interview questions. This researcher believed that providing the participants with time to recall their experiences based on the interview questions would generate more contemplative responses, which are relevant in establishing a vivid picture concerning the

events of their lives. If responses to the interview question were not clear, this researcher asked probing questions to enhance the understanding of the participants to the question as they reflected their experiences concerning the factors that hindered or facilitated their completion of the associate degree in nursing program.

All interviews were audio recorded and transcribed by this researcher. At the conclusion of every interview, this researcher informed the participants that transcripts would be submitted for their review and approval. Only this researcher had access to participant responses in order to ensure participant anonymity. Each participant was assigned a code number which further ensured anonymity and confidentiality.

A copy of the original data was saved on a disk and will be kept by this researcher in a locked cabinet for seven years. All data in the e-mail account hosted on the secure server will be deleted after the seven-year data retention stage.

#### **Field Test**

The interview questions (Appendix A) were field-tested and reviewed by a panel of experts for clarity and alignment to the goal of the study. The field test ensured the content validity of the instrument and the main objective was to determine the appropriateness of the questions as evaluated by a panel of experts. The first draft of the interview guide questionnaire was sent via email to each of the experts for their review and responses were returned to this researcher via e-mail.

The panel of experts were three professionals who are (a) college administrator, (b) healthcare nurse administrator, and (c) licensed guidance counselor. However, only two of the panel experts provided comments and suggestions concerning the instrument. The third field

study participant had no objections concerning the structure and the content of the interview questions.

The first field study reviewer stated that her changes to the instrument were based on the "perception that the phrasing in a number of places presupposed some data that may or may not be true." The first reviewer recommended to (a) eliminate words of assumption such as factor, positive, and negative, and (b) to simplify and shorten these words in order to achieve the full interview in 45 minutes.

The second field study reviewer requested that positive questions be asked before the negative questions. This researcher then changed the questionnaire accordingly. This expert affirmed the original interview questions on nursing students' experiences on the challenges and issues regarding the program. This expert suggested to incorporate questions that were based on the researcher's personal experiences. However, this researcher exercised her professional judgement by refraining to incorporate personal inquiry in the final questionnaire. This researcher wanted the participants' personal experiences to come forward with the general questions on the final questionnaire. The integration of all comments resulted in the final version of the interview questions (Appendix A).

In the first part of the interview, the participants were asked for their names and their personal information. The second part asked for a (a) description of their experiences leading to their enrollment in the nursing program, (b) the experiences while enrolled in the program, (c) the positive and negative experiences that hindered or facilitated the program completion, (c) coping mechanisms, (d) awareness of retention policies and programs, and (e) the student's recommendations regarding ways to improve the associate degree in nursing program.

These final interview questions were conceptualized based on the comments and suggestions submitted by two panel experts as presented earlier. The third panel member articulated his agreement concerning the first version submitted for review. After the interviews were conducted, this researcher transcribed the audio tapes and proceeded to analyze the data.

### **Data Analysis Procedures**

The researcher-designed questionnaire used for this study contained questions that were relevant for the research objectives and research questions of the study. The conduct of the face-to-face interview was recorded and transcribed by this researcher for data analysis. This process ensured that the analysis of the data collected was accurate and verifiable. The researcher used NVivo 8<sup>©</sup> a qualitative software package that can sort, arrange, and code textural data. With these procedures, attributes and thematic categories emerged.

This study used the modified van Kaam method by Moustakas (1994) in the analysis of phenomenological data. Moustakas identified seven steps in analyzing individual transcripts. These include: (a) sorting and grouping of relevant experiences, (b) reduction of irrelevant data and coding the important information, (c) grouping of coded information to identify core themes, (d) verification of core themes against established empirical data and results, (e) development of individualized textural description of the participants and his or her experiences in relation to the identified themes, (f) development of structural description in relation to the identified textural descriptions of each of the participants, and (g) development of combined textural and structural descriptions to generate the meaning of the experiences. These steps and procedures were followed in the course of data analysis and results are presented in Chapter 4, Data Analysis and Results.

Each participant was assigned a code (1A-1G for currently enrolled and 2A-2F for formerly enrolled students). This researcher identified categories of themes based on the interview questions posed to the participants in the study. When categories of themes were identified, this researcher sorted words and phrases that were associated with the categories. In the selection of the relevant thematic categories and themes in this study, this researcher reviewed and counted the number of times the codes within a given thematic category appeared across the responses of the participants.

# **Limitations of the Research Design**

Creswell (1998) suggested that the following methodological assumptions about phenomenological research are widely shared and these apply to this current research study. The first limitation was that phenomenology excludes participants who have no knowledge concerning the phenomenon. Second, as a qualitative research study, the information garnered was limited to a small sample from a specific community college, which then limited the generalizability of findings to other populations. The results of this study, then, are only applicable to the population with similar demographic characteristic of the sample population and the school environment where the associate degree in nursing was studied. In addition, qualitative research is limited to using a small number of participants. Therefore, the responses of seven currently enrolled (during the time of the study) and six formerly enrolled ADN student participants in this study cannot be presumed to be representative of all the student population in the program.

## **Internal Validity (Credibility)**

The definition of internal validity is the determination of whether a research design or test measures the results accurately based on the statistical analysis. Authors have found that for qualitative studies, validity is related to the correctness of the results' interpretation (Tafarodi & Ho, 2006). On the provision of the backgrounds of studies, which provide a full analysis and discussion of information may also allow for the production of future studies that improve documents used in those research designs, which ensures the study's validity (Leedy & Ormond, 2001).

For the present investigation, participant data was gathered while also considering accuracy as a key factor for the research design. To this end, a verification procedure was undertaken to oversee the data (this included the accuracy, taping, and transcribing of the data). This process included the pilot study, or field test, where three experts formed a panel and were requested to assess the interview protocol for content validity. The outcomes were noted in this chapter's section on instrumentation. The researcher considered the changes that the panel suggested in getting the instrument ready for the final data collection. This process ensured that possible misrepresentations were eliminated and that interview questions were clear and appropriate for answering the research questions.

## **External Validity (Transferability)**

Ensuring external validity meant ensuring population generalizability, or the degree to which a sample represents the population. To make sure of external validity, variables that are similar to those factors present in the larger population being studied were ensured (Polit &

Beck, 2009). The sample involved in this study had a good representation of the entire population so that threats of external validity can be addressed (Munhall, 2011).

## **Expected Findings**

This researcher expected to generate thematic categories that were related to (a) students' motivation prior to enrollment, (b) experiences that diminished the student's interest and commitment to pursue program completion, (c) the process of students' disengagement from the program, and (d) the perceived factors that enhanced student engagement. These expected thematic categories formed the basis for answering the research questions.

#### **Ethical Issues**

This researcher ensured that ethical guidelines in the conduct of the research were met.

Ensuring the development of trust between the researcher and the participants (Marshall & Rossman, 1995; Walker, 2007) was sought in this current research. The process of the data collection was used both through written and verbal information and this ensured that participants were fully informed and that their participation was voluntary. To document their understanding of the study and agreement to participate in the study, the participants were asked to sign the consent form which was submitted prior to their interview. The consent form contained personal and contact information. These forms were filed and stored in a password-secured filing cabinet and will be kept for the required seven years. After this time, the interview transcripts, consent forms and all other documents associated with the research study will be shredded.

Participants were informed that the interviews would be recorded and that all information was confidential. Further, the participants were informed that their identities would be coded in order to maintain anonymity. This researcher used pseudonyms to refer to individual participants when data analysis required it.

## **Chapter 3 Summary**

The intent of this study was to explore the lived experiences of nursing students who are currently enrolled in an associate degree in nursing program at one Midwest College (during the time of the study), and additional students who have dropped out from this program.. The researcher was able to conduct seven interviews of students currently enrolled in the associate degree in nursing program and six students who have dropped out from this program,.

This chapter presented the phenomenological methodology that was appropriate for this research study. The qualitative phenomenology research design, including the sampling technique, was justified. This chapter also presented the limitations of the research design, data collection procedure, data analysis, and the ethical assurances.

### **CHAPTER 4. DATA ANALYSIS AND RESULTS**

#### Introduction

The purpose of this qualitative phenomenology research study was to examine the lived experiences of currently enrolled ADN students, as well as formerly enrolled nursing students who had dropped out of the associate nursing program to determine the factors that contribute to students' program completion. The use of phenomenology in this study was justified because none of the current literature this researcher reviewed provided the necessary instrument to measure and determine the factors that lead to students' completion of the associate nursing degree (Armour et al., 2009; Moustakas, 1994). A phenomenological examination of the experiences of the students in the associate nursing degree program provided in-depth information concerning the difficulties as well as their motivations, which enabled this researcher to understand the attrition and retention phenomenon among this group of students.

This chapter contains the findings of the data analysis conducted to achieve the purpose of this study. This chapter offers an explanation of the methods used and the study's findings, which are illustrated with both text and tables. The presentation of the analysis process is essential in explaining how codes, thematic categories, and themes emerged from the data transcripts of the participants' interviews. This chapter concludes with a summary, which highlights the essential elements concerning the answers to the research questions of this study.

# **Description of the Sample**

The site for this current study was a Midwest community college. This community college has a diverse student population (see Table 1). Almost half of the students are students of color. The majority of the entire student population is female. Female students numbered 136, making up 79.1% of the total number of students. About 40% are under the age of the 30 to 40 years old. Eighty different languages are spoken by students and staff. The demographic characteristics of the sample are assumed to provide the perceptions and experiences of ADN students required to understand the students' attrition.

Table 1. Midwest Community College ADN Students' Demographic Profile

Demographic	Number	Percentage	Total
Gender			172
Male	33	19%	
Female	136	79%	
Unknown	3	2%	
Ethnicity			172
Asian	7	4%	
Black	48	28%	
Hispanic	7	4%	
White	82	48%	
Non-res Alien	9	5%	
Two or more races	15	9%	
Unknown	4	2%	
Age			172
26 below	42	24%	
26-30	40	23%	
31-40	68	40%	
41-50	15	9%	
51-60	4	2%	
60 plus	0	0%	
Unknown	1	2%	

While this study targeted 10 nursing students currently enrolled in one Midwest ADN program (during the time of the study) as well as 10 students who had withdrawn from the program, the actual number of participants was 13 (see Table 2 below). In this study, the researcher maintained the anonymity of the participants by implementing coding system (1A-7G for currently enrolled students and 8A-13F for formerly enrolled students). Seven of the participants were current students while the remaining six participants were formerly enrolled in the program. The participants were recruited based on the inclusion criteria, which consisted of students who had at least two semesters of student experience to ensure that the participants had adequate experience in the program. This researcher excluded the graduating students in the ADN program because only participants who may have to make (or already had made) the decision to shift to another course of study or to drop out from school were of interest for this study.

Table 2. Demographic Profile of Study Participants (N = 13)

Participant Code	Category	Gender	Ethnicity
Participant 1A	Currently Enrolled	Male	Caucasian
Participant 2B	Currently Enrolled	Female	Caucasian
Participant 3C	Currently Enrolled	Male	African-American
Participant 4D	Currently Enrolled	Male	Caucasian
Participant 5E	Currently Enrolled	Female	Caucasian
Participant 6F	Currently Enrolled	Female	African-American
Participant 7G	Currently Enrolled	Male	Caucasian
Participant 8A	Dropped Out	Male	Caucasian
Participant 9B	Dropped Out	Male	Caucasian
Participant 10C	Dropped Out	Female	African-American
Participant 11D	Dropped Out	Female	African-American
Participant 12E	Dropped Out	Female	African-American
Participant 13F	Dropped Out	Female	African-American

Under the modified Moustakas (1994) van Kaam method of analysis, the individualized textural description is a subset element describing the demographic profile of the participants in relation with their experiences. This stage illustrates the experiences of the individual pertaining to the phenomenon, which forms the basis in identifying the themes of the study.

## **Currently-Enrolled Students**

Participant 1A. A Caucasian male, is currently enrolled in the ADN program.

Participant 1A shared the exposure he had in the field of nursing, which motivated the participant to pursue a nursing profession. Participant 1A's mother acquired breast cancer and had experienced depressive symptoms, pushing the participant to attend to the mother's medical needs. He finds the nursing experience to be a noble profession. Participant 1A shared that his experiences while enrolled in the program have been positive. He stressed that the factor that facilitate this positive disposition was the positive relationship he had with the faculty, personnel, and classmates. He said that positive relationships could also be seen in the environment and her involvement with the people who appreciate his service.

Participant 1A used to have part-time work in addition to his responsibilities in school. However, when he experienced the demand of the nursing course requirements, he resigned from his job and focused his attention on finishing the program. He said that the minimum GPA requirement helped him stay in the program. Furthermore, participant 1A said that although program completion is a difficult task, he managed to pass the course requirement because of successful initiatives such as practice teaching. He said that program courses are difficult when introductory subjects have not been taken into consideration prior to the enrollment of advanced courses. He recommended that in addition to classifying groups of students, the administrators

may need to provide additional science-related core courses, particularly those related with the nursing practice.

Participant 2B. A Caucasian female, was an accounting professional at a Fortune 500 company. Participant 2B shifted her career path after realizing that she wanted a career in the health industry. Participant 2B said that the faculty members had been supportive in her academic endeavor, particularly when she had to deal with personal issues such as family deaths. Participant 2B noted that the care the faculty provided to the students had been helpful in her program completion.

Participant 2B articulated her difficulties to this point in passing the program. She said that the degree of difficulty of the written examinations was set at a high standard; however, questions were often observed with contestable answers thus decreasing the students' academic satisfaction. She recommended that to eliminate issues of the test questions, a "teaser test" would be an essential policy that can be implemented to help the students. As Participant 2B described a "teaser test," this would be an examination that explores and assesses possibilities of students' answers to the test questions.

Participant 3C. An African-American male student claimed that his childhood interest in nursing and the experience of the death of his stepmother influenced his decision to enroll in the nursing program. Participant 3C utilized his savings and the student loan proceeds to finance his studies. He reported that students enrolled in this program must be fulltime students to pass the subjects and complete the program. He shared the positive effects for each semester he has had to date with the program. He felt that general knowledge is acquired and honed, such that the application of this knowledge in the subsequent semesters would be much easier. He added that the engaging qualities of the faculty and the timely delivery of their feedback were helpful in his

academic endeavors. However, he emphasized the need for more laboratory and simulation activities that can build students' competencies in handling cases at the clinical sites.

Participant 3C explained that his positive relationship with his classmates and faculty had been the factors that motivated him to remain in the program. In addition, he stressed that while the program requirements are difficult to comply with, staying focused and providing time for self-study assisted him in overcoming the demands of the program.

Participant 4D. A Caucasian male, was an employee who saw the employment benefits of the workers in the healthcare industry. He reported that the experience of the non-renewal of his job gave him the opportunity to consider enrolling in the nursing program. Upon his enrollment in the program, he reported the difficulties he experienced in completing the program requirements. However, he stressed that completion of the program requires self-discipline, a value he considered a "force to abide by." Participant 4D said, "It's really easy to get distracted, but if I get distracted I won't succeed."

Participant 4D mentioned that the supplemental instruction program assisted his completion in the program. He described the program as, "a nursing student led program of tutoring in small groups and there's one session a week for each cohort so I go to the sessions for my cohort and get taught by a tutor." He added that his participation in a group reduced his anxieties when he had to speak up. He said, "It was actually a struggle for me to actually get up there and talk in front of people, but I was successful. Like, I got a decent grade on that project." He further claimed that studying in the ADN program requires sacrifices, particularly the time for family and other commitments. When asked for his recommendations, he stressed the importance of wide access to learning materials through the supplemental instruction program.

**Participant 5E.** A Caucasian female, mentioned that prior to becoming a housewife, she worked in a business corporation. However, after 10 years of staying at home, she decided to enroll in the nursing program. Her motivation to enroll in the program was to reacquire the knowledge she used to have and to refocus on a career that would allow her to provide care services for people in need.

Participant 5E shared the positive relationship she had with the medical doctors, the faculty, and the students. She said that positive relationships allowed her to learn from a variety of faculty members as well as other students who were her study friends. Participant 5E stated that among the difficulties she experienced while enrolled in the program was passing all the examinations. She said she encountered difficulty in understanding examination questions. She explained that the barrier to effective learning in her case was the language being used in the questions. She claimed that other of her classmates who spoke English as a second language also found the examination questions difficult to understand.

When asked about the mechanisms that have helped her in the completion of the program, she stressed the importance of the progression policy, a nursing program that allows students to cope with their missed classes and examinations. She implied that students have to struggle daily and that the progression policy provides special consideration to students who were faced with unique and difficult situations such as mothers who still have to attend their children's' needs. She further recommended that in order to help the students who struggled to complete the program, the grading rubric must also have special considerations similar to what the progression policy provides to students.

**Participant 6F.** An African-American female, works as a social worker at a mental health institution. She said that her six years of work experience in that field motivated her to

pursue further studies. However, when confronted with the benefits that the nurses acquired in their profession, she considered redirecting her career path from social work to nursing.

Participant 6F stated that enrolling in the program made her daily schedule the busiest she has had so far in her life. She explained that as she progresses, the learning content becomes more difficult. She said that the presence of other students and faculty with whom she has established a positive relationship has helped her survive the program. She explained:

I feel like in order to survive nursing school you sort of have to study with people. And you start to learn things in different ways because people pick out different things that they sort of latch on to in the material and then you latch on to other things. And just having the discussion about different things helps you learn it from all sorts of angles.

She said that the nursing faculty were ethical and caring to students, especially to those students who they observed as having difficulty completing the course requirements.

When asked about the difficulties she encountered while being enrolled, she said that in addition to the course requirements, she worried about the cost of tuition. She stated the need for nursing students to focus on their studies rather than working. She claimed that while she worked 10 to 15 hours a week, she had to allot extra time to study. She said, "It worked out that way because I don't know that I could have managed the stress of trying to get good grades because, you know, I want to do well. I don't want to just pass."

Participant 6F shared that she received "testing accommodations because I do have a learning disability." She commended the policies of the school for accommodating and supporting students who want to be successful despite their disabilities. She further recommended the inclusion of science courses that are fundamental to the success of the students in the nursing examination.

Participant 7G. A Caucasian male, worked at a finance company when he sustained a head injury due to an accident. His experiences in the hospital and the care of the nurses brought him to the conclusion that nursing is a noble and caring profession. He felt that helping others would provide him the fulfillment he had been seeking in his life. Participant 7G described the program as a "tough program," requiring much time and effort. Participant 7G stated, "You have to put a lot of time into it. You know, sleepless nights! And especially working out until 11:30 and then getting up for a 6:00 clinical. That affects the body and mind." However, he stated that although the program was the toughest program, his motivation was the realization of his life's dream. He also emphasized the opportunities available to students after completing a nursing degree.

When asked about the obstacles that he encountered while enrolled in the program, he shared that his divorce hindered him from enrolling fulltime in school, managing work schedules, and handling family issues. His decisions resulted in his resigning from his job and focusing on completing the program. He shared his appreciation for the fact that despite the difficulties he encountered, he still managed to complete the program. He also commended the support the institution provided to him as a student with multiple learning disabilities. He recommended that while faculty members in the program are part-time, they need to be prepared when they come to class.

### **Students Who Have Dropped Out of the Nursing Program**

**Participant 8A.** A Caucasian male, shared his childhood interest in studying science, which motivated him to enroll in the nursing program. However, completing the program requirements became an obstacle, particularly the practices on synthesizing various sources of

information in order to provide appropriate nursing diagnoses. He said that he had not successfully completed all nursing requirements due to the volume of academic work.

Participant 8A shared that not only were the required readings and the language barriers he experienced in comprehending reports a barrier, he also had to work to finance the needs of his family. He shared:

Learn the language... and I'm a father of two and I'm a full-time breadwinner in my household too so that's why I took everything very, very slowly. I took first year clinicals into my second semester of nursing so I had a whole semester's worth of picking up the language in and of itself underneath my belt already, but still that failed me.

Participant 8A said that while he patiently complied with the required reading activities, the volume of information that his instructor wanted him to learn was excessive. He said that he had difficulty absorbing all the information required to pass the end-of-course examinations. When asked about a turning point that contributed to his decision to drop the program, he said that the progression policy did not work out well in his case. He failed twice in major subjects, and was confronted with family issues involving the health of his wife and the need to manage the childcare of his children.

Participant 9B. A Caucasian male, was a nursing assistant for nine years in the Air Force before his enrollment in the ADN program. He said that while he was exposed to nursing, his weaknesses included the preparation of care plans. He said, "I think that there really should be a class just to teach you how to just do care plans cause it's a large part of your grade for clinical and for other courses or other classes." When asked about the best aspect of the program, he said that it was the applications of the nursing knowledge in one-on-one patient situations. He stressed that fulltime nurses dealt with "multiple patients." However, while he liked the aspect of one-on-one nursing, he complained that the pacing and the workload the instructors imposed on

that the workloads that the teachers gave to their students reflected their inability to provide quality teaching to their students. He explained, "Nursing instructors had nursing jobs as well and so they had to split their time and energy between being an instructor and being a full-time nurse."

Although the difficulties challenged him to complete the program, he accepted that his efforts were not sufficient in managing the stresses he experienced while enrolled in the program. He further claimed that he sought intervention from the instructors to manage his difficulty, but said that he received inadequate assistance from them. His anxiety finally led to his decision to drop out of the program. He shared:

A lot of the instructors that I had did really well at helping me pass my exams. But once I was stressed in clinical... I'd be so focused and so fixated on not doing well in clinical on the papers that it would affect my other work cause I was spending so much time and energy trying to figure out how to make them better.... I was hospitalized and I had to withdraw.

Participant 9B recommended that services for students with learning disabilities should be improved. He further stated that competency of students in the preparation of care plans must be developed such that they comply with the requirements set by the instructors.

**Participant 10C.** An African-American female participant said that she received positive feedback concerning the nursing profession and the performance of the school in providing quality training for the practical nursing program. However, her enrollment in the program and the associated experiences she had were far from what she had expected. She described her experiences:

It is stressful and fast paced. I initially started full time but could not keep that pace with family and working part time so I went down to the part time option. I had a few courses that I did not pass and was given another chance by the faculty but I was again

unsuccessful. I have kids, family and still worked part time. It was just too much and the further I got along, the courses were harder.

Participant 10C described best and worst experiences she had with the program.

The best aspects were the faculty. They seemed like they generally cared about our success in the nursing program. They were very helpful and offered help/resources when things became difficult. Having friends in the nursing program helped, too, as you could support and help each other a lot. Nursing School is hard and fast paced. All students had to participate in simulation and that helped a lot.

She also noted the importance of supplemental instruction and the learning center as elements that assist students. She said:

Supplemental Instruction tutoring helped a lot. I could not attend all the session but when I did it was very helpful and reviewed a lot of material past and present. Plus I could hear other students' comments...The Learning Center was also helpful. They had nurses who gave help with care plans or reviewing anatomy for instance. The Learning center was very helpful initially prior to getting in. I could not utilize this resource a lot while in nursing program. Too much and no time to get there for help.

When considering her difficulties in the program, she stated:

Hard and fast paced. Clinicals were tough at times. I just couldn't keep up. I am an English as a second language student and it is hard at times to grasp the medical jargon. I felt that I needed extra time to work through material and there never was any extra time, we moved onto the next subject. Many of my other English as a second language nursing students felt the same but some were able to keep up. I was not. I have a family and with that comes commitment. I also needed to work part time while in program. So those factors and being in the program, I just could not be successful.

Participant 10C identified that working part time plus the responsibilities she had with her family contributed to her decision to drop out of the program. She noted that she was in the dilemma of choosing her priorities in life. Although she claimed that the progression policy was helpful in encouraging her to pursue and complete the program, the continuing failures she experienced prompted her to quit the program. She stressed, however, that she thought she could have been successful in the program if the institution had a policy to assist students who spoke English as a second language.

**Participant 11D.** An African-American female, confessed that she had applied to nursing programs at several colleges. She was excited about the acceptance of her application at this institution. Participant 11D, however, reported that her excitement turned into a stressful event in her life. She described the nursing program as:

It is very stressful! Nursing course and that path on cannot bend much so other things in my life had to bend. I decreased my work hours and spent less time with my family because of being enrolled in the nursing program. It was also exciting to learn new things, simulation and clinical great! It was fun to be a part of a group as all the other students had same issues or concerns while going through the nursing program. That support given to each other helped a lot. This program has definitely increased my stress level and put my coping skills to the test.

While she stressed that the instructors were effective, she found the coursework of the nursing program to be extremely difficult, to the extent that students with familial responsibilities could not survive. She shared:

Coursework hard and if didn't get it soon you would not get the new material being presented soon. I failed a course twice and then again so I was permanently exited. That was horrible and it took time to feel good about myself and being able to be a nurse. I have transferred the successful courses to another college and am working on becoming a LPN first. I was taking on too much with nursing school. I also had to care for my mother on occasion who had breast cancer so had to be there for her. It was a lot of things that made me unsuccessful here. She just died so I don't regret any time that I took off from school to be with her. I was working almost full time and with family and my mother, I failed my courses.

Participant 12E, an African-American female, shared that her enrollment in the program was made possible through the motivation of her mother and her aunt, who were both practicing nurses. Participant 12E had established friendship with the students and the faculty, which motivated her to pursue the completion of the program. However, like other participants who were unable to complete the program, she found the coursework difficult to understand. She described the coursework as "hard and even though I think I am smart enough to do it, I don't

think I wanted it bad enough. I kept having low scores on tests and sometimes I just didn't feel like I got it."

As such, when asked about the factors that contributed to her departure from the program, she responded:

The biggest challenge was how hard the tests were. They didn't even seem to test what we knew. I studied a lot and I felt like I understood. Half the time, I didn't even know what the question was asking me. Maybe I needed some help with test taking or something but I don't think the tests proved anything about being a nurse...I was also challenged by the time the program took to complete. I never expected nursing school to be so demanding. I have taken lots of courses in other subjects and nothing has ever been this hard. I had to work two part time jobs in order to pay my bills and that did not always leave enough time to study as much as I would have liked to. I would ask my mom for help but I think nursing has changed a lot since she went to nursing school. She wasn't very helpful.

Participant 13F. An African-American female, said she had dreamed of becoming a nurse. She explained that it took a while to enroll in the nursing school because she had engaged in early marriage and had three children who required childcare. However, her attraction to nursing school came in again after the children were grown enough for her to spend time in nursing school. She did not realize before she enrolled in the program that her interest in patient care would require so much study time and effort to complete the program. Accordingly, her responsibilities in the family still hindered her, to the extent that completion of the course requirements became impossible. She said:

Having three kids is hard even though they are all in school. They had to come first and I don't regret that. One of my daughters has asthma and this was a hard season for her and it seemed that whenever I had something really important to do, she would have an attack and I'd have to take her to the hospital.

She further stressed that financial issues also became a barrier for her completion. She recommended that

There should be financial help for nursing students. We need nurses and the future is only going to get worse. The government needs to help those of us who really want to be part of this exciting profession so that we can be successful and help others.

### Research Methodology and Analysis

This study used a phenomenology research design with the intention of examining the lived experiences of currently enrolled ADN, as well as formerly enrolled nursing students who had dropped out, to determine the factors that predict successful program completion. The data collection technique used in the study was a researcher-designed, semi-structured interview. In the recruitment process, the program coordinators assisted in the selection of qualified participants. The coordinators provided a list of currently and formerly enrolled students in the ADN Program who could potentially participate in the interviews. A letter of invitation containing the instructions and a consent form were sent to students who were recommended for participation. The time and place of the interviews were scheduled after the researcher received the signed consent forms from the potential participants.

A researcher-designed questionnaire was used in the conduct of the 45-minute face-to-face interviews with six questions. A panel of experts who have direct and wide experience on the phenomenon examined the appropriateness of the instrument. The interview questions were designed to elicit answers concerning the factors that hindered and facilitated program completion for this group of students. These participants were given ample time to recollect their experiences during the interviews. The interviews were audio recorded, and these recordings were then transcribed by this researcher for review as well as for data analysis. The transcriptions of the interview proceedings were coded (1A-7G for currently enrolled students and 8A-13F for formerly enrolled students) such that anonymity of the responses would be maintained.

In the analysis of the data, this researcher utilized the modified van Kaam method described by Moustakas (1994). The seven steps followed in the analysis of the individual transcripts included: (a) sorting and grouping of relevant experiences, (b) reduction of irrelevant data and coding the important information, (c) grouping of coded information to identify core themes, (d) verification of core themes against established empirical data and results, (e) development of individualized textural description of the participants and his or her experiences in relation to the identified themes, (f) development of structural description in relation to the identified textural descriptions of each of the participants, and (g) development of combined textural and structural descriptions to generate the meaning of the experiences.

The use of NVivo qualitative software aided the sorting and identification of themes and categories from the transcripts of the participants. The software was helpful in sorting words and phrases that are associated with the categories, which aided the researcher in determining the number of times the codes within a theme appeared across the responses of the 13 participants.

## **Detailed Analysis**

This researcher intended to answer two main research questions: (a) What are the lived experiences of select student nurses currently enrolled in a Midwest ADN program that may contribute to the understanding of their retention? and, (b) What are the lived experiences of select students who have dropped out of a Midwest ADN program that may contribute to the understanding of their attrition?

These questions were explored through differentiated questions for current and former associate nursing degree students. For the currently enrolled students, the perceptions regarding the factors that facilitate the completion of an associate nursing degree program were

determined. For the formerly enrolled students, the perceptions regarding the factors that contributed to their dropping out of the program were determined. The responses from both types of students were then consolidated to seek answers to the research questions.

The responses of the participants were reviewed and sorted to extract those responses that directly answered the questions posed for the study. These responses were coded and grouped into relevant experiences, which aided in the explanations of the phenomena being examined. While these experiences varied in context, this researcher eliminated those that were irrelevant, so that only valid experiences were coded and considered in the analysis. These processes follow the first and second steps of the modified van Kaam method of data analysis.

The important codes identified in the first (individual textural description) and second (structural-composite description) stages of analysis were grouped to form the thematic and subthematic categories. These themes were verified and verbatim responses for each of the themes were used to support the arguments of the participants who shared an experience relative to the emerging theme. This section presents the answers to the research questions and the associated themes of the study.

Research Question 1. What are the lived experiences of select student nurses currently enrolled in a Midwest associate degree nursing program that may contribute to the understanding of their retention?

In answering the first research question, three thematic categories were identified. These three thematic categories were engaging learning environment, instructor-related factors, and student-related factors. These three thematic categories are discussed below.

**Engaging learning environment.** This theme demonstrated the importance of positive relationships with the faculty, the quality of exposure in the clinical sites, the progression policy

that provides special consideration for students who struggled to complete the program, the access to student loans and financial aid, and implementation of programs that support the learning needs of students, regardless of their abilities. These factors are the key variables that define an engaging learning environment for non-traditional students enrolled in the ADN program.

Participant 1A (a currently-enrolled male Caucasian student) described the learning engagement as an environment where positive relationships among education stakeholders are established and fostered. He said:

The best thing about being enrolled in the program...is like the relationships (students, faculty, clinical sites) I built. When you're out in the community studying (nursing)... people recognize you as a nurse though you're not necessarily a nurse... It's good to see while you're in the program that it's a highly recognized profession

Instructor-related factors. The crucial qualities that the participants articulated in their successful completion were the effective facilitation and ethical conduct of the instructors in lectures, simulations, and practical applications sessions. Two of the participants cited the effective instruction and the timely delivery of feedback to students as crucial components in defining an effective instructor.

Participant 2B (a currently-enrolled female Caucasian student) shared that without effective instructors in the program, students would not be able to pass the crucial semesters. She described an instructor as someone who assesses the knowledge of the students and provides supplementary instruction in cases where students are unable to answer a question on the test. Participant 3C (a currently-enrolled male student) said that effective instruction requires instructors to provide feedback and evaluation of students' learning achievements so that students will be motivated to study further.

Student-related factors. This thematic category articulates three themes that include (a) the desire and ambition of students, (b) being focused in the studies, and (c) time for self-study as factors that push the students to complete the program. Participant 5E (a currently-enrolled female Caucasian student) shared that she struggled to understand the nursing concepts and that she needed the simplest form of learning materials to understand and pass the examinations. She utilized nursing books for "dummies" and made use of the simulation activities to deepen her understanding on the concepts.

Table 3. Currently Enrolled Students' Perceptions of the Factors that Facilitate the Completion of an Associate Nursing Degree Program

	No. of	Percent (%) of
Currently-Enrolled Participant Responses to	participants	participants to
Research Question 1 $(N = 7)$	to offer this	offer this
	experience	experience
Engaging learning environment		
Positive relationship with faculty	6	86%
Engaging clinical learning sites	5	71%
Progression policy	4	57%
Wider access to student loans and aids	4	57%
Provision of policies and programs that support	3	43%
students with or without disabilities		
Instructor-related factors		
Facilitative and ethical qualities of instructors	6	86%
Effective instruction and provision of feedback	2	29%
Student-related factors		
Desire and ambition in working in health/nursing	7	100%
industry		
Staying focused	5	38%
Extended time for self-study	3	23%

Research Question 2. What are the lived experiences of select students who have dropped out of a Midwest associate degree nursing program that may contribute to the understating of their attrition?

For the second research question, two thematic categories were identified. These were program-related factors and student-related factors. When responses of students who dropped from the program were analyzed, the formers students shared several obstacles that hindered them from completing the crucial semesters in the program and resulted in their dropping out of the program.

**Program-related factors.** This thematic category articulated the importance of the amount and difficulty of the course requirements, the difficulty of the test rubrics, ineffective instructors, and the inability of teachers to comply with the demands of a full-time program.

Participant 10C (African-American female former student) described the nursing program as being:

... stressful and fast paced. I initially started full time but could not keep that pace with family and working part time so went down to the part time option. I had a few courses that I did not pass and was given another chance by the faculty but I was again unsuccessful. I have kids, family and still worked part time. It was just too much and the further I got along, the courses were harder.

**Student-related factors.** This thematic category suggests the difficulty students had in balancing work, family, and school responsibilities, language barriers, and the separation of what were discussed in the classroom against the students' observations in the clinical setting as elements that hindered students from completing the program.

## Participant 10C said:

I worked part time and have a family, then with school it was a lot for me. At times, I put school first but there were times when that just couldn't happen. Family or my job took priority. I felt supported in the program but felt they could have more support for us

students. Nursing school was fast paced even going part time with my outside commitments.

Table 4. Dropped Out Students' Perceptions of the Factors that Hinder the Completion of an Associate Nursing Degree

Dropped Out Participants' Responses to Research Question 2 $(N = 6)$	No. of participants to offer this experience	Percent (%) of participants to offer this experience
Program-related factors		
Amount and difficulty of course requirement (stressful & fast paced)	nts 5	83%
Difficult test rubrics	5	83%
Ineffective instructors (e.g., not motivating)	3	50%
Teacher inability to provide full-time teaching tasks (e.g. delay in feedback)	ng 3	50%
Student-related factors		
Difficulty in balancing work, family, and so responsibilities	hool 4	67%
Language barriers (e.g. medical jargon, examination language)	m 2	33%
Separation of work and school environment	2	33%

## **Subquestions**

The subquestions posed in this study were devised to determine the student-, program-, and instructor-related factors that led to a student's successful completion of the associate nursing degree program along with the factors that led to a student dropping out of the associate nursing degree program. The study was also structured to determine how students coped with managing the obstacles of completing the program and the factors that the participants indicated were effective in assisting them with completion.

The findings indicated that currently enrolled students perceived the following as factors that facilitated the completion of the program: positive relationship with faculty, engaging

clinical learning sites, progression policy, ethical and facilitative instructors, desire and ambition, staying focused, and making time to study. Students who dropped out of the program indicated that balancing work, family, and school, language barriers, separation of the classroom and clinical settings, difficult course requirements, difficult test rubrics, ineffective instructors, and lack of time that teachers spent teaching specific tasks were factors that contributed to their decision to leave.

Finally, students' coping mechanisms and the factors or services that persistent students indicated had helped them stay in the program were noted in the analysis. These included time and financial management, establishing a good relationship with their instructor, and use of student services. These results of the findings related to the subquestions indicated that, generally, students who were successful had a better perception of the school and services, had better relationships with instructors, managed their time better, and found the opportunity engaging. Those who dropped out of the program found the work too difficult, found it hard to manage their responsibilities, had language barriers, and did not find the instructors effective.

### **Summary of the Results**

The descriptions that were extrapolated from the textural descriptions generated with the experiences of the participants yielded three thematic categories that defined the structure concerning the management of students' personal obstacles hindering students' program completion. The themes of the lived experiences of select student nurses currently enrolled and select student nurses who have dropped out of a Midwest ADN program include (a) time and financial management, (b) establishing good relationships with instructors, and (c) use of student support services.

Time and financial management. One of the lived experiences of select student nurses currently enrolled and select student nurses who have dropped out of a Midwest ADN program is about time and financial management. This category emerged after the participants, both current and former students, stressed the large amount of coursework that is required to master in order to pass the program. The fast-paced lessons and the paperwork requirements of core courses that demanded a student's full-time participation in school and enrollment in the program discouraged students from working part-time. Thus, successful completion of the program required students to possess adequate skills to manage their time and finances.

Establishing good relationships with instructors. Another lived experience of select student nurses currently enrolled and select student nurses who have dropped out of a Midwest ADN program was about how to establish good relationship with their instructors. This category related to the positive relationships students required from their instructors. The facilitative and ethical conduct of the instructors in his or her class motivated students to study further and to seek assistance on matters that were difficult to grasp and understand. The good relationships with the instructors also reminded participants of the implementation of the progression policy, which provided the students with the opportunity to comply to the requirements, before needing to drop from the program.

Use of student support services. Lastly, one of the lived experiences of select student nurses currently enrolled and select student nurses who have dropped out of a Midwest ADN program was about utilization of student support services. This category relates to the available services for students to help them cope with the difficulties in school such as making use of financial loans, staying focused in school and work, and using supplemental instructions. The theme of financial loans emerged from the responses of the current and former students

regarding factors that hindered their full integration into the school environment. Students still needed to work, even if only part-time, to defray the costs of their daily needs and the needs of their families. The financial constraints associated with the completion of the program can also be linked to the inability of students to focus their attention on completing the course requirements when several issues are affecting them. For instance, participant 7G (Currently enrolled male Caucasian student), who suffers from dyslexia and anxiety attacks, is easily distracted when available help from instructors appears inadequate. Participant 13F (Dropped out female student who did not indicate her ethnicity) shared that familial responsibilities were the barrier to her program completion.

Supplemental instructions were also helpful among these groups of students. A majority of the participants revealed that students in a group are able to discuss the learning materials, which provides better opportunities for students who were not able to read the materials. Supplemental instructions provided the students with opportunities to discuss issues concerning the application of the knowledge in the clinical setting.

Table 5. ADN Students' Coping Mechanisms to Complete the Program

	No. of	Percent (%)
Participants' Responses $(N = 13)$	participants to offer this experience	of participants to offer this experience
Time and financial management	12	92%
Establishing good relationship with instructor	10	77%
Use of student services	7	54%

# **Chapter 4 Summary**

This qualitative phenomenology research study examined the lived experiences of both currently-enrolled ADN students and formerly-enrolled nursing students to determine the factors that contributed to a student successfully completing the program or caused a student to drop out.

This chapter presented the results of the analysis using the seven steps of Moustakas (1994). The steps allowed this researcher to identify codes and themes relevant to the development of the individualized textural description of the participants, structural description in relation to the identified textural descriptions of each of the participants, and combined textural and structural descriptions to generate the meaning of the experiences. The emerging themes are further discussed in Chapter 5.

#### CHAPTER 5. CONCLUSIONS AND DISCUSSION

#### Introduction

This chapter summarizes the entire study and presents a discussion of the findings to determine the factors that affect attrition and retention of nursing students who study at one Midwest community college. This chapter includes the overview of the study, followed by the statement of the purpose, significance, and research questions of the study. The results of the study are summarized by using participant responses to the research questions that identify the factors affecting attrition and retention of nursing students. The limitations are presented, along with the implications of the study to the understanding of students' attrition and retention.

Recommendations for further research are discussed to strengthen the design of future research on nursing students' attrition and retention. The conclusions are presented last.

The field of nursing within the healthcare sector comprises the largest contribution to the labor workforce of the United States. There has been an increasing demand for nursing professionals in recent years. While this demand exists, the nursing programs in this country can only produce 50% of the required graduates for this profession (NCES, 2009). Along with the increasing annual demand for nursing professionals is the increasing amount of attrition within this field. The number of nursing professionals is insufficient to support this demand, which then affects the economy (Buerhaus et al., 2009). In response to this dilemma, studies have focused on factors that affect student attrition as well as the contributing factors to student retention in nursing programs.

Jacobson (1997) proposed that school characteristics affect student retention. Elliot and Shin (2002) added that student satisfaction with the school environment influences the motivation of students to achieve their academic goals. Moreover, when students' expectations of the services offered by the institutions are not met, it is more likely that students will withdraw from the program (Aldridge & Rowley, 2001). While there is a plethora of studies regarding student retention (Aldridge & Rowley, 2001; Elliot & Shin, 2002; Ilias et al., 2008; Jacobson, 1997), a scarcity of studies deal specifically with the retention of ADN students.

Previous studies found that the quality of the academic mentor-mentee relationship (Thurber et al., 1989), social integration into a nursing program (Jeffreys, 2002, 2007), and the availability of academic and social support services (Courage & Godbey, 1992; Jeffreys, 2007) are directly related to student program completion. However, while these variables were found to affect student retention, they are not directly applicable to students in the ADN program.

Alternatively, the study by Bridgeland et al. (2006) presented factors that affect student attrition. These factors are closely associated with the involvement of parents and teachers in school. These dropping out predictors include school-related factors, socioeconomic factors, academic performance factors, family factors, discipline factors, and individual factors. The U.S. Department of Education (2008) added that factors of dropping out are a student's lack of interest, family or personal problems, and failing grades. The Council for Virginia's Future (COVF, 2008) concluded that no one group of students is more prone to dropping out than another group. However, early warning signals can be acknowledged in order to determine which students are at risk of dropping out. Thus, it is the role of each school system to devise its own way to identify students at risk of dropping out (The National Dropout Prevention Center, 2007).

In line with these factors that affect students dropping out, Shaul (2002) noted three general approaches to dropout intervention, namely supplemental services for at-risk students, alternative education programs for students who do not succeed in the traditional classroom setting, and restructuring efforts to include the entire school. The TEA (2008) added that family engagement, mentoring, and alternative schooling are the most common strategies for students at risk of dropping out.

The focus of this study was to determine the factors that affect both the retention and attrition of nursing students at a Midwest community college. Crow and Hartman (2005) reported that the increasing population in the state at which the nursing program studied is located requires nursing education programs to increase their graduation rate. However, the AACN (2010) indicated their inability to meet the increasing demand of the state. As the attrition rates increase, the shortage of nurses also increases, which supports the need for this current research to examine attrition in ADN programs.

The significance of the current study is two-fold. First, the identification of barriers to student completion of the associate nursing program will be a great help to address the national shortage of skilled nursing graduates who could sustain the operation of the healthcare industry. Second, the implementation of concepts that have emerged from this current research could increase the number of graduating students. Hence, the information from the findings could help address the shortage of nursing professionals in the state as well as within the country as a whole.

The current study utilized a qualitative phenomenology research design with the intention of examining the lived experiences of currently-enrolled ADN (during the time of the study), as well as formerly-enrolled nursing students who had dropped out, to identify the factors that determine associate nursing program completion. This researcher used a semi-structured

interview format with open-ended questions to explore the lived experiences of nursing students regarding attrition and retention in the ADN program. The current study sought to answer the following research questions: (a) What are the lived experiences of select student nurses currently enrolled in an associate degree in nursing program in a Midwest community college that may contribute to the understanding of their retention? and (b) What are the lived experiences of select students who have dropped out of a Midwest community college nursing program that may contribute to the understanding of their attrition?

This researcher found that there was no existing reliable and valid instrument that could be used to measure and examine the topic. To address this, the researcher utilized a phenomenological research design. The phenomenological method is indicated when a full understanding of a given issue is not known but the researcher is interested in obtaining a full and complete appreciation from the data (Moustakas, 1994).

With the qualitative nature of the study, it was assumed that the data gathered from the face-to-face interviews would reflect the participants' perceptions, views, and feelings as they experienced the life of a nursing student in a college nursing program. This researcher used NVivo  $8^{\circ}$ , a qualitative software package that can sort, arrange, and code textural data. With these procedures, attributes and thematic categories emerged. Moreover, this study used the modified van Kaam method by Moustakas (1994) in the analysis of the data.

According to Creswell (2005), most researchers conducting phenomenological studies typically use 10-20 participants. In accordance with this guideline, this researcher used a sample size of seven student nurses currently enrolled in the associate degree in nursing program (during the time of the study) and six students who had dropped out from the program, for a total of 13 participants. The sampling strategy used for choosing participants from the community college

was purposive sampling. The community college chosen as the site for this research is a school with one of the most diverse student populations in the area. Furthermore, the school has been offering an associate degree program since 1975.

### **Summary of the Results**

Three themes emerged when answering Research Question one. These themes include (a) engaging learning environment, (b) student-related factors, and (c) instructor-related factors. The first theme, engaging learning environment, suggests provisions of student support mechanisms that have assisted students to program completion. In particular, all currently enrolled students described an engaging learning environment as a) positive relationships with the faculty, b) the quality of exposure in the clinical sites, c) the progression policy that provides special consideration for students who struggled to complete the program, d) the access to student loans and financial aid, and e) implementation of programs that support the learning needs of students, regardless of their abilities.

The second theme, instructor-related factors, suggests that a student's successful completion can be attributed to the effective facilitation and ethical conduct of the faculty in lecture, simulation, and practical applications sessions. Effective faculty was defined by currently enrolled ADN students as instructors who have the ability to conduct effective instruction and the timely delivery of feedback to students. Feedback as revealed in this study was felt to gauge the academic performance of the students as well as motivate them to study further.

Theme three, student-related factors, suggests that efforts of the academic leaders to provide and ensure an engaging learning environment for students are even more successful

when students (a) have desire and ambition, (b) are focused on their studies, and (c) have time to study by themselves. These factors help the students to complete the program.

For the second research question, two themes were identified. Dropped-out ADN students identified that the amount of and difficulty of the course requirements, the difficulty of the test rubrics, ineffective instructors, and the inability of teachers to provide fulltime teaching tasks that result in delay of delivery of feedback to students were all factors that hindered their program completion.

The second category, student-related factors, suggests that the students who dropped out from the program were nontraditional students who had various family responsibilities. These formerly enrolled students claimed that factors such as balancing work, family, and school responsibilities, language barriers, and the discrepancies between what was discussed in the classroom and the students' observations in the clinical setting hindered them from completing the program.

Finally, the findings related to the subquestions of the study indicated that, overall, successful students had a more positive perception of the school and the services provided, had more positive relationships with instructors, were able to manage their time better, and found that the overall experience was engaging. Students who dropped out of the program indicated that the work was too difficult, noted that it was difficult for them to manage their responsibilities, experienced language barriers, and did not find the instructors effective.

#### Discussion of the Results in Relation to Literature

This current study contributed to the body of literature by examining the retention experiences of students currently enrolled in an ADN program. Moreover, the current study

examined the experiences of formerly program enrolled students in order to understand attrition. While a plethora of researchers have examined the attrition and retention of students to particular courses, a limited number of studies focused on nursing students in an ADN program. Therefore, it is hoped that the findings of this current study will expand the existing body of knowledge on student attrition and retention.

It has been previously established that student attrition is affected by the school environment (Jacobson, 1997), student satisfaction (Elliot & Shin, 2002), and social integration in the nursing program (Jeffreys, 2002, 2007). However, these variables were not directly validated with ADN students in this current study. On the other hand, the school-related factors, socioeconomic situation, academic performance, family factors, discipline, and individual factors as stated in the study conducted by Bridgeland et al. (2006) were found to be associated to ADN student attrition. The present study also confirmed the findings of Shaul (2002), who proposed that supplemental services for at-risk students, alternative education programs for students who do not succeed in the traditional classroom setting and restructuring efforts to include the entire school are effective interventions for attrition.

As mentioned by all of the participants in this study, the primary factor for student retention among ADN students in this study was a desire and ambition to work in the health/nursing profession. This finding can be explained by Tinto's student integration model (1975), the theoretical framework for this study. Tinto's model proposed that student persistence is associated with the student's academic and social integration capacity. In relation to this finding, persistence is triggered by the intrinsic desire of a student to complete the courses and then work as a nursing professional. Moreover, the emergence of this finding among all the

participants (both successful and unsuccessful students) can be explained by two of Tinto's five basic components of student intellectual integration, which then lead to student retention.

The first two basic components are a) a student's pre-entry attributes and initial level of commitment to educational goals and higher education in general, and b) the specific institution of attendance. Applying these components to the current study's findings, a student's desire to work in the nursing industry is an intrinsic motivation that can be considered as an attribute. Thus, it supports the first basic component of Tinto's (1975) student integration model.

Tinto (1993) further explained that these two components are the initial components of intellectual integration. While there were two types of participants in this study (currently enrolled students and those who have withdrawn from the program), it can be assumed that both types of students achieved these initial components of intellectual integration because both currently enrolled and dropped-out students' persistence was motivated by their intrinsic desire to complete the courses and then work as a nursing professional. However, as a person becomes integrated into the institution due to academic and social experiences, a sense of belonging is developed through these experiences (Tinto, 1993).

Tinto (1993) further explained that this process might have two very different results, as social integration may increase or decrease. Relating these concepts to this current study, it was found that currently enrolled students had increased their social integration while the formerly enrolled students had decreased their social integration in the process. For instance, results revealed that dropped out students encountered difficulties in coping with the course requirements. These students claimed that they wanted their teacher to be with them in times that they needed them most. However, their difficulties were not resolved, which led to their decision to drop out of the program. With this in mind, the pre-entry attributes of unsuccessful students

such as their intrinsic desire to complete the course and then work as a nursing professional will eventually diminish as they experience difficulty in integrating with the academic community.

Table 6 illustrates the factors that influence students' social integration as supported by previous empirical studies.

In a different light, the findings regarding amount and difficulty of course requirements (stressful and fast paced) and difficulty of test rubrics, was mentioned as a barrier to success by five of the six formerly enrolled participants (See Table 7). These findings are supported by the study of Cabrera et al. (1993), who asserted that social integration and the academic performance of students were factors that predicted persistence of students. This claim by Cabrera et al. (1993) is associated with Tinto's (1975) student integration model. Cabrera et al. (1993) also proposed that students' coping mechanisms concerning academic challenges affect student attrition. In relation to the current researcher's findings, the amount and difficulty of the course requirements, as well as difficult test questions were found to be academic challenges that were experienced by formerly enrolled ADN students. Moreover, as explained by Cabrera et al. (1993), a student's ability to cope with these challenges is crucial to academic and social integration, the lack of which may influence attrition rates. Thus, this current study's findings are supported by Cabrera et al.'s (1993) proposition about student attrition.

Table 6. Social Integration Factors of Students' Completion

Factors	Supported by Previous Studies
Engaging learning environment	Benjamin (1990) who proposed that
Positive relationship with faculty	student satisfaction depends on their
Engaging clinical learning sites	life experiences during their
Progression policy	educational endeavors.
Wider access to student loans and aids	
Provision of policies and programs that	
support students with or without disabilities	
Instructor-related factors	Astin (1975) proposed that student
Facilitative and ethical qualities of	involvement, institutional advising
instructors	and counseling, independent study,
Effective instruction and provision of	and self-paced instruction are crucial
feedback	in the success of students.
Student-related factors	Tinto (1975) claimed that family
Desire and ambition in working in	background, individual attributes,
health/nursing industry	pre-college schooling, goal
Staying focused	commitment, the institution's
Extended time for self-study	commitment, and student integration
	are crucial in the success of students.

Another significant finding was that difficulty in balancing work, family, and school responsibilities was mentioned by four of the six formerly enrolled participants. This finding can be explained by Bridgeland et al. (2006), who proposed that student attrition factors are associated with the involvement of parents and teachers in school. Bridgeland et al. (2006) proposed that variables such as school-related factors, socioeconomic factors, academic performance factors, family factors, discipline factors, and individual factors affect student attrition. In relation to this current study's findings, the difficulty in balancing work, family, and school responsibilities influence student attrition and is supported by Bridgeland et al.'s (2006) research.

Table 7. Barriers to Student Completion

Factors	Supported by Previous Studies
Program-related factors Amount and difficulty of course requirements (stressful & fast paced) Difficult test rubrics Ineffective instructors (e.g., not motivating) Teacher inability to provide full-time teaching tasks (e.g. delay in feedback)	Cabrera et al (1993) proposed that academic performance of students and their difficulties to cope with the academic tasks hinder their successful completion
Student-related factors Difficulty in balancing work, family, and school responsibilities Language barriers (e.g. medical jargon, exam language) Separation of work and school environment	Bean and Metzner (1985) proposed that nontraditional students have unique needs requiring appropriate intervention.

Another important finding from this current study (as shown in Table 8) was that 12 of the 13 participants (both currently enrolled and formerly enrolled students) mentioned "time and financial management." This finding is supported by the study of Coll and Von Seggern (1991), who found that the completion of a student's first year of college positively influenced retention. According to Douglas (2009) in her review of the study by Coll and Von Seggern (1991), offering financial assistance is a crucial element of student retention. Moreover, Bagayoka and Kelly (1992) proposed that time on task and academic preparedness affected student retention. Time on task was defined as the amount of time the student spent studying. Bagayoka and Kelly (1992) further concluded that students who studied less than the recommended time were at risk of attrition. This current study is supported by Bagayoka and Kelly's (1992) previous research.

Establishing a good relationship with the instructor was also a finding that was mentioned by 10 of the 13 participants. This finding is supported by the study of Lopez-Real and Kwan (2005), who asserted that in order to improve retention of students, mentoring is an important consideration. Mentoring programs provide the faculty with an avenue to develop working relationship with their students. An effective mentor could encourage student persistence in a program and help students when they encountered academic difficulties.

As reflected in the results of this current study, both currently enrolled and former ADN students recommended strategies that can prevent student attrition. In particular, the participants mentioned the difficulty of passing the course examinations. They recommended that there should be a practice test prior to the administration of the test that would assist students in responding to the questions appropriately. This finding is supported by the claim of Ziskin et al. (2009), who stated that the policies and practices in the institution are important for nontraditional students who had unique academic issues. These authors added that attrition varies among institutions due to structure of policies and practices of the colleges or universities which are determined and shaped by the stakeholders of that institution.

Table 8. Crucial Factors to Students' Completion

Factors	Supported by Previous Studies
Time and financial management	Coll and Von Seggern (1991),
	Douglas (2009), and
	Bagayoka and Kelly (1992)
Establishing good relationship with instructor	Lopez-Real and Kwan (2005)
Use of student services	Ziskin et al. (2009)

#### Limitations

There were two limitations to the data analysis of the current study. The first limitation was the small sample size of the study. There was a total of 13 participants and this number does not allow for an extrapolation of the findings to the entire ADN student population in the program. This is especially true since the sample contained seven currently enrolled and six formerly enrolled students. For the small amount of generalizability that does exist, it would be limited to community colleges that are very similar in most key aspects such as size, program type, student demographics, and teaching methods. The study also may have been limited by the honesty and completeness with which the participants answered the questions. Fortunately, there was no apparent bias that would lead student participants to fail to disclose an experience or mislead the interviewer so this limitation should be negligible on the outcome of the study.

## **Implications of the Results for Practice**

The findings of the current study illustrate the factors that affected attrition and retention of nursing students at the community college being studied. Seago and Spetz (2003) found that even though there is a plethora of studies that have developed theories to explain a student's early departure from nursing programs, there are only limited studies conducted on the retention and attrition of nursing program students. Therefore, it is hoped that the findings of the current study will contribute to the body of knowledge on attrition and retention of nursing program students and that these findings can be used as reference for future studies.

In addition, the findings may help educational institutions decrease student attrition as well as improve retention of students in a nursing program. More specifically, the identification of the barriers to the completion of the associate nursing program among students can be utilized

by educational institutions to come up with ways to eliminate these barriers. Alternatively, the identification of non-endogenous aspects that provide support for the success of students could indicate to colleges that more support for students should be provided during their enrollment.

Furthermore, the findings of this current study suggested the implementation of effective coping mechanisms that could encourage students to remain in the associate nursing program.

The findings may also serve as a guide for students currently enrolled in the associate nursing program regarding staying in the program.

#### **Recommendations for Further Research**

The scope of this current study explored only the attrition and retention experiences of students in the ADN program at a Midwest community college. Based on the scope, the findings of this study can only be limited to a community college with similar demographic characteristics of the present study. It would be useful for future researchers to expand the scope of the study to include those students and former students from private and public universities and colleges. Moreover, future studies could consider increasing the number of the sample size. Creswell (2005) asserted that researchers conducting phenomenological studies typically use 10-20 participants. This study included 13 participants. Thus, representativeness of the participants to the target population may have been at risk. It is recommended that future researchers should follow Creswell's (2005) suggestion of increasing the number of participants to strengthen the reliability of the results.

## **Conclusions**

There is an increasing trend of attrition among higher education institutions. This fact is a threat not only to the educational field, but also to the nation's economy as a whole. In response to this, many retention studies have been conducted to address this concern. However, there is a limited body of knowledge on its application to nursing programs. The number of graduates produced by nurse educators cannot keep pace with the increasing demand for health care professionals around the country.

This study revealed that retention is affected significantly by the intrinsic attributes of individuals, as reflected by the current study's participants currently enrolled in the ADN program. Alternatively, attrition may be greatly increased due to the difficulty of the course requirements, as reported by the participants who withdrew from the nursing program being studied. In addition, it was found that time and financial components contribute to a student's decision to either continue or drop out of the nursing program.

In conclusion, retention strategies of higher education institutions should include the qualification and definition of the various needs of both traditional and nontraditional ADN students. A student's individual attributes and individual learning plan are necessary criteria to examine during the pre-acceptance process. Even more important than providing support such as teaching the students time and financial management skills, is the maintenance by the faculty of good rapport with the students, provision of the needed student services, and ensuring that unique student learning needs are met. With these, institutions of higher education can provide the specific activities that can assure student success. National issues of future nursing shortages

can be addressed prior to a crisis if these strategies are successfully implemented and carried out in nursing programs at colleges and universities throughout the United States.

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# APPENDIX A: INTERVIEW GUIDE QUESTIONNAIRE

The following questions were posed to the participants who are currently enrolled in the ADN program:

- 1. Please tell me about how you came to be enrolled in the nursing program.
- 2. Please tell me about being enrolled in the nursing program.
- 3. Please share with me the best and worst aspects of being enrolled in the program and which of these will support or hinder your successful completion of the program.
- 4. What challenges, if any, have you overcome to remain in the program?
- 5. What policies of which you are aware are in place that would or will support or hinder your successful completion of the program?
- 6. If you were offering design advice to the associate degree program, what changes would you make and why?

The following questions will be asked of the nursing students who have dropped out of the ADN program:

- 1. Please tell me about how you came to be enrolled in the nursing program.
- 2. Please tell me about being enrolled in the nursing program.
- 3. Please share with me the best and worst aspects of being enrolled in the program and how they related to your progress in the program.
- 4. What challenges contributed to your departure from the program?

- 5. What policies of which you are aware were in place that supported or hindered your progress in the program?
- 6. If you were offering design advice to the associate degree program, what changes would you make and why?