DISSERTATION

TOWARD A GROUNDED THEORY OF NURSING STUDENT ATTRITION

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WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY LENORA COOK ENTITLED TOWARD A GROUNDED THEORY OF NURSING STUDENT ATTRITION BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

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ABSTRACT OF DISSERTATION

TOWARD A GROUNDED THEORY OF NURSING STUDENT ATTRITION

Attrition of students from a nursing program is a significant concern. It is even more critical now because there are not enough nurses to fill all open positions in the healthcare industry. It is predicted the shortage will worsen in the next decade as an aging society increases the number of people requiring nursing care. While increasing the number of students admitted to nursing programs has been a popular method to meet this demand, finding ways to retain students in nursing programs would also increase the number of nurses entering the profession.

Understanding attrition is the first step in developing retention programs. This grounded theory study of attrition from the student's point of view provided insight on the phenomenon of nursing student attrition. Data were obtained through in-depth interviews of individuals who had left a community college nursing program for a semester or more, returned, and successfully completed a community college nursing program. These nurses provided a rich source of data because they had a unique perspective of attrition and successful completion.

The grounded theory process provided a systematic approach to data collection, analysis, and synthesis of data leading to the emergence of four axial categories and one core category. This study describes and explains the interaction of the axial categories of caring, courage, control, and adaptation. These intricate and entwined categories make up the core category of psychic strength. The findings of this study indicate that students enter nursing programs with varying levels of psychic strength. The challenges and stress of nursing school create anxiety that weaken psychic strength. In most cases students were able to adapt and regain homeostasis. If they were unable to adapt, they felt powerless. This feeling of powerlessness increased their level of anxiety. The cyclical process of challenges and adaptation leads to personal growth. If students are not able to adapt and regain control, they may lose courage to continue in school. These factors weaken or fracture psychic strength.

This study provides insight on nursing student attrition in community college nursing programs. Understanding how psychic strength can be weakened and lead to attrition will be useful to nurse educators searching for retention strategies.

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CHAPTER 1: INTRODUCTION

Background of the Study

A study investigating attrition of student nurses is perhaps best introduced by noting some of the challenges facing the profession. A critical challenge concerns the shortage of registered nurses currently in the field. The nursing shortage began in 1998 and continues today despite the surge in employment growth and wages (Buerhaus, 2005). According to the Joint Commission on Accreditation of Healthcare Organizations (2002), the majority of long term care organizations have inadequate staff to provide even the most basic care and hospitals have 126,000 nursing positions unfilled across the country. Health care facilities have responded to the nursing shortage with expanded recruitment and increased wages for nurses. Despite these efforts to recruit nurses, the shortage persists and is now entering its eleventh year making this the longest lasting nursing shortage in half a century (Buerhaus, 2005).

Nurse educators have the opportunity to help reduce the nursing shortage by increasing the number of graduates from nursing programs. While there are many factors that influence the number of nursing graduates, this study focuses on attrition from community college nursing programs. Background information including factors influencing the nursing shortage, the impact of the nursing shortage, strategies to address nursing shortage, the role of the community college in nursing education, and a brief overview of current research on retaining nursing students will be presented in Chapter

One. In Chapter Two I will discuss literature pertaining to student attrition in higher education first, followed by attrition in community colleges, and ending with attrition in nursing programs. The rationale for selecting grounded theory as a research method within the qualitative paradigm will be presented in Chapter Three. The selection of participants, data collection methods, data analysis approach, and validation methods will also be discussed in this chapter. The substantive grounded theory was derived from in depth interviews with nurses who have experienced an interruption in their nursing education and returned to successfully complete their nursing program will be presented in Chapter Four. A summary of the study, conclusion of the findings, applicability of the theory, implications for practice, and recommendations for future research will be presented in Chapter Five.

Factors Influencing the Nursing Shortage

Two of the main factors influencing the nursing shortage are the increased demand for nurses and the increased age of nurses. In 2007, the United States Bureau of Labor Statistics (BLS) reported nursing as the occupation with the largest job growth potential through 2016 (Bureau of Labor Statistics, 2007). The BLS predicts that there will be openings for an additional 587,000 nurses in that time span. The demand for registered nurses will continue to increase over the next five years as the 78 million "baby boomers" begin to retire (Joint Commission on Accreditation of Healthcare Organizations, 2002). The American Hospital Association (2004) believes that unless this demand is met, the continuous nursing shortage will alter hospitals' ability to continue to provide quality care.

In addition to an increase in consumers there will be an increase in the number of nurses retiring. The average age of registered nurses in the United States has risen steadily in the last two decades (Auerbach, Buerhaus, & Staiger, 2000, 2007). In 1980 the average age of a registered nurse was 38.1 years; by 1996 the average age had risen to 42.3 years. By 2010, the predicted average age of the working registered nurse will be 50 years (Joint Commission on Accreditation of Healthcare Organizations, 2002). The major contributing factor for the increase in the age of registered nurses is that the proportion of college students choosing nursing as a career has declined (Bureau of Health Professions, 2002). Indeed, Staiger, Auerbach, and Buerhaus (2000) found that since 1973 there has been a 40% decrease in the number of college freshman students who indicated nursing as their top career choice. It was speculated the decrease of young women entering the RN workforce was due to the fact that "women who would have entered nursing in the past, particularly those with high academic ability, are now entering managerial and professional occupations that used to be traditionally male" (Staiger et al., 2000, p. 235-236). With a decrease in student nurses entering the profession there also will be fewer people to carry on the profession as older nurses retire.

Impact of the Nursing Shortage

The nursing shortage has created increased financial strain on health care facilities and increased demands on nurses resulting in poor patient outcomes. Health care facilities have responded to the lack of nurses by reducing their services including postponing elective surgeries and decreasing the number of beds available for hospital admission (American Hospital Association, 2004). Health care related organizations have developed strategies to increase the number of nurses in the workforce. For example, the American Hospital Association (2004) helped secure \$142 million in federal funds from the United States Congress for nurse education in the fiscal year 2004. The organization also supports enhancing financial aid for nursing students and streamlining the immigration process to allow foreign qualified nurses and allied health professionals to work in the United States. Health Resources and Services Administration (2009) improves access to health care services through recruitment of healthcare professionals, grants supporting faculty retention, and scholarship opportunities for nursing students. Even with these efforts to increase the number of nurses, health care facilities struggle to provide adequate care for patients.

At a personal level, the nursing shortage impacts everyone at some time in his or her life. Nurse to patient ratios have increased as a result of the nursing shortage. Poor patient outcomes increase when nurses must care for a larger number of patients (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Buerhaus, 2005; Joint Commission on Accreditation of Healthcare Organization, 2002). A recent survey of the public revealed that almost one-half of Americans believe that the quality of health care has declined in the last five years (Kaiser Family Foundation, 2005). Nurses also find the work environment inadequate. According to PricewaterhouseCoopers' Health Research Institute (2007), excessive administrative paperwork, patient workload due to rising patient acuity levels, and inadequate staffing were the top three factors for nurse dissatisfaction and turnover.

Workload, stress, fatigue, and large patient to nurse ratios also contribute to the medical errors. In a survey of physicians, 53% cited the shortage of nurses as the leading cause of medical errors (Blendon et al., 2002). In another study by the National Institute

for Nursing Research, it was found that for every patient added to an average hospital's nurse's workload, a surgical patient's risk of death increased by 7% (Aiken et al., 2002). Reduced staffing levels have been found to be a contributing factor in 24% of unanticipated events resulting in patient death, injury, or permanent loss of function (Joint Commission on Accreditation of Healthcare Organization, 2002). According to the Agency for Healthcare Research and Quality (2007) an increase in registered nursing staff was associated with better patient outcome in the hospital setting but an increase in overtime hours was associated with increased hospital related mortality and infections.

In addition to financial strain, a decline in the quality of health care and an increase in medical errors, the nursing shortage also has created an environment of exhaustion and burnout for nurses (Aiken et al., 2002). Hospitals with 8:1 patient-to-nurse ratios are twice as likely to have nurses reporting emotional exhaustion and burnout than hospitals with 4:1 patient-to-nurse ratios. Moreover, 43 % of the nurses who report burnout will leave their jobs in the next year.

Emotional exhaustion and burnout is a stress outcome typically found in the helping professions that required close interactions with others (Grandey, 2000). Patients are "demanding much higher level of service quality and are insisting that we [nurses] become more interpersonal in their care" (Kerfoot, 1996, p. 59). Although nurses want to spend time at the bedside with their patients, it is impossible to do this with high patient to nurse ratios. These "limited resources, increased consumer and organizational demands, and more acutely ill patients" intensify emotional exhaustion (Vitello-Cicciu, 2003, p. 30).

In summary, there are not enough nurses to meet the healthcare needs of our society. Our society will age over the next few years, a demographic event that in years to come will have a profound effect and exacerbate the nursing shortage. Steps must be taken to increase the number of practicing nurses to be assured of adequate healthcare for our society.

Strategies to Address Nursing Shortage

There have been attempts to address the nursing shortage including increasing the number of students accepted into nursing programs and increasing funds for students and schools. Regardless of the methods used to increase the number of nursing graduates the supply does not meet the demand for nurses.

Associate degree nursing programs have been instrumental in increasing the number of graduate nurses. As mentioned earlier, the average age of nurses is increasing. One factor contributing to the increasing age of nurses entering the profession is the growth in the number of associate degree nursing programs from 57 in 1960 to 876 in 1996 (Auerbach, Buerhaus, & Staiger, 2000). Nursing typically has relied on a young student population and the enrollment of older, nontraditional students at the community college has increased the average age. For example, in 1935, 61.4% of nursing students were less than 22 years old. Most of these graduates worked as a nurse for more than 40 years before retiring. By 1975, however, 55% of nursing students were over 30 years old at graduation and by 1996 the average age of the graduate was 33 years old (Auerbach et al.). These nurses will devote less than 30 years to caring for patients. Although associate degree programs have played a major role in educating nurses, the shortage persists as a result of an increase in open positions and a decrease in the length of nursing careers.

Federal and state governments, private industries, and foundations have made attempts to alleviate the nursing shortage in a variety of ways. For example, Federal funding of nursing education has been supported through the Nursing Education Act, Title VIII of the Public Health Service Act (Joint Commission on Accreditation of Healthcare Organization, 2002). The Department of Health and Human Services initiated a campaign to attract young students to health careers. Hospitals have partnered with nursing schools to fund nursing faculty positions. Foundations such as the Josiah Macy Foundation have provided grants for nursing degrees (Joint Commission on Accreditation of Healthcare Organization, 2002). Even with these initiatives, however, the nursing shortage continues to be unresolved.

Role of Community Colleges

For several decades one role of community colleges has been to serve "industries by supplying them with trained workers" (Cohen & Brawer, 1996, p. 228). Students who are hesitant to enter a university may be willing to commit to a shorter program of study, such as the two year associate's degree at a community college (Cohen & Brawer, 1996). For these reasons, community colleges have now become the leading source for postsecondary training for nurses.

Community college programs have graduated 34,000 to 58,000 nurses every year since 1975, while in that same time span, 20,000 to 25,000 nurses graduated every year from baccalaureate degree programs. Accordingly, the number of students graduating from associate degree programs consistently has exceeded the number of students graduating from bachelor degree programs since 1975 (Bureau of Health Professions, 2002). It is clear that community colleges will play an important role in alleviating the

nursing shortage. Increasing the number of qualified students accepted into nursing programs is the first and most logical reaction to the shortage. One factor that undermines this strategy, however, is the lack of nursing faculty to teach these new students. Every year thousands of prospective nursing students are not accepted into programs because of inadequate faculty numbers (Joint Commission on Accreditation of Healthcare Organization, 2002). Implementation of strategies designed to decrease attrition is one way to increase the number of nursing graduates without increasing faculty numbers.

Student attrition is another challenge facing many nursing programs. No common method of calculating attrition across programs of study and degrees exists, making it difficult to analyze attrition throughout higher education. Even if a common method for determining attrition existed, it would be difficult to compare attrition in nursing programs at the university with those at the community college because of the different populations they serve. The difference in these populations may be a critical factor in explaining the significant difference in retention rates at two-year and four-year institutions. For example, Mohammadi (1996) reported that only 50 % of the general student body in public two-year colleges returned the second year while 67 % returned for a second year at four-year public colleges. This variation in retention rates could be due to many reasons including age, socioeconomic status, academic preparedness, and the student's purpose for attending school. We know the chief reasons for attending open access community colleges include transferring to a senior institution, entering the job market, skill enhancement to get a better job, or learning for one's own purpose (Cohen & Brawer, 1996). According to Cohen and Brawer (1996), many studies have been conducted to determine how the community college can better serve students. These

studies indicate that students who tend to stay in school are young, attend full-time, attend classes during the day, have higher grade point averages, and participate in college activities. This would indicate the students most likely to stay in school are traditional students. Wild and Ebbers (2002) suggested that new research initiatives focus on such factors in order to better understand community college student retention.

Since a common definition of attrition has not been established it is difficult to find attrition rates for nursing programs and more specifically state wide attrition rates. Of the programs reporting attrition statistics, rates vary with location and program types. Generally speaking, baccalaureate nursing programs have lower program attrition rates while associate degree programs have higher program attrition rates. For 2004 Pennsylvania reported 19 % annual attrition in baccalaureate programs and 26 % annual attrition in associate degree programs (Pennsylvania Department of Health, 2006). Colorado reported their 2003 annual attrition rates for baccalaureate programs as 3 % and the associate programs as 15 % (Colorado Center for Nursing Excellence, 2005). The California Board of Registered Nursing reported their state wide attrition as 8.6 % in baccalaureate programs and 19.3 % in associate degree programs for the 2007-2008 school year (California Board Of Registered Nursing, 2009) Again, the variation in these data could be due to inconsistent definitions of attrition or differing retention strategies utilized in the nursing program. Still the difference between baccalaureate degree and associate degree programs appears to hold.

Research on Retaining Nursing Students

Retaining students in nursing programs has been a concern for nurse educators for a long time (Kippenbrock, May, & Younes, 1996). However, as noted above, associate

degree programs appear to have more difficulty retaining nursing students. As a leader in a community college nursing program, I have counseled students as they struggled to be successful in their nursing courses. I often felt unprepared to help students in jeopardy of leaving a nursing program prior to completion. As I searched the literature for guidance, I found that I was not alone in the quest to help students stay in school. In this section, I briefly discuss financial and emotional costs involved in student attrition followed by theories of attrition and strategies to retain students in community colleges and more specifically nursing programs.

Financial and Emotional Costs

There are financial and emotional costs to all involved when students withdraw from nursing programs. Nursing programs are expensive for both the student and the college. In addition to tuition, the students incur expenses for uniforms, nursing equipment, health screens, and health care certifications such as cardiopulmonary resuscitation. In addition to the usual cost of offering classes, colleges have to purchase and maintain laboratory equipment for practice laboratories, carry insurance on equipment, and provide additional faculty members to maintain state mandated instructor to student ratios (Voorhees, 2001). College faculty invest their time and energy in helping students succeed. Most importantly, however, the cost both financially and emotionally is significant for the student. Finding better ways to decrease attrition would help reduce all of these financial and emotional costs.

Theories of Attrition and Strategies to Retain Students in Community Colleges

The literature includes studies pertaining to retention of college students in general, nontraditional students, and more specifically nursing students. Students' ability

to become comfortable in their environment and learning to cope with the stresses of college life has been found to influence the decisions students make to stay in school (Bean, 1985; Eaton & Bean, 1995). Wild and Ebbers (2002) pointed out that most of the retention research has focused on traditional age students typically found in the university setting and is not always applicable to non-traditional students enrolled at community college campuses.

Suggested strategies for retention in the community college setting include learning communities and supplemental instruction (Wild & Ebbers, 2002; Tinto, Russo, & Kadel, 1994). Learning communities are student groups configured around a course sequence or program of study. These groups provide support and facilitate interactions among students, which encourages retention (Wild & Ebbers, 2002). Students involved with learning communities reported feeling more involved in the learning environment (Tinto et al., 1994). This would support the findings of Bean (1985) and Eaton and Bean (1995) that students are more likely to stay in school if they feel connected to the college environment. Supplemental instruction, on the other hand, provides additional instruction to students so they can master difficult content (Wild & Ebbers, 2002). Supplemental instruction may be offered in a variety of courses and programs and may vary in its duration and intensity.

Theories of Attrition and Strategies to Retain Students in Nursing Programs

Nurse researchers also have examined factors that influence student attrition in order to implement strategies for retention. The stress of nursing school has been identified as a factor that may influence attrition (Brodie et al. 2004; Deary, Watson, & Hogston, 2003; Kotecha, 2002). This stress may be a result of unexpected academic

challenges and the demands of the practical experience in the patient care setting (Brodie et al., 2004). It also may be the consequence of a lack of coping strategies to deal with challenges encountered in their program (Deary et al., 2003). The nursing literature also addressed retention strategies such as student success plans (Symes, Tart, Travis, & Toombs, 2002) and admission processes (Dessner & Mosser, 1995; Ehrenfeld & Tabak, 2000). Wells (2003) supported a preventative approach and suggested a campaign for public awareness to provide a realistic view of nursing, strategies to detect students at risk of withdrawing, and methods to rebuild student's self-confidence. The literature repeatedly mentions the emotional strain on students while pursuing their dream of becoming a nurse. Although the phenomenon of nursing student attrition has been well studied, "student attrition research has been unguided by an explicit theoretical framework" (Kippenbrock et al., 1996, p. 163). An explicit theoretical framework would guide research and facilitate the development of retention programs.

Purpose Statement

Attrition is a concern in all education settings; however, attrition within nursing programs is particularly problematic in light of the nursing shortage. For the purpose of this study, attrition was defined as any student leaving a community college nursing program for a semester or more. The overall focus of this study was to learn more about the attrition of nursing students in community college associate degree nursing programs. Nurses who had experienced attrition and successful completion of a community college nursing program were selected for this study because they had unique experiences which would not only provide insight on attrition but also provide valuable information regarding successful completion of a nursing program. Students who only experienced

attrition would not have the experience of successful completion to help us understand what changes were required for successful completion. Since the ultimate goal of this research was to increase the body of knowledge regarding attrition and to provide a theory for the development of retention strategies, it was important to understand how these participants ultimately reached their goal of successful completion of a nursing program. These students were able to describe the factors they believed led to attrition and success. This required a qualitative approach in order to gain thick rich descriptions of the experiences of these nurses. To understand the feelings and perceptions of nurses who had to leave a community college nursing program but eventually completed a program of study that led to becoming a registered nurse, in depth interviews were conducted. Grounded theory methodology was used to investigate this phenomenon and ascertain the student's perspective of their departure and what may have changed to help them reenter and become successful. This process helped develop a conceptual account that explained this phenomenon. Accordingly, my overall goal was to contribute to the development of theory regarding attrition from nursing programs at community colleges.

I chose grounded theory for two reasons. First it provided the means to collect, analyze, and interpret in-depth descriptive stories of selected nursing students who had left a community college nursing program for a semester or more and returned to successfully complete a nursing program. Second, it enabled me to take initial steps towards building a theory concerning the attrition of students in associate degree nursing programs at community colleges.

Research Question

The basic research question for this study is: What experiences influenced students to leave a community college nursing program for a semester or more, decide to return, and successfully complete the community college nursing program? The subquestions are: What were their experiences as nursing students? What experiences hindered their completion of the nursing program? What experiences helped participants eventually become successful?

Delimitations

This study included only nurses who had experienced both leaving a community college nursing program prior to completion and successful completion of a community college nursing program.

Limitations

The participants were from a limited geographical area in which they lived and experienced attrition. The participants also were from the same ethnic group. This study may not be applicable to students in large metropolitan areas or communities with a different population.

The second limitation is related to the design of the study. Including only nurses who had experienced both leaving and successful completion of a nursing program may limit some aspects of attrition. This must be considered when designing retention programs based on the information from this study. It will, however, provide valuable information on ways to screen and assist students reentering nursing programs.

Significance of the study

This study contributes to the understanding of nursing student attrition specifically in the community college setting. The systematic research approach provided an avenue to explore the experiences of nurses who had left a community college nursing program for a semester or more and returned to successfully complete a community college nursing program. The rich data provided insight and contributed to the body of knowledge regarding nursing student attrition. This grounded theory on nursing student attrition will provide a guide for the development of retention programs in associate degree nursing programs.

Researcher's perspective

I entered a community college nursing program in Kansas as a non-traditional student. I was married, had two daughters, and was employed while attending school. I also commuted 60 miles one way to school each day. On the days I attended my clinical rotation in the hospital I left my house around 4:30 am and returned home by 4:30 pm. I went to work for 2 to 3 hours and returned home to prepare for the next day of clinical. The amount of time to prepare for the next day depended on how many patients I had been assigned. On a typical day it required about four hours to prepare the plans of care for my patients. I had a clinical rotation each week lasting two days. The remainder of the week I had classes at the college and worked approximately 20 hours per week. This schedule was intense. I often look back and wonder how I survived.

After graduating from the community college and passing the state board of nursing examination to become a registered nurse in 1992, I worked nine years in Kansas and Texas in medical, surgical, and intensive care nursing. I knew immediately after

graduating and entering the nursing profession I would advance my education because of the responsibilities I encountered as a nurse. Six years after graduating with an Associate's Degree in Nursing I completed a Master of Science Degree in Nursing with a role specialty in nursing education.

I have been in nursing education for over 10 years and have become very familiar with the phenomenon of student attrition. As a nursing instructor, I have observed students struggle and eventually fail. I have utilized research to guide my interventions with failing students but find it is often inadequate.

There is a need to decrease attrition in nursing programs and increase the number of nurses entering the workforce. The nursing shortage not only affects patient care, it impacts the work environment for nurses. I have been on duty when there were not enough nurses to properly care for the patients we had been assigned. Although I did everything I could physically and emotionally to care for the patients, I felt it was not enough. I am committed to finding ways to increase the number of nurses caring for patients to increase the quality of care to patients and reduce the stress in the nursing environment. This study provided an opportunity to explore factors leading to attrition. This grounded theory on nursing student attrition will provide a guide to design programs that will efficiently educate nurses and assist returning students to successfully complete a community college nursing program.

CHAPTER 2: REVIEW OF THE LITERATURE

Student Attrition and Treatment of Attrition

This chapter reviews literature pertaining to attrition from higher education institutions. Recommendations to reduce attrition also were found to be an integral part of the literature in this review. The literature will be reviewed in a general to specific manner. A brief overview of the research will be presented to provide a historical perspective. Then attrition in higher education in general will be discussed, followed by attrition in the community college, and in nursing programs. Then the review of literature will focus more specifically on nursing students' attrition in nursing education in both two and four year programs. Literature in this section is divided into articles from foreign nursing programs followed by articles written about programs in the United States.

The literature for this dissertation was selected to provide a general understanding of attrition and provide a starting point for the central research question: What experiences influenced students to leave a community college nursing program for a semester or more, decide to return, and successfully complete the community college nursing program? The sub-questions are: What were their experiences as nursing students? What experiences hindered their completion of the nursing program? What experiences helped participants eventually become successful? The selection of literature was intentionally limited based on the recommendation for reviewing literature for grounded theory methodology (Strauss & Corbin, 1998). Strauss and Corbin state there is

no need to review all of the literature prior to collecting data because it "is impossible to know prior to investigation what the salient problems will be or what theoretical concepts will emerge" (p. 49). They additionally state that while a general understanding of the phenomenon is important to "enhance sensitivity to subtle nuances in data" (p. 49), too much familiarity with the topic may inhibit creativity and the ability to see new concepts emerge. Consequently, the literature presented in this chapter establishes a foundation to begin the study of attrition of nursing students from a community college nursing program.

Many terms have been used to describe the phenomenon of students leaving school prior to accomplishing their education goals. This was evident while reviewing the literature. To honor the authors of each article, their specific terms of attrition or retention were used in the discussion of the articles. Attrition, retention, wastage, or even persistence are terms that were most often used by researchers or institution. Students, however, were more likely to describe the phenomenon as "dropped out," "quit," or possibly "failed." Regardless of the terms being used the phenomenon is generally the same.

Overview of Research on Attrition

Student attrition in higher education has been studied for several decades in a variety of settings. Researchers utilized findings from previous work to guide their own study of attrition. This section will provide a brief overview of the research demonstrating the integration of research findings in the quest to understand attrition in higher education.

One of the first to research attrition was W. G. Spady. From a review of the literature, Spady (1970, 1971) noted that there was a lack of theory regarding attrition which led him to investigate multiple variables believed to influence dropout from higher education institutions. In an effort to explain the intricate relationships of these variables he developed a "theoretically based model of the undergraduate dropout process" (Spady, 1970, p. 39).

In 1975, Tinto also noted that inadequate attention had been given to the development of theoretical models that sought to explain rather than describe attrition. Tinto (1975) presented a model explaining behaviors leading to attrition. In 1982, Tinto again noted that despite the research over the last decade more inquiry was needed to move into the realm of grand theory. Tinto (1982) noted his model, presented in 1975, did not focus on characteristics or forces external to the institutional environment.

In the meantime, a causal model was developed by Bean (1982) that identified independent variables that influenced attrition. Research of attrition continued as Bean and Metzner (1985) expanded their focus to nontraditional undergraduate students. Pascarella, Smart, and Ethington (1986) noted that two-year colleges were missing from previous research on attrition and utilized Tinto's (1975) model to explain the attrition in two-year colleges. More recently the information from these original models has been used in a variety of settings. Programs have been designed to treat attrition based on the information gathered from the vast studies on attrition. This brief overview provides a historical backdrop to connect the initial work on attrition to the more specific phenomenon of nursing student attrition from community college programs.

Student Attrition in Higher Education

As I noted above, Spady (1970) performed an extensive review of the literature writing about dropouts from higher education. In this article, he discussed the definition of attrition, background variables such as parents and potential or previous performance, sex-linked role of educational goals, maturity of students, and interpersonal relationships. After a lengthy discussion of these interwoven variables, Spady (1970) recommended that with the more advanced multivariate statistical techniques now available, further bivariate research on the correlates of dropping out without a theoretical basis should be abandoned. He further suggested that attrition might be best explained by an interdisciplinary approach involving an interaction between a student and a college where the student's attributes are exposed to a variety of influences. In addition, Spady (1970) pointed out the decision to dropout may be influenced by normative congruence and social integration. Normative congruence involves extrinsic rewards (such as grades) and intrinsic rewards (such as intellectual development) making the student feel compatible with the college environment. Social integration consists of the establishment of close relationships within the system. Through the synthesis of literature, Spady (1970) developed "an explanatory sociological model of the drop out process" (p. 79). This model visually explains how family background, academic potential, grade performance, intellectual development, friendship support, normative congruence, and social integration influence the student's decision to dropout.

Spady (1971) tested the theoretical model of the dropout process at the College of the University of Chicago with data gathered in 1965. There was a notable difference between men and women in this study. For men, grade performance was the primary

reason for attrition. With women, however, the decision to remain or leave was influenced very strongly by their commitment to the college and secondarily by their academic standing. There was also a difference noted in short-term and long-term survival. Although early attrition for women was related to college commitment, it was noted that positive academic performance was the key for long-term survival for both sexes. Spady (1971) acknowledged that while this research has opened the door to helping educators understand attrition, more research is needed.

Tinto also has studied attrition and his student departure theory is frequently cited (e.g., Metz, 2004). Tinto (1975) examined how pre-entry attributes, educational goals, institutional experiences, social integration, and academic integration affected students' decisions to stay or leave the institution. This theoretical model has been instrumental in attempting to explain what behaviors lead up to students' decisions to leave school. This theory, however, was only a beginning and other research was needed to better understand attrition.

In 1982, Tinto discussed the limits of theory in student attrition. Theoretical models only explain a portion of the wide range of behaviors that influence student departure from an academic institution. When discussing his own model, Tinto (1982) stated "what we took to be self-evident in its development has apparently proven not to be" (p. 688). The model explained attributes within the institution but did not take into account the impact of forces outside the institution such as financial pressures or influences of external peer groups.

Building on Tinto's model, Bean (1985) developed a conceptual model of student dropout asserting that exogenous or external variables had an impact on endogenous or

internal variables leading to a student's decision to stay in school. The ten exogenous variables were subdivided into three categories of academic, social-psychological, and environmental. The academic category included prematriculation academic performance and academic integration. The social-psychological category included goals, usefulness of education, alienation, faculty contact, and social life. The last category of environmental variables consisted of finances, opportunity to transfer, and outside friends. The three endogenous variables were college grades, institutional fit, and institutional commitment.

The purpose of this 1985 study was to test the conceptual model empirically and to answer the following questions related to the model: "Do peers or faculty have a greater influence on attrition decisions? Does retention result from selecting students or their socialization after matriculation? Do the relationships vary by grade level?" (Bean, 1985, p. 36). The prematriculation academic performance was determined by percentile rank in high school class, SAT Math, and SAT Verbal scores. The instrument used Likert style questions to determine to what extent the variables might have affected students' decisions to leave school.

In April 1982, 6000 undergraduate students from a major midwestern research university were randomly selected. Students selected for the study had to meet the following criteria: "white, U.S. citizen, 23 years old or younger, not married, registered for 10 or more credit hours, members of the freshman, sophomore or junior classes, and (in a post hoc exclusion) who did not transfer to another campus in the state system in the fall of 1982" (Bean, 1985, pp. 40-41). Surveys were mailed to 5235 qualified students. Completed instruments were received from 517 freshman, 466 sophomores, and 423

juniors. Of the 1406 students, 135 students dropped out of school. The questionnaire collected data pertaining to academic integration, educational goals, feelings of alienation, student contact with faculty, social life, finances, and feelings about the institution.

The results of the study confirmed the model's description of attrition. The most important finding of the study, according to Bean (1985), was that social life has large effects on students' adaptation to the institution. In addition "students seem to have a much greater effect on the attitudes of other students than do faculty members" (Bean, p. 60). Prematriculation academic performance was the best predictor of college grades. The assertions of Bean's model held true for freshman and sophomore students but not with juniors. In summary, this study demonstrated that attitudes influence intent to leave school and intent had a strong positive correlation with attrition.

A decade later, Eaton and Bean (1995) examined the influence of coping behavior on academic and social integration, student intentions to withdraw, and their actual departure from school. The purpose of the study was to test the assertions of a theoretical model that included social approach, academic approach, social avoidance, and academic avoidance. A questionnaire based on Bean's (1985) past attrition research was developed and pilot tested. Questionnaires were distributed to underclass students at a major Midwestern research university. Out of the 534 surveys distributed, 49 % provided usable data for analysis.

Findings from this study supported the hypothesized relationship between behaviors and integration both socially and academically (Eaton & Bean, 1995). Similar to previous studies, they found that "approach behaviors were associated with successful

integration and avoidance behaviors were associated with poor integration" (p. 636). In contrast, this study demonstrated that academic and social integration may be more complex than past studies indicated. In general, if students did not feel a part of the institution, they were more likely to act on their intent to leave (Eaton & Bean, 1995).

These studies appear to indicate that when students feel comfortable in their new educational surroundings, they are more likely to stay in school. However, universities and community colleges offer different experiences for students, which may affect student integration.

Student Attrition Treatment Programs in Community Colleges

As mentioned by Tinto (1982) and Pascarella et al. (1986) few attrition studies have been conducted at two-year institutions. Community colleges differ from universities in a variety of ways ranging from the institutional mission to the student population. Students in community colleges have various reasons for leaving the institution other than graduation. For example, a student may choose to transfer to the university or stop out for a period of time but not permanently drop out. For this reason Pascarella et al (1986) utilized "Tinto's (1975) model to explain the long-term persistence/withdrawal behavior of students who began higher education in two-year institutions" (p. 49).

In 1971, Pascarella et al. (1986) surveyed over 10,000 students in 487 institutions who were entering college. Data regarding background information, aspirations, and expectations of college were collected. Nine years later the same students completed a follow-up survey answering questions about their actual collegiate experience. There were 825 students (418 men and 407 women) from 85 two-year institutions in the final

sample. Academic integration, institutional commitment/satisfaction, and social integration were identified as having a direct positive effect on men persisting toward or completing a bachelor's degree. For women, "the variables with significant, positive direct effects on degree persistence were academic integration, social integration and socioeconomic status" (Pascarella et al., 1986, p. 81). Overall, the study supported the two core concepts of academic and social integration, from Tinto's (1975) model, as having the most consistent affects on degree persistence or completion. While the student in this study began in a two-year institution, the focus of the study was completion of a bachelor's degree. Attrition in the first two years was not addressed.

Wild and Ebbers (2002) also noted that most of the research on student attrition and retention, "is based on traditional-age students in the residential settings of universities" (p. 504) and not appropriate for application to the community college setting. The purpose of their article was to discuss retention goals of institutions and methods used to monitor progress toward the retention goal. At the outset, they noted community college students may want to develop workplace skills or basic reading, writing and math skills instead of receiving a degree. After discussing a variety of considerations, Wild and Ebbers concluded that researchers need to rethink the issues of student retention and refine a definition of retention specific for the community college. The authors also suggested strategies for improving retention that included creating learning communities and developing retention programs such as supplemental instruction.

Learning communities are based on the understanding that student learning increases when students feel they are a part of the institution. Students are encouraged to

work closely with other students creating an environment of camaraderie and inclusion. Seattle Central Community College successfully created a learning community that involved students in education and increased their persistence (Tinto et al. 1994). This program, referred to as the "Coordinated Studies Program" (CSP), was first offered in the Humanities Division and was later incorporated in the Math-Science and Technical divisions. Students registered for CSP classes with integrated content (Tinto et al, 1994). The integrated courses were team-taught. The course objectives were met using a variety of methods, such as lectures, films, field trips, small group discussions, and guest lectures. Although the classes were essentially taught in the same manner as other classes, they included the cross-disciplinary approach, team teaching, continuous class meeting times, and collaborative teaching techniques.

When the experiences of CSP and non CSP students were compared, the CSP students reported "being more involved in course-related activities (including writing) and in activities with other students, more connected with faculty, more experienced with the use of library resources, and more involved in arts activities on campus" (Tinto et al., 1994, p. 27). This model of learning allowed students the opportunity to express their diverse experiences and increased the amount of social, emotional, and academic peer support. The CSP program also encouraged and challenged students to consciously address issues of their own learning (Tinto et al.).

Students in community colleges have many reasons for attending school that may not include graduating with a degree. Regardless of the reason for attending college, it would seem reasonable to search for ways to make students comfortable in their learning environment.

Attrition in Nursing Programs

Students enrolled in associate degree nursing programs within community colleges all have a goal of graduating and becoming licensed as a registered nurse. With the nursing shortage, it is critical we utilize all research available to understand attrition in nursing and develop attrition treatment programs to ultimately graduate more nurses. In this section, literature regarding attrition and programs to decrease attrition from nursing programs outside and inside the United States will be discussed.

Attrition Issues in Nursing Programs Outside the United States

From 1989 to 1992, the University of British Columbia had a significant increase in the number of students who spoke English as a second language (ESL). In 1992, Jalili-Grenier and Chase (1997) conducted a descriptive study to determine how this change had affected the learning environment of nursing students. More specifically, the purposes of the study were to (a) determine nursing students' perceptions of learning activities and their learning difficulties, (b) ascertain nursing faculty perceptions of ESL students learning difficulties, and (c) identify needs for educational support in nursing programs. This was accomplished by distributing questionnaires to students and faculty.

The student questionnaire contained five-point Likert-type questions that solicited information about demographic data, learning activities, and language needs. The faculty questionnaire used a similar format and inquired about demographic data, perceptions of language needs, contribution of learning activities to knowledge and skills of ESL students, and the need for assistance in working with ESL students (Jalili-Grenier & Chase, 1997). Analysis of data collected from students revealed a diverse student

population with 12 languages, other than English, identified as native language. Ninetyfive percent of the faculty, however, reported English as their native language.

Jalili-Grenier and Chase (1997) compared the perceptions of student and faculty groups. They discovered that ESL students found it more difficult to ask questions in the lab and first year clinical courses than non-ESL students. The authors also reported that "the faculty rated difficulty of learning activities as significantly greater than did the ESL students and the level of contribution of learning activities significantly lower than did the students" (Jalili-Grenier & Chase, 1997, p. 202). There was also a significant difference in the perceptions of faculty and ESL students about the way ESL students learn and what they see as difficult. The authors concluded that given the findings, support programs for ESL students would greatly increase retention in nursing programs.

In Tel-Aviv, Israel, Ehrenfeld and Tabak (2000) studied the efficacy of personal and group interviews as a means of choosing students for an undergraduate program. From 1989 to 1992 the nursing program conducted individual interviews as part of the admission process. Prior to the interview, the candidates were asked to complete a structured, open ended questionnaire asking about students' decisions to study nursing, the sources used to assist students in making their decision, and reaction of their family and friends concerning their choice of career. Three senior staff members interviewed each student in a 25-minute individual session.

From 1993 to 1994 the nursing school conducted group instead of individual interviews. Students were again asked to complete a structured, open ended questionnaire. The students were then interviewed in groups of five by three faculty members. After introductions, the students were asked to act out a role in a selected

scenario. The group interview lasted approximately forty minutes. Faculty members then evaluated each participant's choice of role, answers to the questions, assertiveness and participation (Ehrenfeld & Tabak, 2000).

The following school year, 1994 to 1995, the school chose not to interview candidates for the nursing program. Instead admission decisions were based on past academic performance and psychometric testing. They found the attrition rate was lowest during the time from 1989 to 1992 and highest from 1994 to 1995 (Ehrenfeld & Tabak, 2000). While it initially appeared that interviews might help reduce attrition related to personal reasons, the dropout rate was almost 30% "proving the interviews to be unproductive and with many flaws" (Ehrenfeld & Tabak, 2000, p. 105).

In another study conducted in the United Kingdom between 1996 and 2000, Kotecha (2002) also researched non-academic reasons for nursing student attrition. Kotecha combined the concepts of student identity and student integration to create the theoretical framework in this study. The author explained that these two concepts had been discussed separately in the literature but believed they were interrelated and should be studied together to determine their effect on academic persistence. The fusion of these concepts was accomplished by defining institutional integration in terms of the ability of learners to absorb the identities offered to them by the institution (Kotecha, 2002). In other words, the study viewed persistence as a result of the interaction between the institution and the learner.

A multiple case study was used to explore the experience of the "leavers" and "comparable stayers" (Kotecha, 2002, p. 212). A questionnaire given to students defined leavers as those who voluntarily left the course and comparable stayers were those who

remained in the course during the same time period. Reflective questionnaires with openended questions were also administered to the staff members at the institution and to the students. Key staff members and students were interviewed using an in-depth semistructured format focusing on key themes such as motivation, and experiences that made them consider leaving.

The analysis of the data identified two opposing roles for students in nursing programs, the apprentice role and the autonomous role (Kotecha, 2002). The apprentice is the role the student assumed during nursing education in the clinically based environment. This role required "exacted discipline and obedience from learners" because the learning needs of students were subordinate to the needs of the hospital (Kotecha, p. 213). In contrast, the autonomous role involved the academic interaction in the educational setting. This role required the students to be self-directed, assertive, and independent. Integration into the program was complicated by the contradictory expectations of the nursing institution and the clinical learning environment.

Kotecha (2002) recommended a more realistic student orientation with more time to explore role expectations of the educational environment. The author also recommended reflective seminars also could be beneficial. This would enable students to voice difficulties they have had with the program. Lastly, it was suggested that students should be informed about the contradictions in expectations of the clinical and academic areas to reduce stress.

Factors that lead to stress and burnout in nursing students was studied by Deary, Watson and Hogston (2003) in a longitudinal and prospective study. Their study was guided by the following research questions: "What are the antecedents of stress and

burnout in nursing students?" and "What personal factors lead to attrition in nursing students?" (Deary et al., 2003, p. 74). Their literature review showed that students leave nursing programs for various reasons such as failing academic or clinical assignments. They also leave for personal reasons, which include the anticipation of failure or the lack of satisfaction with the program.

To add to this knowledge base, the authors sampled all students in a department of nursing in Scotland who were enrolled between 1996 and 1999. The students were assessed with several instruments to measure stress, burnout, coping ability, mental ability and personality. In order to acquire a greater understanding regarding the impact of educational ability and mechanisms to cope with stress and burnout, Deary et al. (2003) decided to study students while they were participating in a course. Accordingly, the authors collected data at entry, 12 months, 24 months, and the end of the nursing program.

The researchers reported several findings from this assessment. One of these was that students experienced increased levels of stress as the program progressed. However, coping strategies were not adequate to compensate for the increased stress. Another finding indicated that students who left school "scored lower on the personality traits of agreeableness and conscientiousness" (Deary et al., 2003, p. 77). On the other hand, the differences were not statistically significant to warrant generalization to other situations. The authors acknowledged that the study had several limitations, including the challenges of measuring attrition and the lack of a homogenous sample. Overall, it appeared that a positive attitude influenced the student's ability to complete a nursing program.

Perception of the nursing profession could also be a factor in attrition. The purpose of a study by Brodie et al. (2004) was to gain an in-depth understanding of changing perceptions of nursing and their impact on students enrolled in nursing education. The authors explained that the perception of the nursing profession was poor. Most felt nurses were underpaid and overworked. In addition they received little respect (Brodie et al., 2004). The researchers utilized a mixed research design to study students in nursing programs in two United Kingdom universities in three phases. The date of data collection was not reported. The first phase involved surveying first, second, and third year students with a questionnaire soliciting data about clinical placement experience, academic standards, pay, job pressure, and workplace conditions. This allowed the researchers to "explore how nursing education and clinical placement influence student's perceptions of nursing as a profession" (Brodie et al., 2004, p. 726) over a three year period.

The second phase consisted of focus group discussions with nursing students. Questions for the focus group were based on the main themes identified through analysis of data collected through questionnaires in phase one. Focus groups were held on campus during University hours and participation was entirely optional. By combining quantitative and qualitative data the authors created an in-depth analysis of the changing perceptions of nursing within the nursing student population (Brodie et al., 2004).

The data collected and analyzed during the phases revealed "some students entered nursing programmes with commonly held misconceptions and stereotypical images of the nursing profession as a subordinate occupation, requiring only common sense and little intellectual ability" (Brodie et al. 2004, p. 730). The unexpected academic

challenge coupled with clinical requirements created stressful situations, which were cited as the reason for student attrition. While discovering the tremendous knowledge and skills required of nurses, they began to realize how extremely underpaid nurses were in comparison to similar service providers (Brodie et al., 2004).

This study found that students were discouraged by the perceived lack of respect from the public. Brodie et al. (2004) concluded that finding strategies to change the public's perception of nursing was essential in order to attract students who have the academic and clinical aptitudes to be successful in nursing programs. They also suggested changing and improving the overall student experience. However, they acknowledged this might be difficult unless the health care system as a whole is changed (Brodie et al., 2004).

This discussion shows that the focus of research regarding nursing student attrition outside of the United States is varied. While some programs are attempting to determine how to support students in nursing school, others are attempting to determine how to select the best nursing student. Although the foci of these studies were varied, non academic factors affecting attrition were common themes in the research. An attempt to find a theoretical basis for attrition was also evident.

Attrition Issues in Nursing Programs in the United States

Nursing programs offered in the United States also have examined the selection process of nursing student candidates and non academic factors in attrition. In this section I discuss literature from researchers and nurse educators in the United States.

Dessner and Mosser (1995), two nurse educators, described the admission screening form used in their associate degree-nursing program at Northern Kentucky University (NKU) to select candidates. The NKU program typically had 300 to 400 applicants for 120 available spaces. Their screening form collected data about: total number of college hours completed, number of science classes completed with a "C" or better, number of required non nursing classes completed, number of semesters attended at their university, cumulative grade point average (GPA), and completion of a nursing classer designed to assist students determine if the really want to be a nurse (Dessner & Mosser, 1995).

The NKU faculty assigned numerical value to the characteristics described above. The data led the faculty to conclude that the science courses completed should be weighted more heavily than non-science classes because performance in science courses was a more accurate predictor of success in the study of nursing (Dessner & Mosser, 1995). They also found that students were more successful if some of the non-nursing classes were completed prior to entering nursing.

The student grade point averages, success on state board examinations, and attrition rates due to failure were compared to the scores received on the admission screening form. Dessner and Mosser (1995) concluded that data gathered from this study confirmed that the admissions criteria employed in their nursing program was appropriate. The admission screening form provided a method to objectively evaluate each student using consistent criteria. The authors were satisfied with their admission process and believed they were using an equitable, successful method to select highly qualified applicants for their associate degree-nursing program (Dessner & Mosser, 1995). It should be noted however, that although the NKU admission screening form appeared to predict student success, it only utilized academic factors to identify potential

candidates. The article focused on students retained but did not discuss factors that may have affected attrition.

Kippenbrock et al. (1996) examined trends and factors related to attrition in randomly sampled baccalaureate nursing schools in a longitudinal and *expost facto* study. The first survey of students was conducted in 1983 and the follow up study in 1995. The purpose of the 1983 study was to determine: (a) the extent of nursing student attrition, (b) attrition rates by gender, (c) how attrition rates change over time, and (d) the reasons for attrition (Kippenbrock et al., 1996).

Data were collected from 14 United States schools approved by the National League for Nursing (NLN). Because male students are significantly underrepresented in nursing programs, all males were given the opportunity to participate in the study with an equal number of randomly selected females. The authors used Bean's (1985) instrument that focused on exogenous and endogenous variables that included contact with faculty, confidence in their ability to be a successful student, fairness within the university, satisfaction of being a student, and the usefulness of their education toward obtaining employment to collect data.

In the Kippenbrock et al (1996) study, 209 questionnaires from the 1995 sample and 182 from the 1983 sample for a total of 391 completed surveys were used. The response rate was less than half for both years surveyed. The results indicated attrition rates declined in the sample of 14 nursing schools from 1983 through 1995. And although the attrition rate had been higher for male nursing students in 1983, by 1995 there was no difference in the attrition rate between the genders. Student GPA's in nursing school had also improved "with 81% of the 1995 sample having a 3.0 or higher GPA as compared to

less than half of the 1983 sample" (Kippenbrock et al., p. 164). Despite these descriptive findings, however, none of the student characteristics or behaviors correlated with the dropout rate. The authors pointed out that the small sample size of their study and a mixture of class rankings rather than the typical freshman student may have affected their results.

Although the study indicated improvement in retention over time, the authors recommended that nursing schools continue to examine their programs to ensure that capable students have every opportunity to become a nurse. The authors suggested the following strategies to ensure maintenance of low attrition: (a) "academic standards should be kept high," (b) "tutors and help sessions should be provided," (c) "comprehensive orientation" should be offered for beginning students, (d) faculty should send a clear message about the importance of nursing, and (e) faculty, administrators, and staff must "listen carefully and act on student recommendations when possible" to maintain students' commitment to school (Kippenbrock et al., 1996, p. 194). The authors also noted a need for a theoretical framework to guide student attrition research.

This study set out to determine the extent of attrition and examine the reasons for attrition. The authors were unable to identify specific characteristics that would indicate students were at risk of dropping out. Still, the authors offered suggestions they believed would reduce attrition.

Numerous factors believed to affect attrition have been discussed thus far. Nurse educators at the College of Nursing at Texas Women's University-Houston Center (TWU) also suggested that students fail for numerous and often complex reasons (Symes, Tart, Travis, & Toombs, 2002). These reasons included students not understanding the

academic rigors of a nursing program, students not knowing when to seek help, and families with inadequate educational experience to offer practical guidance. In 1997, based on these factors, the authors developed a Student Success Program (SSP) to assist students who were at risk of failing.

The first step in the program was to identify students who would benefit from the SSP. All students entering TWU were required to take the Nurse Entrance Test (NET). Historically, one half of the students who scored less that 55% on the reading portion of the NET did not succeed in the nursing program. The university selected students who scored less than 55% on the reading portion of the NET to be placed in the SSP (Symes et al. 2002).

The goal of the SSP was to retain students by assisting them in becoming expert learners. They defined expert learners as students who are "aware of their own strengths and weaknesses," use a variety of "behaviors to optimize learning," "understand how to evaluate their learning strategies," and "modify their learning strategies" to reach their goal of success (Symes et al., p. 228).

To achieve this goal, students were first assisted in identifying personal and environmental resources as well as deficits. This included language, time management, and coping skills in addition to learning styles. In the next phase the students identified and analyzed problems related to their lack of success in school. Next, the students developed plans to try new learning strategies, set goals, and accept responsibility for their own learning.

Students were encouraged to use time management tools, keep a journal of how they coped with new challenges, and procure time to take care of themselves by eating

well, exercising, and getting adequate sleep. Evaluation was not based solely on exam scores but also the development of new learning strategies. Although the program was new, early results were promising. The first SSP class retained all 14 students and the next class had retained 17 out of 21 in the program at the time the article was written (Symes et al., 2002). While poor readers were identified for this study, others might benefit from strategies taught in the SSP.

Wells (2003) offered her perspectives on nursing student attrition by calling upon her training and experience as a senior nursing educator. She discussed the need for a paradigm shift in the way faculty viewed the changing nursing student population. The author reviewed literature on retention and noted many educators had relied on Tinto's model of student attrition to explain nursing students' departure from school. Wells claimed that Tinto's model may not be appropriate for explaining attrition among nursing students due to the changing population of undergraduate nursing students. Today students enrolled in nursing programs are more likely to live off campus and have family responsibilities than students described in Tinto's model.

Nurse educators also have been reluctant to recognize this significant change. This reluctance is evidenced when faculty refer to18-year-old high school graduates as traditional students, when in fact today traditional students are more likely to live off campus and have family responsibilities (Wells, 2003). As a result, nursing programs have not been responsive to the change in the demographics of the student population.

In light of the changing population, Wells (2003) urged nurse educators to reevaluate methods to retain nursing students and adopt a new paradigm of understanding nursing student attrition. A few programs such as Partnership in Learning for Utmost

Success at Saint Xavier College School of Nursing have been successful making this change. They have increased retention rates by addressing the needs of the current student population. From the success of these programs, it appears that "an epidemiologic approach with its emphasis on prevention provides a unique perspective for the development of strategies to address the problem of student attrition" (Wells, 2003, p. 233).

To address the attrition of nursing students' from a preventative standpoint, Wells (2003) suggested the use of a framework based on the principles of epidemiology that addresses diseases according to the severity of the symptoms. In an epidemiologic framework the three levels of prevention are primary, secondary, and tertiary. The primary level focuses on health promotion and prevention of disease through greater understanding and awareness; the secondary level involves early detection and treatment to prevent disability or death; and rehabilitation is the purpose of the tertiary level.

As applied to nursing student retention, the primary level should include three strategies (Wells, 2003). First, the public must have a more complete awareness of nursing. Students often enter nursing with inaccurate information about the rigors of the nursing curriculum and need a "less-romanticized orientation to nursing" (Wells, p.233). Students who are more informed about these challenges and are prepared to face them are less likely to withdraw from nursing (Wells). Second, faculty members need to be trained on issues of cultural diversity and student retention so they have a greater awareness of learning needs of the new population of students. The third suggestion for primary prevention concerns the development of an institutional think tank on student retention.

Secondary prevention strategies should focus on early detection of students who are at risk and nursing faculty must implement strategies to prevent withdrawal from the program. Wells (2003) suggested institutional cultural audits and data collection on students who drop out. This would help develop criteria for identifying students who are at risk for withdrawal as a prevention strategy for nursing programs.

Tertiary prevention should focus on "career counseling and rebuilding student self-confidence" (Wells, 2003, p. 234). Information from exit interviews can be valuable to determine the reasons for student departure. This information can be analyzed to determine if the departure could have been prevented. In closing, Wells suggested that nursing programs (a) make a commitment to student retention (b) make cultural diversity a thread throughout the curriculum, and (c) obtain appropriate screening tools and implement student support initiatives. In regards to further research, Wells specifically recommended qualitative research with students who have left a nursing program. She stated, a "grounded theory methodology could reveal a substantive theory of student attrition" in the undergraduate population (p. 235).

The literature concerning United States nursing students and nursing programs had similarities to report from other countries in regards to understanding the phenomenon of attrition and development of successful retention programs. Some of the research was based on previous work such as Tinto (1975) and Bean (1985) while others believe there has been little progress toward a theory on attrition. The majority agreed that there are many factors that influence attrition.

Summary

Throughout the literature there have been references regarding personal attributes such as family background, academic aptitude, and ability to develop relationships. On the other hand, there have been references to other influences in the educational milieu. With each attempt to develop a model or explanation of attrition, more questions are formed. However, there appear to be six recurring substantive themes. They are background attributes, social integration, academic integration, external factors, usefulness of education, and coping mechanisms.

Background attributes are the characteristics the students have prior to entering the institution. Spady (1970) and Tinto (1975) discussed previous academic performance, experience of parents in education and sex-linked role of educational goals on students' decision to stay in school. Bean (1985) found prematriculation academic performance was the best predictor of college grades. Dessner and Mosser (1995) utilized academic performance as a means to select candidates for the nursing program and also found the information useful.

Another theme that appeared frequently in the literature involved students feeling comfortable in their educational environment. This has also been referred to as social integration in several studies (Bean, 1982, 1985; Eaton & Bean, 1995; Pascarella et al., 1986; Spady, 1970, 1971; Tinto, 1975, 1982). It appears that students need to be involved with the people around them. This could occur when they find other students with similar interests or when they have quality informal interactions with faculty.

Academic integration is another recurring theme in the literature. Students receive validation of successful progression through grades earned in their coursework while

other students may find satisfaction in the process of gaining knowledge (Bean, 1985; Eaton & Bean, 1995; Pascarella et al., 1986; Spady, 1970, 1971; Tinto, 1975, 1982). Retention programs have been designed and initiated as a result of research. Learning communities (Wild & Ebbers, 2002) and Student Success Program (Symes et al., 2002) are examples of research entering into practice to retain students. The line between social integration and academic integration was blurred in these retention programs.

External factors have also blurred the reasons for attrition. Examples of external factors include financial strain of education (Bean, 1985) and lack of support from family and friends (Ehrenfeld & Tabak, 2000). While the studies did not isolate these factors as being the actual reason for attrition it would be difficult to say they did not play a part in the student's decision to leave the institution. As stated earlier, the reasons student leave an institution are varied and complex (Eaton & Bean, 1995; Symes et al., 2002).

Utility or perceived usefulness of education was a component of the socialpsychological category in Bean's (1985) model. According to Bean, students would be motivated to persist if the reward of education would be beneficial. While it may be expanding on the original concept, other articles discussed perception of nursing combined with stress within the profession as a factor in attrition (Brodie et al. 2004; Ehrenfeld & Tabak, 2000; Wells, 2003). Students who found themselves in stressful situations within the nursing program could be weighing the benefit of nursing with the amount of discomfort they are enduring. Depending on their analysis they would persist or leave the nursing program.

Stress of school and the student's ability to cope has been found to make a difference in integration both socially and academically (Eaton & Bean, 1995). Students

who have inadequate coping mechanisms found it difficult to compensate for the added stress typical in nursing programs which led to attrition (Deary, et al, 2003; Brodie et al. 2004). Wells (2003) believed that students who were informed and prepared for the rigors of nursing would be less likely to withdraw.

There are many facets to the phenomenon of attrition as described in the above literature review. However, the research and retention programs are from the educator's perspective. It would be valuable to attempt to understand this phenomenon from the student's perspective. There is a need to develop a better understanding of attrition in order to improve the learning environment and to increase the number of graduates entering the nursing profession. This grounded theory study attempted to address this need by understanding attrition from former student's point of view.

CHAPTER 3: METHODOLOGY

Overview

The overall focus of this study was to develop a greater understanding of the feelings and perceptions of nurses who left a community college nursing program for a semester or more, decided to return, and successfully completed the community college nursing program. Individuals who have experienced an interruption of their education will have unique experiences that may assist in the understanding of attrition. Nurses who have successfully completed a nursing program may have been able to provide insight on successful completion without the comparison of an interrupted attempt. However, nurses who have experienced leaving a community college nursing program and returned to successfully complete the nursing program had a unique perspective of attrition and successful completion. These individuals provided a rich source of data for grounded theory on attrition and provided insight for the development of retention strategies. The purpose is to explore influences on their educational experiences, particularly those related to their decision to leave a community college nursing program and changes they attributed to successful completion of a nursing program. The overall goal is to contribute to the development of a grounded theory on factors of attrition and thereby influence the development of retention programs.

This chapter will provide my rationale for selecting a grounded theory approach and explain my research design and rationale, the participants and site, data collection

and analysis procedures, and trustworthiness criteria utilized in this study. The central research question is: What experiences influenced students to leave a community college nursing program for a semester or more, decide to return, and successfully complete the community college nursing program? The sub-questions are: What were their experiences as nursing students? What experiences hindered their completion of the nursing program? What experiences helped participants eventually become successful?

Research Design and Rationale

I selected a qualitative methodology for this study. My rationale for using this paradigm will be presented in this section. Utilizing qualitative research methods provided the opportunity to generate rich data regarding the experiences of nurses who had left a community college nursing program for a semester or more. The decision to leave was a result of numerous factors. While understanding factors of attrition may be beneficial for nurse educators, understanding how to overcome attrition will provide valuable information for the development of retention programs. Understanding how students adapted to become successful will provide guidance on assisting returning students reach their goal of becoming a nurse.

Rationale for Qualitative Methodology

Creswell (2003) suggests using a framework to design a research study. The framework provided guidance in all aspects of my study design from general philosophy to data collection and analysis. A framework should include philosophical assumptions, strategies of inquiry, and methods. Selecting a research design most appropriate for the study was accomplished by addressing three questions. "What knowledge claims are being made by the researcher (including a theoretical perspective)? What strategies of

inquiry will inform the procedures? What methods of data collection and analysis will be used?" (Creswell, 2003, p. 5).

Using Creswell's (2003) framework, I gave considerable thought to ways of approaching a study of attrition and the development of retention strategies in nursing programs. The first step included identifying the epistemology and theoretical perspective. Lincoln and Guba (2000) identified five major paradigms, which include positivism, postpositivism, critical theory, constructivism, and participatory action research. These five major paradigms could be divided into modern and postmodern perspectives. Modernism includes positivist and postpositivist paradigms because they were built on the search for an objective reality.

In contrast, the postmodern view asserts there is no ultimate objectivity concerning the truth in the existence of meanings in the world. Shank (2002) states "cultural and historical sensibilities, once swept under the rug by modernism, have reemerged to assert their power to shape meaning in the world" (p. 159). The paradigm shift from modernism to postmodernism provides the researcher with the opportunity to utilize subjective data to add depth and meaning when studying the social world.

The epistemology or the relationship between the knower and the known is also different. According to Lincoln and Guba (2000), from a positivist and postpositivist perspective, the researcher maintains an objective observer stance with findings described as true or probably true. In critical theory, the epistemology is described as subjective with value-mediated findings. The epistemology in constructivism is also subjective but it is understood that the findings are to be created. In participatory action research the data gathered had been expanded to include participatory transactions with co created findings

(Lincoln & Guba, 2000). The descriptions of the epistemologies of the paradigms demonstrate a trend that recognizes the impact of the researcher on research.

Of these paradigms, the constructivist aligns most closely with my view of research and my research interests. I have read many research articles that have examined grade point averages (GPA), science grades, math grades and even interview processes for admission to identify reasons for student attrition. I wanted to know more about the nursing students than performance scores. In addition, I wanted to give students a voice and learn more about their experiences on their own terms. Many students have more roles than merely being a student. They are spouses, parents, and employees. In describing this paradigm, Lincoln (1997) stated, "multiple stories feed into any text; but, equally important, multiple selves feed into the writing or performance of a text, and multiple audiences find themselves connecting with the stories which are told" (p. 38). This paradigm allowed me to hear the stories of nurses who had experienced leaving a community college nursing program for a semester or more, returning and successfully completing the community college nursing program and created with them a theory on attrition. This study provided a framework to develop retention strategies for community college nursing programs.

The second question used to guide the selection of research design involved strategies of inquiry. The qualitative approach provided a means to collect data that I would not have been able to access through surveys. While the quantitative design would allow for comparison of GPA and nursing test averages or try to establish a relationship between hours worked and success in nursing school, a qualitative method provided the means to "describe what is going on" (Creswell, 1998, p. 17). More specifically,

grounded theory provided a means to discover factors that contributed to attrition in nursing programs and those that promote change resulting in successful completion. Exploration of these experiences lead to the development of a theory of attrition providing insight for the creation of strategies for retention.

According to Strauss and Corbin (1998) the three steps involved in the development of a grounded theory are descriptions, conceptual ordering, and theory. Description is defined as "the use of words to convey a mental image of an event, a piece of scenery, a scene, an experience, an emotion, or a sensation; the account related from the perspective of the person doing the depicting" (Strauss & Corbin, 1998, p. 15). My participants' descriptions of their experiences provided the basis for more abstract interpretation of the phenomenon of attrition and changes they made to ultimately reach their goal of becoming a nurse.

Conceptual ordering is the process of organizing data into categories. The data could be organized around well-developed and ordered categories, steps or stages and types of actors or actions. The collection of data is interwoven with analysis and searching for categories. Creswell (1998) described this as a zig-zag process of gathering data, analysis, returning to the field for more data, and back to analysis. This process is an important step in grounded theory. According to Strauss and Corbin (1998, p. 20) "this type of analysis is a precursor to theorizing."

Theorizing is a complex activity that involves conceiving concepts and then "formulating them into logical, systematic, and explanatory scheme" (Strauss & Corbin 1998, p. 21). These concepts were then organized into a framework that helped to explain a phenomenon of attrition followed by successful completion of a nursing program.

The last question used to guide research design involves procedures of data collection, analysis, and writing. The research question and sub questions were designed to solicit information regarding the nursing students' perception of their experiences of leaving a nursing program prior to completion and successful completion of a nursing program. Using qualitative research helped in the "attempt to understand the meaning or nature" of the experience of nursing students and to "gain novel understandings" (Strauss & Corbin, 1998, p. 11). More specifically, grounded theory provided a method to systematically gather and analyze data from which a theory emerged.

Rationale for Grounded Theory

Grounded theories are drawn from data, and they are "likely to offer insight, enhance understanding and provide a meaningful guide to action" (Strauss & Corbin, 1998, p. 12). Although phenomenology might have been an option for this study, this approach focuses on the "meaning of an experience of a number of individuals" while "the intent of a grounded theory study is to generate or discover a theory, an abstract analytical schema of a phenomenon that relates to a particular situation" such as leaving a nursing program for a semester or more prior to completion followed by reentry and completion of a nursing program (Creswell, 1998, p. 55-56). In my study the focus was on the phenomenon of attrition through the experiences of nurses who had experienced both leaving a nursing program prior to completion and successful completion of a nursing program with the intent to generate theory regarding attrition and strategies for retention.

In order to draw theory from data, the researcher must be creative and open to multiple possibilities throughout data collection and analysis. Strauss and Corbin (1998)

refer to this process as both a science and art. The researcher must "maintain a certain degree of rigor by grounding analysis in data" while being creative in naming categories, asking stimulating questions, making comparisons and extracting an innovative scheme from raw unorganized data (Strauss & Corbin, 1998, p. 13).

In summary, utilizing qualitative research methods and more specifically grounded theory provided a systematic approach to collection, analysis, and synthesis of data leading to theory. From a constructivist standpoint, the findings from the data were created from my understanding of student attrition combined with experiences of the nurses who had failed to progress in a nursing program. In addition, the grounded theory method of analyzing and synthesizing data while continuing to collect data from participants provided many layers which allowed me to develop a three dimensional view of the phenomenon of attrition. Last, through a thorough process of identifying categories in the data I formulated a theory grounded in the data of former students who had experienced leaving a nursing program for a semester or more and successful completion of a nursing program.

Participants and Site

Participants for this study were drawn from nurses who had the experience of leaving a community college nursing program for a semester or more, returning, and successfully completing the community college nursing program. These participants provided rich data regarding the experience of being successful in contrast to their previous experience of leaving a community college nursing program for a semester or more prior to completion. The overall focus of my dissertation was to learn more about

the attrition of nursing students in community college associate degree nursing programs in order to develop retention strategies for nursing students.

In grounded theory, a researcher "chooses participants based on their ability to contribute to an evolving theory" (Creswell, 1998, p. 118). Students who have experienced both leaving a nursing program prior to completion and successful completion of a nursing program provided a homogenous sample to study. These students were able to describe the factors they believed led to attrition and success.

Deans or Directors of associate degree nursing programs would have knowledge of the nurses who had completed their program after at least one unsuccessful attempt. In Kansas all of the Deans and Directors belong to the Kansas Council of Associate Degree Nurse Educators (KCADNE). As a member of this council, I had the membership list for KCADNE. I sent letters to the KCADNE membership asking for their assistance in this study (Appendix A). The Deans and Directors were instructed to forward letters to the nurses whom they had identified as meeting the criteria of this study (Appendix B). The letters to the nurses introduced me, my study, and explained the need for further study of nursing student attrition. My contact information was in the letter and the nurses were encouraged to notify me if they were interested in volunteering for my study.

I also purchased a list of all licensed registered nurses in Kansas for \$75.00 from the Kansas State Board of Nursing in order to identify the potential participants for the study. I mailed letters to nurses on the list introducing myself, explaining the study, and asking for their participation in the study (Appendix C).

Participants were encouraged to contact me by mail, phone, or email to arrange a place and time to meet. There were nine nurses who responded to the letters sent to

nurses registered in the state of Kansas. No responses were received from the letters sent by the Directors of nursing programs. The participants and I mutually agreed upon place and time for the interview. Only seven of the nine participants were interviewed due to saturation of categories. Two subsequent interviews were arranged when a need for clarification and additional information was identified. These participants graduated from a variety of schools in Kansas. One participant had attended schools in Kansas and Nebraska. There were two male and five female participants. One entered nursing school immediately after high school while the rest were non-traditional age students. Since students from multiple educational facilities across Kansas, each gender, and both traditional and non-traditional students chose to participate, I was able to gather "important contextual information useful in the axial coding phase of research" (Creswell 1998, p. 114).

Strauss and Corbin (1998) suggested data collection continue until theoretical saturation occurs. The number of participants was influenced by the limits of available time and money. The interviews lasted approximately one hour. In addition to interviews, memos, and journaling were used as a means to collect data. Initial analysis occurred after each interview. Creswell (1998) recommended a "zigzag" process which means the researcher gathered data in the field, analyzed the data then returned to the field for more data collection. This process was used until saturation and no more categories were discovered.

Data Collection

Data collection for grounded theory is derived primarily from interviews. Interview questions were crafted around the participants' life experiences believed to

have influenced their decision to leave a community college nursing program for a semester or more, decision to return, and successful completion of a community college nursing program (Chase, 2003). The research question and sub questions provided an interview guide that allowed me to explore the experiences of the nursing student who left a nursing program followed by the successful completion of an associate degree nursing program. Data analysis began with the first interview and directed further data collection (Strauss & Corbin, 1998). It is imperative in grounded theory the researcher becomes immersed in the data from the onset of data collection. Initial interview questions were formulated from the literature review and my experience as a nurse educator. According to Strauss and Corbin (1998) early concepts are used to guide the initial interviews; however, since these early concepts had not evolved from "real" data, they were discarded as data were collected from the participants. The ongoing analysis provided a guide for future interview questions "to fill in categories and validate the evolving theory" (Strauss & Corbin, 1998, p. 295).

Soliciting information from participants through interview questions can be challenging. As a researcher I wanted to create an environment where participants felt free to discuss the phenomenon being studied without feeling I was manipulating responses to fit my own viewpoint of the phenomenon. Yow (2005) suggested interview guides to assist the interviewer in pursuing specific topics but not hinder the participants' ability to discuss other pertinent issues. The interview guide is not a questionnaire but a plan that is flexible to allow exploration of vague topics.

This method of collecting information works well with grounded theory methodology because it requires the interviewer to be immersed in the data. According to

Yow (2005), the interviewer must understand the topic so well that even if the participant alters the flow of the interview or chooses a different order of topics, the interviewer can still return to the unanswered questions if deemed necessary. The interview guide was changed as new categories emerged from analysis.

When designing the interview guide, Yow (2005) suggests putting nonthreatening topics first allowing the participant to become comfortable. For example, asking the participants to talk about how they decided to become a nurse put them at ease and provided important background information. This information was valuable when comparing the experiences of nurses who had challenges in nursing school. For some of the nurses being interviewed, the nursing school experience was in the distant past and more difficult to recall the specific feelings and perceptions. The act of reminiscing, however, facilitated the retelling of nursing school experiences. An interview guide also assisted this novice researcher to stay organized, listen, and observe the participants during the interview.

The interview setting was selected to provide privacy and an environment free from distractions. The locations were varied but every effort was made to make sure the participants felt comfortable in the surroundings. After introductions, I thanked the participants for their willingness to assist in the research. The purpose and procedure for the research was explained and included expectations of the participant and methods to protect their confidentiality. The interviews were audio taped and transcribed. These data were maintained in a locked file cabinet and destroyed upon completion of the study. Pseudo names were used to protect the privacy of the participants. Once the research had

been explained and questions or concerns were addressed, the participants were asked to read and sign the Human Research consent form (Appendix D).

As a novice researcher, I was concerned about not being able to elicit thick, rich descriptions of the participants' experiences in the interview process. I was pleasantly surprised that once they started to discuss their reasons for entering nursing, a common bond between us developed. As the interviews progressed, the stories unfolded providing an abundance of data. Despite discussing emotionally charged experiences the participants were clear and honest with their perception of the events. These open, honest interviews provided the foundation for the development of a credible theory on attrition of students from community college nursing programs.

Data Analysis

Approach to Answering Research Questions

In grounded theory studies, interviews are the primary source of data used to saturate categories and validate evolving theory (Strauss & Corbin, 1998). The analysis process begins with the first interview and is enhanced by asking questions that will provide rich data to enhance the development of the evolving theory. According to Strauss and Corbin, a detailed analysis "is necessary at the beginning of a project to generate initial categories... and to discover the relationships among concepts" (p. 57). This required examining words, phrases, and sentences of the interview as well as other data such as memos and journals for possible meaning. The analysis was fluid within and among cases. The process also provided an opportunity to be inspired with emerging data.

Building Theory

Grounded theory is a process of building a theory from emerging data. While this may seem like a daunting task, there are analytical tools available to the researcher to help him or her overcome analytic blocks and increase sensitivity. Strauss and Corbin (1998) suggest the researcher build theory by examining a case and searching for a range of possible meanings before moving to the next case. I was able to build on information found in each case looking for connections and integration. The use of analytic tools stimulates the inductive process, provides new ways to think about the phenomenon, allows for clarification or discrediting assumptions, and assists with labeling of concepts (Strauss & Corbin, 1998). For this study several tools were used to analyze and organize data including memos, diagrams, and excel spreadsheet.

The data analysis in grounded theory is systematic and follows a standard format that includes open coding, axial coding, selective coding, and development of a conditional matrix (Creswell, 1998; Strauss & Corbin, 1998). Open coding is the initial process of discovering concepts. Open coding involves opening up the text and exposing "the thoughts, ideas, and meanings contained therein" (Strauss & Corbin, 1998, p. 102). In this process data are broken down into distinct parts and named or coded. As the analysis of data continues, the discovery of other data sharing common characteristics can receive the same code.

Axial coding, the second step of analysis, "involves reassembling data that were fractured during open coding" (Strauss & Corbin, 1998, p. 124). The goal for this step is to systematically develop and relate categories. A category is a phenomenon and a subcategory answers "questions about the phenomenon such as when, why, how, and

with what consequences, thus giving the concept greater explanatory power" (Strauss & Corbin, 1998, p. 125). This is a critical step in building theory.

Selective coding is the process of refining theory. The evolution of theory occurs over time and requires the analyst to be immersed in the data (Strauss & Corbin, 1998). Creswell (1998) describes this step as the identification of a storyline and writing "a story that integrates the categories in the axial coding model" (p. 57). To accomplish this step the researcher often has to return to the raw data to capture the essence of the phenomenon (Strauss & Corbin, 1998).

Summarizing Data

The purpose of the conditional matrix is to assist in the identification of relationships from micro and macro perspectives, tracing the connections between contextual factors and actions, and "develop explanatory hypotheses about these relationships that can be verified or modified through further data collection and analysis" (Strauss & Corbin 1998, p. 191). From the micro and macro perspectives the matrix helped identify the relationships among the student, family support, faculty, peers, nursing program, and the educational environment. The matrix also provided a means to trace the intricate connections between contextual factors and actions. Strauss and Corbin used the metaphor of "billiard balls, each striking the others at different angles, setting off a chain reaction that ends with knocking the appropriate balls in the pockets" (p. 192). Nursing students have many interactions with the environment around them. Each interaction plays a role in the decision to leave or achieve success in a nursing program. The interplay among conditions, the response of the nursing students, and the

consequences of their responses were captured with the help of the matrix (Strauss & Corbin, 1998).

Organization and Fidelity Analysis

The matrix also identifies the complexity of any phenomenon. Being able to organize data and then step back to make coherent sense of what is happening may seem overwhelming but is a critical step in developing theory. Making "reflective remarks, marginal remarks, and pattern coding are all a step away from the immediate toward the more general" (Miles & Huberman, 1994, p. 72). Diagrams can also be used to provide a visual representation of the written memos. These memos and diagrams evolve and "grow in complexity, density, clarity, and accuracy as the research progresses" (Strauss & Corbin, 1998, p. 218). In addition to helping me gain analytical distance from the data, this method of organizing thoughts and clustering information added conceptual density and integration in the final theory of nursing student attrition (Strauss & Corbin).

Trustworthiness

Trustworthiness involves establishing credibility of a study from the standpoint of the reader, participant, and the researcher (Creswell, 2003, Schram, 2003). In grounded theory research, establishing credibility is an "active part of the process of research and becomes part of the standards one should use to judge the quality of the study" (Creswell, 1998, p. 209). Analysis begins with the first interview or observation and requires the researcher to be totally immersed in the data. The researcher is shaped by the data and conversely the researcher shapes data. This mutual shaping process can create challenges for the researcher to maintain objectivity while remaining sensitive to the issues of the participants (Strauss & Corbin, 1998). Strategies to verify the accuracy of the findings in

a research project must be implemented to add credibility and trustworthiness to the study (Creswell, 2003).

Creswell (2003) discusses eight primary strategies to verify the accuracy of the findings. Some of these strategies are impractical and infrequently used by researchers. Creswell (1998) suggests that qualitative researchers utilize at least two verification strategies in any given study. For the study on nursing student attrition, I used clarification of researcher bias, member checks, peer review and debriefing, and thick rich descriptions.

Clarifying Researcher's Bias

Clarifying the researcher's bias creates an open and honest background and allows the reader to understand how the researcher's past experiences, prejudices and perceptions may shape and become entwined with the narrative. I am passionate about student success in nursing programs. Although this was motivation for the study, I had to be careful not to be over zealous in the analysis and interpretation of data. On the other hand, this passion motivated me to be creative and open minded when working with data because I honestly want to understand the factors of attrition.

Member Checking

Member checking is one of the most important techniques for establishing credibility of a study (Creswell, 2003; Strauss & Corbin, 1998). When recording, transcribing, analyzing, and interpreting data, there is a risk of losing the meaning of the participant's story. In this study, two of the participants were interviewed a second time. During these meetings the participants were asked to verify data that had emerged during the initial interviews. The feedback received from the participants confirmed the accuracy of the study to that point. All participants were provided a draft of the data analysis chapter and asked to respond and correct any mistaken perceptions. I received two responses and both verified the findings.

Peer Review and Debriefing

Peer review is another external method of verifying the accuracy of a study. My dissertation advisor and methodologist provided critical feedback and challenged me to remain true to the study. My methodologist guided me through the process of data collection, analysis and interpretation and reviewed the work from an antagonist perspective. The collaborative relationship was essential to the soundness of this study. Constantly comparing "the scheme against the raw data" and performing a "high-level comparative analysis" assisted in validating the study (Strauss & Corbin, 1998, p. 159). The methodologist reviewed the coding and analysis process to provide guidance and direction as I continuously compared my thoughts against the raw data.

The second source of peer review was colleagues from nursing and other educational settings. These individuals provided an informal means to discuss emerging concepts, methods of analysis, and applicability of the findings. Overall, the debriefing process brought clarity to the developing theory.

Thick Rich Descriptions

Thick rich descriptions will provide readers with valuable information allowing them to decide if the findings can be transferred to other situations because of common characteristics (Creswell, 1998). This step began with the interview. The nurses need to be comfortable to honestly discuss their experiences with me. Establishing a trusting relationship facilitated the generation of rich data from the nurses (Yow, 2005). Once the

interviews captured the essence of nurses' experiences, the detailed descriptions were transferred to the study in a manner that enhanced validity. In Chapter 4, the presentation of findings exhibits the thick, rich descriptions of the experiences of nurses who had an interruption in their educational journey to become a nurse. These descriptions enable the reader to transfer the information and ascertain applicability to other settings.

Summary

In this section, I presented the methodology that was used for my research. A qualitative study allowed me an opportunity to explore experiences of nurses while they were students. Although this phenomenon could be studied using other methodologies, grounded theory best suited my desire to learn more about students who had an interruption in a nursing program but more importantly what happened to help them become successful. In addition, it provided me the opportunity to develop a theory regarding nursing attrition utilizing a systematic approach of data collection and analysis.

Selecting participants who had experienced both leaving a nursing program for a semester or more prior to completion and successful completion of a nursing program provided rich data which contributed to an evolving theory on nursing student attrition. In addition, utilizing participants from multiple associate degree programs provided contextual information that was valuable in the axial coding phase of research (Creswell, 1998).

An interview guide consisting of research questions and sub questions was used to collect data. These extensive interviews were guided yet flexible to allow the nurses to fully express themselves. In addition, I had the opportunity to explore vague topics. As

research progressed, the interview guide continually changed as new categories emerged from the ongoing analysis.

Data analysis began with the first interview and continued throughout the interview process. Categories were identified from the emerging data. As suggested by Strauss and Corbin (1998), each case was examined for a range of possible meaning before moving to the next case. Through this systematic process of analysis and synthesis intricate connections were identified and refined as a theory of nursing student attrition emerged.

Establishing credibility of this study is critical for obvious reasons. I have chosen several strategies to verify findings in this study which included clarifying my bias as a researcher, member checks, peer review and debriefing, and thick rich description of data.

It is my hope that this study will provide new and valuable information about nursing student attrition. In light of the nursing shortage, it is also my desire that information from this study can be used as a basis to develop retention programs.

CHAPTER 4: DATA ANALYSIS AND FINDINGS Overview

This study explores the experiences of students who encountered attrition on their journeys to becoming nurses. Through interviews, the participants shared their experiences leading to departure, return, and successful completion of an associate degree nursing program. As a nursing instructor, I have seen students enter a nursing program full of hope and ready to commence their educational journey to become a nurse. Within a few weeks, most of the students seem to adapt to the life as student nurses which includes reading numerous chapters in nursing textbooks, validating acquired knowledge, demonstrating clinical skills, and venturing out into patient care areas with nursing instructors close to their side. There are other students, however, who strive to meet the demands of the program but fall short. The anxiety they feel is evident in their demeanor. The demeanor of students who have moderate to severe anxiety will include lack of eye contact and lack of interaction. They become withdrawn from other students as well as faculty. I often describe it as a "glazed over" look or maybe a blunted affect.

The demand of nursing school is the same for all students and most associate degree nursing programs have similar admission criteria which require students to have achieved a certain academic standard and maintain that standard once admitted. Then why do some students have the strength or fortitude to persist while others do not? It is these observations and the desire to help students which led me to nursing student attrition. The overall intent of this study was to develop a greater understanding of attrition in associate degree nursing programs and contribute to the development of a grounded theory of nursing student attrition which may lead to retention plans. Students in an associate degree nursing program who had an interruption in their course of study

and returned to successfully complete were chosen. These students would provide insight into what happened to bring them to the point where they said "I quit", what led them to return, and what made them successful. Having a greater understanding of why they left a nursing program, how they were able to return, and what made them successful upon return will provide nurse educators information to develop retention plans. In this chapter, findings generated through in depth interviews with nurses who have experienced an interruption in their nursing education will be presented.

This grounded theory study was guided by a central research question: What experiences influenced the students to leave a community college nursing program for a semester or more, decide to return, and successfully complete the community college nursing program? Sub questions included: What were their experiences as nursing students? What experiences hindered their completion of the nursing program? What experiences helped participants eventually become successful?

Introduction of Participants

Heidi

Heidi's interruption occurred when she entered college right after high school. She worked at a restaurant and spent her spare time with her boyfriend. Her focus at that time was more on helping her boyfriend than being successful herself. She quit school, married, and began a family.

Heidi's father was a physician, and she spent considerable time around the nurses who worked with him. She also knew early in life she wanted to be a nurse because she admired the nurses she grew up around, and she knew as a nurse she would always have a job.

Heidi's perception of nursing changed from the admiration of the nurses she grew up around to a deep respect for nurses because her second child was born premature which allowed her to see a different side of nursing. She called the nurses the "miracle workers" because they were the ones who were with her baby around the clock. In

addition to caring for her baby they helped her understand the nursing interventions that were keeping her baby alive and giving her time to mature. This experience helped her realize that nurses have a tremendous amount of responsibility. She desired "more than the white hat;" she wanted the "whole package."

She returned to school with a new motivation but encountered many challenges throughout nursing school. By the time she returned to school she had a growing family. In order to have adequate time to study she had to take time away from family. This meant "a lot of fast food" for the family which she feels remorse for now. She also worked part-time and occasionally full-time during her educational journey. An additional challenge for her was a 23 mile one-way commute, resulting in a very long day when she was required to be at the clinical site by six am. She found additional strength from a group of students who had similar challenges. She adapted and successfully completed nursing school.

Heidi unfortunately had a car wreck after she became a nurse that has presented challenges for her. It has taken courage for her to recover and return to nursing. She has drawn on her experience of dealing with challenging situations in nursing school to persevere her current challenges related to rehabilitation.

Stevie

Stevie's interruption occurred in the second semester of his nursing program. He regained renewed strength through support from family, friends, and co-workers. This support allowed him to adapt and regain control, which gave him courage to enter another nursing program.

Stevie grew up across the street from his grandmother and spent a lot of time with her as a child. This was a special relationship, and he learned about caring from his grandmother. He carried those caring behaviors into adulthood. He became a nurse so he could care for her and return those acts of kindness. He started this journey as a nurse

aide and then he became a medication aide. He thoroughly loved providing care to the elderly in a nursing home.

The facility where he worked was always in need of staff. He ended up working so much that he became burned out and decided to work outside of the health care field. After several years he was not happy and decided to return to health care. He returned to geriatric care and once again found that he enjoyed working with the clients and the nursing staff. The staff could see his potential and encouraged him to go to nursing school. With this encouragement he prepared to take the next step on the career ladder.

Stevie entered nursing school full of confidence and prepared for the days ahead because the nurses he had worked with informed him of the challenges. He took his prerequisites one course at a time because that was all he could afford. Once he had completed all of his pre-requisites, he entered nursing. The first semester he felt confident because of his experience as a CNA and CMA. When Stevie began to lose control, he made numerous changes including decreasing his work hours and joining study groups but nothing seemed to work to keep his test grades above the passing standard. He felt he was spiraling out of control. Regardless of what changes he made he was unable to adapt and complete the semester.

When he returned to school, he chose a different program and earned a practical nurse certificate. This was a good experience because he felt supported, and his self esteem grew with each and every positive experience. He passed his state licensure exam and decided to return to the first nursing program to complete his associate's degree. He was successful this time and talks about how his experiences and what changed. This candid comparison of experiences provides an opportunity to understand the challenges encountered in nursing school and how these challenges effect the student.

Doris

Doris's interruption occurred during the first semester of nursing. She left the nursing program but continued with her general education courses. In retrospect she said

she may have been able to make it, but it would not have met the level of achievement she had set for herself. She did not want to just pass but wanted to truly understand the concepts because she was preparing herself for a career in nursing.

Nursing was what Doris always wanted to do. She could not recall a defining moment, but she did remember performing surgery and bandaging her dolls growing up. During high school she took classes that would prepare her for entry into nursing school. Before she graduated, she fell in love and got married. Her goal to become a nurse never wavered, but other events in her life took priority. Her father-in law was diagnosed with cancer, and she wanted to support her family as they faced the difficult days ahead. By the time her father-in-law died, she had started a family and wanted to stay home with them. Once her littlest child started school, she decided it was time to go to school.

Her first class was a frightful experience. She felt out of place because of her age, and she also doubted her ability to be successful. She commuted to school, was a fulltime mom, and full-time student. It soon became evident that she was not going to be able to adapt enough to meet her own expectations. When she returned to school the following year, she still had challenges but had a better understanding of the expectations. Upon return she also was fully prepared and maintained a sense of control throughout the program.

Tom

Tom's interruption occurred in the first semester of the second year. He was out of school a month before the second year of the program began. With only a month off between the first year and the second year he felt he began the semester feeling very tired and stressed.

Tom grew up on a farm. When he was in junior high, his father went to school and became a nurse. When Tom was in high school, his father and grandfather told him he could be a farmer and in debt for the rest of his life, or he could go to school. From

watching his father he decided that he would try nursing. He took a CNA course which started his journey into nursing.

He enjoyed his experiences as a nurse aide and commented "the elderly ladies like the guys." He also utilized this experience to become familiar with the hospital where he would have his clinical rotations in nursing school. The practical nursing portion of the program was very intense, but he was able to successfully complete the program and pass his state licensure exam.

Tom started the second year tired and low on emotional reserves. During this semester, he got married and moved to town three hours away from school where his wife attended school. He worked as an LPN on the weekend, commuting to school on Sunday and returning home on Thursday. While this is a hectic schedule, this time he knew what to expect and learned to adapt to become successful.

Jennifer

Jennifer completed the practical nursing portion of her program and went into the second level without stopping. She was in the second level when an incident occurred involving a client in a mental health clinical rotation. She is still unsure to this day what happened, but she was asked to leave the program because of this incident. She was devastated and felt out of control of her situation.

Jennifer started out at a university pursuing a degree for physical therapy. She was not into the program long before she was informed by the program leader she was not strong enough to take the classes. She is still uncertain if that meant physically strong enough or something else. In retrospect, she felt it turned out well because she really loves being a nurse. Her aunt was a nurse and encouraged her to try nursing. She became a nurse aide and had a great experience in a large urban hospital working on a trauma team. This provided her experience that most nurse aides never receive. She loved the experience and decided to go to nursing school.

She worked several years as an LPN before entering another nursing school to complete her associate degree in nursing. The fear of failing again was always there. In addition she was 19 when she went to school the first time and now she was 30 years old. She worried she would not succeed because she was older now. The classes were very demanding, but she drew upon her experiences to help her succeed.

Candy

Candy's interruption occurred in the first semester of the nursing program. She described her interruption as result of economics because she had to work to pay for her expenses. Candy also commented there was way too much to do in nursing and "going to nursing school and working full time do not mix." However, she also acknowledged she was spending a lot of time going out with her friends. When she returned to school, she knew what she needed to do to be in control of all of the facets of her life.

Candy wanted to be a nurse all of her life. Her father was a mechanic and tool pusher in the oilfields. She remembers a Sunday afternoon when she was three or four years old. Her father was on the porch taking a nap with his hands in his lap. She remembers looking at his hands and thinking they must hurt. She got a bowl of water and tore up some rags for bandages. While he slept, she washed and bandaged his hands. This is an example of how she always wanted to care for others.

Candy grew up with two younger and five older siblings. Her parents provided for them the best they could, but life was not easy growing up. Candy described her family as dysfunctional due in part to her father being an alcoholic. When she was 15, her older brother was on a drinking binge and was killed in a fight. She also had a period of rebellion in her life and could see herself becoming an alcoholic. Through therapy and personal perseverance she has been able to overcome the challenges of addiction and being an adult child of an alcoholic.

Candy became a nurse's aide when she was 16. She worked as an aide through high school and college. When she went to college, she was still in her rebellious stage

and ended up being asked to leave the dorms. She remained in school, but it took her a couple of years to finish the classes necessary to enter nursing. One of her challenges was feeling a part of the learning environment. She was the youngest member of her nursing class and had trouble becoming engaged with her peers. When she returned to school, she had learned more about who she was as a person and adapted her lifestyle to gain control of her environment.

Charlie

Charlie's interruption occurred between her pre-requisite course work and entry into a nursing program. Her story remains in this study because of her experiences in nursing school. She was challenged throughout her educational journey with full-time work, commute, stressful clinical experiences, difficult classroom experiences and other experiences similar to the rest of the participants. She also had several family members die during her time as a student and the death of her grandfather led her to the point she wanted to quit because she could not take the stress anymore. She didn't quit and I noticed a type of strength about her that I first labeled "true grit." A term to describe the strength I observed was illusive and needed to be developed.

Charlie was drawn to a career in nursing at a young age. She remembered helping her family take care of her grandmother when she was young. When she reached sixteen, she became a certified nurse's aide (CNA). She enjoyed taking care of people and listening to their stories. It was not a hard decision for her to enter nursing.

She prepared for her entry into nursing by taking some of the pre-requisite courses concurrently with high school courses. She also took a certified medication aide (CMA) course to learn medications because she thought that would help her in nursing school.

When she entered nursing school, she was a full-time student, worked full-time on the weekends, and commuted. Her husband and parents were very supportive. She did not have children at this time and felt that if she had children, she may not have been able to

succeed. She talked in-depth about working full time, commuting, long clinical days, not meeting expectations of faculty, and the loss of six family members during her nursing education. With all of the other stress in her life and the added stress of her grandfather's death she stated, "I wasn't going back, I was done." With the insistence of her husband she rebounded enough to go back to class and finish. This inner strength carried her through to the end.

The grounded theory process of constant comparison of data as they were collected provided an opportunity to continue to learn more about a strength that was noted in all of the participants. This strength does not necessarily refer to physical, emotional, mental or spiritual strength but instead a combination of these characteristics. It was determined that this strength would be called psychic strength.

Organization of Data Findings

The interview process created data which were broken down into discrete parts and examined for similarities and differences in regards to nursing student attrition. From these data arose four axial categories which support the core category. The findings will be discussed to illuminate connections among the data and the axial categories and explain the relationships as they relate to attrition. The four axial categories are caring, courage, control, and adaptation. These four axial categories support the core category of psychic strength. First, the core category will be introduced followed by the discussion of the four axial categories. This chapter also will provide evidence that this study meets the four central criteria for judging the applicability of theory which includes fit, understanding, generality, and control (Strauss & Corbin, 1998). The chapter will conclude with discussion of the relationship of the axial categories to the core category of psychic strength.

The Core Category: Psychic Strength

The core category, psychic strength, is the totality of characteristics found in these students who effectively completed an associate degree nursing program. I once thought

that students who were successful did not have as many challenges, but once I really examined the lives of these students that may not be true. I recall a student who performed well throughout school but during the final weeks of school informed me she barely survived. She had worked full time, commuted an hour one way to school, and cared for four children. For the last few weeks of school she drove to school with malfunctioning brakes on her car because she did not have the money to fix them. Some students endure broken relationships and divorce in the months following graduation. I knew nothing of their personal challenges. Any nursing faculty would be able to recall similar situations. Why do some students complete a nursing program under extraordinary circumstances while others do not? It appears that some students have a strength I did not comprehend. This desire to understand led me to study this further.

Nursing school presents many challenges for students; challenges that are different from other educational programs. This would include clinical experiences where students are expected to apply their knowledge to the care of patients with ever changing health care needs. Students are not only evaluated by their instructor but also by the patients and their families. This constant evaluation is a stressful event. Some students appear to have certain characteristics that give them strength which allows them to manage stressful events.

There are similarities between these characteristics and those found by Kobasa (1979) when studying stressful life events in executives. Kobasa studied executives holding high stress jobs and found that personality characteristics appear to have a preventative effect on stress related illness. The executives who remained healthy tended to "have a greater sense of control over what occurs in their lives," feel "committed to the various areas in their lives," and view "change as a challenge" (Kobasa, 1979 pp. 3-4). While the protective mechanisms are not well understood, the personality characteristics cut into it, "decreasing the likelihood of breakdown into illness" (pp. 9-10). This could be applied to nursing students' stressful lives. Nursing students also need to feel they have

control in the events of their lives because powerlessness is a source of stress (Kobasa, 1979). Commitment to becoming a nurse gives students a sense of purpose that prevents giving up in times of great pressure. Finally, when students perceive challenges as an opportunity to learn, they will be motivated rather than feel threatened and overcome with stress (Kobasa, 1979).

Attrition occurs when students experience high levels of stress repeatedly, and they reach a breaking point. I have seen students struggle and appear to be out of control in several areas of their lives, but then they seem to gain control by making changes in study habits or maybe decreasing the hours they work. If these adjustments are inadequate, stress mounts, and they become out of control. The more stress students feel, the less likely they are to be able to adapt. There seems to be a point where this psychic strength is fractured. The fracturing process occurs over time and results in a situation described by a participant as "spiraling out of control." Psychic strength is composed of four axial categories. These axial categories are intertwined creating a strength that keeps a student moving forward to becoming a nurse. This strength is more than emotional, spiritual, mental, or physical strength but instead a combination.

The student needs psychic strength to withstand the multifaceted challenges during nursing school which create stress. When stressed, students perceive challenges as obstacles instead of opportunities to learn. The more obstacles the student faces, the more stressed they feel. The stress and obstacle cycle eventually will fracture psychic strength unless something happens to stabilize the students' lives. Students with caring, courage, control, and adaptability have the potential to maintain or stabilize their lives during stressful, challenging times.

Relationship of the core category to the axial categories

I was awed by the participants' strength as I listened to their stories about the challenges they endured and eventually overcame as they successfully completed the nursing program. I could not come up with any term that adequately described what I

observed. It was more than hardiness because that would mean they merely endured the challenges. These individuals not only endured but acquired new abilities to maintain homeostasis. This strength combined attributes including the individuals' animating principle which makes them unique individuals; moral and ethical characteristics; ability to reason, think, feel perceive, and judge; behavioral and emotional characteristics; capacity for exertion or endurance; and power to resist force. The combination of the characteristics will be called psychic strength. Students who are able to withstand the challenges and stresses of nursing school and become nurses have psychic strength.

Presentation of Data Analysis

Caring Overview

Caring is the first axial category to be discussed. The characteristic of caring often draws people into a helping profession such as nursing and will be explored in detail in this section. The concept of caring is an essential component of nursing. Caring as a concept has been investigated through a nursing literature review. There has been a lot of discussion on the subject of caring but no consensus regarding the definition of caring. Morse, Solberg, Neander, Bottorff and Johnson (1990) believed it was imperative to clarify the concepts of caring if caring was to "be retained as the essence of nursing and if research in this area is to advance" (p. 2). To accomplish this task, the authors researched 35 nursing theorists who explicitly or implicitly defined caring. This examination resulted in the identification of five epistemological perspectives which include caring as a human trait, caring as an interpersonal relationship, caring as a moral imperative or ideal, caring as an affect, and caring as a nursing intervention. This concept of caring is validated in the responses from participants and was evident in the interviews as a motivating factor to enter nursing, endure the challenges and stress that are a part of

the process of nursing education, and reenter a nursing program having survived an interruption. This category will be discussed next and is organized by the five epistemological perspectives.

Caring as a human trait. Caring is an innate human trait. Roach (1997) described caring as coming from the heart and a response to the call to be human. However, the literature suggests that an individual's experience of receiving expressions of care and being cared for influence one's own ability to care (Morris et al, 1990). In other words, if students had been recipients of caring acts while growing up, they are more likely to model those caring behaviors in relationships with others. I noted that caring was a key rationale for choosing nursing among participants. It was interesting to hear the participants' stories on how they came to choose a career in caring.

Stevie experienced empathy from his grandmother. She was a great role model for Stevie, and he learned the behaviors of caring from her. He fondly remembers his years with her.

> What brought me to nursing? My folks both worked when I was a child growing up and my grandmother lived across the street. We spent a lot of time with my grandmother. I never really thought about it, but I think that it was because of the fact that it was my grandmother, and she was always there for me. She was getting up there in age at that time, and I just thought, maybe it is time for me to go back and make that adjustment because she cared for me when I was a child maybe it's my turn to give back to her.

He carried these fond memories with him as he grew into adulthood. By becoming a nurse's aide he would be able to care for others as well as his grandmother. This also would allow him to repay his grandmother's act of kindness. As Stevie reflected on his decision to go into nursing, he said, "So you know that had a lot to do with it. So I made the decision back in 1989, and I started out as a Certified Nurse's Aide (C.N.A.), worked up to a Certified Medication Aide (C.M.A.), worked in a nursing home, totally enjoyed

it." The caring he received from his grandmother influenced his ability to provide care for the elderly in a nursing home. The positive feeling he had when providing care for the elderly merely increased his ability to care for others.

Stevie had other great role models to demonstrate the human trait of caring. As he continued to work in the nursing home, the relationships with the nursing staff helped to diversify and expand on the ways he could express caring behaviors. They saw the potential he had for nursing and spent time encouraging him to go back to school to become a nurse.

It was the nurses that I worked with that knew my potential and with their encouragement that I chose to go back to school. Because they said, "you're good you need to take the next step. You need to continue with your education." So I attribute it to the nurses that I worked with, because they were very positive.

The nursing staff cared about him and expressed this in supportive comments. These caring behaviors bolstered his self esteem when he thought he was not good enough to be a nurse, and demonstrated how to express care to others. He now models his nursing practice after the examples of the nursing home nurses with whom he worked.

Heidi also had experienced caring from nurses as she grew up. When her father was called to the hospital to care for patients, she spent many hours in the waiting room. The nurses watched over her while she waited for her father. In addition to experiencing care from the nurses, she also witnessed the nurses caring for patients. She modeled those behaviors while watching over her brothers.

> I've always been a caregiver. I cared a lot for my brothers while we were young. So I grew up around a lot of nurses and really learned to respect them. With my dad at the hospital, many, many hours I spent nights in the hospital while he would be waiting on a baby to be born I would sleep in the waiting room. And the nurses would take care of us so I really learned

to admire and respect the profession of nursing. I respected the nurses just as people... And actually I was looking back at one of my year books from like seventh grade, and it said that I wanted to be a nurse. And I thought, well I knew then.

Heidi was the recipient of instinctive caring acts from the nurses who watched over her as she waited for her father. She in turn cared for her brothers. This innate human trait of caring has developed into a passion. These nurses were role models for her as she grew and may have influenced how she cared for others.

Caring as an interpersonal relationship. Caring is also an interpersonal

relationship involving a connection between two people. The examples above demonstrate caring as an innate human trait but developed into an interpersonal relationship. Heidi talks about the development of the interpersonal relationship with the nurses she knew when she was a child.

Now that I am a nurse, I have the benefit and the privilege of working with them on the same level, the same profession, and in the same community now. Because I went back to my home community. So it's really neat, a partnership from way back.

The nurse patient relationship involves the patient providing information to the nurse to assist in the development of a plan of care. The nurse provides information to the patient in ways such as health teaching. Through these interactions a supportive interpersonal relationship is formed.

Another way an interpersonal relationship develops is through the nurse-patient relationship. Morris et al (1997) stated that caring includes both the "feeling and the behaviors occurring within a relationship" (p. 6). Heidi experienced an interpersonal relationship when her premature baby was being cared for by the nurses.

She was critical for a long time...they did more than just watch the monitors; they took care of the baby too. Because I know that sometimes she'd say the monitors doing this but, this is how your child's compensating, she really took time to explain to me what was going on.

The nurses showed concern for Heidi and her baby which is the feeling component of the interpersonal relationship. They demonstrated the behavior component of an interpersonal relationship by providing care for the baby and educating Heidi on the care of her daughter. It is evident in this excerpt that Heidi felt she had a great interpersonal relationship with the nurses who cared for her daughter. This relationship occurred as a result of the nurses' caring interactions with Heidi.

Stevie experienced an interpersonal relationship with the nursing department chair. His educational experience had been interrupted. He had an acquaintance who told him she had a similar experience in nursing school and recommended another school. He had time to reflect on his previous experience and regain his psychic strength.

I said ok. So, I called up there and talked to them and they were really, really good. Their program chair was a wonderful lady who just said, ... 'We're here to help you, we're not here to not make you succeed, we are here to help you succeed as an L.P.N. that is our job to see that you succeed to put quality nurses out there into the workplace.' And so it was wonderful to go and talk with her and have a very positive experience.

The interpersonal relationship was initiated by the program chair when she created a positive interaction with Stevie. Stevie also believed the program chair cared about his success which was confirmed by her assistance in his successful completion of the practical nursing program.

Caring as a moral imperative or ideal. Some nursing authors describe caring as a moral ideal in nursing (Morris et al, 1990). This is more than sympathy or support but rather a "commitment of maintaining the individual's dignity or integrity" (p. 5). The moral imperative also may be considered a "fundamental value" in nursing (p.4). I have observed students who work hard to acquire adequate knowledge to provide nursing care.

They fear they will harm a patient if they have not achieved this level of accomplishment. For them there is a moral imperative to prepare themselves to care for patients. A factor in maintaining an individual's dignity is caring enough to learn how to provide care to the best of one's ability.

Tom also believed that there was a moral imperative in caring and that individuals should choose nursing for the right reasons. Tom had learned about nursing from his father who became a nurse when Tom was in middle school. When Tom was choosing a career, he explored his options and chose nursing because that was what he really wanted. Tom became a CNA. He stated "I figured I didn't want to go into the program blind not knowing. I had a clue of what nurses did just from dad's stories, but I wanted to make sure." Tom explored other career choices but entered the nursing program because he knew that was what he wanted. Some individuals, however, see nursing as a gateway to another career or other branch of nursing. While this is very appropriate if it is done for the right reasons, Tom believed a classmate was entering nursing for the prestige and not for the opportunity to care for people who need help. His sentiment is evident in the following passage.

I knew this one kid and I didn't like him. He was a classmate. His grandma bought him a real expensive stethoscope that was still in the box. When we started talking about putting in Foley's and taking people to the bathroom he said "I don't need to learn that. I am going to be a nurse anesthetist." You know, everybody starts somewhere. Be an aide so you get a picture of what nursing is. I mean every nurse is an aide at heart.

Tom was adamant about maintaining the dignity of his patients. This included helping someone who was vulnerable and needed assistance with such personal things as going to the bathroom. He did not believe it was beneath him to provide caring acts such as helping someone to the bathroom. I didn't have any medical experience what so ever and you know when you're a C.N.A. you learn from literally the bottom up. You do everything and it prepared me because nurses do everything too. They don't just give shots; we give baths and help patients to the commode. It helped me a lot and gave me the basics of nursing school.

As Tom talked about the time he spent as a nurse's aide, I sensed he enjoyed the holistic care he provided the patients. He was not going into nursing for the money or to sit at the nurse's station while the nurse's aides do all of the work. I believe he was committed to maintaining the patient's dignity.

Tom also went above and beyond when he was preparing to enter nursing. He wanted to make sure he was adequately prepared. Before he entered nursing school, he tried to prepare himself when he was on duty as a nurse's aide.

> When I worked on the floor I tried to ask questions and tried to learn as much as I could. I knew that the hospital was going to be the place where I was going to do my clinical. So I tried to be familiar with that hospital, with the facility, and their equipment ... When I was an aide I tried to be familiar with the diagnoses, and be familiar with whatever was wrong with the patients. I tried to read up a little bit about them.

His desire to learn as much as possible in his role as an aide indicates he was in nursing because he cared about the patients. He needed to know as much about the patients as possible in order to provide the best possible nursing care. This moral imperative of caring was a strong motivating factor for Tom throughout his educational experience.

Caring as an affect. Caring could be described as a feeling of concern or desire to protect. It is, however, more than a feeling; it is a need to act "selflessly without immediate gratification or expectation of material reward" (as cited in Morris et. al, 1990 p. 5). The following excerpt describes a selfless act on the part of Candy.

I always knew that I wanted to be in the healing arts. I grew up in Brownfield, Texas, which is just 40 miles on the other side of Lubbock with six siblings. I can remember when I was three or four and my dad worked in the oil field. He worked with his hands as a mechanic and tool pusher and different things. One Sunday, for whatever reason I don't know, he was taking a nap on the porch, and it looked like his hands hurt. I remember ... getting a bowl of water,... tearing up a rag, and wrapping bandages around his fingers.

This act demonstrates empathy toward someone who is hurting. When she was three or four, she felt the need to care for others. When she was older, she had the opportunity to take a CNA class which would allow her to care for others outside of her family. In a routine day nurses perform many selfless acts.

Jennifer also utilized her role as a CNA to indulge in selfless acts. She had an aunt who was a nurse. She respected this family member and decided to become a nurse aide at a large hospital at her aunt's request. This job provided her with a vast amount of experience which she obviously enjoyed, but she also was deeply moved by the experience.

> I didn't realize how much I enjoyed that. The experience was so rich in that I got to spend time with people in their last moments with you know, being with them and comforting them, even just washing their lips off like Jesus did with his own people. Wash their face or rub their hands or something, and I realized the experience touched me deeply. I suppose spiritually. Then I didn't realize or have a word for it, but definitely a sense of serenity came over me.

Caring as an affect includes an empathic feeling for the patient (Morris, et. al, 1997). As she cared for her patients in their last moments, she showed compassion and empathy for their needs. Morris et al (1997) go on to say that caring, as an affect, is "primarily focused on increasing intimacy between the nurse and the patient, which in turn enhances mutual self-actualization" (pg. 5). Jennifer experienced a type of intimacy with her patients as she comforted them in their final moments. This moment was a defining experience for her where she experienced a few moments of self-actualization.

Doris had the desire to be a nurse from a young age. She had the ability to demonstrate caring as an affect while playing with her dolls by trying to fix their broken arms.

Ever since I was a little girl I wanted to be a nurse. I can remember doing surgery on my dolls. You know, drawing on it and then one of them had a broken arm and I wanted to fix it up. I mean I don't know if there's anything specific really made me go "bling" I want to be a nurse it was just something that I that always wanted to do.

Doris still carries this ability to selflessly care for others without expectation of material reward. When I asked Doris if she felt she made the right career choice, she immediately responded, "Oh yes! I would do it even if they did not pay me."

Jennifer and Doris both exhibited characteristics of caring as an affect by being concerned about the wellbeing of others and selflessly taking the steps of provide comfort and or nursing care for them. Caring as an affect is the basis for nursing actions. I have often heard students say they gained strength and courage to try again when they remembered how much they wanted to care for others.

Caring as a nursing intervention. Nursing interventions may include procedures that require clinical skills, advocacy, and therapeutic communication. An emphasis, however, is placed on "necessity for adequate knowledge and skill as a basis for these caring actions as well as on the congruence between nursing actions and the patient's perception of need" (Morris et al, 1990 p. 6). Students acquire the knowledge and skills required for nursing interventions in school and then apply this information to patient care during clinical experiences.

Stevie now works in a hospital where nursing students go for their clinical experience. He believes in providing opportunities for students to gain adequate knowledge and skill in caring for patients. He remembers his challenges in school and wants to provide a positive learning experience for the nursing students he mentors. He recalls a recent clinical experience with a nursing student. He told the student:

OK, I'm just going to be honest. I learned best, last year when I was in your position, by standing back and having someone shadowing me. So I'm going to do the same for you. You're the nurse today and I'm going to follow you...You know they liked it. We had a very challenging new patient and she (the student) said, thank you so very much for standing back and letting me do it. She said I got to access a port; I got to work with a picc-line and a G tube. She said that is stuff I never would have done it if you would not have stepped back and let me do.

This is an example of gaining adequate knowledge and skill for caring as a nursing intervention. Clinical experiences provide the student the opportunity to apply the concept learned in the classroom to patients. This can be challenging and stressful for the students because they have instructors and the patients critiquing their attainment of skills. The supportive clinical experience that Stevie provided allowed the student to feel less stress which allowed for learning to occur.

This closing excerpt about caring is a combination of the five epistemological perspectives of caring. Heidi developed an image of nurses when she was little. She loved the interactions she had and admired the "white hat" image they portrayed. As an adult, however, Heidi experienced a different side of nursing. It became very personal because the nurses were caring for her critically ill baby. Her interactions with the nurses encompass all perspective of caring.

I had another child three years after my first one. She was born premature. And I got to see a side of nursing that I really loved; it was the NICU where she was born. She was 32 weeks gestation so she was early. We spent quite a bit of time, an extended period of time in the NICU. She was born with persistent pulmonary hypertension so I basically saw the miracle workers, and it wasn't the doctor that was there giving the orders...it was the nurses that touched my child, that cared for her. They babysat the monitor; she was critical for a long time. And they literally tended to those monitors like they were their own child. And not just watch the monitors, but they took care of the kid too. Because I know that sometimes she'd say the monitors doing this but, this is how your child's compensating. She really took time to explain to me what was going on. And I thought gosh that's what I want to do. I want to be able to help somebody else that is going through this because that was, at that point of my life was one of the lowest times because we didn't know if we were going to take her home or not. And just previously, that three weeks before my daughter was born, I had a friend who had delivered and had a baby in that same NICU, that had congenital defects and didn't make it, but they were angels to her too. After going through something like that, if they could still admire the people that cared for their child. I thought, there is something in that profession that just, it isn't anywhere else.

In this statement by Heidi the evidence of caring as a human state is noted in the comment "it was the nurses that touched my child." Heidi felt that she was cared for and that caring by the nurses was coming from their hearts. It also appears they touched her and made a difference in her life. Caring as an interpersonal relationship occurs when two people connect. Heidi expresses a connection with the nurses through the exchange of information regarding her child's status.

Caring as an affect is noted by the way the nurses empathized with Heidi and took the time to reassure her of her baby's status by explaining the monitors and her baby's response to nursing interventions. Caring as a moral imperative is apparent in the level of knowledge exhibited by the nurses as they gave the orders and "cared for" her baby.

This one excerpt illuminates the complexity of the concept of caring. When Heidi returned to school, her admiration for nurses and the reality of nursing joined. She realized the profession she loved was going to take serious effort and sacrifices because she was learning to care for patients.

I am going to be responsible for people. I mean it wasn't just the white hat nurse title. It wasn't just the person I admired that I really wanted to be; it was the whole package. I am going to be responsible for caring for somebody and I want to do it right. I want to do it right every time.

This defining moment for Heidi gave her a clear understanding of what she needed to do in order to become the nurse that was the whole package. She was duly motivated to return to nursing and achieve her goal.

Caring as a complex concept is an integral part of psychic strength. All of the participants had unique experiences that led them to a career in nursing but caring was a common thread. The five aspects of caring were evident in the participant comments. They reported enjoying the act of caring for others and wanted to continue to care for others in their role as a nurse. Caring provided the motivation to enter nursing and to carry them through the challenging and stressful times.

Students who did not enter nursing because they had a passion to care for others may find it difficult to find the motivation to carry on when times are difficult. In the last few years, I have had several students drop from nursing and enter education, cosmetology, or business among other career choices. Most were afraid I would be disappointed because they did not have the passion for nursing they thought that I expected. When I asked them about their decision to leave nursing, a common response was the concern of being able to be a good nurse because of the responsibility nurses have for the safety and wellbeing of their patients. Another concern they had was the amount of effort that was required to complete the nursing program. Changing careers was the path of least resistance for them. If their desire to express care for others in the role of a nurse was strong enough, they may have sacrificed and have done whatever it took to complete the nursing program. This study seems to confirm my opinion that

caring is a critical element in the strength required to overcome the challenges of nursing. Caring as an axial category is the first facet of Psychic Strength.

Courage

The second axial category is courage. There may be several definitions of courage including definitions for heroic courage. For this study, I have chosen to use a definition for everyday courage. Courage is present in every developmental stage of life. For example, a toddler has to have courage to stand, fall down, and stand again in order to learn to stand alone. According to Norton and Weiss (2009) courage is persistence or perseverance despite having fear. It takes courage to enter an unknown environment such as nursing education. The participants had a general understanding of the challenges of nursing school from friends or family but the fear of failing seems to loom over students. Entering a nursing program takes courage knowing that some have tried and failed. Heidi stated "a lot of us had done the research on how many people entered the program and how many people actually graduated and none of us were real excited about those results. We were pretty worried about it." Regardless of their fear and concern, Heidi and her classmates found courage to enter the nursing program.

As the participants proceeded in the nursing program, they had to find the strength to persevere situations such as feeling embarrassed because they were not prepared for their clinical experience or facing their fear of performing their first invasive procedure on a patient. Charlie had been asked by an instructor to explain how intramuscular injections might effect a lab test. She was unable to answer the question and stated "Oh, it makes you feel so stupid. Cause they are all looking at you like it should be the easiest answer. But you don't know." The source of courage varied, but Charlie found her

courage in being prepared. She explained "so then preparing for my clinicals took even more time, because I was going to know it; I was going to try not to be caught again." These challenging situations were ongoing and created stressful situations on a regular basis. These stressful situations tear away at a student's psychic strength. It might be easier for some students to withdraw than to find the courage to face these demanding situations.

The participants had the courage to enter nursing, but as the challenges increased and when the responses to challenges were not adequate, they felt stressed. When stress increased, the participants needed more courage to continue. This cycle continued until the student lost control or regained control through adaptation. The axial category of control and adaptation will be discussed later. The following passages help define the axial category of courage.

Charlie's courage was well grounded in her passion for caring for others. Charlie decided to enter nursing after working as a Certified Nurse's Aide (CNA), and she found that she loved taking care of patients. The experience of caring for patients gave her the courage to enter nursing. She recalls:

Well you always want to try and advance yourself, but it was just something that I had fun doing; I've always had fun doing. I've never hated my job. You know sometimes there are those days where you hate your job; you don't want to do it but the nursing part of it that has never been an issue for me. I've always loved my job.

This desire to care for patients provided Charlie the courage to enter nursing while knowing it was going to be challenging and there was the possibility of not succeeding. She recalls what people had told her before she started into school and what she tells others wanting to follow in her footsteps. You know people tell you it's going to be difficult and it is difficult. I tell them it's not easy, it's not going to be easy, you're going to get frustrated, you're going to want to quitbut if you want to do it you're going to have to have time and energy and sit back and do it!

Charlie had the ability to persevere when she was faced with a fearful situation. She also found courage from her connection with family and not wanting to disappoint them. Her family was very proud of her and knew she could do anything she wanted. When her grandfather died, she wanted to quit initially, but when she recovered from the initial shock, she was more determined than ever to complete because that would have been what he wanted.

At the times when it was rough, you know you always have your personal things going on when you are going to school and school stuff. It was just getting back into it, remembering why I got back into it and knowing that, mom, dad, grandpa, whoever, that they would want you to continue.

Family was important to Charlie which gave her courage knowing they would be

there regardless of the outcome of the fearful situation. Whenever she was near her

breaking point, she remembered how much her family admired her, and she found the

courage to continue. I have observed many students who appear to have an internal

strength. Charlie's story provided insight on my previous observation of students.

Heidi also had an internal strength that came from a supportive mother. Her

courage to enter nursing is evident in the following excerpt.

Yes, I knew it was going to be challenging but I guess it would be my mom that always told me I could do anything I wanted to do. I had that instilled in me from a very early age that I could do anything. So that really wasn't even an issue. I mean I knew it was going to be challenging, I knew it was going to be expensive, but I just wanted to do it. Heidi and Charlie had similar sources of courage. It has become very evident to me that family support is instrumental in helping students face fearful circumstances and persevere in challenging situations.

As the participants realized that nursing school was not as they had imagined or quite possibly they were not as prepared as they had thought, they needed courage to sustain them through the challenging and stressful times. This phenomenon is seen later in the interview with Heidi as she revisited the encouragement she received from her mother. This support appeared to give her the courage she needed to keep trying even during stressful times. She referred to a silent voice that told her to "do it."

Well, my mom told me since I was little that 'no matter what you do, you can do anything you want to do'. So I had that, and I've identified that in my leadership classes now. Something that's kind of a voice in the background saying go ahead, do it. It doesn't matter how big it is just do it. You can do it; it's not a big deal. Just do it. I think it was just that kind of silent voice or that back ground voice of encouragement (that helped me).

By the time that Heidi had returned to school, she had a family and high expectations for herself. In this excerpt Heidi talks about what sustained her through school, but she also continues to use this courage in her daily life. Heidi found courage in times of stress by remembering her mother and the words "just do it"!

Doris also had to overcome fear and used the "just do it" method. She talks about

the first time she gave a shot.

It was up on the surgical floor and the patient was a paramedic. He was going to surgery, and I had to give him his pre-op (medication delivered prior to surgery). I couldn't hardly draw it up because I was shaking, and I said I can't go in there by myself, somebody needs to go with me. I don't even remember the instructors name for that part or portion of it (clinical rotation) and she said 'It's Ok, go, you are fine, you know what you are doing! Go! Go! Go!' You know? I said what if he knows this is the first time I've ever given a shot? She said, 'well don't tell him'. I gave him his shot and he said, 'how long have you been a nurse? You give awesome shots'.

Students are taught appropriate safeguards when giving injections. In this process they are warned about the harm that could come from hitting a nerve or blood vessel. Since the patient was a paramedic, he would be knowledgeable of appropriate injection techniques. Doris was fearful she would harm the patient, and the patient might know she was a novice. She was fully prepared for that clinical experience, but it was still fearful. She had to find courage to overcome the fear of harming the patient.

Jennifer had to find her courage when she returned to school. She had doubt about her ability to succeed. She was terrified that she may not be able to finish, but she had to find the courage to continue. In the following statement she recalls how she felt returning to school.

I was more frightened that maybe I had changed. When I went to nursing school the first time, I was 19, 20 years old; now I was 30. I looked around and remembered thinking, these people are younger than I am and therefore I am not going to succeed because I'm older.

She felt that since she had been out of school for ten years, she may not have what it would take to be successful in school. Her desire for nursing, however, was very strong. She had promised her Aunt that she would go to school and become a nurse. The desire to fulfill her promise and become a nurse gave her the courage to overcome her doubts and continue. Jennifer went on to say:

Once I got into the class and we got into the nursing school itself, the median age in our group was 40. In fact, we had women that were 65 to 68, and I realized that if they were going back and could be successful, I could as well. Again it was that fast paced, heavy, packed, push, push, push that we all know as nursing students. You have to pass! It was that again. You know it was very demanding, very rigorous, and I had some really large issues, but I realized that this, this is what I wanted to do.

This desire and commitment to finish was a driving force for her and outweighed her fear of not being able to pass. She also found comfort in having peers her own age. She used the older students as a ruler when she said, "if they were going back and could be successful I could as well."

Tom had lived the life of a nursing student through his father's eyes. His father was a farmer and decided to go to school to become a nurse when Tom was in junior high school. Tom recalls how he learned about the challenges of nursing school:

In 1994 my father graduated from nursing school. I was in junior high, sixth grade maybe I'm not sure how old I was, but I remember I helped him out. He was going over medical cards, like flash cards, and I would ask him questions...I knew it was going to be a hard class just being around dad when he was doing it. It was hard he was a little stressed.

Tom felt he knew the challenges he was facing, yet he still wanted to know more about what may be ahead. For him knowing what to expect gave him courage because he could prepare himself. He had taken a Certified Nurse Aide (CNA) course so he could work with nurses and take care of patients. Tom explained:

> So I tried to be familiar with that hospital, with the facility, their equipment where everything was. So when the nursing instructor asked me to go get something, I knew where it was and I didn't have to mull around and be all nervous, lose my concentration on stuff. That's kind of some of the ways I prepared for that. When I was an aide, I tried to be familiar with the diagnoses of the patients and tried to read up a little bit about them. I didn't go into great detail I just learned the basics and tried to learn some medicines. I just didn't want to go into nursing school blind.

Fear of the unknown creates anxiety in many. Some people control that anxiety by

focusing on one day at a time; others such as Tom controlled this anxiety by preparing for the days ahead. Being prepared provided him the confidence and courage needed to proceed with his plans to enter nursing. Tom was learning more about the nursing field in order to be prepared and not be placed in an embarrassing situation such as not knowing where items are in clinical. He felt this would help him stay focused and in control. This act helped him prepare and have the courage he needed to enter nursing school.

Despite the warnings and preparation the participants still found nursing school more difficult than imagined. Their perception, however, is not always congruent with actual requirements of nursing students. For example, students might think that it would take them an hour to prepare for class or clinical when in reality it takes three hours to read, comprehend, and apply the content to the care of a patient. In the fall semester everyone appears fresh on the first day. As the semester progresses and students are faced with new and challenging assignments that require more of their time, fatigue can be observed in many students. Before Thanksgiving break fatigue is quite obvious as the students discuss their struggles in the hallway before and after class. Some do not make eye contact with me as they scurry out the door after class. When students find the courage to come to me to discuss their struggles, I try to have them focus on the needs of one day at a time because that may be all they can do. They have lost the courage to see past tomorrow.

Stevie's story reminded me of so many students I had worked with as a nursing instructor, and he was excited as he entered nursing school but wore down after numerous trials and tribulations. He had worked as a CNA and thoroughly enjoyed that experience. With encouragement from the nurses with whom he worked, he became a Certified Medication Aide. This new certification allowed him to expand his patient care to include giving medication to patients under the supervision of registered nurses.

I started out as a C.N.A. and worked up to a C.M.A. I worked in a nursing home and totally enjoyed it... It was the nurses that I worked with there and I had worked with in the past, that knew my potential, and it was with the encouragement of the staff that I chose to go back to school. Because

they said, you're good you need to take the next step. You need to continue with your education, so I attribute it to the nurses that I worked with, because they were very positive.

Stevie entered nursing school full of enthusiasm and ready for the adventure that lay ahead. At that time he did not know the challenges he would face. Once he was in the nursing program, he had feelings of worry and doubt about his ability to succeed. It took a lot of courage to continue in the program under these circumstances. Stevie explains further in the next entry:

> It was just hard because we were told at the beginning of the year ... flat out 30% of this class will not graduate. It was 30% that did not graduate. I wonder if that was in the back of my mind when second semester rolled around. After first semester and they were dropping like flies. We weren't even two months in and we had already lost three people. I just don't know. I don't remember if it was her saying that and that was why I was struggling, and I admit I was struggling.

It is difficult to determine if the statement made by the instructor had any effect on

Stevie's success; however, the comment increased his fear of failure.

His co-workers and classmates bolstered his courage by putting his situation into

perspective. This support reduced his level of fear and renewed his courage. He recalled a

time when he was really down and not doing well in school:

When I would do bad on a test I had to have that support to say 'it's ok, so you didn't get the grade you want it's still OK. Don't get down on yourself let us completely divert you to something else and forget about it just move on, it's done, go on.' So yeah for me it is support, if that support wouldn't have been there, especially this year, yeah I think it would have been even worse.

They helped him deal with his stress by putting past events he could not change behind him. This also kept him focused on the events he could have some control over, which were future tests. Charlie also had a great support system which included her husband, family, and co-workers. She had endured many personal challenges. When asked "Do you think you would be here today without the support of your husband?" She replied:

No, I think I would have quit. I think I would have quit completely. Just with all the stress, personal stuff that goes along with all the nursing school stress. Nope probably wouldn't be (here without the support of my husband).

This comment puts into focus the fear and stress that students feel during nursing school. Charlie realized that she would not have been successful without her support system. Support systems are varied. Some are people who provide emotional and financial support, while others help with needs of daily living. The support systems also seemed to give the participants the courage they needed to continue with or in some cases return to school.

Another factor of courage may be related to who we are as people, and how we learned to face new adventures and persevere when times are hard. Candy grew up in hard times, and she endured many unpleasant events. It is not understood whether she developed her strength due to her early life experiences, or she had an innate strength, but regardless she seems to be a survivor. She begins by talking about her father who worked in the oil fields to support his wife and eight children. From the excerpt below you can sense the pride Candy had for the strength that had been instilled in her from childhood.

My father dropped out in 10th grade and my mother graduated from high school and took a semester or so of college courses, really probably one of the saddest things ever, because they both are just exceptional (people). My dad was brought up in a single parent home. His dad died when he was three years old. So, in the end he went to work for the pipeline... I just remember that is a life lesson... I grew up knowing it was possible, that all things were possible.

Candy had learned that life was not always easy, and if she was going to change her life circumstances, she would have to have the courage to keep going even when the challenges seemed overwhelming. She used this courage and strength when she returned to school.

I went back, and it's like, that's what I'm going to do! It's like I have to do that and I can't imagine doing anything else. That is what I want to do. You know from the time when I was three years old and wrapping daddy's hands in those band aids and the other consideration that I had, you know, economically. I needed to complete something that was going to be financially...where I could support myself and a family. My mom, worked labor level jobs all of her life because she did not have a college education.

When Candy entered school she was the youngest in her class. She wanted to have fun with students her own age and yet had the responsibilities of supporting herself. She was overwhelmed with work, school, and fun. Some people in Candy's situation would have quit. As a nursing faculty, I have seen students quit so close to their goal. I recall one student who chose to withdraw from school at the end of the first year. She was motivated financially and had the desire to become a nurse. She was so afraid she would not be able to bear the responsibility of being a nurse she lost courage to continue. From my perspective, I think she could have made it, but for whatever reason she did not have the courage to stay.

Students enter school with the courage to begin their journey toward becoming a nurse. They are excited about the days to come. They feel prepared for the challenges. Their perception of what is expected of them may not be congruent with the actual expectations. As the days unfold some students find they were not prepared. When the students' preparation was not adequate to meet the challenges, the students may doubt

and fear their ability to be successful. These fears begin to create stress in their lives. Charlie had a time when she was stressed with nursing school and would have quit. Increased stress in their lives may reduce their ability to persevere, and they lose courage.

Courage can also be increased by nursing faculty supporting students during fearful situations. Doris gave her first injection fearfully to a patient who was also a paramedic. Her courage to try another invasive procedure was increased by the paramedic telling her she gave "awesome" shots. When students have persisted in a fearful situation and ended up being successful, their courage was increased.

Control

Control is the third axial category. Individuals feel in control when they have the ability to make decisions when choosing among courses of action to decrease stress. Control also may involve the ability to accurately appraise a situation and develop a solution to deactivate the jarring effects of stress (Kobasa, 1979). Applying this definition of control to the experience of the participants, control would mean exercising restraint or directing influence over a situation such as deciding to study rather than go out with friends. It also may mean reducing the incidence or severity of an event by developing a solution that decreases stress of the event. This might mean creating a time management plan. Usually students entering nursing programs have made preparations to include the time and effort of school in their lives, so they have a sense of control. As students face some of the unknown expectations of school, they have to make changes. If they are able to make reasonable changes, the students are able to proceed without any further problems. When there is no leeway for change, then stress mounts and the students begin to feel out of control or feel they have a lack influence over their situation. The phrase

"out of control" was noted frequently in the interviews with participants. Control will be discussed as it relates to the ability to make decisions that decrease stress and/or deactivate the effects of a negative situation.

Students begin school with a sense of control that is supported with caring and courage. They have accomplished much to be at the beginning point of nursing school, including completion of pre-requisite classes and admission criteria. Some students have made arrangements for child care, adjusted work schedules, and withdrawn from extra responsibilities in their personal life in order to begin their journey.

Stevie had received encouragement from his coworkers to go to school to become a nurse. He had been working as a CMA and loved being able to take care of people in an assisted living facility. He carefully planned his entry into nursing school because he was not going to be able to quit and be a full-time student. He had been living on his own for a while and needed to provide for himself.

I started with my pre-requisites. I took them one at a time because that was all I could afford to do... I had finally got done with those and I applied to go to nursing school in the fall. I had applied a year before and was accepted then for the following year. I had everything ... all my pre-requisites done and I was ready to go.

A feeling of being in control is evident in this statement. He had made the decision to have everything completed prior to entry into nursing school. Stevie continued to work after he entered nursing school. He thought his experiences as a CNA and CMA would help him understand the concepts in nursing. In the beginning this strategy worked well, and he felt he did very well in school. Charlie prepared in a very similar manner. She had worked in a nursing home for a long time and thoroughly loved her job. She started researching college nursing programs that would lead to becoming a registered nurse.

I started taking some of the pre-requisites in high school if they offered them through the high school and through ITV (interactive television) to get those out of the way. Then I did go ahead, I believe the summer or two before I graduated and took the CMA course to get familiar with the meds and kind of just get a little more experience on that end of it. I just tried to get as much of my pre-requisites out of the way as possible so that I could concentrate more on the nursing part of it.

Charlie knew the challenges of nursing school and wanted to make sure she was prepared. In addition to having experience as a nurse aide she took her general education classes so all she would have to study was nursing. Even with this preparation there were times she felt unprepared and not in control of her learning experience. When asked about her worst day in nursing school she responded:

It was not being prepared. To me clinicals were bad all around until you got use to that instructor (and) kind of got to know how they were going to do things and stuff like that. The first day of clinical was always the worst. You're running around like you don't know what you're doing.

She did not like the feeling of not knowing what she was doing. The basis of the feeling may have come from feeling embarrassed in front of the instructor or not knowing how to care for the patient. She went on to say "I preferred the second day of clinical because you knew your patient and knew what was expected of you." This statement would indicate she was more comfortable when she was prepared and more in control of her day.

While some students took course work and gained experience as a nurse aide to be prepared for nursing school, other students prepared by making sure their family was cared for before diverting time to education. Doris put her dream of becoming a nurse to the side until her youngest child was in school. She wanted to be a full time mother, but when all of the children were in school, she would have time to go to school. She stated:

> Then motherhood took over then I got pregnant very quickly after our first one. By the time the youngest was in kindergarten, I told my husband I really needed to go back to fulfill my dream. So I started taking some prerequisites classes and I started back to school when I was 26.

This provided her a sense of control from a time management perspective but also from an emotional and mental perspective. In other words, she would not feel remorse because she was able to stay home with her children until they entered school. By waiting until the children were in school, she decreased financial strain on the household income and had a schedule of when the children would be in the care of others. This mental and emotional sense of control was needed to begin the journey of nursing education.

In order to feel in control of a situation or to direct influence over a situation, one would have to know what he or she wanted and become motivated to achieve it. Doris had carefully planned her entry into school. Heidi, however, knew she wanted to be a nurse from a global perspective but had not developed a specific plan or defined how she would accomplish it. She explains in the following statement:

I don't really think I had a definition for success for myself at that time. I didn't! I kind of knew. I kind of had a pie in the sky dream that eventually one day I was going to be a nurse. I just didn't really know how I was going to get there. I knew that I was intelligent enough that if I wanted a scholarship I could get it... Anyway I did not apply myself... I never really was focused... A typical day would have been just disorganized day, just kind of came as it came. I think it was still the high school mode a lot... I think I was still in the high school mode, when I went to nursing school the first time.

Heidi was different from the other participants from the perspective of never really having control. The others had a clear definition of success for themselves and had a plan to achieve it. However, when Heidi returned she had developed a goal and now was worried about being able to reach that goal. She had this to say:

I think you develop camaraderie once you are in a program. When you first go into the program, I think you have an apprehension, feeling of unknown. I can just think back to... the anticipation of what we were in for. None of us really knew what to expect, I mean we all knew we were after this end goal, we all knew it was going to be difficult. We... a lot of us had done the research on how many people enter the program and how many people actually graduate and none of us were real excited about those results. We were pretty worried about it.

The camaraderie helped them deactivate the jarring effects of the challenges of the nursing program by having others to help them understand concepts, making sure they did not miss an assignment deadline, keeping them focused or exercising restraint over their environment. Heidi and her classmates had common challenges, and they gained strength and helped each other regain control in difficult times. In addition, knowing that someone else was experiencing the same anxiety gave them an emotional control.

Establishing control is essential to creating a rich learning environment because students have wide perceptual fields and learning occurs more readily when their level of anxiety is mild. The students who seem to perform well in school are those who are prepared everyday for class and clinical. These are examples of establishing control. The next set of excerpts will be directed toward explaining the loss of control.

Stevie was in his second semester before he started losing control. Then for some reason he began to have trouble which was reflected in his grades. He stated "First semester was a breeze, and I don't know why it would have been any different than second semester." Stevie probably was applying some of the information learned in the CNA and CMA classes to the new nursing concepts. This ability to apply information in a new setting allowed him to master the new concepts very rapidly. When he entered the

second semester, the concepts were all new and required more effort to learn. He explains

how he felt when he began losing control:

It was just hard because we were told at the beginning of the year. The instructor came flat out and said 30% of this class will not graduate. It was 30% that did not graduate, we started with 30 people. I wonder if that was in the back of my mind second semester rolled around after first semester and they were dropping like flies. We weren't even two months in and we had already lost three people. I just, I don't know, I don't remember if it was her saying that (but) I was struggling, and I admit I was struggling.

While the students were told about the graduation rate at the beginning of the first

semester, the comment did not affect Stevie until he began having trouble in the second

semester. He also discussed the classroom environment in regards to feeling in control.

They really didn't have enough classrooms so you were kind of... 30 of you were kind of smashed into a small classroom. You are about elbow to elbow and it was just, I don't know...let us just say you had a test, we would be given an hour for a test, and we would be going right back into lecture. There would not be much break time. You were there all day from eight to three and by the time you got done, you were mentally exhausted... We had a syllabus we followed...they just gave you the reading on the syllabus, and you had all your different books, and it just wasn't my thing...you would get that syllabus and it's kind of hard to understand. You're trying to figure out what you have to do and then you would be piled on with 15 chapters. That's stretching it. You had a lot to read that almost was humanly impossible. You couldn't get it all read, it was just too much.

Stevie had been told that 30% of his class would fail which made him feel he might be one of them that would fail. He felt he had no control over the instructor's perception of the class's ability. He also was not in control of his classroom environment including small classroom, scheduling, and overwhelming amount of work. In addition, he was unable to determine what was expected of him. It appears it was the combination of the comment of the instructor, academic struggles, and classroom environment which created a feeling of being out of control. Candy felt she had prepared for school, but she was the youngest in her class and may not have been as focused as the older students.

I was the youngest person in the program all the way through. The year I graduated in 82' I was 22 and the next youngest person was 28-29 (who was) a single parent with a child...but everybody else in my class was so much older. They were like grown women with families and a lot of it was I just really felt, wow, overwhelmed!

She liked to go out and have fun with people her own age and was not as motivated as she could have been. She stated "occasionally something would really spark, and I would really work on it hard, but I was never a high student... because, I was lazy." Another component was her age and lack of focus on school. She had older classmates who were very dedicated, and she wanted to have time to have fun. Candy did not exercise restraint in her life and chose to party and not focus on school. Control also is defined as being able to deactivate the jarring effects of a situation. Candy lost control by choosing not to focus on school and ended up dropping the program. When she returned the next year she said, "My grades were much better than last year. I mean my whole life was just much more calm and stable. I guess I wasn't out being crazy and partying."

The term stable would indicate control in her life. This control came from a cognitive choice to focus on school. She had also met her future husband and life was in control financially, mentally, and emotionally.

The next example of losing control from Tom is related to physical, mental, and emotional fatigue. Tom worked to support himself while in school. He had a girlfriend when he began school, and they married during his second year. His wife was in college at another school, so he commuted home every weekend. He explained his life at that time.

I was a husband on Thursday afternoon and Friday and then I was working you know seven to eleven on Saturday, seven to eleven on Sunday and then leaving at 8 o'clock on Monday, I left before she even went to class.

By working four shifts every weekend he was able to provide financial support. It also is

evident in this statement he made time for maintaining a relationship. He went on to talk

about the intensity of the classes.

It was hard because you know you're learning everything. You're learning the basics and I knew a lot of things, but I didn't know that much when I got into it. But, it was hard, very intense, and not a lot of breaks.

The combination of the work schedule, commute, and intensity of school creates a

situation where a minor event could cause a loss of control. Tom did very well managing

this schedule. When asked to describe his worst day in school he replied:

One day before clinical, I had worked the night before and stayed after work to study and get my paper work filled out for the patient that I picked that next morning. I got up, got ready to go, and was waiting to leave. I sat down in my chair for just a moment with one of those big cups that hold four cups of coffee. I was sitting in my chair, the cup of coffee here and my phone here. I dozed off and the phone rang. I jerked and spilled the entire cup of coffee in my lap. It was a little difficult getting through that day.

As I listened to Tom tell me about this event, I thought of so many times I have seen students in a similar state of exhaustion. They are depleted of all physical, mental, and emotional reserves trying to maintain job, family, and perform well in school. In some cases choices to deactivate the jarring effects of stress are limited. Tom did not have financial support other than his income and could not opt to quit work or even reduce his hours. His decision to stay in school and work full time was based on the knowledge it was a short term obligation. His perception of this short term obligation provided the deactivation of the jarring effects. When students feel they are in control, they feel less stressed. The participants attempted to decrease the stress by preparing for entry to school by becoming a CNA and/or CMA, arranging for child care, and developing support groups. Once in school maintaining control may consist of time management and learning what is expected to be successful.

Deactivating the effects of stressful situation was also discussed. The students utilized peer support to decrease stress through helping one another learn nursing concepts, develop time organization plans, and sharing concerns with each other. This camaraderie proved beneficial to several participants. Another method of deactivating stress is to appraise the situation and develop a plan. Tom was not able to decrease work but he developed a plan to be a husband one day, employee two days, and student for the rest of the week. This allowed him to survive for a short time while he completed his last year.

In order to be in control, students need to make good decisions and know how to deactivate stressful situations. Learning is easier when students feel they are in control of their environment because they feel less stress and their level of anxiety is mild. Students need to feel they are in control of their environment and emotions and they need to have confidence in their abilities. They must face each challenge with assurance in themselves and their abilities to achieve success. If they do not successfully overcome the challenge or have difficulty with the challenges, anxiety mounts. There are many ways to decrease anxiety. The next section will discuss how students adapted to decrease the anxiety they were feeling and gain a sense of control in their lives.

Adaptation

The final axial category is adaptation. Callista Roy, a nursing theorist, believes that humans are biological, psychological, and social beings who cope with environmental change through the process of adaptation (Roy & Andrews, 1999). As biopsychosocial beings students are continually adapting to their new environment to maintain their physical, mental, and emotional integrity as they strive to find meaning and purpose in life. Roy's theory of adaptation is based on assumptions that "thinking and feeling persons as individuals or in groups, use conscious awareness and choice to create human and environmental integration" (Tomey & Alligood, 2006, p. 361). Adaptive responses to environmental stimuli promote health and integrity of the person. Ineffective responses lead to disruption of personal integrity (Tomey & Alligood, 2006). Roy's Adaptation Model is divided into four modes which comprise physiologic needs, self-concept, role function, and interdependence. Physiologic needs include the basic need for oxygenation, nutrition, elimination, activity and rest, and protection. Self concept includes beliefs and feeling about ourselves and is formed from our own perception of self and how we believe others' perceive us. This mode also has been identified as psychic and spiritual integrity. The role function mode is the need to understand who we are is in relation to others in society. Interdependence mode is the need for reciprocation of love, respect, and value in relationships. Roy's adaptation model explains how adaptive modes protect physiologic integrity, psychic integrity, and social integrity. (Roy & Andrews, 1999; 1987; Tomey & Alligood, 2006).

Students face environmental changes when they are in nursing school. Examples of physiological environmental change include lack of sleep and alteration in nutrition

due to increased demands on their time. Self concept may be altered as they face challenges and fear they may not be successful. They may also worry about how others view their performance in school. Students with family responsibilities find their role as a caregiver has changed in order to have time to devote to their educational journey. Their psychic integrity may be shaken by mental and emotional challenges as they learn new concepts of nursing and learn who they are as an individual in a stressful environment. During stressful times students adapt through the development of new interdependent relationships with other students.

As discussed in the last section, the participants had experiences of feeling out of control of their environment and emotions. According to Roy, humans have the ability to adapt. From this theoretical perspective nursing interventions would be developed to assist the patient in adaptation (Roy & Andrews, 1999; Tomey & Alligood, 2006). It is important to note that Roy's adaptation theory is focused on the care of patients, but the concepts also may be applied to nursing students and their ability to adapt to their environment while in nursing school. However, some students fall short of being able to adequately adapt. In this instance, they are unable to regain control and successfully complete a course of study for nurses. In the following section, examples of how students adapted will be discussed. The examples are organized by the four modes of adaptation: physiological, self-concept, role function, and interdependence.

Physiological integrity can be threatened when students have multiple roles such as employee and or parent. A major challenge for students is working while going to nursing school. Some students do not have the luxury of only being a student. They have family and job responsibilities. When students have so many responsibilities and not

enough time to fulfill all obligations, they choose to decrease the number of hours they sleep. While this may be a short term solution eventually it will affect their physiological

integrity. The next excerpt demonstrates how Tom adapted his schedules to meet the

demands of work and school.

I worked 3 -11 and I'd get out of class at four I'd go to work. Then after work, I'd get out my books ...I was at the hospital until about 1 o'clock in the morning working on paper work for the next clinical day. Then I'd go home, sleep for 2-3 hours and comeback at 6 o'clock in the morning ready to go to school.

Tom was able to endure this schedule without adequate sleep for a while. In the next

passage Tom discusses a morning when he was exhausted. I asked if he could tell me

about his worst day in school. He replied:

Really, really, really, really bad day ...one day before clinicals, I had worked the night before and stayed after work to study and get my paper work filled out for the patient that I chose to care for that next morning in clinicals. I got up, got ready to go, and was waiting to leave. I sat down in my chair for just a moment with one of those big cups that hold four cups of coffee. I was sitting in my chair, the cup of coffee here and my phone here. I dozed off and the phone rang. I jerked and spilled the entire cup of coffee in my lap. It was a little difficult getting through that day.

Tom's busy schedule created a situation where he was relying on the coffee to keep him going. This morning he was low on reserves and even the coffee couldn't give him the energy to function adequately throughout the day. Tom realized he could not maintain this commitment. He adapted by working part-time. This was his response when I asked if this was a typical day.

Not typical... at least one day a week, one or two days a week it was like that. The rest of it I, I worked part time just enough to pay the bills and to buy cheerios and ramen noodles, you know?

The reduction in hours created a situation where his nutrition was altered due to lack of money to buy adequate healthy meals. Tom was able to maintain control of his physiological status for the short time he had left in school.

Stevie also had to make sacrifices and decreased the number hours he worked in order to have time to meet the challenges of school. The nursing faculty in Stevie's program realized students had to work. They also knew that nursing school required a lot of study time and when students worked too many hours they become so tired that they may not be safe taking care of patients. Students in Stevie's program were given a guideline of how many hours they could work and remain safe in clinical and be successful academically. Stevie, however, had to work enough to provide the basic necessities, so he found ways of decreasing expenses such as carpooling to school with other students.

I cut down to part time, completely part time. I can't remember what they (nursing faculty) said, they didn't want you working. They knew that everybody had to work, and this is the cut off, please do not work more than this. I was well under the cut off. I think I was maybe doing eight hours a week to just try to get money to pay the bills, was all I was doing. I was also car pooling at the time with others.

Stevie adapted to the best of his ability to provide for his physiologic needs of food and lodging and psychic integrity of being successful in school.

The next section discusses the integrity of self-concept. Students are continually evaluated on their performance which could affect their psychic or spiritual integrity. The students' perception of how the instructor views their performance may alter how they feel about themselves. Charlie stated "It makes you feel so stupid. They look at you like it should be the easiest answer." Some students adapt as Charlie did in the following quotation: And you know they would always ask... well what do you think? And I kind of told her, I don't know what I think. Sorry! I'm like, I don't know. If I knew I would be able to tell you. I was very frustrated. She says well go home, look it up, do a short report on it and come back tomorrow. So I had to go home and do that. But it was one of those things I'll never forget again. I will always remember that. And so from then on (definitely on all my clinical) if there was a test (or whatever it was that I didn't know) I didn't just kind of presume we were going to skip over it. I found out exactly why they were running (lab tests) and why it related to that person's condition. So then preparing for my clinicals took even more time. Because I was going to know it, I was going to try not to be caught again.

Charlie developed a plan to prevent future threats to her self-concept. Some students may have allowed a similar situation to decrease their self-concept, which is the case in the following statement from Stevie.

> I just let them get to me. I think that they knew the buttons to push from day one. I think, that when students went in for their initial interview, they sat in the session thinking the whole entire time "ok this is what we can do if we don't like him." My own opinion, that's what I felt.

Stevie had his self-concept damaged in his initial contact with faculty. He tried to adapt through self talk and hard work. Stevie's story will be continued in the discussion of the core category, psychic strength.

Self concept also is comprised of spiritual integrity. To maintain this portion of self concept, individuals must sustain a "positive or hopeful view of what one is, what one expects to be, and what one hopes to do" (Tomey & Alligood, 2006, p. 376). Heidi feels her spirituality has been a main source of strength during difficult times and has allowed her to become the mother and professional she is today. She stated that success has to come from within, "so make sure that you are whole before you enter nursing school…because nursing requires a lot of giving and if you don't have it to give then you won't be a good nurse." For Heidi spirituality made her feel whole.

Role function is the third mode of Roy's Adaptation Model. Role is a set of expectations for a position one assumes. For example, society has attached certain social and cultural expectations for the role of wife. Charlie learned to adapt when her role as wife and employee changed to student, wife, and employee. She learned how to use the time it took to commute to school to her advantage. For example, taping her lectures allowed her to take advantage of the time she spent on the road to listen to classroom discussion again. In the following she describes a typical day.

> I usually got up if it wasn't a clinical day, (if it was a clinical day I got up earlier) but it was usually around 5:30 to 6 o'clock. We lived in a town about 45 minutes away from school. I recorded a lot of my lectures and listened to them on the way to class. I think class started around 8:00 o'clock, and I was in school some days until noon and some days until 1:00 pm. Then I would go to work until about 10 o'clock at night. If I didn't work, of course, I came straight home and did home work, made supper did all the wifely duties you do on top of that. Then I usually was in bed by about midnight or so if at all possible. During my R.N. year, I did not work during the week but I put in 40 hours in a weekend (Friday, Saturday, and Sunday), so that I could go home after school and do home work and stuff. Because they warned us that it was going to be a little bit more difficult, and more time consuming and it was, by the time you prepared for clinical. If it was a clinical day, of course you go the day before (clinical) after class about one or two o'clock. You get your patient, get all your information, your medicines ... You go home and look up everything you don't know, so that if you were drilled by the teacher that you could figure it out, hopefully. And like I said, trying to take time to do the homework and also provide (do the suppers and the cleaning and all that for your spouse also). Thank goodness I didn't have any children, I don't know, I think that would have been a pushing factor.

She had learned that she needed to make the best use of her time, so she reinforced learning by listening to taped lectures as she traveled back and forth from home to school. She also adapted for the R.N. year by only working on weekends to allow more time for study and other family responsibilities during the week. Charlie was willing to make the changes and sacrifices in order to succeed.

You have to change a lot. You have to change your work schedule to go around your clinical, and I wasn't one of those that was fortunate enough to not have to work. And it's a lot of adjustment on your home life too. Because you don't get to spend your evenings watching TV or doing whatever, you have home work to do and things like that. I think it was hard for my husband for the first part of it, trying to get use to that also.

In addition to time management, there was a need for a change in mindset. She knew that her relationship with her husband had to change because she added the role of student to the role of wife. She was not going to be able to spend evenings watching TV with him because her time would need to be focused on homework. Charlie's environment changed when she became a student which threatened her psychic integrity. In these statements there are several examples of how she adapted to a very hectic and demanding environmental change in order to protect her psychic integrity.

Heather also had multiple roles and had to juggle family, work, and school. She knew she had to make a sacrifice in order to reach her goal of becoming a nurse; however, she felt remorse for not being able to care for her family in her usual way by cooking meals at home; instead, she served fast food. Even though she adapted it was a source of stress for her. The following is her description of a typical day.

A typical day, depending on what rotation we were in, some of our clinicals (supervised patient care experiences) were early. I lived about 22 or 23 miles from the campus so we had a little drive. When I first started, my second daughter was ... I'm guessing six or eight months maybe, I can't tell you exactly, but I know she was in the daycare there. The daycare opened, like when we did our geriatric rotation the daycare opened, for us early in the morning and we were in at the nursing home by six. Before that, the night before we went up and looked up our meds and studied what our patients conditions were... a lot of preparations, there was a lot of thought. I think I lived at school; I lived the whole picture with a lot of McDonalds and a lot of fast food. I blame myself for that now. But a lot of fast food in between times.

Heather's psychic integrity was threatened by the demands of nursing school and role responsibility of being a mother. She was ashamed that she resorted to giving her children fast food and "living at school." The responsibilities of being a mother, the time of commuting, and the demands of the program created a situation where she had to adapt to meet all of the expectations. She was able to complete school this time and reach her goal. Her psychic integrity was maintained because she knew it was a short term commitment for a long term gain.

The last mode of Roy's Adaptation Model is interdependence which includes the interaction among individuals as it relates to love, respect, and value. Students have many interdependent relationships with family, peers, and instructors. The following section will explore the interdependent relationships of nursing students and in some cases how students adapted to protect the basic need for relational integrity.

Doris had always wanted to be a nurse and valued her relationship with her family. It was hard for her to sacrifice time with family in order to go to school to become a nurse. In the following section she describes her family support.

I was the first person in my family to go to college, the first person in my family to graduate from college. (I was) the oldest of three kids so I had an enormous support system. My mom always wanted to go to college and didn't so she was good about keeping the kids. My husband was a 100% plus supportive, my mother in law was extremely supportive so I don't know that I even could have been successful without that support group at home, especially since I had a five year old and a seven year old. That was a core part of my stability.

This assurance from family allowed her to spend the time needed to be successful in school without the fear of damage to her relational integrity.

Students also develop support from their peers. This mutual giving and receiving of emotional and cognitive support provided a means to stabilize their self concept as well as fulfill their need for interdependent relationships. Heidi talks about the support she received from her peers.

In our nursing class we were really a tight class. We found ourselves at 2 am in the nursing study or in the lab doing clinical skills...So we build our support systems along the way.

Many students develop camaraderie with their peers that give them courage to continue when they are tired and stressed. Peers can fulfill a need that families cannot because peers have a more intimate understanding of the challenges.

The instructor-student interdependent relationship is important to the students' success. The instructor's role is to create a rich learning experience while the students' role is to come prepared to expand their knowledge. Doris felt she had a learning environment that was instrumental in her success. She had this to say about one of her instructors and the director of the nursing department.

But I did have one nursing instructor that was extremely supportive ... she could tell it was getting a little tough for me. She'd let me know and say "come on you can do it, what can I do to help" that kind of thing. And the director at the time was superb; so lots of support from those two.

The instructor wanted to make sure that Doris learned the concepts. This interaction reassured Doris that this was an interdependent relationship and help was available when needed.

Not all instructor-student relationships are as positive as Doris's relationship was with her instructors. Stevie recalls a situation when he did not feel supported by the faculty and tried to adapt by joining a study group. First semester I just... you know I pretty much was on my own. And I studied for the test on my own. And then second semester when I started having trouble, I went to study groups to try to get over that hump, to get with other people and maybe what I need is other people to study with, to bounce ideas off of and say, ok what am I missing that your getting that I'm missing. I did that probably for every test second semester. I just don't know. I don't know if it was the fact that maybe I set in the front of class and we had one instructor who just could glare you down. I don't know maybe if it was her sitting there that put that mental block in my head. I honestly don't know. I completely recharged my study habits from first to second semester to try everything under the sun I could to make it, because this is what I wanted to do.

Stevie's frustration was evident when he told me his story. He was doing everything he could to be prepared to expand his knowledge but he did not feel the instructor was creating a rich learning environment. He expanded his interdependence to include a study group to compensate. Adaptation did not occur and his self-concept was decreased as evidenced in the statement regarding the mental block in his head.

Adaptation is an integral part of the core category of psychic strength. Adaptation occurs through counterbalancing of the four modes and results in individuals finding homeostasis. The participants had myriad of experiences that challenged their wellbeing. They also adapted to the environmental change in some cases. When adaptation occurs, a meaningful and purposeful relationship with the universe is restored. (Tomey & Alligood, 2006). When adaptation does not occur the individual searches for balance and homeostasis in their lives. Sometimes removal from the situation is required in order to adapt and find homeostasis.

Psychic Strength

For the purpose of this study, the term psychic will be defined as one's own animating principle which makes an individual unique and includes the ability to reason,

feel, perceive, and judge, as well as behavioral, emotional moral and ethical characteristics. The term strength refers to one's ability to resist force and the capacity for exertion or endurance. Roy's (1999) adaptation model was based on the assumption that individuals are thinking and feeling beings who have the capacity to resist negative environmental stimuli. Individuals also use conscious awareness and choice to integrate into their surroundings. Psychic strength is a complex concept that encompasses these attributes and is evident in the axial categories of caring, courage, control, and adaptation.

Students who enter nursing are unique individuals with the desire to become a nurse. By entering nursing they have made a moral choice to take the responsibility for another person's wellbeing. Through the selection process for a nursing program, students have demonstrated their ability to reason, think, feel, perceive, and judge. Their behavioral and emotional characteristics have been observed through formal and informal interactions with nursing staff. Students also have demonstrated their ability to persevere and meet expectations through completion of prerequisite courses and the admission process.

On the first day of the first course in nursing, I have seen the excitement in the faces of students because they are caring individuals, and they want to learn how to care for others. I also have observed apprehension as they worry about their ability to succeed. It took courage for them to fulfill all of the entrance requirements and show up for the first day of class. They have made arrangements for outside obligations, purchased their books, and feel they are in control and ready to begin their educational journey. Most of them also have adapted to the best of their ability to their new life as a student nurse.

While there may be varying levels of psychic strength, it is evident in all students upon entry.

Along the way, the student's psychic strength is challenged by numerous environmental stimuli that attack the physiological, psychological, and sociological aspects of their being. Their psychic strength can be weakened as a result of this attack. In most cases, students are able to adapt and regain homeostasis. When students' psychic strength is repeatedly attacked by environmental stimuli, they feel powerless. This feeling of powerlessness increases their level of anxiety. The cyclical process of attack and adaptation leads to either personal growth or fractured psychic strength. Students who adapt successfully regain control, refresh their courage and commitment, and become stronger individuals through their experience.

At one point in the data collection process it occurred to me there were defining moments in the participants' experiences where psychic strength was fractured, and they withdrew. This discovery led me to return to interview two participants with a focus on that defining moment.

The following is an excerpt from Stevie as he recalls his defining moment of departure.

Yeah that would have to be before that last test, because you're in class and you know you're down. I probably did give up. I probably didn't put what I needed into that last test... We just took those tests. That last test and out of the four of us who took it one passed. And you know as they are dropping like flies in front of you you're just thinking "Oh my God" I'm next.

His response when asked if he put his whole heart into preparing for this test:

Looking back at it I probably didn't. I probably could have done more. You just get so frustrated and when you are out on clinical and that clinical instructor says to you "it's not right." ... I felt like it was up to them, they were in control. I felt like the instructors were completely in control, 100% control...I had fairly decent test scores, it was after that test, that I kind of just went downhill again, so I was just spiraling out of control... it was at that point, it's like I was completely -third time and I'm toast, and I can't do this anymore, I can't be a part of a program that doesn't want me and that's what it was, it was a program that didn't want me.

At this moment his psychic strength was fractured, and he departed from school. He was unable to effectively respond to the environmental stimuli resulting in disruption of his psychic integrity. He had lost control of his environment; he lost his courage to try; he lost his drive to adapt. His desire to care for others was not strong enough to override his loss of psychic strength.

You are probably wondering about the adaptation process that occurs to give the student the courage to re-enter nursing after psychic strength has been fractured. In the case of Stevie, he had to withdraw from the school environment where he experienced his loss of psychic strength to allow time to begin the healing process. His desire to care for others facilitated the process that renewed his courage, helped him regain control, and refreshed the adaptive process. This process provided him the opportunity to reflect on the events that led to his departure from school. He stated:

I always wanted to say my biggest regret was going there, but in all actuality it wasn't! That was the best thing that ever could have happened to me because it put me into a different program that prepared me for success. I drew off of that experience to finish my LPN. Then when I went on those two women were my motivation to get through RN school... because I wasn't good enough for your program, but I'm going to teach you by getting my RN. When I get my RN, I can always look back and say ...it's because of you, because I wasn't good enough for your program; you gave me that drive; you gave me that determination to get where I wanted to be ... I am presently where I wanted to be as an RN, it's awesome!

Stevie's self-concept was shaken at the time of departure. Through this experience he learned about his capabilities and strengths. He also transformed the anger and frustration he felt into a motivation to succeed. This interview took place soon after his graduation from his associate degree program. It is evident healing is still in progress because he has not resolved his anger.

The student who has experienced fractured psychic strength spirals out of control and leaves nursing school. Time away from the increased environmental stimuli from nursing school can repair their psychic strength. Fracturing of psychic strength is similar to the fracturing of a bone from the perspective of the healing process. They need time and support to heal and the healing process makes both stronger.

In this chapter the axial categories of caring, courage, control, and adaptation that make up psychic strength have been discussed. The axial categories have intricate connections and interactions. This is similar to billiard balls striking each other at different angles, setting off a chain reaction. For example, if a student lacks courage to engage in patient care they might receive an unsatisfactory evaluation from the instructor. This unsatisfactory evaluation could make the student feel they are losing control. The student may or may not be able to adapt and regain control. This also may lead to the feeling of spiraling out of control. Anywhere in this chain of events an action or reaction could change the outcome of success or attrition. In order to summarize this complex concept, I have created a composite story of the participants and their respective journeys through nursing school including fracturing, recovering, and renewing of their psychic strength. This story will help clarify the intricate interaction of the axial categories of caring, courage, control, and adaptation to the core category, psychic strength.

My name is Sam and this is my experience of entering, departing, returning, and completing an associate degree nursing program.

I grew up in a loving home and was the recipient of caring behaviors from my family. I remember coming home from school and smelling fresh baked cookies as I entered the house. It seemed that mother was always nearby waiting to hear about the events of my day. When I had a bad day, she had a way of making me feel better and preparing me for other challenges in life. My life also was influenced by my grandma and grandpa who lived nearby. They made me feel I was capable of anything when they told me "I am proud of you and I know you can do it." Even today when I feel overwhelmed I recall those words of encouragement.

I always enjoyed taking care of others. When I was little, I would perform surgery on my doll and then bandage the wounds. Before long I was old enough to help take care of my younger siblings. When I was twelve my grandma became ill. I helped my mother care for her until her death. The time I spent helping care for grandma made me feel good about myself. I took a Certified Nurse's Aide course when I was sixteen and began working in a nursing home. I really enjoyed taking care of the residents. I found their stories fascinating and soon became very fond of them. They also appreciated the care I provided. This gave me purpose and meaning in my life and confirmed my desire to become a nurse.

I began taking pre-requisite courses and soon found other students who were preparing for entry into nursing. We shared stories that we had heard from nurses or students in a nursing program regarding the challenges. Soon a cohort formed because we had a common goal of completing a challenging nursing program. This bond was strengthened because we were all drawn to nursing by the desire to care for others.

I knew that nursing school was going to be challenging so I took every opportunity to learn more when I was at work. The nurses took time to explain the procedures and medications because they knew I was going to nursing school. Their encouragement and support gave me the courage to continue when I had doubts about being successful.

When I entered the nursing program, I was excited but worried about my ability to succeed. I remembered the stories I heard from former students whom I thought were very capable of success, yet they struggled through school. I took a deep breath and remembered my grandparents telling me "you can do it." I entered the classroom on the first day and made my way to the front of the room. The nursing instructors began their orientation to the nursing program. They told us it was going to be difficult to meet the demands of the program. This was not a surprise for me but when one nursing instructor informed the class that 30% of the students would not graduate, I was filled with fear of failure. Again, I had to push back all my fear. It took all of the courage I could muster to return the next day. As the days passed the instructor's prediction was turning out to be true. At the

end of the first two months 10 % were already gone. However, I remained courageous. I performed well on tests which added to my confidence and maintained my courage.

I think my CNA experience helped in the beginning. Our clinicals were in the nursing home, and I felt comfortable in this environment. As the nursing concepts became more complex, however, I could not rely on my CNA experience. I began to feel mentally exhausted. The syllabus was hard to understand, and we had reading assignments from several books. The expectations were almost humanly impossible. It was just too much and soon I felt out of control. I had to totally recharge my study habits and join a study group. It seemed that other students were getting the concepts I was missing. I benefited from being able to discuss our assignments with other students. These changes helped me increase my test averages.

The second semester our clinical experiences were in the hospital. This was so much different than any of my experiences in the nursing home. There were so many challenges, and I was afraid I was going to harm a patient. I did not know what to expect, and I felt out of control in this new environment. One of my first assignments was a surgical patient, and I had to give him a shot before he went to surgery. I could hardly draw the medication up because I was shaking. The instructor was supportive and said "you can do it." Even with that support, it took all the courage I had to go in to the patient's room and give the shot. The patient was very complimentary of my technique which gave me courage to try other new skills. I soon became more comfortable in this setting.

The clinical hours and reading assignments were increasing with each semester. It took me hours to prepare for class and clinical. In order to get everything done, I stayed up until midnight reading or preparing for clinical. I had to get up early to arrive at the hospital by six o'clock. One morning I got up, made a pot of coffee, and got ready for clinical. I sat down for a few minutes to drink some coffee and dozed off while sitting in my chair. The phone rang and I jerked spilling the entire cup of coffee in my lap. It was a little difficult getting through that day. I realized I was mentally, emotionally, and physically exhausted. I had to do something if I was going to endure. I decreased the hours I worked and asked my family to help with household responsibilities. I regained control for a while, but before long I was faced with insurmountable challenges. I was spiraling out of control and could not adapt to the new expectations.

My test grades were deteriorating. There were just too many balls in the air. I also remembered we were told that 30% of the class would fail. At that moment, I knew I was one of the 30%. I was lost and I did not have enough time to commit at this point. I was really down, and I probably didn't study as much as I could have. I knew it was all over when I saw

the test, and it looked like a foreign language. I tried to answer a few questions, but I felt totally overwhelmed. My heart was racing, and I felt physically ill. I let everything get to me.

I withdrew from nursing but remained in my general education classes. I did not want to give up on my dream of being a nurse. I was embarrassed that I could not handle the load but at the same time felt relieved because I had time to recuperate and focus on my family.

I finished the other classes and continued to work as a nurse's aide. I was angry, hurt, and embarrassed. As time passed, however, I began to heal. I realized I did not fully understand the expectations of nursing school. I heard from others it was going to be difficult, but I really did not understand how difficult it was until I experienced it for myself.

I recalled the voices of encouragement from my past saying "you can do it." With a new perspective I reviewed my experiences in nursing school. I began to think of ways I would face those challenges with a true understanding of the expectations. In that review, I gained courage to try again. I also had support from family, peers, co-workers, and friends. Everyone understood my situation and encouraged me to try again. This review process made me realize I had a strength that permeates my being. I was not able to finish the nursing program the first time, but the experience has made me even stronger. I discovered how I learn best, to mange time, and to make the most of passing moments with my family. More importantly I learned that I can persevere through difficult times and be a better person from that experience. I used all of this information when I returned to and completed nursing school.

Sam's story exemplifies psychic strength as an intricate combination of caring,

courage, control, and adaptation. Caring is a key characteristic that leads students to a career in nursing. It may also be a characteristic that gives them the motivation to continue when stressful events occur. When students experience a barrage of challenges, they may lose courage to continue or lose control of their environment which increases levels of stress. When this occurs, the students attempt to regain homeostasis through adaptation. Caring was a motivator for students entering nursing, but it is also motivator to adapt as they pursue meaning and purpose in their lives through nursing. Psychic strength can be weakened or fractured when students lose courage or control, and they

are not able to adapt and regain balance in their lives. When psychic strength is weakened or fractured, students are at risk for attrition. Examples of threats to psychic strength were presented throughout the discussion of the four axial categories.

When students experience weakening or fracturing of psychic strength, a time of healing is required. This time allows them to not only renew courage, control, and adaptability but also helps them refocus on what brings meaning and purpose in their lives. This process gives them courage to renter nursing school. When they reenter they have firsthand knowledge of what is expected of nursing students. This knowledge helps them to establish control of their environment. They have learned how to adapt in order to protect their biopsychosocial integrity. This sets the stage for successful completion of a nursing program.

Studying participants who had an interruption in nursing school but returned to become a nurse led me to discover psychic strength. Not all students complete a nursing program. It is unknown to me what happens to students' psychic strength when they do not return. They may not have regained their courage, or they may have found other ways to have meaning and purpose in their lives.

CHAPTER 5: CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS Introduction

Nursing student attrition is of particular interest during this time of nursing shortage. The literature review discussed attrition from the educator's perspective. This study gave a voice to nurses who experienced an interruption of their education. The rich data from their candid interviews has provided insight on their experiences leading to the discovery of psychic strength. This final chapter has five sections which include a) summary of the study, b) conclusions of the findings, c) applicability of theory, d) implications for practice, and e) recommendation for future research.

Summary of the Study

The literature review discussed attrition from universities, community colleges and nursing programs. Several factors connecting the student to the academic institution were studied. Social integration, however, was identified as a common factor that influences a student's decision to stay or leave school (Spady, 1970; Bean, 1984; Eaton & Bean, 1995; Pascarella, 1971; Tinto, 1975; Wild & Ebbers, 2002). Based on assumptions from previous research, Tinto (1994) and Wild and Ebbers (2002) explored learning communities as a retention strategy. They found that learning communities created an environment of camaraderie and inclusion which led to decreased attrition. Symes, Tart, Travis, and Toombs (2002) also developed a retention program to assist students in becoming expert learners. This program addressed learning strategies, time management,

coping skills, and wellness which improved retention in their nursing program. The participants of this study also confirmed the benefits of social networking and camaraderie.

The articles pertaining to nursing attrition discussed a variety of possible factors influencing a student's decision to leave. Kotecha (2002) discussed opposing roles of students in a nursing program which causes confusion and stress. The apprentice role requires precise skills and obedience as a subordinate in the hospital compared to the autonomous role which requires assertive interaction with faculty in the academic setting. Deary, Watson and Hogston (2003) found that student's leave nursing programs for personal reasons such as anticipation of failure or the lack of satisfaction with the program. In their study, students experienced increased levels of stress as the program progressed and coping strategies were not adequate to compensate for the increased stress. They also found that a positive attitude influenced a student's ability to complete the program. The common thread in these studies was the increased stress of nursing school. The participants of this study often felt overwhelmed and stressed. Over the years I have observed students in the hallway between classes. In the beginning of the year they smile at me and make eye contact. Over the semester it is easy to identify the students who are struggling to survive. They are so overwhelmed they walk down the hall with their head down, flat affect, and no eye contact. These are the students who have weakened or fractured psychic strength.

Conclusion of the Findings

This study found that when a student's psychic strength is weakened or fractured they are at risk for departure from nursing school. Psychic strength is a complex concept

with four axial categories of caring, courage, control, and adaptation which are intertwined.

Caring was a common factor that drew the participants into nursing, carried them through stressful times, and motivated them to return after departure. According to Morris et al. (1990) there are five facets to caring which include human trait, interpersonal relationship, moral imperative, affect, and nursing interventions. Caring is a human trait or a call to be human. This facet motivated the participants to enter nursing. Caring is also found in interpersonal relationships. The interpersonal relationships experienced by the participants made them feel valued and motivated them to persevere through challenging times. The moral imperative facet of caring involves a commitment to maintain ones integrity and the dignity of patients. This includes caring enough to learn how to provide care to the best of one's ability. Affect is the facet of caring described as a desire to act selflessly or without immediate gratification or material reward. The last facet is caring as a nursing intervention. This facet requires knowledge and skill to implement the caring actions provided to patients. The axial category of caring was found to be very complex but an integral part of the strength found in participants who persevered as long as they could, returned, and completed their journey to become a nurse. When psychic strength was fractured however, caring alone was not enough to sustain them.

Courage was required to enter an unknown environment. Kotecha (2002) discussed the challenges of students to be autonomous in the classroom but subordinate in clinical. This was consistent with the accounts of the participants as they described being "drilled" by the instructor if they were not adequately prepared to take care of a patient. It takes

courage to enter an environment full of challenges and high expectations. When students do not feel they are meeting the expectations stress increases. Stress leads to anxiety. A student's performance decreases in periods of moderate to severe anxiety. The decreased ability to function increases the chance of reprisal from an instructor which further increases the level of anxiety. A student experiencing this cyclical process that increases the level of anxiety may lose courage to persist.

The increased anxiety may also lead to the feeling of loss of control. Students prepare for hours prior to a test or clinical. When their performance is judged as less than adequate they feel they need to spend more hours preparing. The participants had full schedules including work, family, commute, and school. Most of them chose to decrease the hours they slept in order to have extra time to study and be prepared for the challenges. Lack of sleep coupled with anxiety leads to loss of control. The feeling of being out of control increases anxiety. The constant exposure to stressful situations without adaptation leads to spiraling out of control and eventually weakening or fracturing of psychic strength.

If students are able to adapt to stressful situations, control is restored. According to Roy (1999), individuals are biological, psychological and social beings who cope with environmental change through the process of adaptation. When students enter school they accept the new role of student in addition to their role as a spouse, parent, employee, child, and/or member of a social group. Some adapt by decreasing their participation in the other roles while others are unable to relinquish their responsibilities. In the beginning students have made appropriate adjustments in their life and feel they are in control. As the challenges of nursing school increase, students must adapt to meet the benchmarks set

by nursing faculty. Anxiety increases when students are unable to meet the demands of the program. When levels of anxiety remain high for prolong periods of time the student loses the ability to function at the level expected which perpetuates the cycle and the student spirals out of control. This leads to the weakening or fracturing of psychic strength. Some students depart when their psychic strength is weakened. This is a part of the adaptation. They withdraw to regain control by adjusting demands in their lives. Doris withdrew from nursing to complete co-requisite courses to reduce the amount of studying when she returned to nursing. Others may withdraw until a child goes to school. Some students, however, do not withdraw until their psychic strength is fractured. These students need to distance themselves from the stressor of nursing school in order for healing to occur.

The four axial categories work together to create psychic strength within the student. Students entered school full of hope and looking forward to their journey of becoming a nurse. Their psychic strength was intact. The participants admitted they had been informed about the rigors of the nursing program and they had prepared for the challenges. Their perception of the challenges and their ability to arise to the expectations was different from reality. Along the way, the student's psychic strength was tested by numerous challenges including extraordinary reading assignments, invasive procedures on complete strangers, and endless hours of preparing for clinical. The participants reported feeling stressed. They often reduced the hours they slept and resorted to fast food to try to find moments of time to study and prepare. Their response to the challenges ultimately led to an attack on their physiological, psychological, and sociological aspects of their being. Their psychic strength was weakened as a result of this attack. In most

cases students were able to adapt and regain homeostasis. When students' psychic strength is repeatedly attacked by environmental stimuli, they feel powerless. This feeling of powerlessness increases their level of anxiety. The cyclical process of attack and adaptation leads to either personal growth or fractured psychic strength.

Evaluation of Theory

The responsibility for establishing verification in a grounded theory study belongs with the researcher (Creswell, 1998). Throughout the research process the researcher verifies the data by posing questions that "relate the categories and then returns to the data and looks for evidence, incidents, and events that support or refute the questions" (p. 209). Strauss and Corbin (1998) developed four central criteria for judging applicability of theory to a phenomenon and then went a step further and identified seven evaluative criteria for grounded theory studies. Both means of evaluating grounded theory studies are presented in this section.

Judging Applicability of Theory

A well constructed grounded theory study will meet four criteria that demonstrate the theory is applicable to a phenomenon (Strauss, A., & Corbin, J. 1998). This grounded theory on attrition meets the criteria of fit, understanding, generality, and control.

Fit refers to the theory being "faithful to the everyday reality of the substantive area and carefully induced from diverse data" (Strauss, A., & Corbin, J. 1998, p. 23). The theory on nursing attrition was grounded in data from nurses who had an interruption in their course of study but returned to complete and become nurses. The participants who were interviewed a second time were given the opportunity to review the data analysis. They verified that the axial categories and core category fit with their own experiences.

My colleagues were also able to relate these findings to their observations of nursing student attrition and returning students.

Understanding relates to the theory being comprehensive or making sense to the participants in the study and professionals working in the related field. Fellow nurse educators were asked if the theory was easy to understand and was congruent with their observations. In general they agreed and could recall similar situation with students.

As I discussed this with one nurse educator, she recalled her own experiences in nursing school. She recalled one year in nursing school her father and a granddaughter died. She recalled that she not only had to maintain control in her student world, she had to deal with the grief she felt from the loss of her family members. There was a time that she felt like quitting. Her father was very proud of her and was happy she was going to be a nurse. At her lowest moments, she said she could almost hear her father say "You have started this, you need to finish it. You can do it."

Students enter nursing school and persist through numerous challenges including long hours of study, validation of skills, and balancing work, family and school responsibilities. The anecdotal stories have many similarities. This study meets the criteria of understanding because those who read it were able to easily identify with the findings.

Generality is when the theory is "abstract enough and include sufficient variation to make it applicable to a variety of contexts related to the phenomenon" (Strauss, A., & Corbin, J. 1998, p. 23). This occurs when the data upon which the theory is "based are comprehensive and the interpretations conceptual and broad" (p.23). The data collected on attrition, return and successful completion of students were comprehensive enough to

add meaning to student attrition from other technical programs. As I visited with faculty from criminal justice and paramedic programs about this study, they made connections between these findings and their experiences with students departing from technical programs.

Control -"Finally, the theory should provide control with regard to action toward the phenomenon" because the data are "systematically derived from actual data related to that (and only that) phenomenon" (p. 23). The concepts from this study were systematically derived from actual data regarding nursing student departure, return and successful completion. It was encouraging to hear from my colleagues that the findings from this study were congruent with their experiences. The findings also paralleled previous research regarding social integration (Spady, 1970; Bean, 1984; Eaton & Bean, 1995; Pascarella, 1971; Tinto, 1975; Wild & Ebbers, 2002), time management and coping (Symes, Tart, Travis, and Toombs, 2002), role conflict (Kotecha, 2002), and fear of failure (Deary, Watson and Hogston, 2003).

The four criteria for judging applicability of this study have been addressed in this section. The axial categories of caring, courage, control and adaptation and the core category of psychic strength are in fact derived from the data and accurately describe the phenomenon of nursing student attrition.

Seven Evaluative Criteria

Grounded theory follows an integrated process of data collection and analysis leading to the development of theory. Readers are not present during this process and need a guide to determine the quality of an emerging theory. As a final step to assist the

reader in judging the adequacy of the research, Strauss and Corbin (1998) suggest the following criteria be addressed:

Criterion 1: How was the original sample selected? On what grounds?

As indicated previously, the original sample was selected from a pool of registered nurses in Kansas who could answer the question: "What experiences influenced students to leave a community college nursing program for a semester or more, decide to return, and successfully complete the community college nursing program?"

Criterion 2: What major categories emerged?

The interview process created data which were broken down into discrete parts and examined for similarities and differences in regards to nursing student attrition. From these data arose four axial categories of caring, courage, control, and adaptation which support the core category.

Criterion 3: What were some of the events, incidents, or actions (indicators) that pointed to some of these major categories?

The four axial categories are interwoven and interactive. When students enter nursing school, they are excited about the opportunity to become a nurse because they enjoy *caring* for others. They have made arrangements for outside responsibilities and feel they are in *control* of events in their lives. Somewhere along the way some students begin to have extraordinary challenges which make them feel they are spiraling out of control. The stress created from this situation increases anxiety. It takes *courage* for the students to continue when they are anxious and afraid. Students who are unable to *adapt* to all of these challenges and expectations are at risk for attrition.

Criterion 4: On the basis of what categories did theoretical sampling proceed? That is, how did theoretical formulations guide some of the data collection? After the theoretical sampling was done, how representative of the data did the categories prove to be?

A strength was noted in students who entered school. What weakened that strength? The initial codes identified themes of challenges leading to increased stress and anxiety. As stress increased so did anxiety. The desire to understand what weakens the strength of students drove the sampling process. After the sampling was complete a composite story was derived to verify the findings.

Criterion 5: What were some of the hypotheses pertaining to conceptual relations (i.e., among categories), and on what grounds were they formulated and validated?

This study began as an exploration of the experiences of nurses who had withdrawn from an associate degree program and returned to successfully complete the program. During open coding when thoughts and ideas were exposed I searched for the meaning of these discrete parts as I coded the transcripts. As the analysis continued in the axial coding phase, I attempted to find relationships among the categories. It was difficult to totally remove my personal experiences from the coding process. I often found myself verifying the findings with my personal observations of nursing students who struggled to succeed during these two phases of coding. As I refined the theory, I reviewed the raw data to ensure that I captured the essence of the phenomenon. When I found congruence among, the raw data, the analysis, and my personal experiences it validated the accuracy of the theory.

Criterion 6: Were there instances in which hypotheses did not explain what was happening in the data? How were these discrepancies accounted for? Were hypotheses modified?

The axial category of Caring emerged primarily because the interview guide was designed to have an opening question that would put the participants at ease. The participants were asked "What brought you to nursing"? The overwhelming response surrounded the desire to care for others. This became an axial category; however, it was difficult to connect this concept to the core category of psychic strength. In an attempt to understand the concept of caring, a thorough exploration of the literature was performed. As a result of the literature search, it was determined that the concept of caring was broader, deeper, and more complex than originally thought. Caring may have been the reason they entered nursing, but it was not always adequate to overcome the challenges encountered in nursing school. It was, however, the motivating factor for the participants to return.

Criterion 7: How and why was the core category selected? Was this collection sudden or gradual, and was it difficult or easy? On what grounds were the final analytic decisions made (p. 269)?

From the first interview it was noted that the participants had a strength that was difficult to describe. As data were collected, compared, and analyzed in a continuous fashion the four axial categories that emerged appeared to support the original concept of a unique strength observed in the participants. This strength was more than hardiness or perseverance. This strength does not necessarily refer to physical, emotional, mental, or

spiritual strength but instead a combination of these characteristics. In collaborating with my dissertation advisor, the term psychic strength was given to the core category.

The evaluative criteria assisted me in providing the reader with essential information to follow the logic of my coding procedure and evaluate the results (Strauss & Corbin, 1998).

Summary

The most important result of this study relates to a better understanding of attrition from the student's perspective. The participants entered school to learn how to be a nurse. They knew it was going to be hard, and from their perspective they were prepared. Before long they found that the expectations of faculty indeed included learning how to be a nurse but also included passing tests. In many instances the passing grade was higher than other courses they had previously taken. So the student's focus becomes studying to pass the test rather than learning to be a nurse. This also correlates with role confusion as described by Kotecha (2002). Students in some cases are left with the choice of passing the test or learning how to be a nurse. From my perspective as a faculty, they were one and the same. If you could pass the test, you also had the knowledge to be a nurse. I believe faculty can improve the learning environment by understanding the incongruence of students' and faculty perceptions and expectations. I will discuss possible strategies in the Implications for Practice section.

This study has certain limitations that should be considered. First, there are potential limitations related to the design of the study to only include nurses who had experience of both leaving a nursing program prior to completion and successful

completion of a nursing program. Data from students who never returned was not gathered and may limit needed information when designing retention programs.

Another limitation regarding the participants is the limited geographical area in which they lived and experienced attrition. The participants also were from the same ethnic group. This study may not be applicable to students in large metropolitan areas or communities with a different population. Lastly, this study only addresses psychosocial aspects of attrition and does not explain all attrition.

Implications for Practice

In the literature review there were examples of retention strategies that had been implemented and found to be helpful in the retention of students. These examples were not in nursing programs but further evaluation of the strategies would be warranted for application in nursing programs. In this section I will discuss implications for students entering nursing from the perspective of caring, courage, control and adaptation. I will conclude with strategies for retention based on the finding in this study combined with Poorman, Mastorovich and Webb's (2008) study of how faculty help or hinder at risk students. These studies have many similarities and further support the applicability of this grounded theory study. The recommendations will be presented in the following order: (a) providing students with realistic expectations regarding the rigors of nursing school, (b) helping student prepare for the rigors of nursing school, (c) developing a caring learning environment, (d) discussion of Poorman et al. study, (e) attending at-risk students, and (f) maintaining psychic strength.

Students entering nursing need to prepare for their educational journey from a psychosocial perspective as well as academically. The desire to care for others was a common reason to choose nursing as a profession. Individuals who have a strong desire to take care of others often put the needs of others before their own. Heidi's husband

accused her of "feeding the world before she took a bite". It is this very desire to care for others that make it difficult to be successful. Students may need to understand that they have to put themselves and their education first in order to survive the rigors of nursing school.

Courage is essential to overcome the fear of an unknown environment. While any educational journey involves entering an unknown environment, nursing requires entering a stranger's personal space, inflicting pain through invasive procedures, and being under scrutiny from patients and instructors to mention a few apprehensive situations. Students must have healthy coping mechanisms in place to compensate for the anxiety they may encounter in nursing school

Students must feel they have control over their emotional and physical environment. This can be accomplished through the development of good decision making processes and knowing how to deactivate stressful situations. Choosing the right time to enter nursing school is important as well. For example, some of the participants in this study found they became successful when they waited until children were older or they were more mature themselves. Students who have the capabilities to maintain control in their lives are more likely to be successful.

Is it is impossible to be prepared for everything that may occur while in nursing school. Students who are able to adapt to changing environments will be more likely to stay in control while meeting new demands. Adaptation may need to occur to maintain, physical, mental, or emotional integrity. Students who have a healthy self image and appropriate responses to challenges will find the stress of nursing school manageable.

Prospective students should be given information regarding the rigors of nursing programs. As nursing administrators, we often assume students have an accurate understanding of the challenges of nursing school and they will make nursing school a priority. This is not the case for many students. Borrowing from the nursing process, a holistic approach should be used in the initial advisement phase which would include

allowing time for an admission counselor to become familiar with the student and discover all aspects of their life including responsibilities outside of the school environment. This approach encompasses the physiologic, psychologic, and sociologic aspects of the student leading to a comprehensive, individualize plan for success during the advisement phase. This would help the student understand the importance of balancing work, study, child care, and co-requisite courses as they add the role of student to their other roles.

The findings in this study also indicate the need to help students become prepared for the rigors of a nursing program. Helping students understand the expectations is different than telling students that 30% of the class will fail, as in the case of Stevie. Unfortunately, the case of Stevie is not an isolated case. I have heard faculty use this strategy to impress upon entering students the necessity for hard work and dedication to succeed. I would recommend a twofold approach to orienting students to nursing. First, develop an orientation course. This course should include methods to explore learning strategies, time management, stress reduction, and maintenance of health. During this course, the students could explore realistic expectations of the nursing program including strategies to prepare them to meet those challenges. Second, create a collaborative and equitable relationship among students and teachers where conversations to enhance learning can occur (Poorman et al., 2008). When students are given extraordinary challenges, they must have support and skills to succeed.

As Wells (2003) suggested, increased awareness of the unique needs of the students in community college nursing programs and attrition factors is needed as a first step in the development of retention programs. In light of the significance of the student-faculty relationship and a supportive learning environment, faculty need to be an integral part of the development of these retentions strategies. Wade and Kasper (2002) have developed a tool to measure student's perception of instructor's caring. This tool may help to evaluate and change the student-instructor relationship leading to a caring environment. A caring

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environment would help the students have the courage to enter a setting full of unknown experiences and maintain control when the unexpected happens. Early recognition of students losing control and assistance with adaptation may prevent weakening of psychic strength. Faculty work closely with students and are the key to early intervention. A mentoring program for new nursing faculty would be essential to support the implementation of a caring learning environment. Seasoned faculty who are passionate about student success would be the most appropriate candidates for mentors. Institutions may need to support this initiative by offering incentives for a mentoring program.

Poorman et al. (2008) found that faculty who attend to at-risk students made a difference in their academic success. In their study they interviewed thirty nurse educators. The educators were asked: "Tell us about a time when you worked with a struggling student. Then reflect on your story and describe what this experience meant to you in either helping or hindering the struggling student" (p.273). They found two ways in which faculty attended to students.

The first way faculty attended students was through understanding. In the process of understanding, one faculty listened to students to learn how they approached problems and assisted them to a higher level of thinking (Poorman et al., 2008). Another faculty would "gently guide the student away from the tremendous focus on grades to a greater focus on learning, thinking, and understanding." (p. 274). As previously mentioned students believe that grades are the ultimate determination of being successful. Attending to students through understanding would help decrease the gap in student and faculty expectations. The process of understanding is often hindered because the students fail to approach faculty with academic problems. The faculty in this study were amazed and confused when students avoided asking for help. Is it the student's responsibility to ask for help? I have worked with nursing faculty who have commented "the student never came to see me so I guess they don't want my help." Whose responsibility is it? Poorman et al. (2008) believe that it should be a shared responsibility or a partnership. This study

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provides insight on student's perceptions which will help faculty understand the challenges student's face.

The second way faculty attended students was through expecting (Poorman et al., 2008). Students want to know what the teacher expects of them but faculty may want to know what the student expects from faculty. Some examples from this study include "Don't let me be alone. Don't let me do this procedure by myself. I don't know how to do this, come with me. Make sure you are there to support me. Don't yell at me" (p. 275). This is similar to Doris's story of her first injection to the patient who was a paramedic. Her plea was for the instructor to go with her. Charlie did not feel supported when the instructor made her feel stupid. It is important for faculty to know that students expect them to be present physically and emotionally to support them in their learning.

I concur with Poorman et al. (2008) when they recommend a partnership between students and faculty. The authors describe this as a "creation of a collaborative and equitable relationship or partnership where students and teachers would engage in conversations about each others' worlds" (p 276). These partnerships can decrease the gap between the expectations of students and faculty in regard to the learning environment.

In conclusion, students enter nursing because they want to learn to care for others in the role of a nurse. *Caring* also helps them persevere when challenges occur. Nurse educators have the opportunity to model caring behaviors as they attend to students. During difficult times students need to have a nursing instructor present to help them have the *courage* to face the unknown. Students need assistance to maintain *control* in their lives. This can be accomplished through collaborative partnerships among students and faculty. When a student loses control, nursing faculty need to be ready to help them *adapt* and regain their *psychic strength*.

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Recommendations for Future Research

This grounded theory study provides a framework for future research in the areas of attrition specific to nursing programs. Expanded research to include a more diverse population would be beneficial to enhance understand of the phenomenon of attrition. Retention programs may need to be tailored to fit the specific academic environment in order to be effective. A broadened understanding of attrition would guide this effort.

Research regarding nursing faculty perspectives of student attrition would provide insight on the development of mentoring programs for faculty. More research in this area would also provide information needed to support institutions in providing faculty incentives.

Conclusion

The ultimate success of the participants was inspiring and their willingness to share their experiences leading to weakening or fracturing of psychic strength yielded rich data which added clarity to the phenomenon of attrition in community college nursing programs. The grounded theory methodology led to the discovery of psychic strength and the four axial categories of caring, courage, control, and commitment. The first axial category to be discovered was caring. When tying this category back to the literature it was invigorating to learn that all five epistemological perspectives of caring identified by nursing theorists were noted in the participant's stories. In addition, discovering the congruence with Roy's (1999) adaptation model was enlightening as well as reaffirming that adaptation was an integral part of the grounded theory of psychic strength. These discoveries will be valuable in the development of retention programs.

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APPENDICES

APPENDIX A

Dear

Nursing student attrition is a concern for almost every nursing program. In light of the nursing shortage it is important we understand attrition in order to develop retention strategies. As a doctoral student at Colorado State University, I have the opportunity to explore attrition from the students' perspective by interviewing nurses who have experienced leaving a community college nursing program for a semester of more followed by a successful completion of a community college nursing program. I need your assistance to identify participants for my study.

The participants need to be former students who left your associate degree nursing program for a semester or more and then returned to graduate. To protect the privacy of the candidate, I am asking you to send the enclosed letters to former students who meet the criteria for the study. The students will remain anonymous to me until they choose to participate in the study by contacting me.

Clifford P. Harbour, J.D., Ed.D. is my dissertation advisor and principal investigator of this study. He may be contacted in the following ways:

Mail:	Email:
Colorado State University	cliff.harbour@colostate.edu
School of Education – Mail Code 1588	Phone:
Fort Collins, CO 80523	970-491-5425

I appreciate your support and assistance in this endeavor. Please do not hesitate to contact us if you have any questions regarding the study.

Sincerely,

Lenora Cook, RN, MSN Doctoral Student Colorado State University

APPENDIX B

Dear Prospective Participant:

Nursing student attrition is a concern for almost every nursing program. In light of the nursing shortage it is important we understand attrition in order to develop retention strategies. My name is Lenora Cook and I am a doctoral student at Colorado State University. As a doctoral student, I have the opportunity to explore attrition from the student's perspective by interviewing nurses who have experienced leaving a community college nursing program for a semester or more followed by successful completion of a community college nursing program. I need your assistance to study attrition in community college nursing programs.

This letter has been forwarded to you by the Director/Dean of your nursing program. To protect your privacy, you will remain anonymous to me until you contact me and agree to participate in my study. If you are willing to talk about your experiences that influenced your decision to leave your community college nursing program prior to completion as well as the experiences that helped you return and become successful, I would like the opportunity to interview you.

The first interview will take approximately one and one-half hour. The second interview, if needed will last about one hour. Each interview will be taped and transcribed to facilitate analysis and interpretation of the information. Should you decide to participate, I would also like for you to review a rough draft of our conversations and provide feedback to ensure the accuracy of the information.

The nursing shortage has made it difficult to provide quality care to patients. Assisting students to complete nursing school in an efficient manner will increase the number of graduates and subsequent nurses into the profession.

Clifford P. Harbour, J.D., Ed.D. is my dissertation advisor and principal investigator of this study. He may be contacted in the following ways:

Mail: Colorado State University School of Education - Mail Code 1588 Fort Collins, CO 80523 Phone: 970-491-5425 Email:cliff.harbour@colostate.edu

I may be contacted in the following manner:

Mail: Lenora Cook, RN, MSN	Phone: 620-276-9562 (office)
P. O. Box 409	620-277-0574 (home)
Holcomb, KS 67851	620-272-4212 (cell)
	Email: lenora.cook@sbcglobal.net

I sincerely hope you choose to assist me in my quest to understand attrition. Please do not hesitate to contact us if you have any questions regarding the study.

Sincerely,

Lenora Cook, RN, MSN Doctoral Student Colorado State University

APPENDIX C

Dear Prospective Participant:

Nursing student attrition is a concern for almost every nursing program. In light of the nursing shortage it is important we understand attrition in order to develop retention strategies. My name is Lenora Cook and I am a doctoral student at Colorado State University. As a doctoral student, I have the opportunity to explore attrition from the students' perspective by interviewing nurses who have experienced leaving a community college nursing program for a semester or more followed by successful completion of a community college nursing program. I need your assistance to study attrition in community college nursing programs.

This letter has been sent to you because you are listed as a licensed Registered Nurse in the State of Kansas. I want to interview nurses who left a community college nursing program for a semester or more, decided to return, and successfully completed a community college nursing program. If you meet these criteria and are willing to talk about your experiences that influenced your decision to leave your community college nursing program prior to completion as well as the experiences that helped you return and become successful, I would like the opportunity to interview you.

The first interview will take approximately one and one-half hour. The second interview, if needed will last about one hour. Each interview will be taped and transcribed to facilitate analysis and interpretation of the information. Should you decide to participate, I would also like for you to review a rough draft of our conversations and provide feedback to ensure the accuracy of the information.

The nursing shortage has made it difficult to provide quality care to patients. Assisting students to complete nursing school in an efficient manner will increase the number of graduates and subsequent nurses into the profession.

Clifford P. Harbour, J.D., Ed.D. is my dissertation advisor and principal investigator of this study. He may be contacted in the following ways:

Mail:Email:Colorado State Universitycliff.harbour@colostate.eduSchool of Education - Mail Code 1588Phone: 970-491-5425Fort Collins, CO 80523Phone: 970-491-5425

I may be contacted in the following manner:

Lenora Cook, RN, MSN	Phone:	620-276-9562 (office)
P. O. Box 409		620-277-0574 (home)
Holcomb, KS 67851		620-272-4212 (cell)
		Email: lenora.cook@sbcglobal.net
		-

I sincerely hope you choose to assist me in my quest to understand attrition. Please do not hesitate to contact us if you have any questions regarding the study.

Sincerely,

Lenora Cook, RN, MSN Doctoral Student Colorado State University

APPENDIX D

TITLE OF STUDY: Toward a Grounded Theory of Nursing Student Attrition

Principal Investigator: Clifford P. Harbour, J.D., Ed.D., Professor, School of Education, Colorado State University, Fort Collins, CO, 80523 Tel: 970.491.5425 E-Mail: cliff.harbour@colostate.edu

CO-Principal Investigator: Lenora Cook, P. O. Box 409 Holcomb, KS 67851 Tel: 620-272-4212 (cell) or 620-277-0574 home

WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH? We are asking you to participate in this study because you have been identified as a nurse who has had the experience of leaving a community college nursing program for a semester or more, decided to return, and successfully completed the community college nursing program. If you agree to participate in the study, we will ask you about your perspective in two private confidential interviews. The first interview may last up to one and a half hours. The second interview may last up to one hour. You will be asked a series of open-ended and focused questions about experiences that influenced your decision to leave the community college nursing program prior to completion, your decision to return, and your successful completion of a community college nursing program.

WHO IS DOING THE STUDY? This study is being conducted by Lenora Cook at a site in Kansas that is mutually agreed upon by the participant and the Co-Principal Investigator. Lenora Cook is a doctoral student at Colorado State University and is conducting this research as a part of her doctoral dissertation. Lenora Cook is the Co-Principal Investigator in this study. Cliff Harbour is a Professor in the School of Education at Colorado State University. Cliff is Lenora Cook's dissertation advisor and is the Principal Investigator in this study.

WHAT IS THE PURPOSE OF THIS STUDY? The purpose of this qualitative study is to understand nursing student attrition. Participants will be interviewed to understand experiences that led to a decision to leave a community college nursing program for a semester or more, what led them to return, and what experiences led to successful completion of a nursing program. Private, individual, face-to-face interviews will be conducted, and transcript data will be analyzed to identify emergent themes reflected in the participant's stories. The interviews will be open-ended and in-depth to discover the unique, layered experiences and allow the participants to discuss relevant and perhaps unanticipated topics related to attrition. A grounded theory analysis and interpretation of the data will be applied.

Page 1 of 3. Participant's initials _____ Date _____

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST? The study will take place at sites in Kansas. The study is scheduled to run from September 3, 2007 to August 31, 2008.

WHAT WILL I BE ASKED TO DO? This study will collect data through an analysis and interpretation of interview transcripts. If you agree to participate in the study we will interview you in private at a date, time, and location that we both agree upon. You will be asked to participate in a follow-up interview. Your identity and the identity of your institution will remain confidential.

ARE THERE REASONS WHY I SHOULD NOT TAKE PART IN THIS STUDY? There are no known reasons why you should not take place in this study.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS? There are no known risks or discomforts to you if you participate in this study. It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

WILL I BENEFIT FROM TAKING PART IN THIS STUDY? There are no known benefits to you if you decide to participate in this study.

DO I HAVE TO TAKE PART IN THE STUDY? Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

WHAT WILL IT COST ME TO PARTICIPATE? The only cost to you for participating in the study will be the time needed to conduct your interviews. We estimate the first interview will take approximately one and half hours and the second interview approximately one hour.

WHO WILL SEE THE INFORMATION THAT I GIVE? The information that you give will be seen by the Principal Investigator, Co-Principal Investigator, and a professional transcriber. Selected excerpts from your interviews may be reviewed by the members of my dissertation committee. They may also be included in my dissertation or incorporated into journal articles or conference presentations. In all such cases, pseudonyms would be used to identify you and your institution.

CAN MY TAKING PART IN THE STUDY END EARLY? We are unaware of any reason why your participation in the study would be ended once your interview begins.

WILL I RECEIVE ANY COMPENSATION FOR TAKING PART IN THIS STUDY? No, you will not receive any compensation for taking part in this study.

Page 2 of 3. Participant's initials _____ Date _____

WHAT HAPPENS IF I AM INJURED BECAUSE OF THE RESEARCH? The Colorado Governmental Immunity Act determines and may limit Colorado State University's legal responsibility if an injury happens because of this study. Claims against the University must be filed within 180 days of the injury.

WHAT IF I HAVE QUESTIONS? Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the principal investigator, Cliff Harbour, at 970-491-5425. If you have any questions about your rights as a volunteer in this research, contact Janell Baker, Human Subjects Administrator at 970-491-1553. We will give you a copy of this consent form to take *with you*.

WHAT ELSE DO I NEED TO KNOW? Your signature acknowledges that you have read the information stated and willingly sign this consent form. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing three pages.

Signature of person agreeing to take part in the study Date

Printed name of person agreeing to take part in the study

Name of person providing information to participant Date

Signature of Research Staff

Page 3 of 3. Participant's initials _____ Date _____